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INTRODUCTION
Purpose of This Toolkit

Improving the care for the chronically ill is one of the most pressing health needs of our time. The Institute of Medicine’s report, *Crossing the Quality Chasm*, made clear that there were no easy roads to improvement. Healthcare organizations must redesign their systems of care to better address the needs of their patients with depression, asthma, diabetes, and other chronic conditions. America’s safety net providers have led the way. Today, 10 years after the development of the Chronic Care Model and the initial implementation of the Health Disparities Collaboratives, the lessons learned, tools developed, and strategies used by these vanguard teams provide the foundation for the next wave of improvement in chronic illness care.

To help more safety net organizations implement the Chronic Care Model (CCM) effectively and sustainably, the Agency for Healthcare Research and Quality (AHRQ) asked Group Health’s MacColl Institute in Seattle, RAND, and the California Health Care Safety Net Institute (SNI) to develop and test a toolkit and a practice coaching approach. The toolkit provides a step-by-step practical approach to guide teams through quality improvement. A companion Practice Coaching Manual that outlines our approach and provides orientation to other national efforts is also available.

**THIS TOOLKIT:**

- **SEQUENCES and DESCRIBES** the specific practice changes involved in Chronic Care Model implementation;

- **INTEGRATES BUSINESS STRATEGIES** to address the financial and operational barriers to quality improvement;

- Links **MORE THAN 60 TOOLS** commonly used for quality improvement with the relevant changes; and

- Includes **EXAMPLE STORIES** from practices that have made quality improvement pay.

Need To Improve Chronic Illness Care

Chronic diseases such as heart disease, stroke, cancer and diabetes are among the most prevalent, costly, and preventable health problems facing Americans. Seventy percent of American deaths (1.7 million) are due to chronic disease.¹ For the more than 100 million people in the United States living with at least one chronic disease, quality of life can be low and medical expenses, high. In fact, the treatment for individuals with chronic illness accounts for more than three quarters of national healthcare expenditures.² According to the Institute of Medicine’s *Crossing the Quality Chasm* report, about 50 percent of these Americans are not receiving good chronic illness care.³ For those living without health
insurance, the situation is even more drastic. Most people now agree that the poor quality of care in this country is a result of healthcare that is misaligned, unplanned, and fragmented.

The Chronic Care Model as a Guide for Change

With funding from The Robert Wood Johnson Foundation, the MacColl Institute developed and tested a quality improvement approach based both on evidence and experience of how to effectively care for chronically ill people. This work led to the development of the Chronic Care Model, a visual guide to the comprehensive, integrated reorganization of care delivery needed to improve important patient outcomes. The diagram below illustrates the Chronic Care Model:

Redesigning health systems to align with the Chronic Care Model emphasizes the central role of patients and their relationship with an organized practice team to achieve optimal health outcomes. It changes the healthcare system’s focus from reacting to the acute care needs of individuals to taking a proactive approach to engaging a population of patients. The Chronic Care Model puts the patient’s long-term health goals, needs, and competencies at the center of the healthcare system. It challenges the notion of specialized knowledge resting solely with the physician in favor of a broader approach where every member of the care team, including the patient, brings expertise to the table.

The Chronic Care Model includes six essential elements of a health care system that when integrated encourage high-quality chronic disease care:

- Community resources
- Health system
- Self-management support
• Delivery system design
• Decision support
• Clinical information systems.

To achieve real improvements in the quality of care as indicated by process and outcome measures, attention should be paid to each of these six elements. For more detailed information about the evidence base for the Chronic Care Model and a discussion of how the need for this toolkit and coaching methodology arose, please see Appendix A.

Making Changes in Practice

Implementing changes across all six elements of the Chronic Care Model can sound intimidating. In years of working with practices across the country, we have often been asked: Where do I start? This toolkit is designed, in part, to answer this question. Although all six elements of Chronic Care Model will be taught, experience suggests that practice changes can and should be made sequentially.

THE TOOLKIT DESCRIBES FOUR MAIN PHASES:
Phase 1 to Phase 4 include all of the Chronic Care Model Elements.

PHASE 1: Getting Started
PHASE 2: Assess Data & Set Priorities for Improvement
PHASE 3: Redesign Care and Business Systems
PHASE 4: Continuously improve performance and work to make changes sustainable

The goal of the Chronic Care Model is to improve health outcomes by optimizing the individual practice team’s interaction with patients, but it is clear that changes need to be made at all levels of the organization to support this work. The tools in this kit are generally focused on changes at the physician practice level. However, changes in both clinical and business practices, like those discussed below, require involvement and support from leaders and staff in financial and managerial departments. Depending on the structure of your organization, effective practice redesign efforts need to ensure that the decision-makers at all levels of the organization are involved.
The Business Case for Quality Improvement

One of the first questions that financial and administrative leaders ask is: What is the business case for this new initiative? In addition to serving the business of healthcare by improving the very core of our work — improving patients' health — implementing the Chronic Care Model has the potential to:

- **IMPROVE** staff satisfaction and retention;
- **ENHANCE** patient satisfaction and loyalty;
- **POSITION** clinics to capture pay-for-performance and quality improvement bonuses and grants;
- **STREAMLINE** workflow and maximize the use of staff; and
- **IMPROVE** efficiency.

The first step to making the business case for any new quality initiative in healthcare is to understand your organization’s unique financing structure. Examine your payer mix and learn what types of practice activities generate revenue. For example, if you are reimbursed primarily on a fee-for-service basis, you may generate more revenue by ensuring that all of your diabetic patients have the recommended number of Hemoglobin A1c tests. If you are paid primarily on a capitated basis, then ensuring that your patients are taught how best to manage their illness and avoid specialist or emergency room visits will likely provide a more robust financial return.

This toolkit provides strategies and tools to improve your financial performance while improving your clinical performance. Because the business of healthcare is to deliver the highest quality care to patients, improving clinical performance is the driving focus of our toolkit. However, understanding and responding to the reality of financial pressures through increased efficiency and enhanced revenue capture is what makes clinical changes possible and sustainable.

Because the financial landscape differs among organizations and even practices within organizations, we emphasize financial tools that are broadly applicable. We have also integrated text advice tailored to three financial tracks marked as track 1, 2, or 3. Which track of tools you use will be based on where your organization falls in the flowchart below.
FINANCIAL TRACK IDENTIFICATION TOOL

Are you reimbursed primarily on a...

Capitated basis?

Fee-for-service basis...

that cannot bill for ancillary service providers?

that can bill for ancillary service providers?

**TRACK 1** Track 1 is designed for practices that are reimbursed primarily on a capitated basis. In general, track 1 focuses on tools that increase efficiency, primarily by optimizing the care team and using process mapping to reduce waste. Certainly practices that are at risk for emergency department admissions, hospitalizations, or pharmaceutical utilization will want to focus on areas that help to contain these costs.

**TRACK 2** Track 2 is designed for practices that are reimbursed primarily on a fee-for-service basis and that are not generally reimbursed services provided by ancillary, nonphysician, providers. In these practices, a physician must be involved in the delivery of care to receive reimbursement. Services provided by other professionals such as Licensed Clinical Social Workers or Certified Diabetes Educators are not reimbursable. In addition to efficiency tools applicable to the capitated group, track 2 practices will use tools focused on increasing revenue by examining billing practices. Each visit in the track 2 practices should be designed to include physician time.

**TRACK 3** Track 3 practices are those that are reimbursed based primarily on a fee-for-service structure and for which providers can receive payment for ancillary services. These practices will be directed toward the efficiency tools in tracks 1 and 2, and the revenue enhancement tools in track 2. In addition, track 3 practices will focus on further optimizing
the care team by making use of non-physician specialists for patient education and self-management support functions with billable.

Admittedly, primary care practices are faced with many different payers and many different and sometimes conflicting financial incentives. The goal of this toolkit is not to be overly prescriptive. Rather, we encourage you to examine the financial structure of your practice and to take advantage of those financial elements that support and might be rewarded by your quality improvement efforts.

Finally, revenues are only one side of the equation. Reducing costs benefits all practices, regardless of payer source, and therefore applies to all user tracks. Additional cost-cutting tools are included under “Advanced Topics.”

This toolkit provides you with specific clinical and business key changes that you can put to use in your practice. The clinical changes are paramount, and the business change processes are important to the extent that they facilitate clinical improvements. Therefore, we have purposely omitted many potentially worthwhile business tools that are not explicitly linked to improving clinical care. Many of those concepts, such as improving your collections policy, are valuable strategies that teams might want to undertake after implementing the Chronic Care Model. While we certainly encourage efficiency in the business as well as clinical realm, our focus here is guided by the clinical changes.
How To Use This Toolkit

This toolkit is meant to be explicit enough to be used as a standalone document, but our experience suggests that real change is rarely achieved unless information and tools are linked to an organized quality improvement effort. You can read about quality improvement techniques on the Web at sites such as IHI.org if you want to be self-directed. Alternatively, you can use expertise, such as a practice coach or facilitator to aid in implementing the toolkit. A companion Practice Coaching Manual was developed and tested in conjunction with this toolkit. The Practice Coaching Manual also provides orientation to other national efforts using practice coaching and aids organizations in recruiting a coach to guide clinical quality improvement.

With or without the use of a facilitator, orientating yourself to the structure and layout of the toolkit before getting started will be helpful. As mentioned above, the toolkit is broadly organized into four phases. Each phase is denoted by an icon that will help to orient you in the toolkit.

The phases are meant to be covered chronologically with practices starting in phase 1 and then working through phases 2, 3, and 4.

Within each phase there are several “key changes” to put into practice. The key changes are not necessarily meant to be tackled chronologically. In fact, many practices may have already addressed the content and tools presented in a given key change. If so, teams should skip that key change and move to the next one. Practices should ensure that they have a handle on the content of each key change, even if they do not need to do any work in that section. Key changes are denoted by two numbers, such as: **Key Change 1.2**. The first number indicates the phase, the second, the key change. In this example, you are looking at the second key change within the first phase.

Each key change section is organized the same way, so you know what to expect as you move through the toolkit. The first page starts with a header that includes the phase locator icon and the number and title of the key change. Following the header, introductory content about the key change is presented.

Financial track icons are woven throughout the introductory content. These icons are a tool to help you navigate the toolkit, locating specific business advice for each track. Once you’ve identified which financial track you’re on, keep your eye out for that icon.
Following the introductory content and specific financial track information (if applicable), there is a table with specific action steps and associated tools.

Each tool has been reviewed or created by staff at the MacColl Institute and represents what we think is one of the best examples of a given type of tool available in the public domain. This is not meant to be an all inclusive list.

*To access a tool, click on the name of the tool, and it will take you to that tool in Appendix B. A citation indicating the source of each tool is provided as well.*

After the action and tool table, additional resources are listed. Unlike the tools, physical copies of these resources are not included in the toolkit unless indicated by hyperlink text. In most cases, these resources are not available for free or require specific technology (such as a DVD player), but we thought they were worthwhile to include for those interested in learning more. Not all key change sections will have additional resources.

In developing the toolkit we recognize that each practice will be at a different point in their quality improvement work, and will approach this effort with different strengths and challenges. Feel free to pick the tools, and the improvement method that will be of the most help to you.

**TECHNICAL SPECIFICATIONS:** This toolkit was created to be useful for practices that may not have access to the internet. Although a handful of tools require internet access, the vast majority are accessible to users who have Adobe Acrobat.
PHASE 1
Getting Started
The Chronic Care Model calls for a paradigm shift in the way we think about medical care. Instead of focusing on the acute needs of individual patients, the Chronic Care Model calls practices to a thoughtful, organized, proactive approach to improving the healthcare of a population of patients. The goal of focusing on a population of patients, such as people with diabetes, is to ensure that EVERY patient receives optimal medical care. Initiating and sustaining this kind of shift in thinking requires strong and effective leadership and a clear strategy for improving care. Based on our research and experience working with teams, effective quality improvement is a team sport. The most effective teams include at least three categories of members. These can be summarized as:

1. **SENIOR LEADERS**: These organizational leaders allocate resources, remove roadblocks, and support spreading the changes to other practices.

2. **CLINICAL CHAMPIONS**: Practicing providers, usually physicians or nurses, these individuals are respected opinion leaders who understand the environment and processes of care, drive improvements and motivate colleagues.

3. **DAY-TO-DAY CHAMPIONS**: These team administrative leaders keep up momentum, convene and coordinate colleagues, and oversee implementation of change ideas.

It is important to ensure that this work is done, even if your improvement effort doesn’t have three separate individuals in these roles.

Safety net clinics experienced in implementation of the Chronic Care Model say that one of the most important steps is to assemble and use your lead team well. This team will include representation from clinical, administrative and financial settings in your organizations. The team will be active in identifying the area to be improved, discussing resources needed, and coordinating the moving parts of whatever improvement you select.
### ACTIONS

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assemble a lead team to represent all disciplines and roles in your practice, ensure regular meetings, and work to actively engage all staff and patients.</td>
<td>Forming the Team (guide) 6</td>
</tr>
<tr>
<td>Focus leadership attention on improvement.</td>
<td>Seven Leadership Leverage Points (white paper) 7</td>
</tr>
</tbody>
</table>

### ADDITIONAL RESOURCES

- The Health Disparities Collaboratives spent considerable time thinking about team functioning. Here is a presentation they used entitled, the *Zen of Teams.*

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KEY CHANGE 1.2
Familiarize your entire team with key improvement strategies

Experience tells us that for change to be successful, a team needs to have a vision of both where they are trying to go and how they are going to get there. In this key change, your team will want to acquaint itself both with the vision of a high quality practice — through the Chronic Care Model — and with the strategy to get there - through the Model for Improvement. The resources listed below will provide a succinct primer on the essential elements of these two models. Many of you have undertaken Chronic Care Model-based improvement collaboratives on your own, and this information will be familiar to you. If not, consider that peers in your area, or even other parts of your own system, may already be experienced in these areas and can provide valuable information.

### ACTIONS

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>TOOLS</th>
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</thead>
</table>
| Learn the Chronic Care Model as a system for redesigning your current care delivery. | Chronic Care Model Primer (guide)
| Learn the Model for Improvement as a quality improvement strategy that teaches the team how to make rapid changes to their practice and measure their progress. | A Model for Accelerating Improvement (online) |
| Acquaint the team with efficiency concepts including process mapping. | Going Lean in Health Care (white paper) |

### ADDITIONAL RESOURCES

- *The Chronic Care Model Talk* (streaming media). Access it at [www.improvingchroniccare.org](http://www.improvingchroniccare.org)
- Web-based training on the *Model for Improvement*. Access it at [www.ihi.org](http://www.ihi.org)
- *The Toyota Way* by Jeffrey Liker

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PHASE 2
Assess Data & Set Priorities for Improvement
Most medical practices would like to improve aspects of their clinical and business processes and outcomes. Whether you want to decrease your patients’ cardiovascular risk or increase staff satisfaction, you’ll need data. Baseline data help you assess the current state of care and provide a picture of where you are succeeding and where improvement is needed. In other words, the baseline data help to inform the priorities for improvement. Ongoing data collection helps you see if the improvements you are implementing make a difference.

In reality, data may not be readily available for the issues that you care most about. If you believe a particular clinical goal is important to tackle—such as improving diabetes processes and outcomes—it might be worth asking your information support team to conduct a special data run or a chart audit to gather baseline data. A sample of about 25 charts should be enough to get you started. For more information on what clinical data might be interesting to collect and measure, the National Quality Forum Starter Kit can help (go to the tool in key change 2.2 below).

To support improvement in clinical measures, practices often need to understand their business infrastructure and capabilities. Below are tools that can help your team collect data about the five areas teams are most often interested in:

- **PATIENT** satisfaction & activation
- **STAFF** satisfaction
- **OFFICE** processes & efficiency
- **FINANCIAL** system function
- Available **RESOURCES** in the community

One advantage to incorporating both clinical and non-clinical goals in your improvement efforts is that it enables creative thinking when implementing strategies for change. Sites can often brainstorm ways to improve multiple measures at once. Keep in mind that collecting this information is not an end in and of itself; it is only useful in guiding decisions for improvement.
### ACTIONS

<table>
<thead>
<tr>
<th>PATIENT SATISFACTION &amp; ACTIVATION</th>
<th>TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess your patients’ experiences with chronic care.</td>
<td>Patient Assessment of Chronic Illness Care (survey) 12</td>
</tr>
<tr>
<td></td>
<td>Patient Assessment of Chronic Illness Care Scoring Guide 13</td>
</tr>
<tr>
<td>Assess overall patient satisfaction.</td>
<td>CAHPS Adult Primary Care Survey 14</td>
</tr>
<tr>
<td>STAFF SATISFACTION</td>
<td>Primary Care Staff Satisfaction Survey 15</td>
</tr>
<tr>
<td>Assess staff satisfaction.</td>
<td>Assessment of Chronic Illness Care (survey) 16</td>
</tr>
<tr>
<td></td>
<td>Assessment of Chronic Illness Care Scoring Guide 17</td>
</tr>
<tr>
<td>OFFICE PROCESS &amp; EFFICIENCY</td>
<td>Primary Care Practice Know Your Processes (survey) 18</td>
</tr>
<tr>
<td>Assess your system’s chronic care capability.</td>
<td>Finance Collaborative Pre-Work (survey) 19</td>
</tr>
<tr>
<td>AVAILABLE RESOURCES IN THE COMMUNITY</td>
<td>Building Your Community (online) 20</td>
</tr>
</tbody>
</table>

### ADDITIONAL RESOURCES

- The *Patient Cycle Tool*, available at [www.clinicalmicrosystem.org](http://www.clinicalmicrosystem.org), will be helpful for those who have gone through a collaborative, or want to focus on access and efficiency as a way to improve chronic care. This is one of a variety of tools that help to quantify cycle time from the patient’s perspective.

- *First, Break All the Rules* by Marcus Buckingham. This book includes a staff satisfaction survey recommended by many safety net providers.
KEY CHANGE 2.2
Select performance measures based on your needs assessment

Now that you know something about your team and your business infrastructure, it is time for your team to select specific clinical system changes that will be the focus of your improvement effort. The key changes should be evidence based and supported by a useful clinical guideline.

You’ll want to identify a reasonable number of performance measures tied to the evidence-based system changes you intend to make. Think broadly, and identify a few performance measures that represent the major clinical, business, satisfaction, and operations goals you identified in key change 2.1 above. Many practices find using a “dashboard” of measures a helpful and concise way to monitor multiple measures. Be careful to balance the number and variety of your data measures with the time and resource burden of collecting and tracking those data. Improvement efforts will be greatly facilitated if each measure is simple and has a clear operational definition.

It is important to track your measures throughout the process of implementing improvements so that the team can monitor its progress. Seeing improvements in the numbers can be incredibly motivating for the team. Using the measurement process as a mechanism to inform the clinic or organization about the improvement effort is one of the best ways to generate interest in and commitment to the aim and improvement priorities.

The tools below provide a wide variety of guidelines, models, and measures. You’re likely to find something that fits your needs.
## ACTIONS

<table>
<thead>
<tr>
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<th>Tools</th>
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</thead>
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<td>Procure and adapt specific guidelines.</td>
<td>National Disease Guidelines (online) 21</td>
</tr>
<tr>
<td>Choose clinical performance measures.</td>
<td>National Voluntary Consensus Standards for Ambulatory Care (measures) 22</td>
</tr>
<tr>
<td>Establish system-level performance aims.</td>
<td>Redesign and Finance Measures 23</td>
</tr>
<tr>
<td>Be sure to include a measure of self-management support.</td>
<td>% of patients with self-management goals noted in the registry</td>
</tr>
</tbody>
</table>

## ADDITIONAL RESOURCES

- Promote the transparency of data. This is one of the best ways to generate interest in and support for improvement. One great book that talks about creative and interesting ways to display data is *The Elements of Graphing Data* by W.S. Cleveland.
- Utilizing a dashboard of measures is one way that organizations can get a handle on multiple metrics including patient satisfaction, finances, clinical measures, and market share. One example of a dashboard is located on the [JENY Web site](#), an online community for quality improvement professionals.
KEY CHANGE 2.3
Build performance measurement capacity

A data collection system is the backbone of performance improvement efforts. Without data about your patients, you can’t proactively plan care or demonstrate improvements in process or outcomes. That said, data collection for performance measurement can be expensive, time consuming, and misleading if not done well. To maximize data measurement efforts:

- **LEVERAGE** information technology (IT) to harvest data that are already in the system.
- **AVOID** developing new IT capacity to start on data collection; you may be waiting a long time.
- For those data not readily available, **CREATE** the easiest process to secure them with an eye toward building future IT capacity. Double data entry or manual chart extraction requirements invariably stymie efforts to sustain and spread the improvement.
- **BEGIN** using your measurement system to create efficient clinical and business processes, and document the successes.
- **ENGAGE** the rest of your system in the need for improved performance measurement capability, demonstrating the return on investment associated with your efforts.

One way to maximize both clinical quality and efficiency is to use a patient-centered data registry rather than one focused on a specific disease. In fact, there is nothing inherently disease specific about a registry at all. It is just a spreadsheet used to collect patient data. You can always add columns. For example, Chronic Disease Electronic Management System (CDEMS) is a publicly available database tool that can be used even without electronic medical records and enables a practice to get a holistic sense of its patients needs.

It is likely that your ability to identify and track data will influence the performance measures you chose to focus on, so you can think of key changes 2.1, 2.2, and 2.3 as iterative.
REMEMBER:

- Use the guidelines and dashboard to inform the process for data collection and measurement;
- Start thinking at the beginning of ways to eliminate waste by considering the use of technology to monitor both clinical and business components; and
- To the extent to which strategy, resources, and priorities for improvement are aligned, transformation is more sustainable.

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>TOOLS</th>
</tr>
</thead>
</table>
| Build database and implement reminder system. | Chronic Disease Registries: A Product Review (online) 24  
Chronic Disease Electronic Management System (online) 25 |
| Focus leadership attention on improvement by building business and clinical improvement capability. | Executive Review of Improvement Projects (white paper) 26 |
| Use monthly reports to track progress toward goals. | Quantitative Diabetes Monthly Report Template (worksheet) 27  
Narrative Monthly Report Template (worksheet) 28 |
PHASE 3
Redesign Care and Business Systems
KEY CHANGE 3.1
Organize your care team

Team care is at the heart of improvement and presents one of the biggest opportunities to improve practice efficiency. There are four key goals in rethinking primary care teams:

- **ENSURE** all of the needs are met in caring for the chronically ill;
- **USE** the least expensive & best trained staff to perform each task;
- **MAXIMIZE** patient and staff satisfaction and retention; and
- **STANDARDIZE** care, improving both quality and efficiency.

To achieve team-based care, an organization needs strong leaders willing to break down professional silos and clinicians willing to delegate tasks and assign roles and responsibilities for patient care to others on the team. Every staff person must be involved in the team and perceive their duties as improving the patient’s experience of care.

Tom Bodenheimer, M.D., notes that physicians often try to perform all the clinical and self-management support functions necessary for effective patient care but are unable to do so as the burden of chronic illness increases. Bodenheimer emphasizes the need to delegate work to all staff, clinical and nonclinical. Nonphysician staff are more likely to adhere to protocols than physicians and therefore should be asked to engage in more of those care processes. Increasing staff involvement in patient care and creating a more cohesive care team increases both patient and team satisfaction, improving patient and employee retention.

One of the more efficient ways to begin developing a team is to:

- **MAP** out the existing care process for a specific clinical change (e.g. annual foot exams for patients with diabetes);
- **DETERMINE** which tasks aren’t being completed or can be moved from “swamped” personnel to those more appropriate for the task; and
- **TEST** how the new process works with the next patient scheduled.

Team members should be trained as needed. In addition, regular meetings are critical to solidify the team. These can be early morning huddles or scheduled time during the week to review cases, evaluate outcomes of ideas being tested, and modify roles and responsibilities.
FINANCE TRACKS

**TRACK 2** All finance tracks will want to organize the care team for efficiency, but track 2 will want to ensure that every visit has a physician involved.

**TRACK 3** Track 3 can further optimize efficiency by using ancillary staff to conduct prework.

**HINT:** *Standing orders can empower medical assistants and other ancillary staff to ensure that appropriate tests are conducted and available before a planned visit.*

### ACTIONS

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<td>Acquaint yourself with the concept of optimizing the care team.</td>
<td>High functioning clinical teams are extremely efficient (presentation) 29</td>
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<tr>
<td>Decide where to start.</td>
<td>Project Planning Form (worksheet) 30</td>
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<tr>
<td>Based on the key areas for improvement identified above, use process mapping to understand how care is delivered.</td>
<td>Primary Care Practice High Level Flowchart (worksheet) 31</td>
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<td>Clearly assign roles and responsibilities to staff based on their capacities and licensure.</td>
<td>Converting Guidelines to Practice (guide) 32</td>
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<td>Use PDSA cycles to generate and implement ideas on improved flow.</td>
<td>Plan Do Study Act Worksheet 33</td>
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<td>Conduct cross-training for staff where necessary/appropriate.</td>
<td>Plan Do Study Act Self-Management Support Example 34</td>
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<td>Evaluate team function.</td>
<td>Cross Train Staff (guide) 35</td>
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<td>Team Effectiveness Exercise (survey) 36</td>
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ADDITIONAL RESOURCES

- Improving Primary Care by Thomas Bodenheimer and Kevin Grumbach
  Chapter 9: Health Care Teams in Primary Care.

- Online training on improvement teams is available at www.improvementskills.org.
KEY CHANGE 3.2
Clearly define patient panels

Understanding your patient population is essential. If your practice does not have all patients paneled in some kind of electronic system, this will be your next major task. Creating patient panels helps to establish a linkage between a specific provider and his or her patients, a necessary prerequisite for quality measurement and improvement and many pay-for-performance programs. In addition, it enables the practice to assess the balance between patient demand and capacity.

Patient panels can help capture efficiency gains, especially if supply and demand are not properly matched. For example, once you can identify all your patients, you can begin to look at how the practice operates on a daily, weekly, and monthly basis. Knowing when you are likely to have heavy loads of chronically ill patients or walk-ins allows you to schedule for these peak times.

REMEMBER:

- Some practices already have this in hand, but if not, panel assignment is an essential first step.
- Practices overwhelmed by demand should consider strategies for aligning supply and demand, first by maximally using the existing team. If this is insufficient, ensuring that all providers have reasonable panels by adding additional clinical staff may be indicated.
- As you match patients and providers, ensure that you have up-to-date patient contact information. This will make it easier to contact patients for planned care visits described in key change 3.4 below.

**ACTIONS**

Optimize the care team by assigning a panel of patients for each provider and manage panel size and scope of practice.

Assess supply and demand to further optimize your team and ensure appropriate panel sizes.

**TOOLS**

Panels and Panel Equity (guide) 37

Practice Supply Worksheet 38

Daily Demand (guide) 39
KEY CHANGE 3.3
Create infrastructure to support patients at every visit

The ultimate goal of care that follows the Chronic Care Model is for every interaction between the patient and the medical team to be productive. Whether the visit is acute or planned, the care for every patient needs to change if we hope to improve health outcomes. Practices can start by treating the next patient that comes through their door as a partner for whom the clinic is organized to support. Some elements of Chronic Care Model-based care that should be present at every visit - planned or acute - should be:

- A deliberate focus on understanding and meeting patients’ needs, including taking into account their treatment priorities. This can be accomplished through the creation and integration of a care plan.

- An explicit effort to enhance patient’s health literacy. This can be accomplished using teach-back techniques to ensure that patients understand what you have told them.

- A perspective that any single interaction with a patient is part of an ongoing set of productive interactions where all of the patient’s needs are being met. This can be accomplished by using each visit as an opportunity to engage the patient around the full array of medical needs including multimorbidities and depression, encouraging them to return for a planned visit when time is short.

FINANCE TRACKS

All three financial tracks benefit from productive patient - provider interactions. This interaction is, after all, the source of all value in the health care system. Practices that ensure that patients truly understand their medication regimen, for example, greatly reduce errors and the resulting rework and poor outcomes associated with them.

When providers manage the total breadth of their patient’s needs, rather than creating more work, efficiencies can be gained.

**TRACK 3** Specifically, good integration of depression screening and management can directly increase revenues for track 3 practices, while dramatically freeing up time for primary care providers.
Good mental health management can ensure that “15-minute visits don’t turn into disorganized 45-minute visits,” (Ann Lewis, CEO CareSouth Carolina, Curing the System May 2002). Such practices can dramatically improve efficiency for all three tracks. The CareSouth Carolina Story in the “Stories From The Field” section provides more details about their mental health work. In addition, the integration of case management activities into each visit increases the complexity of visits, increasing reimbursement opportunities.

## ACTIONS

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<tr>
<td>Create a patient care plan that captures the needs of the whole patient.</td>
<td>Shared Care Plan (patient material) [40]</td>
</tr>
<tr>
<td>Reduce the health literacy demands made on patients.</td>
<td>Health Literacy and Patient Safety: Manual for Clinicians (online) [41] see pages 18-40</td>
</tr>
<tr>
<td>Utilize depression screening and care management to engage the whole patient.</td>
<td>Depression Management Tool Kit [43] see Appendix I, p. 17 (online) Spanish PHQ-9 (online) [44]</td>
</tr>
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</table>

## ADDITIONAL RESOURCES

- Visit [www.patientpowered.org](http://www.patientpowered.org) for more information about a shared care plan, including an electronic version that can be shared via the Web.
- The Center for Health Care Strategies has put together a set of fact sheets on health literacy that you may find interesting. They are available at [www.chcs.org](http://www.chcs.org).
- In addition to their Health Literacy manual, the American Medical Association has a number of other good health literacy tools, including a video available on their Web site [www.ama-assn.org](http://www.ama-assn.org).
Now that you have some of the fundamental building blocks of Chronic Care Model-based care in place, you are ready to try delivering planned care. A planned visit is an interaction with a patient designed and organized to ensure that the care is consistent with guidelines. Prenatal and well-child visits are examples already in use. Planned visits are proactive, not patient initiated.

Many health care providers believe themselves to already be doing “planned” visits. They note that their patients with chronic conditions come back at defined intervals. Upon closer inspection, however, these visits may look a lot like acute care. The provider might lack necessary information about the patient’s care needs; provider and patient might have different expectations for the visit; and staff may not be fully used to help with the organization of the visit and delivery of care. These “check-back” visits, while scheduled in advance, are often not efficient or productive for the provider and patient.

FINANCE TRACKS

Finance tracks need to look closely at how proactive clinical care can improve business practices. For example, while a team member is ensuring that labs and screenings are up to date, they or others can verify coverage or eligibility for supplemental programs.

**TRACK 2  TRACK 3** For fee-for-service tracks 2 and 3 with onsite labs, ensuring that all patients receive the recommended number of tests can dramatically increase revenue. The Mercy Clinic and the Point of Care A1c Testing stories in the “Stories from the Field” section demonstrate how real clinics used this concept to increase revenue.

In addition, the more complex and comprehensive nature of planned care visits enables sites to qualify for more robust evaluation and management (E&M) codes when they integrate the educational and counseling elements of the Chronic Care Model into practice. The Greenfield Clinic story illuminates this point.

Finally, once you have worked out how your team can best deliver planned care to individual patients, consider including group visits as part of your practice. Group visits benefit patients clinically and can benefit your center financially.
**TRACK 2** **TRACK 3** Fee-for-service tracks 2 and 3 can benefit by including a medical exam component and billing for each patient in the group.

**TRACK 1** Track 1 can use nurses to conduct group visits as an alternative to phone or individual office consultations.

**ADDITIONAL IDEAS TO HELP MAKE EFFICIENT PLANNED CARE A REALITY**
- Use registry and guidelines as the informational basis for your planned care visit.
- Integrate case management to improve efficiency and patient outcomes.
- Fully use the team you developed as part of key change 3.1.

### ACTIONS

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<td>Use planned interactions to support evidence-based care for individuals.</td>
<td>Organizing the Planned Visit (guide) 45</td>
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<td>System Changes and Interventions: Planned Care (presentation) 46</td>
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<tr>
<td>Conduct visit preparation to ensure labs and screenings are up to date, &amp; referral/specialty care information is available.</td>
<td>Diabetes Standing Orders (worksheet) 47</td>
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<td>Patient priorities are elicited &amp; available.</td>
<td>Open Access - Open Office (patient material) 48</td>
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<td>Shared Care Plan (patient material) 49 see page 3</td>
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<td>Patient eligibility &amp; insurance information is up-to-date.</td>
<td>Front Desk Collections Flow Chart (guide) 50</td>
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<td>Teams have all the information they need at the time of the visit.</td>
<td>Huddle Sheet (worksheet) 51</td>
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<tr>
<td>Ensure that this more complex visit is being appropriately reimbursed.</td>
<td>Getting Paid: Maximizing Collections (presentation)\textsuperscript{52}</td>
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<tr>
<td>Try group visits.</td>
<td>Group Visit Starter Kit (guide)\textsuperscript{53}</td>
</tr>
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<td></td>
<td>Group Visit Financials (worksheet)\textsuperscript{54}</td>
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**ADDITIONAL RESOURCES**

- *Planned Care* (streaming media), available at [www.improvingchroniccare.org](http://www.improvingchroniccare.org). This video was produced by Improving Chronic Illness Care and demonstrates how planned care occurs within the context of a busy office.
To cope with their illness, patients living with chronic conditions must carry out complex treatment regimens, adjust everyday life tasks to accommodate their physical capacities, and deal with emotional responses to illness and loss. Because patients and families carry out much of the management of chronic illness, collaborative self-management support with patients is key to any effort to improve health outcomes. This effort can be seen both as a set of techniques useful in partnering with patients and as a cultural shift in the delivery of health care that places patients’ goals, beliefs, preferences, and capacities at the center of care.

Creating informed, activated patients is particularly helpful when those patients have more than one chronic condition. When patients are informed and participate as partners in their care, they can provide valuable information to help their clinical team prioritize issues. Knowing patient preferences enables teams to have a realistic conversation about what self-care actions may best meet the patient’s multiple needs. Other strategies the clinical teams can use to effectively partner with multimorbid patients include:

- Helping all patients to engage in general preventive care, such as exercising, eating well, and quitting smoking.
- Seeking out clinical “two-fers,” where synergistically managing related chronic diseases results in positive outcomes for both, particularly in managing depression.

Providing necessary information, responding to patients’ goals, and problem solving with patients to support continued improvement are central to self-management and can be part of every interaction between patients and the care team.

**FINANCE TRACKS**

**TRACK 1** Self-management is important for patient improvement in all three financial tracks. For practices in track 1, good support for self-management support can keep patients healthy, reducing their demand for frequent, low-intensity visits. Self-management support in conjunction with planned care also reduces costly emergency department visits, a key financial lever in integrated delivery networks.

**TRACK 2** and **TRACK 3** Track 2 and 3 practices benefit because when patients do come in for a planned visit, that visit is often more complex.
For those in track 3, self-management support by professionals such as Licensed Clinical Social Workers or Certified Diabetes Educators may be reimbursable.

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<th>ACTIONS</th>
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<tr>
<td>Empower patients to be responsible for their health.</td>
<td>Helping Patients Manage their Chronic Conditions (online)</td>
</tr>
<tr>
<td>Use the care team to work with patients collaboratively to:</td>
<td>Action Plan (guide)</td>
</tr>
<tr>
<td>• Create action plans.</td>
<td>Agenda Setting Tool: Bubble Diagram (patient material)</td>
</tr>
<tr>
<td>• Follow up regularly to problem solve barriers and set new goals.</td>
<td>World Education (online)</td>
</tr>
<tr>
<td>• Share easy-to-read, culturally and linguistically relevant information with patients.</td>
<td>Diabetes Initiative (online)</td>
</tr>
<tr>
<td>Explore resources in the community to support patient self-management.</td>
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</table>

**ADDITIONAL RESOURCES**

- The “5 A's” Behavior Change Model, a useful framework for organizing the infrastructure of self-management support. Check out the model by Glasgow et al and Whitlock et al. | 50 |
- New Health Partnerships, [www.newhealthpartnerships.org](http://www.newhealthpartnerships.org), for those interested in self-management support. They are also developing a business case for self-management support.
- *Improving Primary Care* by Thomas Bodenheimer Chapter 5: Self-Management Support for People With Chronic Illness.
PHASE 4
Continuously Improve Performance and Sustain Changes
KEY CHANGE 4.1
Reexamine your outcomes and make adjustments for continued improvement

Real practice improvement means being committed to change, and that means planning for challenges even when you’re succeeding. Generally, practices see great improvement in the first months of practice redesign, and they are tremendously motivated by those improvements. But inevitably those improvements start to plateau. The key is not allowing setbacks to halt your efforts. Continue to go back and evaluate your clinical, financial, and operational goals and strive for improvement. This constant reevaluation requires organizational commitment to ongoing improvement, but it is the only way sustainable change can be realized. Remember, improvement is a journey, not a destination.

There is a whole community of safety net practices who have gone through what you’re going through. Look for ways to connect with those groups, and learn what they did to sustain their improvement efforts.

In addition, we’ve provided a number of tools below that can help to keep you motivated and focused on improvement. One such tool is the Change Flow Chart. This tool helps practices reflect on their results and then prompts them with specific questions to continue their improvement journey. The rest of the tools can be used within the context of the Change Flow Chart to keep focused on long-term financial sustainability and clinical improvements.

<table>
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<td>Overcome barriers to improvement.</td>
<td>Change Flow Chart (guide) 61</td>
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<tr>
<td>Apply process mapping methodology to new processes to ensure efficiency and sustainability.</td>
<td>Primary Care Practice High Level Flowchart (worksheet) 62</td>
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<tr>
<td>Continue to optimize clinical interactions.</td>
<td>Plan Do Study Act Worksheet 63</td>
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<tr>
<td>Work with community resources to ensure access to services that may not be available in house.</td>
<td>How Hot Are Your Improvement Action Plans PDSAs (worksheet) 64</td>
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<td>Community (presentation) 65</td>
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KEY CHANGE 4.2
Capture incentives based on quality of care

Evidence remains mixed about the ability of pay-for-performance programs to change health outcomes by themselves. However, incentives can serve an important motivating and sustaining function when used as part of a robust quality improvement program.

Many health plans and other organizations are working on quality incentives, so maximize your revenue by taking advantage of those certifications, grants, and programs that tie into your Chronic Care Model work.

In addition to responding to pay-for-performance programs from payers, staff-model organizations also have an opportunity to structure their pay packages to create quality incentives for their staff. A few safety net provider groups have tried restructuring benefits to incentivize quality improvement. Learning from their experience could be helpful for sites interested in pursuing this strategy. Also, take a look at the Agency for Healthcare Research and Quality’s Pay-for-Performance guide to learn what factors health plans take into account when designing their pay-for-performance programs.

**ACTIONS**

| Pursue opportunities for enhanced reimbursement through grant funding as well as your payer’s pay-for-performance and accreditation programs. |
| Contact leaders in the field who have successfully leveraged these opportunities and learn from them. |
| Learn what purchasers consider when developing a pay for performance program. |

**TOOLS**

| Pay For Performance: An Introduction (guide) 66 |
| See “Stories from the Field” section |
| Pay for Performance: A Decision Guide for Purchasers (guide) 67 |

**ADDITIONAL RESOURCES.**

- The National Association of Community Health Centers, [www.nachc.org](http://www.nachc.org), conducts numerous trainings on grant writing and billing and coding, and they can connect you with a large network of other community health centers involved in quality improvement work.
ADVANCED TOPICS
Tackle Operational Barriers to Improved Patient Care
## Advanced Topics

Some sites find that their quality improvement efforts are stymied by broken operational systems. For example, planned care visits are worthwhile only when patients can secure an appointment with their providers in a reasonable amount of time. Many sites have found that addressing core operational issues, such as access to care, can facilitate better patient care. But, redesigning office practices can be a major undertaking. For those sites interested in going beyond the clinical and business changes outlined in this tool kit, these advanced topics provide some basic resources to help get started.

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<td>Reduce patient cycle time.</td>
<td>The CAHPS Improvement Guide 68 see page 68 &amp; 69</td>
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<tr>
<td>Increase access to care (Advanced Access).</td>
<td>The CAHPS Improvement Guide 69 see page 61-67</td>
</tr>
<tr>
<td>Explore other mechanisms for improving health center finances.</td>
<td>Redesign and Finance Change Package (guide) 70</td>
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STORIES FROM THE FIELD
GreenField Health, Chuck Kilo, MD

GreenField Health is an independent, six-physician primary care group in Portland, Oregon. GreenField Health also provides teaching and consulting services focused on all aspects of ambulatory care performance improvement. We started clinical services in 2001 by creating a fully paperless clinic that was established on the principles of the Chronic Care Model. We continue this focus today as we’re moving to establish our second clinic and to drive continuous performance improvement in our clinical work. GreenField Health has a fully integrated electronic health record with a robust registry available to all clinicians. Our electronic health record and our registry provide (1) patient-specific reminders of needed care at the time of visits, (2) lists of patients due for services, and (3) aggregate population-based performance data. Our secure messaging system allow patients to connect to us electronically to provide updates on their care such as glucose levels in diabetic patients or weights in those with congestive heart failure. Secure messaging allows us to give patients rapid coaching and support for self-management, as well as timely lab results with instructions.

SPECIFIC BENEFITS OF THE CHRONIC CARE MODEL TO OUR CLINIC INCLUDE:

- **POSITIONING OUR GROUP** to excel at pay-for-performance, which is on the horizon in our state, Oregon.

- **ALLOWING US TO BILL** evaluation and management (E&M) code 99214 for nearly all of our visits for those with chronic conditions.

- Supporting the **ABILITY TO PROVIDE** group visits at an E&M code 99213 or 99214.

- **FACILITATING PAYMENTS** of $30 to 40 per e-visit, so vital in our efforts to engage patients in relationship-based care, which we also worked with our insurers to establish.

- **ENABLING GRANT FUNDING** of more than $75,000 in 2007 as we help others in our State to implement the Chronic Care Model.

Point-of-Care Hemoglobin A1c Testing at the Medical College of Wisconsin, Jaishree Hariharan, MD

At the Medical College of Wisconsin (MCW), the Primary Care Clinic partnered with the endocrinologists to test a reliable, easy, and effective point-of-care A1c test. Point-of-care A1c testing allows the physician or nurse practitioner to administer and receive results of the test at the time of the appointment — facilitating face-to-face information sharing, immediate decision making with patients, and better glycemic control.

MCW tested the DCA 2000, which requires a finger stick, analyses the sample, and provides the results in 6 minutes. After MCW tested and confirmed the reliability of the DCA 2000 in fall
2005, one medical assistant was trained on its use. It was piloted with one physician starting in November of 2005. By April 2006, all medical assistants were trained on its use and it spread to all the clinic physicians. The standardized lab testing was also available.

A total of 330 tests were performed over one year at the Internal Medicine Clinic in MCW. Approximately half the tests were ordered by the resident physician during their clinic sessions. The clinic has more than 800 diabetic patients. The impact of the point-of-care testing includes better diabetes control, improved patient care, and financial benefits. Specifically, the test:

- **ALLOWS FOR IMMEDIATE** decision making at the time of the visit.
- **ENABLES PHYSICIAN** to show patients a snapshot of their control over time, to help engage them in self-management.
- **BENEFITS RESIDENT PHYSICIANS** who are there only part time and decreases their paperwork.
- **ADDS VALUE** for patients who cannot obtain standardized laboratory tests due to financial or transportation issues. The test is much more convenient and provides immediate answers.
- **ENHANCES FINANCES.** The Centers for Medicare and Medicaid Services (CMS) increased payment for point-of-care A1c testing in 2007.

**CareSouth Carolina Integration of Behavioral Health Services, Liz Kershner, MSW, LISW**

Fifteen years ago, CareSouth Carolina ended the fragmentation between medical and mental health services by hiring clinical social workers to assist medical providers with the care and treatment of primary care patients with mental health needs.

Through our initial participation in the Health Disparities Collaborative for depression and implementation of the Chronic Care Model in 2000, our care teams:

- **IMPLEMENTED** evidence-based guidelines for the treatment of depression in primary care.
- **USED** the Patient Electronic Care System (PECS), a clinical information system provided by the Bureau of Primary Health Care, to track the depression outcomes of all patients.
- **SCREENED** all new adult and adolescent patients for depression with the PHQ-9, an evidenced-based, self-administered depression screening tool designed for use in primary care. All patients are also assessed for depression at their annual visits.
• **MONITORED** patients diagnosed with depression using depression care management guidelines. The PHQ-9 is the tool used at CareSouth Carolina to track outcomes and response to treatment.

**QUALITY OF CARE**

Currently, 47 percent of all CareSouth Carolina patients with major depression are achieving at least a 50 percent improvement in their depression outcomes within 4 months of treatment, as tracked by PHQ-9 score updates.

An additional benefit of onsite integration is the ability of the primary care provider to introduce the patient in need of mental health care to the behavioral health care provider by way of the “warm handoff.” This promotes trust between patients and providers and coordinated care plans between providers.

**FINANCIAL IMPACT**

Primary care providers also appreciate the immediate availability of onsite behavioral health providers to assist with complex mental health cases, thus allowing them to maintain the quick pace of a primary care practice.

The clinical social workers at CareSouth Carolina have been credentialed with all major private insurance carriers as well as Medicaid and Medicare. Therefore, same-day reimbursement is possible for patients receiving both physical and mental health treatment at a CareSouth Carolina facility. The clinical social workers have also been added to local employee assistance programs. In addition, they provide mental health treatment in juvenile and long-term care facilities, which reimburse at least $65 per mental health session.

**Economic Impact of Chronic Care Model Implementation at Mercy Clinics, David Swieskowski, MD**

Mercy Clinics, a network of outpatient clinics in Des Moines, Iowa, began implementing a Chronic Care Model for diabetes care in two clinics in 2002. A disease registry was used to track all patients and a quarter-time care coach was identified in each clinic. In addition to improving the quality of care for diabetic and hypertensive patients, Mercy has also improved its financial position.

Because of prework done by the care coaches, use of standing orders, and use of a diabetes office visit form, providers were able to bill a higher level of service without requiring more provider time. An analysis of diabetes visit E&M coding for 2003 to 2005 showed that E&M
level 4 visits went from 35 percent to 74 percent of the billings. The impact was to increase the average net revenue from diabetes visits by $12.29.

In addition to the increased E&M coding revenue, Mercy Clinics is seeing other financial benefits from Chronic Care Model implementation:

- **INCREASED LAB REVENUE.** Systemwide urine microalbumin testing went from essentially 0 to 10,868 tests per year. The Medicare profit was $8 per test, yielding about $87,000 profit per year.

- **PROFITABLE GROUP VISITS.** Revenues exceeded expenses by a large margin.

- **REDUCED TRANSCRIPTION AND FILING COSTS.** The diabetes office visit form requires little or no dictation, saving physician time and transcription cost.

- **INCREASED REIMBURSEMENT FOR PATIENT EDUCATION.** Mercy negotiated a payment of $54 for patient education with their largest insurer.

- **PAY-FOR-PERFORMANCE BONUSES.** Mercy has completed the first year of a pay-for-performance project and has received the maximum payment for all 25 providers involved for a total of $353,000.

- **NEW GRANTS.** Mercy has received more than $170,000 in grant funding to further this initiative.

**Reduced Hospitalizations in the Univera System**

Univera’s initial foray into disease management using the Chronic Care Model began in 1999 with congestive heart failure, a condition responsible for a significant portion of overall health care costs in the United States. According to Peggy Calogero, R.N., Manager for Univera’s Chronic Illness Program, costs for congestive heart failure are increasing for a variety of reasons including lack of coordination in the delivery of care and wide variation in the application of care.

By the time Univera completed the Chronic Disease Collaborative, about 100 patients were participating in the program. Univera saw a reduction in hospital admission rates for heart failure. “Even with the increase in pharmacy costs, savings in hospitalization alone still created overall savings,” Calogero says.
APPENDIX A
The Evidence Base for the Chronic Care Model
History of the Chronic Care Model

The initial evidence upon which the Chronic Care Model was based came from evaluations of interventions to improve care. For example, the MacColl Institute participated in a Cochrane Collaboration review of interventions to improve diabetes care in primary care. This review demonstrated the need for the same integrated set of changes called for by the Chronic Care Model. A more recent meta-analysis by Tsai and colleagues confirms these earlier findings and extends them to other conditions.

Several healthcare organizations began adopting the Chronic Care Model around the turn of the 21st century either through participation in the Improving Chronic Illness Care (ICIC)-sponsored collaboratives or on their own. The second body of evidence about the effectiveness of the Chronic Care Model comes from observational evaluations of that experience. Several early chronic care collaboratives have been evaluated and generally document improvements. Investigators at the Center for Medicare and Medicaid Services (CMS) studied the quality of diabetes care in 134 managed Medicare organizations participating in a diabetes performance measurement program. Fleming and colleagues used an organizational assessment tool based on the Chronic Care Model to compare high- (top quartile) and low- (bottom quartile) performing organizations. They found that high-performing organizations were much more likely to organize care delivery in accordance with the Chronic Care Model. They then identified specific systemic features that characterized high-performing organizations and differentiated performance. These included computerized reminders, practitioner involvement on quality improvement teams, guidelines supported by academic detailing, formal self-management programs, and a registry.

Feifer and colleagues studied the relationship between Chronic Care Model implementation and clinical outcomes in nine community-based practices. They found a strong correlation between Chronic Care Model implementation and performance measures for diabetes and cardiovascular disease. Most recently, two randomized trials have tested interventions that explicitly used the Chronic Care Model to change primary care for asthma and diabetes. The Chronic Care Model-based intervention significantly improved asthma quality of life, and the diabetes intervention significantly improved glycemic and lipid control compared to usual care.

Learning from Experience: The Case for a Toolkit

Our experience and a growing body of evidence suggests that implementation of the Chronic Care Model needs to be part of a explicit program of quality improvement, supported by leadership and designed to facilitate learning between practices. In the past, the structure of these improvement efforts frequently has taken the form of Breakthrough Series Collaboratives, which bring together dozens of teams to learn from each other at periodic
learning sessions. They then return to their systems to test incremental improvements using Plan-Do-Study-Act cycles. The largest national collaborative effort was the landmark Health Disparities Collaboratives (HDC) program sponsored by the Health Resources and Services Administration (HRSA) beginning in 1998. In concert with the Institute for Healthcare Improvement, MacColl/ICIC conducted chronic care Breakthrough Series Collaboratives in diabetes, congestive heart failure, asthma, and depression that were attended by pilot community health centers (CHCs) selected by HRSA.

These early collaboratives demonstrated that the Chronic Care Model was a feasible and useful guide to practice redesign and led to measurable improvements in the quality of care. In addition, this experience led to two major observations. First, the collaborative structure, although effective as a learning tool, was expensive in terms of staff time and meeting costs. A search began for other, less lengthy and burdensome improvement methods that were still effective. The idea of a manual, or toolkit, first arose in the context of this work.

Second, many of the changes inspired by HDC participation did not sufficiently consider the efficiency and financial health of the participating CHCs. Many changes were made in ways that clearly were not going to be sustainable. To participate in the HDC, CHCs subsidized staff involvement in the collaborative and made new investments in information technology and staff. In addition, planned care often resulted in longer visits, more extensive counseling, or group visits for which reimbursement was often difficult to obtain. Huang and Chin evaluated an early diabetes HDC collaborative and found that implementation of the Chronic Care Model cost the CHC an additional $6.41 to $23.93 per patient. This represents a significant portion of a CHC budget. These observations convinced the leaders of the HDC that “a primary care practice is at risk if they simply add the planned care work to their existing systems without stepping back and reengineering their organization.”

The pressing need for change, the early evidence of the promise and the limitations of collaboratives, and the requirement to consider both clinical and financial changes all led to the recognition of the need for a coherent set of tools that practices could use. This toolkit is an attempt to fill that need.


1.1
Forming the Team (guide)


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Forming the Team

Including the right people on a process improvement team is critical to a successful improvement effort. Teams vary in size and composition. Each organization builds teams to suit its own needs.

First, review the aim.

Second, consider the system that relates to that aim: What processes will be affected by the improvement efforts?

Third, be sure that the team includes members familiar with all the different parts of the process — managers and administrators as well as those who work in the process, including physicians, pharmacists, nurses, and front-line workers.

Click here for more information and general tips on Setting Aims, Establishing Measures, Selecting Changes, Testing Changes, Implementing Changes, or Spreading Changes.

Examples of Effective Teams

Effective teams include members representing three different kinds of expertise within the organization: system leadership, technical expertise, and day-to-day leadership. There may be one or more individuals on the team with each kind of expertise, or one individual may have expertise in more than one area, but all three areas should be represented in order to drive improvement successfully.

System Leadership
Teams need someone with enough authority in the organization to institute a change that has been suggested and to overcome barriers that arise. The team’s system leader understands both the implications of the proposed change for various parts of the system and the more remote consequences such a change might trigger. It is important that this person have authority in all of the areas that are affected by the change. This person must have the authority to allocate the time and resources the team needs to achieve its aim.

Clinical Technical Expertise
A technical expert is someone who knows the subject intimately and who understands the processes of care. An expert on improvement methods can
provide additional technical support by helping the team determine what to measure, assisting in design of simple, effective measurement tools, and providing guidance on collection, interpretation, and display of data.

**Day-to-Day Leadership**
A day-to-day leader is the driver of the project, assuring that tests are implemented and overseeing data collection. It is important that this person understands not only the details of the system, but also the various effects of making change(s) in the system. This person also needs to be able to work effectively with the physician champion(s).

**Example 1: Improving Care in Office Practices**
Aim: We will improve care for all our patients with chronic disease by making improvements in our clinic that impact the six dimensions of quality, as outlined in the Institute of Medicine report, *Crossing the Quality Chasm: A New Health System for the 21st Century*.

**Team:**
Team Leader: ____, MD, Medical Director for primary care clinics  
Technical Expert: ____, MD, Physician at downtown clinic 
Day-to-Day Leader: ____, RN, Manager of downtown primary care clinic  
Additional Team Members: Patient educator, medical assistant, clerk/scheduler, laboratory manager, quality expert

**Example 2: Improving Patient Safety**
Aim: Reduce adverse drug events (ADEs) on all medical and surgical units by 75 percent within 11 months.

**Team:**
Team Leader: ____, MD, Chair, Pharmacy and Therapeutics Committee, Patient Safety Officer  
Technical Expertise: ____, RPh, Director, Clinical Pharmacist 
Day-to-Day Leadership: ____, RN, Manager, Medical/Surgical Nursing  
Additional Team Members: Risk Manager, Quality Improvement Specialist, Staff Nurse, Staff Education, and Information Technology

**Example 3: Improving Critical Care**
Aim: Redesign the leadership and care systems of our Medical Intensive Care Unit (MICU) in order to reduce harm and improve outcomes for patients.

**Team:**
Team Leader: ____, MD, Medical Director, Medical Intensive Care Unit (MICU)  
Technical Expertise: ____, MD, Intensivist  
Day-to-Day Leadership: ____, RN, MICU Manager  
Additional Team Members: Respiratory Therapy, Quality Improvement Specialist, Staff Nurse, Clinical Pharmacist, Clinical Nurse Specialist
**Example 4: Improving Flow**
Aim: Ensure that patients receive timely access to appropriate care in our hospital and move through the system efficiently.

**Emergency Department Team:**
Team Leader: Medical Director or Physician
Technical Expertise: Director or Nurse Manager
Day-to-Day Leadership: Front-line nurse
Two "continuity staff" with a cross-organizational view of flow, e.g., Operations Engineer or vice president with management responsibilities across departments/services, who will be assigned to this work over time

**Intensive Care Unit Team:**
Team Leader: Intensivist or Medical Director
Technical Expertise: Director or Nurse Manager
Day-to-Day Leadership: Front-line nurse
Two "continuity staff" with a cross-organizational view of flow, e.g., Operations Engineer or vice president with management responsibilities across departments/services, who will be assigned to this work over time

**Operating Room Team:**
Team Leader: Surgeon or Anesthesiologist
Technical Expertise: Director or Manager of Surgical Services
Day-to-Day Leadership: Operating Room (OR) Nurse (circulating or scrub nurse)
Surgery Technician
One "continuity staff" with a cross-organizational view of flow, e.g., Operations Engineer or vice president with management responsibilities across departments/services, who will be assigned to this work over time

Institute for Healthcare Improvement. “Forming the team.”
1.1
Seven Leadership Leverage Points (white paper)

Reinertsen JL, Bisognano M, Pugh MD. Seven Leadership Leverage Points for Organization-Level Improvement in Health Care.

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Seven Leadership Leverage Points
For Organization-Level Improvement in Health Care
100,000 Lives Campaign: We invite you to join a Campaign to make health care safer and more effective — to ensure that hospitals achieve the best possible outcomes for all patients. The Institute for Healthcare Improvement (IHI) and other organizations that share our mission are convinced that a remarkably few proven interventions, implemented on a wide enough scale, can avoid 100,000 deaths between January 2005 and July 2006, and every year thereafter. Complete details, including materials, contact information for experts, and web discussions, are available on the web at www.ihi.org/IHI/Programs/Campaign/.

We have developed IHI’s Innovation Series white papers to further our mission of improving the quality and value of health care. The ideas and findings in these white papers represent innovative work by organizations affiliated with IHI. Our white papers are designed to share with readers the problems IHI is working to address; the ideas, changes, and methods we are developing and testing to help organizations make breakthrough improvements; and early results where they exist.

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Seven Leadership Leverage Points
For Organization-Level Improvement in Health Care

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Context and Background

Many leaders of health care delivery systems want to achieve better performance. They are becoming painfully aware of defects in their own organizations and communities—needless deaths, suffering, delays, feelings of helplessness, waste, and inequities—and they have become quite skilled at achieving project-level reductions in these defects. But despite extensive efforts, in some cases over many years of work, we can point to relatively few examples where performance has dramatically improved beyond current benchmarks, across an entire organization or system of care, as measured by a powerful indicator of system-level quality such as mortality rate or cost per capita. Increasingly, it appears that health care CEOs and other leaders want to make these changes happen, but they don’t have a tried-and-true method by which to bring about system-level, raise-the-bar change.

In IHI’s work of supporting and encouraging leaders of innovative health systems, we have observed what we believe to be some important leverage points for leaders who want to achieve dramatic, system-level performance improvement. Together, these leverage points are offered as a sort of hypothesis, framed something like this: *If leaders are to bring about system-level performance improvement, they must channel attention to and take action regarding several, if not all, of these leverage points.* In other words, this set of leverage points is not offered as a tried-and-true method, but as a theory—one that we hope will be useful for individual leaders in planning their work and for us in organizing a support and learning system to share best leadership practices and results across organizations; and from which all of us can learn about what works, and what doesn’t, in bringing about large-system change in health care.

The foundation for our hypothesis comes from at least three different sources:

1. **Complex System Theory:** Complex adaptive systems such as health care organizations and communities cannot be specified and managed in detail. It is highly likely that small changes in certain critical aspects of these systems might bring about surprising and unpredictable amounts of improvement or deterioration in overall system performance. If leaders could choose the right system attributes (“leverage points”) and make small, perhaps difficult, but important changes, very large performance change might result.

2. **Observed Performance of Leaders and Health Systems:** We have been able to watch the actions of leaders in organizations participating in IHI’s Pursuing Perfection and IMPACT programs and other health care systems, and simultaneously to observe the performance of those systems. Where system-level change has occurred, we have attempted to infer from these sources what some of the leadership leverage points for improvement might have been. For example, we have observed that system-level improvement does not occur without a declared aim to achieve it, and that how the aim is declared and adopted by leaders appears to be very important. These leverage points are based largely on qualitative data—more anecdotes and stories about the work of leaders than a solid research base. Nevertheless, these stories are powerful, and serve to support and help refine the theory, and define the agenda for further testing and study.
3. Hunches, Intuition, and Collective Experience: The authors come from a variety of backgrounds in health care and have tapped into our collective experience to postulate some of these leverage points — particularly those that surface as recurrent “difficult moments” for leaders. For example, it is our sense that the business case for quality is still tenuous for many health care organizations, and therefore that if the chief financial officer (CFO) were somehow to become a champion for system-level improvement in quality, dramatic improvement would become much more likely.

It might be helpful to note what these leverage points are not:

- The leverage points are not intended to be a comprehensive framework for the leadership of organizational transformation. That is a much broader subject, addressed by approaches such as The Baldrige National Quality Program.

- The leverage points are not a substitute for a coherent quality method such as the Toyota Production System or the Model for Improvement. In fact, the organizations in which the leverage points would be applied are assumed to have adopted a coherent quality framework. The question addressed by the leverage points is, “How can leaders lead within that framework (whatever it is) to get measured system-level results?”

Finally, we would emphasize that we have framed these as leadership leverage points. In other words, we hypothesize that these are the particular responsibility of the senior leaders of organizations to address effectively in order to bring about system-level change.

This paper has three sections:

1. The first section briefly explains the Seven Leadership Leverage Points.

2. The second section applies the Seven Leadership Leverage Points framework to a current leadership challenge for executives of the more than 1,800 hospitals that have signed on to IHI’s 100,000 Lives Campaign: how to achieve a dramatic improvement, in a short time, in the biggest of all system-level measures — mortality rate.

3. The third section (Appendix A) is a self-assessment tool designed specifically for leaders of hospitals participating in the 100,000 Lives Campaign, but which could easily be adapted for any type of system-level performance improvement.
Section One: Seven Leadership Leverage Points

Leverage Point One: Establish and Oversee System-Level Aims for Improvement at the Highest Board and Leadership Level

A broad quality aim is part of the mission statement of most health care organizations. But if leaders are to actually achieve breakthrough performance at the system level, we believe that they must do the following:

- Establish solid measures of system-level performance — e.g., hospital mortality rate, cost per adjusted admission, adverse drug events per 1,000 doses — that can be tracked monthly, if not more frequently;
- Establish aims for breakthrough improvement of those measures;
- Establish oversight of those aims at the highest levels of governance and leadership; and
- Commit personally to these aims and communicate them to all stakeholders in a way that engenders heartfelt commitment to achieving them.

Establishing system-level performance measures helps to answer the questions, “What are we trying to achieve, and how are we doing at it?” Sometimes referred to as “The Big Dots” (a reference to the visual display of critical data points), the system-level measures collectively define what is ultimately important to the stakeholders of the organization.

Leverage Point Two: Align System Measures, Strategy, and Projects in a Leadership Learning System

Organizational strategy should be linked to moving the performance measures described in Leverage Point One. The traditional focus of strategic planning in health care has been on growth, financial planning, and service planning, often creating a disconnect between those projects which leaders view as strategic, and quality improvement work which is viewed as important, but not necessarily strategic. As a result, many organizations tend to approach quality on a project-by-project basis without making a clear connection between projects and the overall strategic aims or performance metrics of the organization. Alignment is created when there are clear and explicit linkages between performance measures, strategies, improvement work, and daily work.

To this end, an important role of leaders is to organize the system of improvement work in such a way that all who work in the system know their part, and how it fits into the overall system-level aim. To do this well, leaders must formulate a “Theory of the Strategy” for achieving the aim — that is, a prediction of what will happen if a specific plan is carried out successfully. For example, if the aim is to reduce Hospital Standardized Mortality Rate — mortality rates appropriately adjusted for multiple variables such as population characteristics and diagnoses — from a current level of 129...
to a target level of 85 within two years, then a credible, quantitatively sufficient plan to achieve that aim must be framed, and translated into project work and other actions for leaders at every level throughout the system. (Telling people to “go out and do two quality projects in each department” is unlikely to achieve this system-level aim.) Moreover, leaders must monitor progress monthly against the aim and revise their Theory of the Strategy if they are not moving far enough, fast enough.

**Leverage Point Three: Channel Leadership Attention to System-Level Improvement**

The currency of leadership is attention. To achieve system-level aims, leaders must actually pay attention to them. All potential resources for channeling leadership attention, whether formal or informal, should be connected to the aim: personal calendars, meeting agendas, project team reviews, executive performance feedback and compensation systems, hiring and promotional practices, membership by patients in design teams and committees. In other words, the signals sent both by the “body language” of individual leaders and by the organization’s leadership systems must change, if leaders are to expect system-level results to change. Note: One of the most powerful known methods for channeling attention *inside* your organization is to become transparent about your quality performance *outside* your organization, so some leadership “channel attention” work must be done outside the boundaries of your system.

**Leverage Point Four: Get the Right Team on the Bus**

The most common reason for failure of large systems to change is the failure of the senior leadership team to function as an effective team, with the appropriate balance of skills, healthy relationships, and deep personal commitment to achievement of the goal. Achieving a fundamentally different level of performance may be possible with the current team, or it may not be. Getting this difficult judgment correct, and acting on it, is a critical task for the CEO, and is therefore a key leverage point for system-level performance improvement. This requirement for getting the team, and the teamwork, right flows throughout the organization. If it isn't right at the top of the organization, it tends not to be right anywhere else.

This is more than a matter of getting the appropriate internal staff on the team. An equally critical aspect of this leverage point is to get patients and family members onto the teams — from the executive suite on to the clinical microsystem (the small, interdependent groups of people who work together regularly to provide care for specific groups of patients) and improvement project teams. We simply must make it a routine matter to bring patients’ ideas, perspectives, and insights into the room in which we are redesigning their care.
Leverage Point Five: Make the Chief Financial Officer a Quality Champion

One particular member of the senior executive team stands out, in our view, as a critical “leverage point” for large system change: the CFO. The connection between quality improvement and business performance is weakly made in most health care organizations. Traditionally, the successful health care CFO is a master of the revenue stream, able to maximize contracts and payment systems. Cost reduction efforts are generally in reaction to external changes in the market or payment systems and are mostly one-time events focused on reducing the cost of labor, supplies, and vendor contracts. There is little history in health care of the CFO leading a systematic focus on improving patient care and support processes with an aim of reducing per-unit operating cost. In other industries, CFOs appear to spend proportionately more of their time focused internally on the reduction of waste and the improvement of core operating processes. If CFOs were to become strong drivers of quality-based elimination of waste, and if their commitment were translated deeply into the budgeting, capital investment, and innovation/learning systems of an organization, we believe that health care organizations would be far more likely to achieve dramatic improvement in system-level measures of both financial and quality performance.

Leverage Point Six: Engage Physicians

This leverage point requires that leaders reframe the problem. We commonly speak of this challenge in terms of “engaging the physicians in the quality work of the organization,” whereas it might well be a far more powerful leverage point if we thought of it as “engage our organizations in the quality work of physicians.”

Clearly, all professionals need to be engaged, if leaders are to succeed. So why single out physicians? This leverage point arises from the reality that whereas physicians by themselves cannot bring about system-level performance improvement, they are in a powerful position to stop it from moving forward, and therefore their engagement is critical. Simply stated, leaders are not likely to achieve system-level improvement without the enthusiasm, knowledge, cultural clout, and personal leadership of physicians.

How might health system leaders better engage physicians in the effort to achieve measured system-level improvement? The specific answers depend on local structures, processes, and cultural patterns of behavior, but are likely to include elements such as the following:

- **Build trust:** Say what you do, and do what you say, consistently over time.
- **Share power:** Equip physicians to lead, and let them do so.
- **Reframe the “compact” with physicians in a way that reinforces the cultural values necessary for success.**
• Hold discipline: Keep the work of physicians evidence-based and data-driven.

• Avoid “monovoxoplegia,” or “paralysis by one loud voice.” This requires courage, backed by evidence and data and bolstered by the moral case for improvement. Courage of this sort is beautifully illustrated by Donna Isgett at McLeod Regional Medical Center, and the question she now asks physicians when they balk at using evidence-based practices: “Are you saying that you value your individual autonomy more than you value your patients’ outcomes?”

Leverage Point Seven: Build Improvement Capability

There is no substitute for knowledge. If superb projects are to spring up throughout an organization, leaders must devote the resources to establishing capable leaders of improvement everywhere. And if successful projects are to scale, spread, and change the performance of the entire system, then leaders must build a system of leaders capable of rapidly recognizing, translating, and locally implementing change concepts and improved designs. The list of capabilities required of senior leaders is long, but includes at minimum the ability to know, use, and teach the following:

• The Model for Improvement

• A coherent improvement strategy such as Toyota Production System

• Concepts and practices of High-Reliability Organizations

• Sophisticated practices in Flow Management

• Concepts and practices in Scale and Spread

Note: This last leverage point provides a good illustration of the interdependence of leverage points. It would do little good to create lots of improvement capability (#7) without establishing an aim (#1) and a strategy by which to guide those who are now capable of doing improvement work (#2). Furthermore, it would be unlikely that capable improvers’ work would scale, spread, and sustain, without some understanding of the impact of that work on financial performance (#5).
Section Two:
Applying the Seven Leadership Leverage Points to the 100,000 Lives Campaign

Introduction

As of April 2005, more than 1,800 hospitals and other health care organizations have signed on to the Institute for Healthcare Improvement’s 100,000 Lives Campaign. Many of these institutions have started the hard work of implementing the six Campaign interventions, along with other strategies to reduce hospital deaths. But there are only 15 months left, and a lot of improvement remains to be done. Just as “Some is not a number, and soon is not a time,” signing on to the Campaign is not enough; hospitals must plan and execute specific, significant changes in care design and processes.

The early going in implementation has surfaced a number of significant challenges and triggered some early learning for the leadership teams of Campaign organizations. For example, the Campaign timetable requires leaders to plan and execute improvement at a larger scale and faster pace than ever before. And while hospitals are finding that being part of the national enthusiasm around the Campaign is helpful, enthusiasm alone is not enough to carry any individual hospital through the implementation of the necessary changes.

How might hospital executives map out their approach to achieving their part in the Campaign? The Seven Leadership Leverage Points provide a framework for leaders to answer these questions as they plan to save 121, or 392, or however many lives would represent their contribution to the overall goal of 100,000 fewer deaths in US hospitals.

Getting Started: Use this document to guide the development of your agenda for the 100,000 Lives Campaign

We suggest that the CEO and senior management team start by doing the following:

- Read and understand the 100,000 Lives Campaign documents that describe each of the Campaign interventions, and the evidence base and potential impact of implementing each intervention.

- Individually review this document and complete your own self-assessment (Appendix A).

- Meet and share their assessments and recommended actions.

- Gather the relevant data needed to establish appropriate aims.

- Adopt an aim and create a plan for the local application of the 100,000 Lives Campaign interventions.
It is important to complete this process very quickly (within two weeks), in order to get on with the implementation and steering of the plan. Leaders signal the pace, or tempo, of any major initiative by how they act during the first phases of the work. Your organization cannot work at *allegro* if the downbeat of your leadership baton is *largo*.

**Leverage Point One: Establish and Oversee System-Level Aims for Improvement at the Highest Board and Leadership Level**

*Has the leadership team developed an aim for the number of lives your hospital will save by June 14, 2006?*

Setting an aim for lives to be saved within any one hospital cannot be done with great precision. Nevertheless, it is important to set such an aim, because if your aim is a vague statement about “better,” without any specificity about “how good, by when,” you will have no idea about the scale and pace requirements that you must build into the plan. In other words, if you don’t go through the difficult task of setting an aim for “lives saved by June 14, 2006,” it’s highly likely that your improvement work will lack the urgency and the drive to spread that are necessary for success.

There are several interrelated approaches that you might use to come up with a reasonable target for your hospital. The point of this exercise is not to be exact; it is to wrestle with the question, “What reduction in deaths is possible in our hospital?” and to arrive quickly at a reasonable answer.

- The first approach depends on knowing your hospital standardized mortality rate, or HSMR. If your HSMR is 30 percent higher than the national norm, you probably should set a fairly aggressive goal for overall reduction in deaths — for example, to bring your results to the national norm, or 30 percent lower. On the other hand, if your HSMR is half the national average — for example, because you have already implemented four of the six Campaign interventions — there are probably some further reductions in mortality you could achieve, but it will take some careful planning to identify them, and your aim for improvement might be a 10 percent reduction in HSMR.

- The second approach doesn’t depend on knowing your specific HSMR, but uses your own hospital’s mortality statistics — total yearly deaths — to come up with a reasonable estimate of improvement. There are relatively few hospitals in the US for which a 20 percent reduction in gross mortality would be completely out of reach. So, if your hospital had 1,000 total deaths last year, you could set an aim of about 200 fewer deaths, and do some rough calculations to see if this makes sense with respect to the interventions you might envision. For example, if it is true that a Rapid Response Team alone can reduce gross mortality by 25 to 37 percent, then it seems reasonable (and quite conservative) to estimate a 10 percent reduction, or 100 saved lives, by implementing this key Campaign intervention. Your leadership team would then need to identify interventions that might have the power to save an additional 100 lives, if 200 were your aim.
• A third approach is even less precise, but might be useful. Simply tally the number of beds your hospital is staffing, and estimate that you could save one life for every four beds in the hospital. This is a gross approximation for all US hospitals and might not apply specifically to your situation, but some hospitals have found it helpful.

Probably the most valuable approach would be to use all three methods (HSMR, total deaths, total beds) to triangulate on an aim that makes sense in your context and that will guide the development of a strategy to achieve the aim.

Once you have the answers to these questions, you can come up with a fairly specific statement of aim such as, “At St. Elsewhere, our aim is that 190 fewer patients will die in hospital on an annualized basis by June 14, 2006.”

Leverage Point One posits that it is not enough for the executive leadership group to frame an aim. The Board must know about the aim, understand it, care about it, and oversee its achievement.

This is critical, because Board engagement is essential to building the will needed to drive change at this scale and pace. Consider taking the following steps:

1. Present the 100,000 Lives Campaign, and your proposed aim for number of lives saved, to the Board Quality Committee and ask for their adoption of the aim.

2. Put this item on the full Board’s agenda at the earliest possible date, and ask the Board to adopt the aim and oversee its achievement.

3. Establish and communicate clear accountability for the achievement of the aim, and build that accountability into the Board’s normal mechanisms of executive performance feedback.

4. Show the Board your proposed performance monitoring measurements and the timetable on which they will be displayed and reviewed by the Board.
Leverage Point Two: Align System Measures, Strategy, and Projects in a Leadership Learning System

Now that the hospital has a clear aim, and the leadership team is accountable for achieving it, have you adopted a strategy and a “100,000 Lives Campaign set-up” that you believe has the impact and scale and pace of implementation necessary to achieve the aim?

Note: It is important to consider this strategy something like a theory: “We predict that if we implement the following changes at these levels of depth, spread, and pace, we will achieve the aim.” You need to ask the same sorts of hard questions about this strategy that you would for any other serious endeavor, e.g., your plan to “improve from 70 days of cash on hand to 90 by the end of the year.”

One important question to ask is, “How big is the opportunity, in your hospital, for each intervention in the 100,000 Lives Campaign?” For example:

1. **What is your acute myocardial infarction (AMI) death rate?** How many actual deaths does that represent? What are your AMI Core Measures? If you have AMI death rates at or above the national norms (~11 percent) and your AMI Core Measures range from 80–99 percent (typical hospitals), then you might be able to expect approximately half the AMI deaths if you were to become an order of magnitude more reliable in the application of evidence-based medicine to AMI. For example, if 94 patients died of AMI in your hospital last year, you could predict perhaps 47 fewer deaths with full implementation of this Campaign intervention.

   Note: For this example, and for all the Campaign interventions, it is exceedingly difficult to come up with precise predictions of number of lives that might be saved in any one hospital. Nevertheless, it is important to have SOME idea of the power of each of these interventions. Without such estimates, how would you know whether your strategy (any set of interventions such as the Campaign interventions) has any likelihood of achieving your aim for reduced deaths?

2. **How many patients are currently being harmed by unreconciled medications in your hospital?**

   If you haven’t assessed this using the Global Trigger Tool,” it would be a good idea to do so, in order to establish a baseline against which to plan, as well as a monthly feedback loop on whether your work on medication reconciliation is producing results. For example, if you are experiencing typical levels of “unreconciled medications per 100 admissions,” then it is reasonable to expect substantial reduction in harm, and death rates, with widespread, effective introduction of medication reconciliation.
3. How many central line infections, ventilator-associated pneumonias (VAPs), and surgical site infections does your hospital expect to cause this year? Your current performance on these measures will help you decide how big your opportunity is for reduction in deaths. If you have implemented the ventilator bundle reliably in all your ICUs, and VAP is a rare event now in your hospital, then you can't expect major additional saving of lives in this arena, and should probably consider adding your own local intervention to those of the Campaign (e.g., the reliable application of beta-blockade to all eligible surgical patients).

4. As noted above, the single biggest opportunity in most hospitals is to implement Rapid Response Teams. The estimate of lives saved here is fairly simple: at least 10 percent of the total number of deaths at your baseline, and perhaps as high as 30 percent or more.

Once you've worked through (and perhaps added to!) the various Campaign interventions, you can get some indication of whether you've got enough power in your proposed changes to achieve your aim. You will now have a “theory of your strategy.”

Note: This raises a critical point that cannot be overemphasized. The 100,000 Lives Campaign is aimed at reducing deaths by a significant, specific number in a certain time period. The Campaign is NOT about the implementation of six specific interventions. These have simply been served up as a “prototype strategy to achieve the aim,” and each hospital must evaluate them, as well as other interventions that might be locally more important than the six Campaign interventions, and devise its own strategy to achieve reductions in mortality.

The senior leadership team also needs to ask some other important questions about the “setup” of the 100,000 Lives work. Again, these questions will sound very familiar, because executives address them regularly for financial plans, market share strategies, and other important business goals. Reducing needless deaths deserves the same rigorous thinking and planning. Examples of such questions include the following:

- Do we have the right leaders in place to take the strategy forward? Have we assigned accountability for each of the specific strategies among the executive team and clinical leadership?

- Working backward from June 14, 2006, do we understand the key milestones within the plan that will tell us whether we are on pace to achieve the aim?

- Looking at all the strategic aims we are working on (not just 100,000 Lives aims), has the management team prioritized and aligned the work so that we can devote the energy and attention necessary to the success of the 100,000 Lives Campaign?
One of the most important questions to answer is, “Is a measurement feedback loop in place that will inform us about progress against the overall aim, and on each Campaign intervention?” A good measurement system will provide reasonably credible data at frequent intervals, perhaps one or two measures for each of the six Campaign interventions (or whatever other interventions you decide are needed locally to achieve your aim), and an overall measure of mortality rate. Ideally, the interval between measurements would be weekly or, at worst, monthly. One cannot steer either the strategy or its implementation with quarterly or annual feedback loops. An example measurement set, displayed on the walls of the Board, Medical Executive Committee, and Senior Management Team meeting rooms, might include the following:

- A monthly run chart of gross mortality rate for the hospital, which can reasonably be converted into “lives saved.” If the baseline mortality rate is 2 percent, and it falls over time to 1.5 percent, and the baseline number of deaths was 1,000 per year, then the approximate number of deaths that didn’t occur at the new mortality rate is 250. Of course, the number of deaths can be counted directly as well. (Note: Should Hospital Standardized Mortality Rate data become available on a weekly or monthly basis, this will be a far more accurate measure of overall impact of your strategy. This sort of data is available to hospital leaders in the National Health Service in England, but is not yet available in the United States.)

- A weekly run chart of the number of “code calls” as an indicator of impact of the Rapid Response Team

- A monthly run chart of a composite score for AMI Core Measures, along with AMI mortality rate

- A monthly run chart of “Unreconciled Medications per 100 Admissions”

- A weekly or monthly run chart of composite score for each of the “bundles”: ventilator-associated pneumonia and central line infection

- As appropriate, for each of the bundles, a run chart or other indicator of rate of events (e.g., VAPs, central line infections)

- Similar measurements for any other interventions that your team has judged to be necessary in order to achieve your targeted reduction in deaths

The last question that you should answer has to do with establishing a learning and action “loop,” using the feedback that comes to the executive team through the measures that you are watching. The question is: “How will the executive team make the necessary changes in either strategy or execution, if the measures aren’t moving far enough, fast enough?”
This is the critical point at which three things come together: the overall aim for number of saved lives, the strategy to achieve this aim, and the measures that allow the management team to predict whether they will succeed on the current course or whether changes need to be made. For example, if the surgical site infection measurements show that the process is bogged down with low implementation of the insulin protocols, then the leadership team needs to diagnose and deal with the situation reasonably quickly. Similarly, if all six Campaign interventions are apparently being implemented across the organization with depth and pace, but the mortality rate isn't budging... then the leadership team might need to revise the strategy.

Leverage Point Three: Channel Leadership Attention to System-Level Improvement

If the currency of leadership is attention, then the Board, Medical Executive Committee (MEC), and executive agendas must give prominent placement to oversight of the 100,000 Lives results. The Board Quality Committee should review progress against the 100,000 Lives aims as a standing agenda item, preferably at the beginning of the agenda. Similarly, the full Board should hear a regular report from the Quality Committee, and the CEO, on the results. Remember that stories can channel attention in ways that run charts cannot, and so it might be a good idea to include a story of needless death in your hospital at each Board meeting. As one Board member said, “Maybe we should keep telling a fresh story each Board meeting until there isn’t one to tell.”

If your Board is watching closely, it’s likely that the executive and MEC teams will also be paying attention to the 100,000 Lives work. Review of the results, and of the ongoing issues in the depth, spread, and pace of implementation of your strategy, must be a standing and prominent agenda item on your key management meetings.

You also channel attention by the choices you make about leadership, and the resources (time, organization focus, energy, staff, etc.) that you free up to allow them to succeed. The key question here is, “Are great performers assigned to this effort and is it seen as an important part of their regular work, not an add-on?” This is part of a larger human resources/leadership development system, through which the organization channels attention by its promotion, hiring, and leadership appointment processes. 100,000 Lives Campaign leaders must ensure that the right signals are being sent by how they’ve set up the teams that must take these projects forward.

Similarly, you send powerful signals by how you use your own time. For example, have your personal calendars changed to allow executive reviews and walkrounds on 100,000 Lives project teams?
Each senior executive, and most especially the CEO, should schedule visits to the key 100,000 Lives intervention teams, and perform project reviews that send powerful signals about the importance of this work and your focus on results, not on endless activity reports. Informal walkrounds should also be part of your daily and weekly routine. These aren't aimless wanderings and chitchats. Both executive project reviews\textsuperscript{10} and more informal walkrounds\textsuperscript{11} have been described in some detail and the executive teams should review these papers to make sure that they not only do these activities, but also do them well. All senior executives, including physician leaders, should be included in executive walkrounds.

Finally, you should take the difficult step of becoming transparent about your performance measures, by distributing measures of progress on each 100,000 Lives project, and on the overall aim, widely throughout the organization and the community. Perhaps the single most powerful method by which leaders can channel attention is through adopting and implementing a policy of transparency in performance measures. It’s no mystery to your staff and patients that needless deaths and other mishaps occur in your organization. Similarly, the existence of central line or surgical site infections will not come as a surprise to anyone. What will surprise and engage your staff, your patients, and your community is if you display all your data on these subjects, not just the data you’d give to the marketing department to put on a billboard. The learning from organizations that have gone transparent about performance data, whether good, bad, or ugly, is that it has the following effects:

- Tends to drive a much faster pace of internal improvement
- Allows internal staff to feel respected and trusted by leaders
- Creates an atmosphere of open dialogue about real problems — necessary to get to solutions!
- Doesn’t drive patients away — they give you a lot of credit for being honest with them, and for your declared intentions to do something about issues such as hospital deaths.
**Leverage Point Four: Get the Right Team on the Bus**

There is no question that the most common cause of failure in major change initiatives, in any setting, has to do with the absence of an effective, committed leadership team. There are two types of questions that leaders of the 100,000 Lives Campaign hospitals must ask: “Are the right people (right skills, knowledge, attributes) on the team?” and “Is the team really functioning as a team?”

With respect to the question about the right people, executives should first make sure that patients and family members are prominent members of the improvement teams. Direct patient and family engagement in active roles in the design and improvement of care has proven to be a powerful driver of results. The presence of patients and families “in the room” tends to silence self-serving conversations, to surface the whole system, and to bring innovative ideas forward.  

Within the leadership team itself, it is important to identify the technical and leadership skills necessary to implement the 100,000 Lives strategy at the required scale and pace, and to know that these skills they present on the team. Leadership behaviors such as the ability to tell stories that engage hearts, the ability to be authentically transparent about performance, and to focus on measured results, are absolute “musts” to be present on the executive team — if not in every member, at least in several of them. Similarly, technical improvement skills such as the ability to spread innovations, to improve reliability, and to manage flow must not only be present, but the senior leadership team must be seen as credible teachers of these and other fundamental quality capabilities. The executive team should build a list of all the skills that should be represented on the senior team, and must ascertain whether the skills are in fact represented. If not, then the CEO needs to build a plan to develop these skills in current executive team members, or to bring the necessary skills onto the team through new or revised membership.

Finally, it is vital that the entire senior executive team be engaged in and committed to achieving the 100,000 Lives aim. This is perhaps the hardest issue of all within this leverage point. If you aren’t sure of your team’s commitment, one suggestion would be for the entire executive team to watch the videotape of Don Berwick’s speech from IHI’s 2004 National Forum, “Some Is Not a Number, Soon Is Not a Time,” and engage in a deep dialogue about the 100,000 Lives initiative and how it fits into each executive’s values, work roles, and other factors. It is critically important that no member of the executive team regard the achievement of the 100,000 Lives aims as “someone else’s problem” or as a “do-good project of little relevance to the overall strategy of this hospital.” Each senior executive on the team should be assigned accountability for one of the 100,000 Lives improvement teams.
Leverage Point Five: Make the Chief Financial Officer a Quality Champion

One simple way to connect finance leaders with 100,000 Lives initiatives is related to Leverage Point Four: make them part of each improvement team. If major 100,000 Lives Campaign changes such as Rapid Response Teams are to be implemented on a large scale, it will be critical to understand the financial implications on staffing budgets and other drivers of daily managerial behavior. If members of the finance department work directly on these projects, they can help to make projections, support revisions in budgets, and make the case for investment in resources, as necessary.

Sometimes longstanding, deeply embedded processes such as the annual budget cycle can overwhelm even the most well-planned change initiatives. How will you ensure that changes needed to save lives are not stalled as a result of the current budget planning process? For example, how will you incorporate the impact of full scale and spread of the 100,000 Lives projects as a primary input, not a dependent variable at the end of the budget cycle? If the 100,000 Lives work is truly a top priority, it should be evident in the budget planning process for 2005–2006. Projections of staffing needs, ICU lengths of stay, and other key outputs from the various 100,000 Lives interventions should be incorporated into next year’s budget as primary inputs. The analytical work necessary to do this will prove to be a major point of engagement for the CFO, and should be important to establishing the credibility of the “business case” for reducing needless deaths.

As teams go about this work, it will be necessary to develop a set of performance metrics for each 100,000 Lives project that include a unit cost financial measure and a global financial measure. The goal of the 100,000 Lives Campaign is to save lives. If money were not an issue, we could simply throw more resources at the problem. But money is always an issue in organizations, and financial indicators should always be included in a balanced set of project or performance measures. Financial measures should be viewed at two levels, unit cost and organizational impact. Some of the 100,000 Lives projects may increase the per-unit cost of care, but have a positive overall organizational impact due to reimbursement issues. The opposite may also be true. The point is not that the 100,000 Lives Campaign should save money (it might in some organizations), but that leaders must know the impact of decisions. CFO participation and leadership is required.

A final note on this leverage point: Whether there needs to be a business case for the 100,000 Lives Campaign is an interesting question. Some would argue that putting a business calculus to needless deaths is at best, a distraction, and at worst, immoral. We don’t wish to take one side or the other in this debate — but simply to acknowledge its existence.
Leverage Point Six: Engage Physicians

The success of several of the 100,000 Lives initiatives will depend on active support and leadership from the medical staff. To get physicians engaged in this agenda, you must reframe your mindset and engage in their quality agenda. The important question is, “Does your executive team truly understand and share the medical staff’s intrinsic motivation for quality?”

In an environment often clouded by battles over issues such as economic credentialing, Emergency Medical Treatment and Active Labor Act (EMTALA) on-call obligations, and departmental turf issues, administrators may lose sight of the strong intrinsic motivation of physicians to improve patient outcomes and reduce wasted time and other inefficiencies in their daily work. The 100,000 Lives Campaign puts the most critical outcome of all — alive or dead — squarely in the center of the agenda. If ever there were an aim around which all parties can gather with unalloyed shared purpose, it is “reduce needless deaths.” It is critical that the shared motivation be articulated and acknowledged, to build the base for making major changes in a short span of time.

Structurally, every hospital has an “organized medical staff,” and its Medical Executive Committee is typically charged by the Board with the delegated responsibility for clinical quality. But it is relatively rare for an MEC to be one of the principal drivers of a major quality initiative such as the 100,000 Lives Campaign. Rather, MECs tend to take a primary role in the credentialing and privileging process for individual physicians, and more often than not play a bystander role to the core administration and its nursing and paid medical directors when major quality initiatives are underway. The MEC (or whatever is the highest leadership group of physicians) must explicitly take the reins of many of the 100,000 Lives projects, regularly review the measures and progress against the aims, and join with senior executives in owning the results.

The right physician leaders must also be chosen for each of the 100,000 Lives interventions. If leaders are chosen badly, projects are likely to flounder. Some characteristics of good physician leaders to consider include the following:

- Has the respect of peers; is seen as “authentic”
- Models the values needed, especially teamwork and respect
- Has courage to take risks, try things
- Has “social skills”: listens well, brings out all voices, articulates well
- Knows and can use the Model for Improvement, reliability principles, and other key skills needed for improvement
Finally, those who work with physicians on making the 100,000 Lives-related changes must know that the organization stands behind them. Are your executive and nurse managers confident of backup and support all the way to the Board, and do they have the courage to engage physicians in difficult conversations to avoid “monovoxoplegia”?

Physicians are strongly aligned, professionally, with the goal of reducing needless deaths. And the vast majority of them will be strongly supportive of the changes that are needed to improve the safety of patients. But it is also highly likely that some of these changes will come up against strong resistance at one or more points in their implementation, and that some of those who oppose the changes will be physicians.

It is important that ALL members of the teams have the courage to face up to strongly negative voices, even in those negative voices are physicians. Otherwise, it’s likely that implementation teams will suffer from “monovoxoplegia” — paralysis by one loud voice — a common condition in hospitals. There are several good antidotes to this problem, but none is more important than courage. Nursing leaders, quality staff, and even senior executives often express hesitance to take on loudly negative physicians, because past history has told them that when the physician takes the issue higher — including to a favorite Board member on the golf course — it is the administrative staff member who pays the consequences.

The Board and senior administrative team must send a very powerful signal about the 100,000 Lives Campaign, and back it up with action. Each manager, team leader, and other participant in this process must know that they have backup — all the way to the Board — if they are to find the courage to speak up in response to loud negativism from powerful individuals.
Leverage Point Seven: Build Improvement Capability

Implementing the changes needed to reduce mortality will require that hundreds of capable improvers exist throughout the hospital. And the requirement for real technical capability includes the senior leadership team. The question you must answer is, “Does the entire leadership team (including CEO and senior managers) know, use, and teach the technical and change leadership knowledge required to achieve the 100,000 Lives aim?”

Capability for improvement must be developed far and wide throughout the organization. But too commonly, executive leaders exempt themselves from this requirement, and delegate the technical learning about quality to “the quality staff.” But the depth, breadth, and pace of change required to achieve the aims of the 100,000 Lives Campaign demand that executive leadership not only know these skills, but also be the principal practitioners and teachers of these technical capabilities. Although it’s not a comprehensive list, the following technical skills are a starter set of basic requirements for 100,000 Lives executives:

- Basic understanding of the 100,000 Lives interventions and their impact: Executives should have read the Campaign literature thoroughly, and be able to explain and communicate the core rationale for each of the Campaign interventions.14

- Model for Improvement and rapid tests of change: The various Campaign interventions generally don't lend themselves to the “make the perfect design and then implement it everywhere” change model. Executives leading projects need to know and apply the Model for Improvement and many, many rapid tests of change.15

- Flow Management: The success of many of the Campaign interventions will depend on a deep quality characteristic — how well the organization manages its flow. Executive leaders need to have a very strong understanding of this core quality body of knowledge.16

- Reliability: All of the Campaign interventions will benefit from reliability science and its thoughtful application.17

- Scale and Spread: The biggest risk for failure in the Campaign is that organizations will do lots of isolated pockets of nice improvement, but fail to scale, spread, and sustain the changes. This is both a technical and a leadership challenge — but the executive team MUST understand and use good spread concepts if the Campaign is to succeed.18
Appendix A:
Leadership Leverage Points Self-Assessment Tool for the 100,000 Lives Campaign

This Self-Assessment Tool is designed to help the administrative, physician, and nursing leaders of a 100,000 Lives Campaign hospital design and plan their work in order to lead to a significant reduction in hospital mortality, in a fairly short time. Ideally, the self-assessment should be done by individual leaders as soon as possible after signing on to the Campaign, by whatever group the hospital feels is its “senior leadership team.” The team should then meet to go over their results, and to plan the actions that will address any Leadership Leverage Points that appear to need particular attention in that hospital.

<table>
<thead>
<tr>
<th>Leadership Leverage Points</th>
<th>Score 1, 2, 3*</th>
<th>Actions and Behaviors That Support the Score Response</th>
<th>Action Planned</th>
<th>By Whom</th>
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<tbody>
<tr>
<td>1. Establish and Oversee System-Level Aims for Improvement at the Highest Board and Leadership Level</td>
<td>X</td>
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<tr>
<td>Leadership team has developed a specific aim for # of lives saved, by when</td>
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<tr>
<td>Leadership team has developed a measurement and reporting system that provides monthly feedback on # of lives saved</td>
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<tr>
<td>Board has adopted the aim, and is overseeing its achievement using this measurement system</td>
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<tr>
<td>Accountability for achieving the aim is embedded into the Board’s executive performance feedback system</td>
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[Note: * 1=not in place, 2=just beginning, 3=established practice]
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<tr>
<td>Leadership team has developed a plan (Campaign interventions plus?) with the necessary scale and pace to achieve the aim</td>
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<td>Monthly (or better, weekly) measures of performance on lives saved, and on individual Campaign interventions, are reviewed by senior leadership team</td>
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<tr>
<td>These measures are also displayed and reviewed by Medical Staff Exec Committee, and by Board Quality Committee</td>
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<tr>
<td>The leadership team (administration, Med Exec…) is steering and adjusting both the strategy to achieve the aim, and its execution, based on the measures</td>
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<tr>
<td>3. Channel Leadership Attention to System-Level Improvement</td>
<td>X</td>
<td>Board agendas give prominent place to oversight of 100,000 Lives results</td>
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<tr>
<td></td>
<td></td>
<td>Regular executive and Medical Exec Committee meeting agendas give prominent place to steering 100,000 Lives strategy and its execution</td>
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<td>Personal calendars are changed to allow executive reviews and walkrounds on 100,000 Lives project teams</td>
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<td></td>
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<td>Great performers are assigned to this effort and is seen as an important part of their regular work, not an add-on</td>
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<td></td>
<td></td>
<td>Measures of progress on each 100,000 Lives project, and on the overall aim, are widely distributed throughout the organization and the community (transparency)</td>
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<tr>
<td>4. Get the Right Team on the Bus</td>
<td>X</td>
<td>Patients and families are deeply involved in each 100,000 Lives project teams</td>
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<tr>
<td></td>
<td></td>
<td>The entire senior executive team is engaged and committed to achieving the 100,000 Lives aim</td>
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<tr>
<td></td>
<td></td>
<td>Executive Team: The right technical and leadership skills to implement the 100,000 Lives strategy at the required scale and pace have been identified</td>
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<tr>
<td></td>
<td></td>
<td>Executive Team: The right technical and leadership skills to implement the strategy at the required scale and pace are present</td>
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<tr>
<td>5. Make the CFO a Quality Champion</td>
<td>X</td>
<td>Finance reps are integrated into 100,000 Lives project teams to support business case needs</td>
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<td></td>
<td></td>
<td>Current budget planning incorporates the impact of full scale and spread of the 100,000 Lives projects as a primary input, not a dependent variable at the end of the budget cycle</td>
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<tr>
<td>6. Engage Physicians</td>
<td>X</td>
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<tr>
<td>The executive team understands and shares the medical staff’s intrinsic motivation for quality (outcomes, wated time…)</td>
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<tr>
<td>The Medical Executive Committee regards the 100,000 Lives initiative as a core aspect of its delegated responsibility for quality</td>
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<tr>
<td>Capable leaders have been appointed to physician leadership roles in 100,000 Lives projects</td>
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<td>Executive and nurse managers are confident of backup and support all the way to the Board, and have the courage to engage physicians in difficult conversations and avoid “monovoxoplegia” (paralysis by one loud voice)</td>
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<tr>
<td>7. Build Improvement Capability</td>
<td>X</td>
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The entire leadership team (including CEO and senior managers) knows and uses the technical and change leadership knowledge required to achieve the 100,000 Lives aim

- Basic understanding of the 100,000 Lives interventions and their impact
- Model for Improvement and rapid tests of change
- Flow Management
- Reliability
- Scale and Spread

Leadership team can, and do, teach the technical and change leadership knowledge to others in the organization

[Note: * 1=not in place, 2=just beginning, 3=established practice]

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18 Online information; retrieved 21 April 2005. www.ihi.org/IHI/Topics/Improvement/SpreadingChanges/Changes/
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5. Transforming Care at the Bedside
6. Seven Leadership Leverage Points for Organization-Level Improvement in Health Care

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1.1 Zen of Teams (presentation)


*Used by permission of Roger Coleman, MBA, May 2007.*
The Zen of Teams

LS I, March 10, 2005
Washington, D.C.
Keys to Successful Teams

- The Discipline of Teams
- Clear Performance Mandates
- Team Dynamics
- Effective Team Meetings
The Discipline of Teams

- Using Teams
  - Processes are cross-functional; teams need to be the same
  - A team can produce higher quality than an individual
  - Diversity in perspective brings strength
  - Self-directed teams save time and energy
  - Usually less than 7 people
The Discipline of Teams

- A Team is Not a Group
  - Collectively responsible for success or failure: all for one and one for all
  - Accountable to each other and to the organization
  - Self-directed with oversight by management
Clear Performance Mandates

- Exquisitely clear, measurable performance goals
- Allows team to measure and monitor progress
- Mandates are meaningful and challenging
- Ability to reward progress and completion
- Sets expectations & accountability for team members & management
- Goals are set by management; the team has tactical freedom
- Patient-focused goals
Effective Team Meetings

Organization
- Off or on site, but with enough room and privacy for creative work. Observe the ‘100 mile rule’
- Good teams start and end on time.
- Have refreshments for team to keep alert & productive.
- Team leader facilitates work sessions, but then may rotate role to develop others’ facilitation skills.
- Flip-chart and markers for creative thought and documentation of work or future ideas.
- Assign archivist: keeps critical notes (not too detailed) & work organized. Brings to each meeting.
Effective Team Meetings

- **Starting Meetings**
  - Begin by checking in with each member - “How are you doing?”. Listen with a caring ear.
  - Give honest answers and work as a team to quickly resolve issues that might distract the team.
  - Review previous responsibilities/assignments.
  - Team leader should ask the team “What will we accomplish by the end of this work session?”
  - Set work goal(s), stay on task, monitor progress, and consider time constraints.
Effective Team Meetings

- **Work Session Framework**
  - Maintain honesty - don’t hide feelings or opinions, listen respectfully. No after-meeting dissenting discussions.
  - Put aside personal agenda - think team, keep patient focus.
  - Seek the best solutions, not just consensus or majority; make “Robust Discussion” a norm.
  - Avoid gossip - may be fun, but unproductive & time waster.
  - Call for “process check” when team veers from stated purpose of work session - refocus and align.
  - Work with urgency - time is short, work volume is great.
  - Review assignments and commitments for next meeting.
Effective Team Meetings

- Confronting and Caring
  - Confront team members who go astray
    - Set ground rules and use to point out errant behavior
    - Use humor, if possible
    - Don’t let errant behavior go unaddressed, address it early and monitor closely
  - Care for team members
    - Let team members know they are valued
    - Celebrate successes & learn from failures as a team
    - Never be derogatory or demeaning toward each other
    - Use humor to acknowledge and relieve tension
Team Dynamics

- Emotional Intelligence
- Team Leader Excellence & Choice
- Commitment
Emotional Intelligence

A team can perform only up to its emotional capacity

- Must be able to respond constructively to uncomfortable internal and external issues
- Caring for team members - acknowledging contributions, protection, respect, support
- Confrontation of errant behavior
- Maintaining a positive environment - remain patient focused
Team Leader Excellence

- Chosen by the team - not the manager or spokesperson, but “the first among equals”
- Nurtures and maintains team momentum
- Their workload is no greater than others
- Select a person who can and will hold you to the commitments you voluntarily make to the team
- Seeks excellence in all work team produces
Attributes of a Team Leader

- Utterly reliable and keeps deadlines
- Respected by staff and management
- Exemplary team player
- Passionate about bringing positive change
- Well organized and disciplined
- Has a good sense of humor
- Brings out the best in others
- Has ability to “take a punch” or criticism
Choosing a Team Leader

- A deliberate, honest, thoughtful discussion about who best fits the leader attributes
- Put aside titles, position and education
- No one can exclude themselves from selection by the team
- No secret ballots; open & honest discussion is required
- Remember, you are choosing “the first among equals”
Commitment

This is the fuel and safety harness for teams

- Teamness is voluntary
  - Do you want to be a team member?

- Teamness is passionate
  - Are you passionate about the team goals?

- Teamness is dedicated
  - Do you care enough to never let a teammate down?

If you can answer YES to all three questions then verbally commit to each other as a team.
Sources


1.2
Chronic Care Model Primer (guide)


The Chronic Care Model
The Chronic Care Model (CCM) is an organizational approach to caring for people with chronic disease in a primary care setting. The system is population-based and creates practical, supportive, evidence-based interactions between an informed, activated patient and a prepared, proactive practice team. The CCM identifies essential elements of a health care system that encourage high-quality chronic disease care: the community; the health system; self-management support; delivery system design; decision support, and clinical information systems. Within each of these elements, there are specific concepts (“Change Concepts”) that teams use to direct their improvement efforts. Change concepts are the principles by which care redesign processes are guided. The bulleted items below are the change concepts associated with each component of the model that once implemented result in improved patient and system outcomes.

The Community - Mobilize community resources to meet needs of patients
Community resources, from school to government, non-profits and faith-based organization, bolster health systems’ efforts to keep chronically ill patients supported, involved and active.

- Encourage patients to participate in effective community programs
- Form partnerships with community organizations to support and develop interventions that fill gaps in needed services
- Advocate for policies that improve patient care

Health Systems - Create an organization that provides safe, high quality care
A health system’s business plan reflects its commitment to apply the CCM across the organization. Clinician leaders are visible, dedicated members of the team.

- Visibly support improvement at all levels of the organization, beginning with the senior leader
- Promote effective improvement strategies aimed at comprehensive system change
- Encourage open and systematic handling of errors and quality problems to improve care
- Provide incentives based on quality of care (financial or otherwise, or both?)
- Develop agreements that facilitate care coordination within and across organizations

Self-Management Support - Empower and prepare patients to manage their health care
Patients are encouraged to set goals, identify barriers and challenges, and monitor their own conditions. A variety of tools and resources provide patients with visual reminders to manage their health.

- Emphasize the patient’s central role in managing his or her health
- Use effective self-management support strategies that include assessment, goal-setting, action planning, problem-solving and follow-up
- Organize internal and community resources to provide ongoing self-management support to patients
Delivery System Design - Assure effective, efficient care and self-management support
Regular, proactive planned visits which incorporate patient goals help individuals maintain optimal health, and allow health systems to better manage their resources. Visits often employ the skills of several team members.

- Define roles and distribute tasks among team members
- Use planned interactions to support evidence-based care
- Provide clinical case management services for complex patients
- Ensure regular follow-up by the care team
- Give care that patients understand and that agrees with their cultural background

Decision Support - Promote care consistent with scientific data and patient preferences.
Clinicians have convenient access to the latest evidence-based guidelines for care for each chronic condition. Continual educational outreach to clinicians reinforces utilization of these standards.

- Embed evidence-based guidelines into daily clinical practice
- Share evidence-based guidelines and information with patients to encourage their participation
- Use proven provider education methods
- Integrate specialist expertise and primary care

Clinical Information Systems - Organize data to facilitate efficient and effective care
Health systems harness technology to provide clinicians with an inclusive list (registry) of patients with a given chronic disease. A registry provides the information necessary to monitor patient health status and reduce complications.

- Provide timely reminders for providers and patients
- Identify relevant subpopulations for proactive care
- Facilitate individual patient care planning
- Share information with patients and providers to coordinate care
- Monitor performance of practice team and care system

So what does all this mean?
Successful system change means you will redesign care within each of the six components of the CCM; it does not mean tweaking around the edges of an acute care system not capable of handling the needs of the chronically ill. You will be building a new system that works in concert with your acute care processes. You will accomplish this by testing the above change concepts and adapting them to your local environment. The remaining steps in this manual help focus where you can start making these changes.

Tools that can help
After learning more about the chronic care model (see www.improvingchroniccare.org), there are two things that may assist you in understanding how it directs system change. The first is the
Assessment of Chronic Illness Care, which is a diagnostic survey that you and your team can complete together. The ACIC helps you identify that current state of your chronic care; what’s working and what is needed to achieve redesign in all components of the CCM.

The other tool is the ACT Report (see www.improvingchroniccare.org). This report provides concrete examples of teams that have redesigned their care based on the CCM. Some of these stories and the practices they represent should resonate with you and your team.

The Model for Improvement:
The Model for Improvement* is a simple yet powerful tool for accelerating quality improvement changes in your organization. Developed by Associates in Process Improvement, the model has two parts. In the first part, your team will address three fundamental questions. These questions will guide your team in creating aims, measures, and specific change ideas. Secondly, your team will use Plan-Do-Study-Act (PDSA) cycles to allow these changes to be easily tested in your work environment. These successful tests of change pave the way for real-world implementation within your system. A brief synopsis of the model is presented below. There is considerably more detail available on the Institute for Healthcare Improvement’s Web site: www.ihi.org.

*The Model for Improvement was developed by Associates In Process Improvement, www.apiweb.org/API_home_page.htm

Three Key Questions for Improvement
AIM – What are we trying to accomplish?
When you answer this question, you are creating an aim statement – a statement of a specific, intended goal. A strong clear aim gives necessary direction to your improvement efforts. Your aim statement should include a general description of what your team hopes to accomplish, and a specific patient population on which your team will focus. A strong aim statement is specific, intentional, and unambiguous. It should be aligned with other organizational goals, and all those involved in the improvement process should support it.

MEASURES – How will we know that a change is an improvement?
Your team will use a few simple measures to see if the rapid cycle changes in care are working. They can also be used to monitor performance over time. These measurements should not be confused with research. Where research focuses on one fixed and testable hypothesis, the methods for measuring improvement rely on sequential testing using practical measurement strategies. Keep in mind that the measures your team uses should be simple and directly aligned with your aim statement.

IDEAS – What changes can we make that will result in an improvement?
Ideas for change to be tested come from evidence provided by previous research. These ideas are distilled into the design principles of the Chronic Care Model. They are used to develop testable ideas from your team’s own observations of the current system, stories from others, and
creative thinking. When selecting specific ideas to test, consider whether an idea is directly linked to your stated aim, if it’s feasible, and if its implementation can provide good potential for learning.

**PDSA Cycles**

The PDSA (Plan-Do-Study-Act) cycle is a method for rapidly testing a change - by planning it, trying it, observing the results, and acting on what is learned. This is a scientific method used for action-oriented learning. After changes are thoroughly tested, PDSA cycles can be used to implement or spread change. The key principle behind the PDSA cycle is to test on a small scale and test quickly. Traditional quality improvement has been anchored in laborious planning that attempts to account for all contingencies at the time of implementation; usually resulting in failed or partial implementation after months or even years of preparation. The PDSA philosophy is to design a small test with a limited impact that can be conducted quickly (days if not hours!) to work out unanticipated “bugs”. Repeated rapid small tests and the learnings gleaned build a process ready for implementation that is far more likely to succeed.

**Parts of the PDSA cycle**

*Plan* – In this phase, your objectives are defined and your team makes predictions about what will happen, and why it will happen. Your team will also prepare for the next step by answering the questions of who, what, where, and when.

*Do* – In this phase, your team will carry out the plan and collect the data. This will include documenting experiences, problems, and surprises that occur during this test cycle.

*Study* – In this phase, your team will analyze the test cycle and reflect on what you have learned. You will compare results with the predictions made in the planning stage, and draw conclusions based on the collected data.

*Act* - In this last phase, your team will decide if there are any refinements or modifications needed to the change you have tried. This may lead to additional test cycles, which starts the process all over again with *Plan.*
1.2

A Model For Accelerating Improvement (online resource)


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1.2
Going Lean In Healthcare (white paper)


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We have developed IHI's Innovation Series white papers to further our mission of improving the quality and value of health care. The ideas and findings in these white papers represent innovative work by organizations affiliated with IHI. Our white papers are designed to share with readers the problems IHI is working to address; the ideas, changes, and methods we are developing and testing to help organizations make breakthrough improvements; and early results where they exist.
Going Lean in Health Care

This paper is based on presentations made by the following experts during an IHI Calls to Action Series in January and February 2005:

James P. Womack, PhD: Founder and President, Lean Enterprise Institute
Arthur P. Byrne, MBA: Operating Partner, JW Childs Associates LLC
Orest J. Fiume, MS: Co-author, “Real Numbers: Management Accounting in a Lean Organization”
Gary S. Kaplan, MD, FACP, FACMPE: Chairman and CEO, Virginia Mason Medical Center
John Toussaint, MD: President and CEO, ThedaCare, Inc.

Editor: Diane Miller, MBA: Director, IHI
Executive Summary

Lean management principles have been used effectively in manufacturing companies for decades, particularly in Japan. The Institute for Healthcare Improvement believes that lean principles can be — indeed, already are being — successfully applied to the delivery of health care.

Lean thinking begins with driving out waste so that all work adds value and serves the customer’s needs. Identifying value-added and non-value-added steps in every process is the beginning of the journey toward lean operations.

In order for lean principles to take root, leaders must first work to create an organizational culture that is receptive to lean thinking. The commitment to lean must start at the very top of the organization, and all staff should be involved in helping to redesign processes to improve flow and reduce waste.

Although health care differs in many ways from manufacturing, there are also surprising similarities: Whether building a car or providing health care for a patient, workers must rely on multiple, complex processes to accomplish their tasks and provide value to the customer or patient. Waste — of money, time, supplies, or good will — decreases value.

Examples in this paper of lean thinking in health care demonstrate that, when applied rigorously and throughout an entire organization, lean principles can have a positive impact on productivity, cost, quality, and timely delivery of services.
Introduction

The concept called “lean management” or “lean thinking” is most commonly associated with Japanese manufacturing, particularly the Toyota Production System (TPS). Much of the TPS way of thinking is based on the work of quality guru W. Edwards Deming, who taught, among other things, that managers should stop depending on mass inspection to achieve quality and, instead, focus on improving the production process and building quality into the product in the first place.

So what is meant by “lean thinking”? Simply put, lean means using less to do more.

Lean thinking is not typically associated with health care, where waste — of time, money, supplies, and good will — is a common problem. But the principles of lean management can, in fact, work in health care in much the same way they do in other industries. This paper presents a brief overview of lean management principles, and provides examples of two health care organizations that are successfully using lean thinking to streamline processes, reduce cost, and improve quality and timely delivery of products and services.

Lean thinking is not a manufacturing tactic or a cost-reduction program, but a management strategy that is applicable to all organizations because it has to do with improving processes. All organizations — including health care organizations — are composed of a series of processes, or sets of actions intended to create value for those who use or depend on them (customers/patients).

The core idea of lean involves determining the value of any given process by distinguishing value-added steps from non-value-added steps, and eliminating waste (or muda in Japanese) so that ultimately every step adds value to the process.

To maximize value and eliminate waste, leaders in health care, as in other organizations, must evaluate processes by accurately specifying the value desired by the user; identifying every step in the process (or “value stream,” in the language of lean) and eliminating non-value-added steps; and making value flow from beginning to end based on the pull — the expressed needs — of the customer/patient.

When applied rigorously and throughout an entire organization, lean principles can have a dramatic affect on productivity, cost, and quality. Figure 1 presents some statistics that testify to the power of lean thinking in industry. There is no a priori reason why much of this same effect can’t be realized in health care.
Agreement is growing among health care leaders that lean principles can reduce the waste that is pervasive in the US health care system. The Institute for Healthcare Improvement believes that adoption of lean management strategies — while not a simple task — can help health care organizations improve processes and outcomes, reduce cost, and increase satisfaction among patients, providers and staff.

The Power of Lean in Health Care

Virginia Mason Medical Center in Seattle, Washington, has been using lean management principles since 2002. By working to eliminate waste, Virginia Mason created more capacity in existing programs and practices so that planned expansions were scrapped, saving significant capital expenses: $1 million for an additional hyperbaric chamber that was no longer needed; $1 to $3 million for endoscopy suites that no longer needed to be relocated; $6 million for new surgery suites that were no longer necessary.

Despite a “no-layoff policy,” a key tenet of lean management, staffing trends at Virginia Mason show a decrease in 2003 and 2004, after six years of annual increases in the number of full-time equivalents (FTEs). Using lean principles, staff, providers and patients have continuously improved or redesigned processes to eliminate waste, requiring fewer staff members and less rework, and resulting in better quality. Consequently, as employees retire or leave for other reasons, improved productivity allows for them not to be replaced.

All 5,000 Virginia Mason employees are required to attend an “Introduction to Lean” course, and many have participated in Rapid Process Improvement Weeks (RPIW). RPIWs are intensive week-long sessions in which teams analyze processes and propose, test, and implement improvements. The results from the 175 RPIWs that were conducted from January 2002 through March 2004 are shown in Figure 2.

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How did Virginia Mason achieve these striking results?

Figure 2. Results of 175 Rapid Process Improvement Weeks at Virginia Mason Medical Center

<table>
<thead>
<tr>
<th>Category</th>
<th>2004 Results (after 2 years of “lean”)</th>
<th>Metric</th>
<th>Change from 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>$1,350,000</td>
<td>Dollars</td>
<td>Down 53%</td>
</tr>
<tr>
<td>Productivity</td>
<td>158</td>
<td>FTEs</td>
<td>36% redeployed to other open positions</td>
</tr>
<tr>
<td>Floor Space</td>
<td>22,324</td>
<td>Sq. Ft.</td>
<td>Down 41%</td>
</tr>
<tr>
<td>Lead Time</td>
<td>23,082</td>
<td>Hours</td>
<td>Down 65%</td>
</tr>
<tr>
<td>People Distance</td>
<td>Traveled 267,793</td>
<td>Feet</td>
<td>Down 44%</td>
</tr>
<tr>
<td>Product Distance</td>
<td>Traveled 272,262</td>
<td>Feet</td>
<td>Down 72%</td>
</tr>
<tr>
<td>Setup Time</td>
<td>7,744</td>
<td>Hours</td>
<td>Down 82%</td>
</tr>
</tbody>
</table>

Source: Virginia Mason Medical Center

Key Concepts in Lean Thinking: Lessons from the Experience in Industry

Virginia Mason’s achievements were based on lean thinking, the major precepts of which are as follows:

**Leadership:** Introducing lean thinking in an organization is, in the words of those who have done it, not for the faint of heart. It cannot be done piecemeal, but must be a whole-system strategy. There is no single “silver bullet” solution such as a new computer system or automated equipment that will achieve the same results. And it cannot be done only by middle managers or frontline workers. Those at the very top of the organization must lead it.

Implementing lean thinking requires major change management throughout an entire organization, which can be traumatic and difficult. Strong commitment and inspiring leadership from senior leaders is essential to the success of an effort this challenging. The CEO must be a vocal, visible champion of lean management, create an environment where it is permissible to fail, set stretch goals, and encourage “leaps of faith.” A senior management team that is aligned in its vision and understanding of lean is a critical foundation for “going lean.”

**Culture:** A lean culture is the backdrop against which lean tools and techniques are implemented. That culture differs in some significant ways from a traditional culture in business, as well as in health care. Figure 3 offers some examples.
Figure 3. Traditional Culture vs. Lean Culture

<table>
<thead>
<tr>
<th>Traditional Culture</th>
<th>Lean Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function Silos</td>
<td>Interdisciplinary teams</td>
</tr>
<tr>
<td>Managers direct</td>
<td>Managers teach/enable</td>
</tr>
<tr>
<td>Benchmark to justify not improving: “just as good”</td>
<td>Seek the ultimate performance, the absence of waste</td>
</tr>
<tr>
<td>Blame people</td>
<td>Root cause analysis</td>
</tr>
<tr>
<td>Rewards: individual</td>
<td>Rewards: group sharing</td>
</tr>
<tr>
<td>Supplier is enemy</td>
<td>Supplier is ally</td>
</tr>
<tr>
<td>Guard information</td>
<td>Share information</td>
</tr>
<tr>
<td>Volume lowers cost</td>
<td>Removing waste lowers cost</td>
</tr>
<tr>
<td>Internal focus</td>
<td>Customer focus</td>
</tr>
<tr>
<td>Expert driven</td>
<td>Process driven</td>
</tr>
</tbody>
</table>

Source: A.P. Byrne, O.J. Fiume

An organization’s culture is the set of values and beliefs that cause people to behave in certain ways. When they behave that way and get the results they expect, it reinforces those values and beliefs. This self-reinforcing cycle creates a culture.

Leaders who wish to change their organizational culture cannot do so by edict. They must intervene and require people to behave differently, allowing them to experience a better set of results. As this process is repeated, a different set of values and beliefs — a new culture — will evolve.

One of the challenges of implementing lean in health care is that it requires people to identify waste in the work in which they are so invested. All workers want to feel their work is valuable, perhaps most especially health care workers. Recognizing that much about their daily tasks is wasteful and does not add value can be difficult for health care professionals. A nurse who is hunting for supplies is doing it to serve the needs of patients. Nurses may not see this as wasted time, and may not stop to wonder why those supplies aren’t where they need them every time they need them. But if the supplies were always readily available, the time nurses spend hunting for them would instead be devoted to something more appropriate to their skills and expertise.

To help staff see and embrace the promise of lean, leaders must create a clear vision statement that guides people to make the right choices. They must evaluate the organizational structure and work to flatten it, eliminating hierarchical layers and organizing staff into operational teams based on products or services.

**Process:** A process is a set of actions or steps, each of which must be accomplished properly in the proper sequence at the proper time to create value for a customer or patient. **Primary** processes serve the external customer (in health care, patients and their families). **Internal** processes serve internal...
customers/staff in support of the primary process. Primary processes are easier to see, but internal processes are necessary to create value in the primary process.

Compared to other industries, health care has been slow to identify who the customer really is. Because of the complexity of the health care system, internal customers — physicians, hospitals, insurers, government, payers — have often driven processes. It is critically important that value be defined by the primary customer: the patient.

A perfect process creates precisely the right value for the customer. In a perfect process, every step is valuable (creates value for the customer), capable (produces a good result every time), available (produces the desired output, not just the desired quality, every time), adequate (does not cause delay), flexible, and linked by continuous flow. Failure in any of these dimensions produces some type of waste. The Toyota Production System (TPS) identifies seven categories of waste: overproduction, waiting, transporting, processing, inventory, motion, and correction.

A perfect process not only creates value, but it is also satisfying for people to perform, managers to manage, and customers to experience.

**Getting Started**

To create the perfect process, begin by identifying the key processes (value streams) in your organization. Key processes are those that support core “products.” In health care, a core product might be an office visit, or an inpatient stay, or a visit to the emergency department.

For each of those core products, identify key processes, both primary and internal, that support them. Identify the person responsible for thinking about each process as a whole, how it works, and how to make it better. In most organizations, there is no one performing that role. Leaders should appoint someone who is widely respected within the organization to “own” each process in its entirety. This is not a full-time job, should not require reorganization, and needn't involve a supervisory role over those who work within the process. It does require attention to relentless pursuit of driving waste out of the process.

Lean experts note that the only sustainable process is one that participants believe in. The best way to create belief in a process is for participants to be able to see it in its entirety and to understand its logic. The best way to create vision and understanding is to directly involve participants in improving the process.

This is most often done by bringing together key participants from a chosen process in a kaizen event, an intensive four- or five-day session focused solely on analyzing current processes and implementing changes. (Kaizen means continuous, incremental improvement of an activity to create more value with less muda.) Large lean organizations typically conduct hundreds of kaizen
events every year; employees know they are expected to participate, either directly on the team or testing and continuing the daily work while others participate. Some companies develop compensation mechanisms tied to kaizen events, or use a productivity-based compensation system so that participants feel a measure of personal investment.

For each key process identified, a kaizen team begins by mapping the process as it actually operates (not how it is supposed to operate), specifying value from the standpoint of the customer (external or internal), as well as waste in steps or between steps. Physically walking through the process steps — following the route of a referral form or insurance claim, for example — can be very illuminating. An example of a value stream map — in this example, for processing an insurance claim — is shown in Figure 4. The map depicts the current process containing nine steps (as indicated in the lower left corner), with the actual required work time and elapsed process time indicated below each step in the process. Note in the lower right corner that, because of excessive delays between steps, the 19 minutes of actual work required to complete the process takes place over a 28-day period.

Figure 4. Example of a Value Stream Map

Source: Lean Enterprise Institute
Next, the group envisions and maps the future state (typically within the next 12 months) by asking how the process should be changed to move toward perfection. This is known as a “future state value stream map.” Figure 5 shows a future state value stream map for the same process mapped in Figure 4, now with only five steps in the process. Note that in the ideal future state most of the wasted time between steps is eliminated, allowing workers to complete the same 19 minutes of work in 8.3 hours instead of 28 days.

The details of these sample maps are less important than the ideas they represent. The format of a value stream map can vary according to the mapmakers’ preferences. The important thing about a value stream map is that it is explicit about the flow and value of the process.

Figure 5. Example of a Future State Value Stream Map

Source: Lean Enterprise Institute
Using the future state value stream map, the group reorganizes staff if necessary to match the requirements of the process. Notice that most processes flow horizontally, while most organizations are organized vertically. This is a fundamental challenge, because the process must flow across organizational impediments and boundaries. A patient’s journey from a diagnostic center to a treatment facility would be an example of this.

Like other quality improvement initiatives, implementing and sustaining the future state of a process involves Plan-Do-Study-Act (PDSA) cycles in which small tests of change are carried out, the results assessed and analyzed, adjustments made, and successes spread. In trying to create a perfect process, teams should design small tests of change (“Plan”); implement the tests on a small scale (“Do”); measure the performance compared with the current state and reflect on how it could be better (“Study”); introduce the necessary changes to adjust the process (“Act”); and determine whether the adjusted process is stable and sustainable.

Continuous measurement of processes is important, as is the choice of measures, because what gets measured influences behavior. People may have an incentive to do the wrong thing if it will improve the metric. For example, a measure that focuses on the purchase price of an item might create the incentive for a purchasing manager to buy large quantities at a discount. But whether it’s carburetors or catheters, excess inventory and carrying costs, along with the possibility that technical advances might render the items obsolete, create waste. “Just-in-Time” inventory is an important lean principle.

A good performance measurement system for lean processes is simple and does not include too many metrics. It supports the strategy to implement lean; motivates the desired behavior; is not overly focused on financial metrics; measures the process not the people; does not include ratios, which most people find confusing; is timely (hourly, daily, weekly) so that corrective action can be taken when the process is not going well; and uses visual displays so that people can see trends over time.

There are many additional aspects to lean thinking, more than can be covered in this paper. Readers interested in delving deeper into lean thinking are encouraged to see the list of additional resources at the end of this paper.

**Applying Lean Thinking to Health Care**

**Virginia Mason Medical Center**

Seattle’s Virginia Mason Medical Center is an integrated health care system that includes a 336-bed hospital, nine locations, 400 physicians and 5,000 employees. In 2000, following a period of economic stress and a general malaise in the organizational culture, the Board of Directors issued a broad mandate for change. Under new leadership, Virginia Mason developed a new strategic plan that called for, among other things, a sharper business focus and more accountability.
The Virginia Mason Strategic Plan is more than just words. It is mapped out in graphic form as a triangle divided into sections like the food pyramid, with the primary customer — the patient — at the top, supported equally by four “pillars”: people (recruiting and retaining the best staff), quality (a focus on achieving best outcomes), service (to internal and external “customers”), and innovation (supported by the culture). The goal at Virginia Mason is to design the system and its processes around the patients’ needs rather than around the needs of providers and staff. The reality is that, in lean companies, this focus on the customer also supports the staff.

The organization’s vision is to be the quality leader in health care. The method that leadership chose to pursue that vision is the Virginia Mason Production System (VMPS), modeled on the Toyota Production System. The VMPS forms the foundation for the organization’s strategic plan (see Figure 6).

Figure 6. The Virginia Mason Medical Center Strategic Plan

![Strategic Plan Diagram]

Source: Virginia Mason Medical Center
Creating this strategic plan, with its clear and unequivocal focus on the patient, was the first step in changing the culture at Virginia Mason. When it was introduced in late 2001 and to this date, leaders referred to it in every presentation, relating all work to the strategic plan. Graphic images of the plan were posted in visible places throughout the organization.

In a lean environment, roles and expectations are explicit. So Virginia Mason leaders sought to clarify expectations, responsibilities, and accountabilities. In the spirit of transparency, feedback, and trust that underlies both the Toyota Production System and the Virginia Mason Production System, Virginia Mason leaders created "compacts" for leaders, for the Board of Directors, and for physicians, spelling out expectations and responsibilities for each, as well as what they can expect from the organization. This is another way that Virginia Mason laid the cultural foundation for lean.

The Virginia Mason Production System

To get all the senior leaders "on the same page" and help them immerse themselves in lean principles, in 2002 Virginia Mason sent all its senior executives to Japan to "see with their own eyes" how lean management really works. Working on the production line in the Hitachi Air Conditioning plant, executive leaders recorded workflow, measured cycle times, and documented process flow. According to senior leaders, they learned that health care has many steps and concepts in common with the production of goods.

Like health care, Japanese manufacturing processes involve concepts of quality, safety, customer satisfaction, staff satisfaction, and cost-effectiveness. The completion of the product — or the service — involves thousands of processes, many of them very complex. As in health care, the stakes are high: A product failure can cause fatalities.

Senior leaders developed the Virginia Mason Production System (VMPS), based on the principles of the Toyota Production System, following that first trip to Japan (there have been many trips since that first visit including managers, physicians, nurses and front-line staff). The idea behind VMPS is to achieve continuous improvement by adding value without adding money, people, large machines, space or inventory, all toward a single overarching goal — no waste.

VMPS has six areas of focus:

1. "Patient First" as the driver for all processes

2. The creation of an environment in which people feel safe and free to engage in improvement — including the adoption of a "No-Layoff Policy"

3. Implementation of a company-wide defect alert system called "The Patient Safety Alert System"
4. Encouragement of innovation and “trystorming” (beyond brainstorming, trystorming involves quickly trying new ideas or models of new ideas)

5. Creating a prosperous economic organization primarily by eliminating waste

6. Accountable leadership

Two details on this list bear further explanation. The No-Layoff Policy is critical to the success of implementing lean management. People will more fully commit and engage in improvement work if they are not worried about improving themselves out of a job. Attrition, typically steady in health care, will enable most organizations to reassign staff to other necessary work. A culture shift is important here as well: Staff, especially in health care, do not typically view themselves as working for the organization, but for their individual department and/or care team. In lean thinking, the patient/customer drives all processes, and staff/providers must come to understand that they work for the patient. This means they may be reassigned depending on the needs of the patients.

Secondly, the defect alert system is a fundamental element of the TPS, known as “stopping the line.” Every worker in the Toyota plant has the power and the obligation to stop the assembly line when a defect or error is identified or even suspected. Workers pull a cord, a light goes on, music plays as a signal for supervisors to come and help, and the entire assembly line either slows or stops (depending on the degree of the defect resolution time) while line workers and supervisors assess and fix the problem, often preventing an error from becoming embedded in the final product. This typically happens many times a day.

The theory behind stopping the line is that mistakes are inevitable, but reversible. Defects are mistakes that were not fixed at the source, passed on to another process, or not detected soon enough and are now relatively permanent. If you fix mistakes early enough in the process, your product will have zero defects. Mistakes are least harmful and easiest to fix the closer you get to the time and place they arise. The reverse is also true.

At Virginia Mason, the Patient Safety Alert System is part of a culture in which anyone can, and indeed must, “stop the line,” or stop the care process if they feel something is not right. The person who activates the alert calls the patient safety department (or submits the alert via the website) and an administrator or other relevant manager and the appropriate process stakeholders come immediately to assess the situation and conduct a root cause analysis.

In 2002 there were an average of three alerts per month at Virginia Mason; by the end of 2004 that number had risen to 17. The alerts predominately identify systems issues, medication errors, and problems with equipment and/or facilities.
An Example of a Patient Safety Alert at Virginia Mason Hospital

A Virginia Mason staff nurse noticed that a new patient had a pink wristband. A pink wristband signifies “No Code 4,” meaning all resuscitation is withheld. The nurse felt this was odd because the patient had a new diagnosis of operable lung cancer, so she asked the patient what the wristband meant. The patient indicated it signified his allergy to certain medications.

The nurse replaced the wristband with the correct one — an orange one that signifies drug allergies — and reported the incident to her manager who called a Patient Safety Alert. That same day a new procedure was developed to print “Allergy Alert” on the orange wristbands.

Leadership accountability is a key component in the Patient Safety Alert System. In this instance, the Chief Nursing Officer and the Vice President of Information Systems facilitated the hospital-wide change in the wristband printing process by the following morning. When leadership goes to the gemba, or shop floor, changes can happen quickly.

More about the VMPS Structure and Functional Elements

The VMPS is an integrated system of processes and approaches that tie together, and must be thought of in an integrated way. A major component of the system is value stream mapping. Nearly every area in the medical center has a high-level value stream map and a detailed process flow diagram.

Kaizen events, or Rapid Process Improvement Workshops at Virginia Mason, are held weekly, bringing people together to use the tools of lean to achieve immediate results in the elimination of waste.

Other tools of VMPS include 5-S and 3-P, shorthand for organizing frameworks. 5-S (sort, simplify, standardize, sweep and self-discipline) is a method for organizing work areas to maximize smooth and efficient flow of activities and reduce wasted time and effort. 3-P (production, preparation, process) focuses on the design of new processes or workspaces.

A Sobering Reminder

In addition to the financial and efficiency gains cited earlier, the lean culture has also advanced clinical improvements at Virginia Mason. For example, because lean promotes the consistent and reliable use of standardized processes, the groundwork was laid for introduction of the “ventilator bundle,” a set of specific steps proven to reduce the incidence of ventilator-associated pneumonia (VAP). In 2002, Virginia Mason had 34 cases of VAP, at an estimated cost of $500,000. In 2004, after implementing the ventilator bundle, Virginia Mason had only four cases of VAP, at an estimated cost of $60,000.

Even with these successes, leaders there say that the work of implementing lean thinking throughout the organization remains challenging, requiring considerable focus and commitment, and that despite
steady progress, they are still on the journey to lean, defect-free care. This was made painfully clear in November 2004 when a Virginia Mason patient died as a result of a medical error.

Senior management, then in the process of setting its executive leadership goals for the coming year, used the tragedy as a guide in its work and reduced the proposed five executive leadership goals to just one: Ensure the Safety of Our Patients. Virginia Mason leaders believe that the Virginia Mason Production System is the means by which they can achieve this goal.

**ThedaCare, Inc.**

ThedaCare, Inc., is a health delivery system with three hospitals, 27 physician clinics, and a 300,000-member health plan, based in northeast Wisconsin. Nationally recognized for its quality performance results, ThedaCare is also among the nation’s “most wired,” or computer-savvy, health care institutions. With 5,000 employees, it is northeast Wisconsin’s second largest employer.

Though some of the details differ, the “lean story” at ThedaCare is very similar to Virginia Mason’s. While it is helpful to see the principles in use, it is not necessary to visit a Japanese company to gain a clear understanding of lean thinking; manufacturing companies in the US are using lean principles as well. ThedaCare leaders consulted with a nearby Wisconsin-based business, Ariens Outdoor Power Equipment Company, that has very successfully employed lean management for several years.

ThedaCare leaders set ambitious and specific goals to kindle a culture change: Improve quality to “world-class” levels (95th percentile or greater); become the health care employer of choice, making the *Fortune 100* list of best employers; and lower costs in order to lower the price paid for services, gaining $10 million a year through cost savings and increased productivity. The patient is at the center of these goals.

ThedaCare represents the goals graphically to help all staff visualize them (Figure 7).
The culture ThedaCare leaders and staff are working to create is one in which constant improvement is seen as a never-ending journey, relying on the organization’s most important attribute: the brainpower of its staff.

ThedaCare leaders recognize that a great deal of waste is the result of time the staff spend “putting out fires,” and that designing processes that work better reduces waste and enables staff to better meet the needs of patients. Like Virginia Mason, ThedaCare engages staff in intensive process improvement efforts, which they call Event Weeks. Participation in at least one Event Week is mandatory for all staff members (staff can choose from six different Event Week topics each week).

The groups that come together for Event Weeks use the ThedaCare Improvement System, which includes three tenets for change, as a framework for their work. These tenets are:

1. Respect for people
2. Teaching through experience
3. Focus on world-class performance

The details of these tenets are spelled out so that leaders and staff can use them in their process improvement work. For example, Figure 8 shows how the organization defines the first tenet.

Figure 8. ThedaCare’s First Tenet for Change: Respect for People

<table>
<thead>
<tr>
<th>What It Is:</th>
<th>What It Isn’t:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error-free practice</td>
<td>Long wait times</td>
</tr>
<tr>
<td>Timely service</td>
<td>Creating/doing non-value-added work</td>
</tr>
<tr>
<td>No waste</td>
<td>Wasted time</td>
</tr>
<tr>
<td>No-layoff philosophy</td>
<td>Wasted materials</td>
</tr>
<tr>
<td>Professionals who work together to improve performance</td>
<td>People focused on tasks rather than patient outcomes</td>
</tr>
</tbody>
</table>

Source: ThedaCare, Inc.

Teaching through experience is important because people learn best when they are directly involved. The rapid results of the work — “What gets designed on Wednesday is implemented on Friday,” says one ThedaCare leader — demonstrates for participants the power of their work and helps to build momentum.
The three goals of the ThedaCare Improvement System are:

1. Improved staff morale
2. Improved quality (reduction of defects)
3. Improved productivity

Every Event Week must focus specifically on these three goals.

ThedaCare leaders have acknowledged to staff that the new culture of lean will feel counter-intuitive for a while, with its emphasis on reducing waste and non-value-added work, as opposed to adding technology, buildings, or manpower. Lean also has a penchant for redeploying the best employees when productivity improves, not the poor or marginal performers; moving an accomplished lean thinker to a new department is an effective way to spread change.

The new culture requires new behaviors, including the use of smaller, “right-sized” groups of workers or technologies in “cells” rather than large, cumbersome processes; strong, sometimes directive leadership, augmenting more traditional team approaches; and less batching of work in favor of “right now” real-time action.

The new culture of lean also means that some roles change. For example, managers become teachers, mentors, and facilitators rather than simply directors or controllers.

Results at ThedaCare

On a monthly basis, ThedaCare tracks a range of outcomes related to lean management, including number of Event Weeks, number of employees who have participated in at least one Event Week, significant quality improvements, and financial measures.

With about six rapid improvement Event Week topics every week, by the end of 2004 ThedaCare had involved more than 600 employees directly in learning about lean thinking.

Examples of results at ThedaCare include the following:

- $3.3 million in savings in 2004
- Saved $154,000 in the Catheterization Lab supply procurement processes
- In 2004, reduced accounts receivable from 56 to 44 days equating to about $12 million in cash flow
- Redeployed staff in several areas saving the equivalent of 33 FTEs
• Improved ThedaCare Physicians phone triage times by 35 percent, reducing hold time from 89 to 58 seconds

• Reduced ThedaCare Physicians phone triage abandonment rates by 48 percent (from 11.6 percent to 6.0 percent)

• Reduced by 50 percent the time it takes to complete clinical paperwork on admission

• Appleton Medical Center Med/Surg decreased medication distribution time from 15 minute/medication pass (the amount of time it takes to pass one medication to one patient) to 8 min/medication pass impacting 4.1 FTEs of staff time.

**Conclusion**

Lean management is not a new concept, but it is relatively new to health care. While skeptics are right when they say, “Patients are not cars,” medical care is, in fact, delivered in extraordinarily complex organizations, with thousands of interacting processes, much like the manufacturing industry. Many aspects of the Toyota Production System and other lean tools therefore can and do apply to the processes of delivering care.

Courageous, forward-thinking health care organizations such as Virginia Mason and ThedaCare, along with others, are leading the way by demonstrating that lean management can reduce waste in health care with results comparable to other industries. Leaders of these organizations emphasize the importance of creating an organizational culture that is ready and willing to accept lean thinking. Without a receptive culture the principles of lean will fail.

The Institute for Healthcare Improvement believes that many management and operations tools in other industries can be applied successfully to health care. Lean principles hold the promise of reducing or eliminating wasted time, money, and energy in health care, creating a system that is efficient, effective, and truly responsive to the needs of patients — the “customers” at the heart of it all.
Glossary of Lean Terms

5-S: Sort, Simplify, Sweep, Standardize, Self-Discipline: a visually-oriented system for organizing the workplace to minimize the waste of time.

Adequate: In value stream mapping, the capacity for any given step in a process is adequate if the process is not delayed at that step.

Available: In value stream mapping, a step in a process is available if it produces the desired output, not just the desired quality, every time.

Batch-and-queue: The mass-production practice of making large lots of a part then sending the batch to wait in the queue before the next operation in the production process. Contrast with single-piece flow.

Capable: In value stream mapping, a step in a process is capable if it produces a good result every time.

Cycle time: The time required for completing one step of a process.

Flow: The progressive achievement of tasks along the value stream so that a product proceeds from design to launch, order to delivery, and raw materials into the hands of the customer with no stoppages, scrap, or backflows.

Just-in-Time: A system for producing and delivering the right items at the right time in the right amounts. Just-in-Time approaches just-on-time when upstream activities occur minutes or seconds before downstream activities, so single-piece flow is possible. The key elements of Just-in-Time are flow, pull, standard work (with standard in-process inventories), and takt time.

Kaizen: Continuous, incremental improvement of an activity to create more value with less muda.

Kanban: A signal, often a card attached to supplies or equipment that regulates pull by signaling upstream production and delivery.

Lead time: The total time a customer must wait to receive a product after requesting the product or service. In service sectors, it is the time from the beginning of the process to the end (e.g., from when a patient arrives until he or she leaves the hospital).

Muda: Waste.

People distance: The distance staff must travel to accomplish their tasks.

Product distance: The distance products must travel to meet the customers’ needs.
Pull: A system of cascading production and delivery instructions from downstream to upstream activities in which nothing is produced by the upstream supplier until the downstream customer signals a need; the opposite of push.

Set-up time: All time spent getting ready to add value (e.g., time preparing a room for an office visit).

Single-piece flow: A situation in which products proceed, one complete product at a time, through various operations in design, order-taking, and production, without interruptions, backflows or scrap. Contrast with batch-and-queue.

Standard work: A precise description of each work activity specifying cycle time, takt time, the work sequence of specific tasks for each team member, and the minimum inventory of parts on hand needed to conduct the activity.

Takt time: The available production time divided by the rate of customer demand. For example, if customers demand 240 widgets per day and the factory operates 480 minutes per day, takt time is two minutes. Takt time sets the pace of production to match the rate of customer demand and becomes the heartbeat of any lean system.

Throughput time: The time required for a product to proceed from concept to launch, order to delivery, or raw materials into the hands of the customer. This includes both processing and queue time.

Trystorm: To generate and quickly try ideas, or models of ideas, rather than simply discuss them, as in brainstorming.

Value: A capability provided to the customer at the right time at an appropriate price, as defined in each case by the customer.

Value stream: The specific activities required to design, order, and provide a specific product (or service) — from concept launch to order to delivery into the hands of the customer.

Value stream mapping: Identification of all the specific activities occurring along a value stream for a product or product family (or service).

Valuable: In value stream mapping, a step in a process is valuable if it creates value for the customer.

Waste: Anything that does not add value to the final product or service, in the eyes of the customer; an activity the customer wouldn't want to pay for if they knew it was happening.
Lean Resources


White Papers in IHI’s Innovation Series

1 Move Your Dot™: Measuring, Evaluating, and Reducing Hospital Mortality Rates
2 Optimizing Patient Flow: Moving Patients Smoothly Through Acute Care Settings
3 The Breakthrough Series: IHI’s Collaborative Model for Achieving Breakthrough Improvement
4 Improving the Reliability of Health Care
5 Transforming Care at the Bedside
6 Seven Leadership Leverage Points for Organization-Level Improvement in Health Care
7 Going Lean in Health Care

All white papers in IHI’s Innovation Series are available online — and can be downloaded at no charge — at www.ihi.org in the Products section.
2.1
Patient Assessment of Chronic Illness Care (survey)


Patient Assessment of Chronic Illness Care

Staying healthy can be difficult when you have a chronic condition. We would like to learn about the type of help with your condition you get from your health care team. This might include your regular doctor, his or her nurse, or physician’s assistant who treats your illness. Your answers will be kept confidential and will not be shared with your physician or clinic.

**Over the past 6 months, when I received care for my chronic conditions, I was:**

<table>
<thead>
<tr>
<th></th>
<th>None of the time</th>
<th>A Little of the Time</th>
<th>Some of the Time</th>
<th>Most of the Time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1. Asked for my ideas when we made a treatment plan.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
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<tr>
<td>B2. Given choices about treatment to think about.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
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<tr>
<td>B3. Asked to talk about any problems with my medicines or their effects.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>B4. Given a written list of things I should do to improve my health.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
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<tr>
<td>B5. Satisfied that my care was well organized.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>B6. Shown how what I did to take care of myself influenced my condition.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
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<tr>
<td>B7. Asked to talk about my goals in caring for my condition.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>B8. Helped to set specific goals to improve my eating or exercise.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>B9. Given a copy of my treatment plan.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>B10. Encouraged to go to a specific group or class to help me cope with my chronic condition.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>B11. Asked questions, either directly or on a survey, about my health habits.</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
</tbody>
</table>
### Over the past 6 months, when I received care for my chronic conditions, I was:

<table>
<thead>
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<th></th>
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<th>Most of the Time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>B12. Sure that my doctor or nurse thought about my values, beliefs, and traditions when they recommended treatments to me.</td>
<td></td>
<td></td>
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<tr>
<td>B13. Helped to make a treatment plan that I could carry out in my daily life.</td>
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<td>B14. Helped to plan ahead so I could take care of my condition even in hard times.</td>
<td></td>
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<tr>
<td>B15. Asked how my chronic condition affects my life.</td>
<td></td>
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<tr>
<td>B16. Contacted after a visit to see how things were going.</td>
<td></td>
<td></td>
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<tr>
<td>B17. Encouraged to attend programs in the community that could help me.</td>
<td></td>
<td></td>
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<tr>
<td>B18. Referred to a dietitian, health educator, or counselor.</td>
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<td></td>
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<tr>
<td>B19. Told how my visits with other types of doctors, like an eye doctor or other specialist, helped my treatment.</td>
<td></td>
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<tr>
<td>B20. Asked how my visits with other doctors were going.</td>
<td></td>
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<td></td>
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</tbody>
</table>
2.1
Patient Assessment of Chronic Illness Care Scoring Guide


Patient Assessment of Chronic Illness Care Scoring Guide

The 20 items were derived from a larger pool of 46 items generated by a national pool of experts on chronic illness care and the CCM. A pilot test was done with a separate, earlier sample of 130 patients, and the 20 items were aggregated into five a priori scales based on the key components of the CCM. These sub scales were:

- Patient Activation (items 1-3)
- Delivery System Design/Decision Support (items 4-6)
- Goal Setting (items 7-11)
- Problem-solving/Contextual Counseling (items 12-15)
- Follow-up/Coordination (items 16-20)

Each scale is scored by averaging the items completed within that scale, and the overall PACIC is scored by averaging scores across all 20 items. These scales emphasize patient-healthcare team interactions and, in particular, aspects of self-management support (e.g., goal setting, problem-solving). Because we did not feel that the majority of patients would be able to report on issues that are generally not visible to them, such as clinical information systems or organization of health care, the 5 PACIC scales don't map perfectly onto the 6 CCM components. The various scales of the PACIC, as well as the overall score, appear to be both internally consistent and moderately stable over the three month test-retest interval.
2.1
CAHPS Adult Primary Care Survey


CAHPS® Clinician & Group Survey
Adult Primary Care Questionnaire

[English Version]
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SURVEY INSTRUCTIONS

♦ Answer all the questions by checking the box to the left of your answer.
♦ You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☑ Yes  ➔ If Yes, Go to Question 1 on Page 1
☐ No

{This box should be placed on the Cover Page}

All information that would let someone identify you or your family will be kept private. {VENDOR NAME} will not share your personal information with anyone without your OK. You may choose to answer this survey or not. If you choose not to, this will not affect the health care you get.

Your responses to this survey are completely confidential. Once you complete the survey, place it in the envelope that was provided, seal the envelope, and return the envelope to [INSERT VENDOR ADDRESS].

You may notice a number on the cover of this survey. This number is only used to let us know if you returned your survey so we don't have to send you reminders.

If you want to know more about this study, please call XXX-XXX-XXXX.
## About the Never/Always Response Scale

This survey employs a six-point response scale – “Never/Almost Never/Sometimes/Usually/Almost Always/Always” – rather than the more common CAHPS four-point response scale of “Never/Sometimes/Usually/Always.” This expanded scale, which was tested by several early adopters of the survey, is recommended by the CAHPS Consortium.

Survey sponsors have the option of substituting the four-point scale. The Agency for Healthcare Research & Quality requests that users of the shorter scale notify the CAHPS User Network ([cahps1@ahrq.gov](mailto:cahps1@ahrq.gov)) so that the Consortium can continue to examine the performance of the two response scales in the context of this survey.
YOUR DOCTOR

1. Our records show that you got care from the doctor named below in the last 12 months.

NAME OF DOCTOR LABEL GOES HERE

Is that right?
1.❑ Yes ➔ If Yes, Go to Question 2
2.❑ No ➔ If No, Go to Question 26

The questions in this survey booklet will refer to the doctor named in Question 1 as “this doctor.” Please think of that doctor as you answer the survey.

2. Is this the doctor you usually see if you need a check-up, want advice about a health problem, or get sick or hurt?
1.❑ Yes
2.❑ No

3. How long have you been going to this doctor?
1.❑ Less than 6 months
2.❑ At least 6 months but less than 1 year
3.❑ At least 1 year but less than 3 years
4.❑ At least 3 years but less than 5 years
5.❑ 5 years or more

YOUR CARE FROM THIS DOCTOR IN THE LAST 12 MONTHS

These questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

4. In the last 12 months, how many times did you visit this doctor to get care for yourself?
1.❑ None ➔ If None, Go to Question 26
2.❑ 1 time
3.❑ 2
4.❑ 3
5.❑ 4
6.❑ 5 to 9
7.❑ 10 or more times

5. In the last 12 months, did you phone this doctor’s office to get an appointment for an illness, injury or condition that needed care right away?
1.❑ Yes
2.❑ No ➔ If No, Go to Question 7 on Next Page
6. In the last 12 months, when you phoned this doctor’s office to get an appointment for care you needed right away, how often did you get an appointment as soon as you thought you needed?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

7. In the last 12 months, did you make any appointments for a check-up or routine care with this doctor?

1 ☐ Yes
2 ☐ No ➔ If No, Go to Question 9

8. In the last 12 months, when you made an appointment for a check-up or routine care with this doctor, how often did you get an appointment as soon as you thought you needed?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

9. In the last 12 months, did you phone this doctor’s office with a medical question during regular office hours?

1 ☐ Yes
2 ☐ No ➔ If No, Go to Question 11

10. In the last 12 months, when you phoned this doctor’s office during regular office hours, how often did you get an answer to your medical question that same day?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

11. In the last 12 months, did you phone this doctor’s office with a medical question after regular office hours?

1 ☐ Yes
2 ☐ No ➔ If No, Go to Question 13 on Next Page

12. In the last 12 months, when you phoned this doctor’s office after regular office hours, how often did you get an answer to your medical question as soon as you needed?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always
13. Wait time includes time spent in the waiting room and exam room. In the last 12 months, how often did you see this doctor within 15 minutes of your appointment time?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

14. In the last 12 months, how often did this doctor explain things in a way that was easy to understand?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

15. In the last 12 months, how often did this doctor listen carefully to you?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

16. In the last 12 months, did you talk with this doctor about any health problems or concerns?

1 ☐ Yes
2 ☐ No ➔ If No, Go to Question 18

17. In the last 12 months, how often did this doctor give you easy to understand instructions about taking care of these health problems or concerns?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

18. In the last 12 months, how often did this doctor seem to know the important information about your medical history?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

19. In the last 12 months, how often did this doctor show respect for what you had to say?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always
20. In the last 12 months, how often did this doctor spend enough time with you?

1. ☐ Never
2. ☐ Almost Never
3. ☐ Sometimes
4. ☐ Usually
5. ☐ Almost Always
6. ☐ Always

21. In the last 12 months, did this doctor order a blood test, x-ray or other test for you?

1. ☐ Yes
2. ☐ No ➔ If No, Go to Question 23

22. In the last 12 months, when this doctor ordered a blood test, x-ray or other test for you, how often did someone from this doctor’s office follow up to give you those results?

1. ☐ Never
2. ☐ Almost Never
3. ☐ Sometimes
4. ☐ Usually
5. ☐ Almost Always
6. ☐ Always

23. Using any number from 0 to 10, where 0 is the worst doctor possible and 10 is the best doctor possible, what number would you use to rate this doctor?

   0 ☐ 0  Worst doctor possible
   1 ☐ 1
   2 ☐ 2
   3 ☐ 3
   4 ☐ 4
   5 ☐ 5
   6 ☐ 6
   7 ☐ 7
   8 ☐ 8
   9 ☐ 9
   10 ☐ 10  Best doctor possible

CLERKS AND RECEPTIONISTS AT THIS DOCTOR’S OFFICE

24. In the last 12 months, how often were clerks and receptionists at this doctor’s office as helpful as you thought they should be?

1. ☐ Never
2. ☐ Almost Never
3. ☐ Sometimes
4. ☐ Usually
5. ☐ Almost Always
6. ☐ Always
25. In the last 12 months, how often did clerks and receptionists at this doctor’s office treat you with courtesy and respect?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

26. In general, how would you rate your overall health?

1 ☐ Excellent
2 ☐ Very good
3 ☐ Good
4 ☐ Fair
5 ☐ Poor

27. A health provider is a doctor, nurse or anyone else you would see for health care. In the past 12 months, have you seen a doctor or other health provider 3 or more times for the same condition or problem?

1 ☐ Yes
2 ☐ No ➔ If No, Go to Question 29

28. Is this a condition or problem that has lasted for at least 3 months? Do not include pregnancy or menopause.

1 ☐ Yes
2 ☐ No

29. Do you now need or take medicine prescribed by a doctor? Do not include birth control.

1 ☐ Yes
2 ☐ No ➔ If No, Go to Question 31

30. Is this medicine to treat a condition that has lasted for at least 3 months? Do not include pregnancy or menopause.

1 ☐ Yes
2 ☐ No

31. What is your age?

1 ☐ 18 to 24
2 ☐ 25 to 34
3 ☐ 35 to 44
4 ☐ 45 to 54
5 ☐ 55 to 64
6 ☐ 65 to 74
7 ☐ 75 or older

32. Are you male or female?

1 ☐ Male
2 ☐ Female

33. What is the highest grade or level of school that you have completed?

1 ☐ 8th grade or less
2 ☐ Some high school, but did not graduate
3 ☐ High school graduate or GED
4 ☐ Some college or 2-year degree
5 ☐ 4-year college graduate
6 ☐ More than 4-year college degree
34. Are you of Hispanic or Latino origin or descent?
   1 ☐ Yes, Hispanic or Latino
   2 ☐ No, not Hispanic or Latino

35. What is your race? Please mark one or more.
   1 ☐ White
   2 ☐ Black or African American
   3 ☐ Asian
   4 ☐ Native Hawaiian or Other Pacific Islander
   5 ☐ American Indian or Alaskan Native
   6 ☐ Other

36. Did someone help you complete this survey?
   1 ☐ Yes
   2 ☐ No ➔ Thank you.
   Please return the completed survey in the postage-paid envelope.

37. How did that person help you? Mark all that apply.
   1 ☐ Read the questions to me
   2 ☐ Wrote down the answers I gave
   3 ☐ Answered the questions for me
   4 ☐ Translated the questions into my language
   5 ☐ Helped in some other way
      (Please print)

THANK YOU
Please return the completed survey in the postage-paid envelope.
CAHPS Clinician & Group Survey – Adult Primary Care Questionnaire

Supplemental Items

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Important Instructions Regarding Definition of Specialist

If you choose to use one or more supplemental items that refer to specialists, please insert this definition before the first of these items: “Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care.”
After Hours E-Mail

Insert AE1-AE2 after core question 12.

AE1. In the last 12 months, did you e-mail this doctor’s office with a medical question?

1 □ Yes
2 □ No ➔ If No, Go to Core Question 13

AE2. In the last 12 months, when you e-mailed this doctor's office, how often did you get an answer to your medical question as soon as you needed?

1 □ Never
2 □ Almost Never
3 □ Sometimes
4 □ Usually
5 □ Almost Always
6 □ Always

Being Kept Informed About Appointment Start

Insert KI1 after core question 13. In core question 13, add instruction at the "Always" and "Almost Always" responses to skip over KI1 to core question 14.

KI1. In the last 12 months, after you checked in for your appointment at this doctor's office, were you ever kept informed about how long you would need to wait for your appointment to start?

1 □ Yes
2 □ No

Cost of Care (Prescriptions)

Insert COC1-COC3 after core question 20.

COC1. In the last 12 months, did you take any prescription medicine?

1 □ Yes
2 □ No ➔ If No, Go to Core Question 21
COC2. In the last 12 months, were you ever worried or concerned about the cost of your prescription medicine?

1 □ Yes
2 □ No

COC3. In the last 12 months, did you and this doctor talk about the cost of your prescription medicine?

1 □ Yes
2 □ No

Cost of Care (Tests)

Insert COC4-COC5 after core question 22.

COC4. In the last 12 months, were you ever worried or concerned about the cost of your blood tests, x-rays or other tests?

1 □ Yes
2 □ No

COC5. In the last 12 months, did you and this doctor talk about the cost of your blood tests, x-rays or other tests?

1 □ Yes
2 □ No

Doctor Role

Insert DR1 after core question 2.

DR1. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care. Is this doctor a specialist?

1 □ Yes
2 □ No
**Doctor Thoroughness**

*Insert DT1-DT2 before core question 21.*

**DT1. In the last 12 months did this doctor ever examine you?**

1. □ Yes  
2. □ No  ➔ If No, Go to Core Question 21

**DT2. In the last 12 months, how often was this doctor as thorough as you thought you needed?**

1. □ Never  
2. □ Almost Never  
3. □ Sometimes  
4. □ Usually  
5. □ Almost Always  
6. □ Always

**Health Improvement**

*(Use only if sample will include elderly or individuals with chronic conditions.)*

*Insert HI1 after core question 17.*

**HI1. In the last 12 months, did you and this doctor talk about specific things you could do to prevent illness?**

1. □ Yes  
2. □ No

**Health Promotion and Education**

*Insert HP1-HP6 after core question 17. Note: If “Health Improvement” is included, HP1-6 follow HI1.*

**HP1. In the last 12 months, did you need this doctor’s help in making changes to prevent illness?**

1. □ Yes  
2. □ No  ➔ If No, Go to Question HP3
HP2. In the last 12 months, did this doctor give you the help you needed to make changes to prevent illness?

1 □ Yes
2 □ No

HP3. In the last 12 months, did you and this doctor talk about a healthy diet and healthy eating habits?

1 □ Yes
2 □ No

HP4. In the last 12 months, did you and this doctor talk about the exercise or physical activity you get?

1 □ Yes
2 □ No

HP5. In the last 12 months, did you and this doctor talk about things in your life that worry you or cause you stress?

1 □ Yes
2 □ No

HP6. In the last 12 months, did this doctor ever ask you whether there was a period of time when you felt sad, empty or depressed?

1 □ Yes
2 □ No

Help With Problems or Concerns

Insert HPC1 after core question 16.

HPC1. Did this doctor help you with these problems or concerns?

1 □ Yes
2 □ No
**Other Doctors and Providers at Your Doctor’s Office**

Insert OD1-OD9 after core question 25. If this section is used, patients who had no visits with the sampled doctor should skip to OD1; this requires a change in the skip instructions at question 4.

These questions ask about your experiences with other doctors and providers at this doctor’s office. Please answer only for your own health care. Do not include dental care visits.

OD1. Sometimes when you go to this doctor's office, you might get care from another provider – for example, another doctor in the practice, a nurse, a nurse practitioner or a physician assistant.

In the last 12 months, were any of your appointments at this doctor’s office with another doctor or other provider?

1. Yes
2. No ➔ If No, Go to Core Question 26

Please answer the following questions for the other doctors or providers you visited at this doctor’s office.

OD2. In the last 12 months, how often did the other doctors or providers explain things in a way that was easy to understand?

1. Never
2. Almost Never
3. Sometimes
4. Usually
5. Almost Always
6. Always

OD3. In the last 12 months, how often did the other doctors or providers listen carefully to you?

1. Never
2. Almost Never
3. Sometimes
4. Usually
5. Almost Always
6. Always
OD4. In the last 12 months, did you talk with the other doctors or providers about any health problems or concerns?

1 □ Yes
2 □ No ➔ If No, Go to Question OD6

OD5. In the last 12 months, how often did the other doctors or providers give you easy to understand instructions about what to do to take care of these health problems or concerns?

1 □ Never
2 □ Almost Never
3 □ Sometimes
4 □ Usually
5 □ Almost Always
6 □ Always

OD6. In the last 12 months, how often did the other doctors or providers show respect for what you had to say?

1 □ Never
2 □ Almost Never
3 □ Sometimes
4 □ Usually
5 □ Almost Always
6 □ Always

OD7. In the last 12 months, how often did the other doctors or providers spend enough time with you?

1 □ Never
2 □ Almost Never
3 □ Sometimes
4 □ Usually
5 □ Almost Always
6 □ Always
OD8. In the last 12 months, how often did you feel that the other doctors or providers had all the information they needed to provide your care?

1 □ Never
2 □ Almost Never
3 □ Sometimes
4 □ Usually
5 □ Almost Always
6 □ Always

OD9. Using any number from 0 to 10, where 0 is the worst care possible and 10 is the best care possible, what number would you use to rate all your health care from the other doctors or providers you visited at this doctor’s office in the last 12 months?

0 □ 0 Worst care possible
1 □ 1
2 □ 2
3 □ 3
4 □ 4
5 □ 5
6 □ 6
7 □ 7
8 □ 8
9 □ 9
10 □ 10 Best care possible

Provider Communication

Insert C1 after core question 20. Note: If “Health Promotion and Education” is included, C1 should follow HP2.

C1. In the last 12 months, did this doctor encourage you to talk about all your health concerns?

1 □ Yes
2 □ No

C2. In the last 12 months, were the explanations this doctor gave you about each of the following hard to understand?

<table>
<thead>
<tr>
<th>Does Not Apply</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>a) What was wrong with you?</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>b) The reason for a treatment?</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>c) What a medicine was for?</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>d) How to take a medicine?</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>e) Results of a blood test, x-ray or other test?</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>f) What to do if a condition got worse or came back?</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>g) Something else? please specify:___________________</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Insert C3 after core question 14. In core question 14, add instruction at the “Usually,” “Almost Always,” and "Always" responses to skip over C3 to core question 15. If item C2 is used, C3 should follow C2.

C3. In the last 12 months, were any of the explanations this doctor gave you hard to understand because of an accent or the way the doctor spoke English?

1 □  Yes
2 □  No

Insert C4 - C7 after core question 20.

C4. In the last 12 months, did you feel this doctor really cared about you as a person?

1 □  Yes
2 □  No

C5. In the last 12 months, did this doctor ignore what you told him or her?

1 □  Yes
2 □  No
C6. In the last 12 months, did this doctor use a condescending, sarcastic, or rude tone or manner with you?

1 ☐ Yes
2 ☐ No

C7. In the last 12 months, did this doctor show interest in your questions and concerns?

1 ☐ Yes
2 ☐ No

Insert C8 before core question 21. If items SD1 – SD3 are used, C8 should follow SD3.

C8. In the last 12 months, during any of your visits, did this doctor:

<table>
<thead>
<tr>
<th>Does Not Apply</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Listen to your reasons for the visit?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>b) Show concern for your physical comfort?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>c) Describe his or her physical findings?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>d) Explain the reason for any additional tests?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>e) Describe the next steps for your care or treatment?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
</tbody>
</table>

Insert C9 before core question 21. If items SD1 – SD3 are used, C9 should follow SD3. If item C8 is used, C9 should follow C8.

C9. In the last 12 months, did this doctor give you complete and accurate information about:

<table>
<thead>
<tr>
<th>Does Not Apply</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Tests?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>b) Choices for your care?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>c) Treatment?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>d) Plan for your care?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>e) Medications?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
<tr>
<td>f) Follow-up care?</td>
<td>☐ 1</td>
<td>☐ 2</td>
</tr>
</tbody>
</table>
Provider Knowledge of Specialist Care

Insert PK1-PK2 after core question 20. Note:
• These items are recommended for use only if the sampled provider is not a specialist.
• If C1 is included, insert PK1-PK2 after C1.
Please refer to instructions at the front of this document about defining “specialists.”

PK1. In the last 12 months, did this doctor suggest you see a specialist for a particular health problem?

1. ☐ Yes
2. ☐ No ➔ If No, Go to Core Question 21

PK2. In the last 12 months, how often did the doctor named in Question 1 seem informed and up-to-date about the care you got from specialists?

1. ☐ Never
2. ☐ Almost Never
3. ☐ Sometimes
4. ☐ Usually
5. ☐ Almost Always
6. ☐ Always

Recommend Doctor

Insert RC1 – RC2 after core question 23.

RC1. Would you recommend this doctor to your family and friends?

1. ☐ Definitely yes
2. ☐ Somewhat yes
3. ☐ Somewhat no
4. ☐ Definitely no

RC2. Please tell us how this doctor's office could have improved the care and services you received in the last 12 months.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Shared Decision Making

Insert SD1 – SD3 before core question 21.

SD1. Choices for your treatment or health care can include choices about medicine, surgery, or other treatment. In the last 12 months, did this doctor tell you there was more than one choice for your treatment or health care?

1 □ Yes
2 □ No ➔ If No, Go to Core Question 21

SD2. In the last 12 months, did this doctor talk with you about the pros and cons of each choice for your treatment or health care?

1 □ Yes
2 □ No

SD3. In the last 12 months, when there was more than one choice for your treatment or health care, did this doctor ask which choice you thought was best for you?

1 □ Yes
2 □ No

Wait Time for Urgent Care

Insert WU1 after core question 6.

WU1. In the last 12 months, when you contacted this doctor’s office to get an appointment for care you needed right away, how long did you usually have to wait between trying to get an appointment and actually seeing someone?

1 □ Same day
2 □ 1 day
3 □ 2-3 days
4 □ 4-7 days
5 □ 8-14 days
6 □ 15 days or longer
Your Care from Specialists in the Last 12 Months

Insert SC1-SC8 after question 25. If this section is used, patients who have no visits with the sampled doctor should skip to SC1; this requires a change in the skip instructions at question 4.

Note: If “Other Doctors and Providers at Your Doctor’s Office” items are included, change the skip at OD1 to SC1.

Please refer to instructions at the front of this document about defining “specialists.”

These questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

SC1. In the last 12 months, did you try to make any appointments to see a specialist?

1 ☐ Yes
2 ☐ No ➔ If No, Go to Core Question 26

SC2. In the last 12 months, how often was it easy to get appointments with specialists?

1 ☐ Never
2 ☐ Almost Never
3 ☐ Sometimes
4 ☐ Usually
5 ☐ Almost Always
6 ☐ Always

SC3. In the last 12 months, did you and this doctor talk about the cost of seeing a specialist?

1 ☐ Yes
2 ☐ No

SC4. In the last 12 months, were you ever worried or concerned about the cost of seeing a specialist?

1 ☐ Yes
2 ☐ No
SC5. How many specialists have you seen in the last 12 months?

1. [ ] None ➔ If None, Go to Core Question 26
2. [ ] 1 specialist
3. [ ] 2
4. [ ] 3
5. [ ] 4
6. [ ] 5 or more specialists

SC6. In the last 12 months, how often did the specialists you saw seem to know the important information about your medical history?

1. [ ] Never
2. [ ] Almost Never
3. [ ] Sometimes
4. [ ] Usually
5. [ ] Almost Always
6. [ ] Always

SC7. We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate that specialist?

0. [ ] 0  Worst specialist possible
1. [ ] 1
2. [ ] 2
3. [ ] 3
4. [ ] 4
5. [ ] 5
6. [ ] 6
7. [ ] 7
8. [ ] 8
9. [ ] 9
10. [ ] 10  Best specialist possible

SC8. Was the specialist you saw most often in the last 12 months the doctor named in Question 1?

1. [ ] Yes
2. [ ] No
Your Most Recent Visit

Insert RV1-RV11 after core question 25.

These questions ask about your most recent visit with this doctor. Please answer only for your own health care.

RV1. During your most recent visit with this doctor, were you kept informed about how long you would need to wait for your appointment to start?

1  ☐ Yes
2  ☐ No

RV2. Wait time includes time spent in the waiting room and exam room. During your most recent visit with this doctor, did you see this doctor within 15 minutes of your appointment time?

1  ☐ Yes
2  ☐ No

RV3. During your most recent visit, did this doctor explain things in a way that was easy to understand?

1  ☐ Yes
2  ☐ No

RV4. During your most recent visit, did you talk with this doctor about any health problems or concerns?

1  ☐ Yes
2  ☐ No  ➔ If No, Go to Question RV6

RV5. During your most recent visit, did this doctor give you easy to understand instructions about what to do to take care of these health problems or concerns?

1  ☐ Yes
2  ☐ No

RV6. During your most recent visit, did this doctor seem to know the important information about your medical history?

1  ☐ Yes
2  ☐ No
RV7. During your most recent visit, did this doctor show concern about your health and how you were feeling?

1☐ Yes
2☐ No

RV8. During your most recent visit, did this doctor spend enough time with you?

1☐ Yes
2☐ No

RV9. During your most recent visit, did clerks and receptionists at this doctor’s office treat you with courtesy and respect?

1☐ Yes
2☐ No

RV10. Using any number from 0 to 10, where 0 is the worst medical care possible and 10 is the best medical care possible, what number would you use to rate the medical care you received during your most recent visit with this doctor?

0 ☐ 0  Worst medical care possible
1 ☐ 1
2 ☐ 2
3 ☐ 3
4 ☐ 4
5 ☐ 5
6 ☐ 6
7 ☐ 7
8 ☐ 8
9 ☐ 9
10 ☐ 10  Best medical care possible

RV11. Please tell us how this doctor’s office could have improved the care and services you received at your most recent visit.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
2.1
Primary Care Staff Satisfaction Survey


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Professionals

- Creating a joyful work environment starts with a basic understanding of staff perceptions of the practice. All staff members should complete this survey. Use a tally sheet to summarize results.
- Ask all practice staff to complete the Staff Survey. Often you can distribute this survey to any professional who spends time in your practice. Set a deadline of one week and designate a place for the survey to be dropped off. You may have an organization-wide survey in place that you can use to replace this survey, but be sure it is CURRENT data, not months old, and that you are able to capture the data from all professionals specific to the Primary Care Practice workplace.

### Primary Care Staff Satisfaction Survey

1. I am treated with respect every day by everyone that works in this practice.
   - [ ] Strongly Agree  [ ] Agree  [ ] Disagree  [ ] Strongly Disagree

2. I am given everything I need—tools, equipment, and encouragement—to make my work meaningful to my life.
   - [ ] Strongly Agree  [ ] Agree  [ ] Disagree  [ ] Strongly Disagree

3. When I do good work, someone in this practice notices that I did it.
   - [ ] Strongly Agree  [ ] Agree  [ ] Disagree  [ ] Strongly Disagree

4. How stressful would you say it is to work in this practice?
   - [ ] Very stressful  [ ] Somewhat stressful  [ ] A little stressful  [ ] Not stressful

5. How easy is it to ask anyone a question about the way we care for patients?
   - [ ] Very easy  [ ] Easy  [ ] Difficult  [ ] Very difficult

6. How would you rate other people’s morale and their attitudes about working here?
   - [ ] Excellent  [ ] Very Good  [ ] Good  [ ] Fair  [ ] Poor

7. This practice is a better place to work than it was 12 months ago.
   - [ ] Strongly Agree  [ ] Agree  [ ] Disagree  [ ] Strongly Disagree

8. I would recommend this practice as a great place to work.
   - [ ] Strongly Agree  [ ] Agree  [ ] Disagree  [ ] Strongly Disagree

9. What would make this practice better for patients?

10. What would make this practice better for those who work here?

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Adapted from the original version, Dartmouth-Hitchcock, Version 2, February 2005
2.1 Assessment of Chronic Illness Care (survey)


Please complete the following information about you and your organization. This information will not be disclosed to anyone besides the ICIC/IHI team. We would like to get your phone number and e-mail address in the event that we need to contact you/your team in the future. Please also indicate the names of persons (e.g., team members) who complete the survey with you. Later on in the survey, you will be asked to describe the process by which you complete the survey.

**Your name:**

**Date:** __________/________/________

**Month**  **Day**  **Year**

**Organization & Address:**

**Names of other persons completing the survey with you:**

1. 

2. 

3. 

**Your phone number:** (______) __ __ __ - __ __ __ __

**Your e-mail address:**

---

**Directions for Completing the Survey**

This survey is designed to help systems and provider practices move toward the “state-of-the-art” in managing chronic illness. The results can be used to help your team identify areas for improvement. Instructions are as follows:

1. **Answer each question** from the perspective of one physical site (e.g., a practice, clinic, hospital, health plan) that supports care for chronic illness.
   
   Please provide name and type of site (e.g., Group Health Cooperative/Plan) ________________________________

2. **Answer each question** regarding how your organization is doing with respect to one disease or condition.
   
   Please specify condition ________________________________

3. **Circle the point value** that best describes the level of care that currently exists in the site and condition you chose. The rows in this form present key aspects of chronic illness care. Each aspect is divided into levels showing various stages in improving chronic illness care. The stages are represented by points that range from 0 to 11. The higher point values indicate that the actions described in that box are more fully implemented.

4. **Sum the points in each section** (e.g., total part 1 score), calculate the average score (e.g., total part 1 score / # of questions), and enter these scores in the space provided at the end of each section. Then sum all of the section scores and complete the average score for the program as a whole by dividing this by 6.

---

**For more information about how to complete the survey, please contact:**

Judith Schaefer, MPH  
Improving Chronic Illness Care  
A National Program of the Robert Wood Johnson Foundation  
Group Health Cooperative of Puget Sound  
1730 Minor Avenue, Suite 1290  
Seattle, WA 98101-1448  
tel. 206.287.2077; Schaefer.jk@ghc.org
Assessment of Chronic Illness Care, Version 3.5

Part 1: Organization of the Healthcare Delivery System. Chronic illness management programs can be more effective if the overall system (organization) in which care is provided is oriented and led in a manner that allows for a focus on chronic illness care.

<table>
<thead>
<tr>
<th>Components</th>
<th>Level D</th>
<th>Level C</th>
<th>Level B</th>
<th>Level A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Organizational Leadership in Chronic Illness Care Score</td>
<td>…does not exist or there is a little interest.</td>
<td>…is reflected in vision statements and business plans, but no resources are specifically earmarked to execute the work.</td>
<td>…is reflected by senior leadership and specific dedicated resources (dollars and personnel).</td>
<td>…is part of the system’s long term planning strategy, receive necessary resources, and specific people are held accountable.</td>
</tr>
<tr>
<td>Organizational Goals for Chronic Care Score</td>
<td>…do not exist or are limited to one condition.</td>
<td>…exist but are not actively reviewed.</td>
<td>…are measurable and reviewed.</td>
<td>…are measurable, reviewed routinely, and are incorporated into plans for improvement.</td>
</tr>
<tr>
<td>Improvement Strategy for Chronic Illness Care Score</td>
<td>…is ad hoc and not organized or supported consistently.</td>
<td>…utilizes ad hoc approaches for targeted problems as they emerge.</td>
<td>…utilizes a proven improvement strategy for targeted problems.</td>
<td>…includes a proven improvement strategy and uses it proactively in meeting organizational goals.</td>
</tr>
<tr>
<td>Incentives and Regulations for Chronic Illness Care Score</td>
<td>…are not used to influence clinical performance goals.</td>
<td>…are used to influence utilization and costs of chronic illness care.</td>
<td>…are used to support patient care goals.</td>
<td>…are used to motivate and empower providers to support patient care goals.</td>
</tr>
<tr>
<td>Senior Leaders Score</td>
<td>…discourage enrollment of the chronically ill.</td>
<td>…do not make improvements to chronic illness care a priority.</td>
<td>…encourage improvement efforts in chronic care.</td>
<td>…visibly participate in improvement efforts in chronic care.</td>
</tr>
<tr>
<td>Benefits Score</td>
<td>…discourage patient self-management or system changes.</td>
<td>…neither encourage nor discourage patient self-management or system changes.</td>
<td>…encourage patient self-management or system changes.</td>
<td>…are specifically designed to promote better chronic illness care.</td>
</tr>
</tbody>
</table>

Total Health Care Organization Score ________ Average Score (Health Care Org. Score / 6) ________

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**Part 2: Community Linkages.** Linkages between the health delivery system (or provider practice) and community resources play important roles in the management of chronic illness.

<table>
<thead>
<tr>
<th>Components</th>
<th>Level D</th>
<th>Level C</th>
<th>Level B</th>
<th>Level A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Linking Patients to Outside Resources</strong></td>
<td>…is not done systematically.</td>
<td>…is limited to a list of identified community resources in an accessible format.</td>
<td>…is accomplished through a designated staff person or resource responsible for ensuring providers and patients make maximum use of community resources.</td>
<td>…is accomplished through active coordination between the health system, community service agencies and patients.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Partnerships with Community Organizations</strong></td>
<td>…do not exist.</td>
<td>…are being considered but have not yet been implemented.</td>
<td>…are formed to develop supportive programs and policies.</td>
<td>…are actively sought to develop formal supportive programs and policies across the entire system.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Regional Health Plans</strong></td>
<td>…do not coordinate chronic illness guidelines, measures or care resources at the practice level.</td>
<td>…would consider some degree of coordination of guidelines, measures or care resources at the practice level but have not yet implemented changes.</td>
<td>…currently coordinate guidelines, measures or care resources in one or two chronic illness areas.</td>
<td>…currently coordinate chronic illness guidelines, measures and resources at the practice level for most chronic illnesses.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Community Linkages Score ___________ Average Score (Community Linkages Score / 3) _________

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Part 3: Practice Level. Several components that manifest themselves at the level of the individual provider practice (e.g. individual clinic) have been shown to improve chronic illness care. These characteristics fall into general areas of self-management support, delivery system design issues that directly affect the practice, decision support, and clinical information systems.

Part 3a: Self-Management Support. Effective self-management support can help patients and families cope with the challenges of living with and treating chronic illness and reduce complications and symptoms.

<table>
<thead>
<tr>
<th>Components</th>
<th>Level D</th>
<th>Level C</th>
<th>Level B</th>
<th>Level A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment and Documentation of Self-Management Needs and Activities</td>
<td>…are not done.</td>
<td>…are expected.</td>
<td>…are completed in a standardized manner.</td>
<td>…are regularly assessed and recorded in standardized form linked to a treatment plan available to practice and patients.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Self-Management Support</td>
<td>…is limited to the distribution of information (pamphlets, booklets).</td>
<td>…is available by referral to self-management classes or educators.</td>
<td>…is provided by trained clinical educators who are designated to do self-management support, affiliated with each practice, and see patients on referral.</td>
<td>…is provided by clinical educators affiliated with each practice, trained in patient empowerment and problem-solving methodologies, and see most patients with chronic illness.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Addressing Concerns of Patients and Families</td>
<td>…is not consistently done.</td>
<td>…is provided for specific patients and families through referral.</td>
<td>…is encouraged, and peer support, groups, and mentoring programs are available.</td>
<td>…is an integral part of care and includes systematic assessment and routine involvement in peer support, groups or mentoring programs.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Effective Behavior Change Interventions and Peer Support</td>
<td>…are not available.</td>
<td>…are limited to the distribution of pamphlets, booklets or other written information.</td>
<td>…are available only by referral to specialized centers staffed by trained personnel.</td>
<td>…are readily available and an integral part of routine care.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Self-Management Score_______ Average Score (Self Management Score / 4) _______
**Part 3b: Decision Support.** Effective chronic illness management programs assure that providers have access to evidence-based information necessary to care for patients—decision support. This includes evidence-based practice guidelines or protocols, specialty consultation, provider education, and activating patients to make provider teams aware of effective therapies.

<table>
<thead>
<tr>
<th>Components</th>
<th>Level D</th>
<th>Level C</th>
<th>Level B</th>
<th>Level A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence-Based Guidelines</td>
<td>…are not available.</td>
<td>…are available but are not integrated into care delivery.</td>
<td>…are available and supported by provider education.</td>
<td>…are available, supported by provider education and integrated into care through reminders and other proven provider behavior change methods.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Involvement of Specialists in Improving Primary Care</td>
<td>…is primarily through traditional referral.</td>
<td>…is achieved through specialist leadership to enhance the capacity of the overall system to routinely implement guidelines.</td>
<td>…includes specialist leadership and designated specialists who provide primary care team training.</td>
<td>…includes specialist leadership and specialist involvement in improving the care of primary care patients.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Provider Education for Chronic Illness Care</td>
<td>…is provided sporadically.</td>
<td>…is provided systematically through traditional methods.</td>
<td>…is provided using optimal methods (e.g. academic detailing).</td>
<td>…includes training all practice teams in chronic illness care methods such as population-based management, and self-management support.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Informing Patients about Guidelines</td>
<td>…is not done.</td>
<td>…happens on request or through system publications.</td>
<td>…is done through specific patient education materials for each guideline.</td>
<td>…includes specific materials developed for patients which describe their role in achieving guideline adherence.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Decision Support Score ________ Average Score (Decision Support Score / 4) ________
Part 3c: Delivery System Design. Evidence suggests that effective chronic illness management involves more than simply adding additional interventions to a current system focused on acute care. It may necessitate changes to the organization of practice that impact provision of care.

<table>
<thead>
<tr>
<th>Components</th>
<th>Level D</th>
<th>Level C</th>
<th>Level B</th>
<th>Level A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practice Team Functioning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Practice Team Leadership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Appointment System</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Follow-up</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Planned Visits for Chronic Illness Care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Continuity of Care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

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Part 3d: Clinical Information Systems. Timely, useful information about individual patients and populations of patients with chronic conditions is a critical feature of effective programs, especially those that employ population-based approaches.\textsuperscript{7,8}

<table>
<thead>
<tr>
<th>Components</th>
<th>Level D</th>
<th>Level C</th>
<th>Level B</th>
<th>Level A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registry (list of patients with specific conditions)</td>
<td>…is not available.</td>
<td>…includes name, diagnosis, contact information and date of last contact either on paper or in a computer database.</td>
<td>…allows queries to sort sub-populations by clinical priorities.</td>
<td>…is tied to guidelines which provide prompts and reminders about needed services.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Reminders to Providers</td>
<td>…are not available.</td>
<td>… include general notification of the existence of a chronic illness, but does not describe needed services at time of encounter.</td>
<td>…includes indications of needed service for populations of patients through periodic reporting.</td>
<td>…includes specific information for the team about guideline adherence at the time of individual patient encounters.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Feedback</td>
<td>…is not available or is non-specific to the team.</td>
<td>…is provided at infrequent intervals and is delivered impersonally.</td>
<td>…occurs at frequent enough intervals to monitor performance and is specific to the team’s population.</td>
<td>…is timely, specific to the team, routine and personally delivered by a respected opinion leader to improve team performance.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Information about Relevant Subgroups of Patients Needing Services</td>
<td>…is not available.</td>
<td>…can only be obtained with special efforts or additional programming.</td>
<td>…can be obtained upon request but is not routinely available.</td>
<td>…is provided routinely to providers to help them deliver planned care.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Patient Treatment Plans</td>
<td>…are not expected.</td>
<td>…are achieved through a standardized approach.</td>
<td>…are established collaboratively and include self management as well as clinical goals.</td>
<td>…are established collaborative and include self management as well as clinical management. Follow-up occurs and guides care at every point of service.</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Total Clinical Information System Score_______  Average Score (Clinical Information System Score / 5) ________

**Integration of Chronic Care Model Components.** Effective systems of care integrate and combine all elements of the Chronic Care Model; e.g., linking patients' self-management goals to information systems/registries.

<table>
<thead>
<tr>
<th>Components</th>
<th>Little support</th>
<th>Basic support</th>
<th>Good support</th>
<th>Full support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Informing Patients about Guidelines</strong></td>
<td>...is not done.</td>
<td>...happens on request or through system publications.</td>
<td>...is done through specific patient education materials for each guideline.</td>
<td>...includes specific materials developed for patients which describe their role in achieving guideline adherence.</td>
</tr>
<tr>
<td><strong>Score</strong></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Information Systems/Registries</strong></td>
<td>...do not include patient self-management goals.</td>
<td>...include results of patient assessments (e.g., functional status rating; readiness to engage in self-management activities), but no goals.</td>
<td>...include results of patient assessments, as well as self-management goals that are developed using input from the practice team/provider and patient.</td>
<td>...include results of patient assessments, as well as self-management goals that are developed using input from the practice team and patient, and prompt reminders to the patient and/or provider about follow-up and periodic re-evaluation of goals.</td>
</tr>
<tr>
<td><strong>Score</strong></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Community Programs</strong></td>
<td>...do not provide feedback to the health care system/clinic about patients' progress in their programs.</td>
<td>...provide sporadic feedback at joint meetings between the community and health care system about patients' progress in their programs.</td>
<td>...provide regular feedback to the health care system/clinic using formal mechanisms (e.g., Internet progress report) about patients' progress.</td>
<td>...provide regular feedback to the health care system about patients' progress that requires input from patients that is then used to modify programs to better meet the needs of patients.</td>
</tr>
<tr>
<td><strong>Score</strong></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Organizational Planning for Chronic Illness Care</strong></td>
<td>...does not involve a population-based approach.</td>
<td>...uses data from information systems to plan care.</td>
<td>...uses data from information systems to proactively plan population-based care, including the development of self-management programs and partnerships with community resources.</td>
<td>...uses systematic data and input from practice teams to proactively plan population-based care, including the development of self-management programs and community partnerships, that include a built-in evaluation plan to determine success over time.</td>
</tr>
<tr>
<td><strong>Score</strong></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Copyright 2000 MacColl Institute for Healthcare Innovation, Group Health Cooperative
<table>
<thead>
<tr>
<th>Components</th>
<th>Little support</th>
<th>Basic support</th>
<th>Good support</th>
<th>Full support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine follow-up for appointments, patient assessments and goal planning</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>...is not ensured.</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>is ensured by assigning responsibilities to specific staff (e.g., nurse case manager).</td>
</tr>
<tr>
<td>...is sporadically done, usually for appointments only.</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>...is ensured by assigning responsibilities to specific staff (e.g., nurse case manager).</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Guidelines for chronic illness care</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>...are not shared with patients.</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>...are given to patients who express a specific interest in self-management of their condition.</td>
</tr>
</tbody>
</table>

Total Integration Score (SUM items): __________  ➤  Average Score (Integration Score/ 6) = __________
Briefly describe the process you used to fill out the form (e.g., reached consensus in a face-to-face meeting; filled out by the team leader in consultation with other team members as needed; each team member filled out a separate form and the responses were averaged).

Description: ___________________________________________________________________________________________
_________________________________________________________________________________________________________________________

Scoring Summary
(bring forward scoring at end of each section to this page)

Total Org. of Health Care System Score
Total Community Linkages Score
Total Self-Management Score
Total Decision Support Score
Total Delivery System Design Score
Total Clinical Information System Score
Total Integration Score

Overall Total Program Score (Sum of all scores)  ______

Average Program Score (Total Program /7)  ______
What does it mean?

The ACIC is organized such that the highest “score” (an “11”) on any individual item, subscale, or the overall score (an average of the six ACIC subscale scores) indicates optimal support for chronic illness. The lowest possible score on any given item or subscale is a “0”, which corresponds to limited support for chronic illness care. The interpretation guidelines are as follows:

- Between “0” and “2” = limited support for chronic illness care
- Between “3” and “5” = basic support for chronic illness care
- Between “6” and “8” = reasonably good support for chronic illness care
- Between “9” and “11” = fully developed chronic illness care

It is fairly typical for teams to begin a collaborative with average scores below “5” on some (or all) areas the ACIC. After all, if everyone was providing optimal care for chronic illness, there would be no need for a chronic illness collaborative or other quality improvement programs. It is also common for teams to initially believe they are providing better care for chronic illness than they actually are. As you progress in the Collaborative, you will become more familiar with what an effective system of care involves. You may even notice your ACIC scores “declining” even though you have made improvements; this is most likely the result of your better understanding of what a good system of care looks like. Over time, as your understanding of good care increases and you continue to implement effective practice changes, you should see overall improvement on your ACIC scores.
2.1
Assessment of Chronic Illness Care Scoring Guide


COMPLETING AND SCORING THE ACIC

COMPLETING THE ACIC

Users should complete the ACIC for one chronic condition at a time (e.g., how well they are providing care for diabetes). Respondents (practice teams, health plan representatives) are asked to rate the degree to which each component (e.g., partnerships with community organizations, patient treatment plans) is being implemented within their system for that chronic condition, using a scale ranging from 0 (not at all) to 11 (fully). To aid in selecting a value, the ACIC provides general descriptions for limited, basic, good and excellent support of chronic illness care in connection with that component. One of the advantages of the ACIC is that the most advanced category (the highest possible score for each item) describes optimal practice, educating respondents about where they should be targeting their practice.

SCORING THE ACIC

The ACIC provides subscale scores corresponding to each of the Chronic Care Model elements, as well as an overall score. Scores for each section are obtained by summing the values for all items within a section (e.g., self-management support) and dividing by the number of items within that section. The overall score is derived by summing the average scores of each section and dividing by the number of sections administered. For Version 3, you should divide the overall score (sum of average subscale scores) by 6 (the number of subscales in Version 3) to obtain the average overall score. For Version 3.5, you should divide the overall score by 7 (the number of subscales in Version 3.5) to obtain the average overall score.

The ACIC is organized such that the highest "score" (an "11") on any individual item, subscale, or the overall score (an average of the seven ACIC subscale scores) indicates optimal support for chronic illness. The lowest possible score on any given item or subscale is a "0", which corresponds to limited support for chronic illness care. The interpretation guidelines are as follows:

Between "0" and "2" = limited support for chronic illness care
Between "3" and "5" = basic support for chronic illness care
Between "6" and "8" = reasonably good support for chronic illness care
Between "9" and "11" = fully developed chronic illness care

It is common for teams to begin a collaborative with average scores below "5" on many (or all) areas the ACIC. After all, if everyone was providing optimal care for chronic illness, there would be no need for a chronic illness collaborative or other quality improvement programs. Over time, as teams' understanding of good care increases and they continue to implement effective practice changes, they should see overall improvement in their ACIC scores.

MacColl Institute for Healthcare Innovation, Group Health Cooperative
http://www.improvingchroniccare.org
2.1 Primary Care Practice Know Your Processes (survey)


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Processes

- Review, adapt and distribute the Core and Supporting Processes evaluation form to ALL practice staff. Be sure the list is accurate for your practice and then ask staff to evaluate the CURRENT state of these processes. Rate each process by putting a tally mark under the heading which most closely matches your understanding of the process (first 6 columns). Also mark if the process is a source of patient complaints. Tally the results to give the Lead Team an idea as to where to begin to focus improvement from the staff perspective.

- **Steps for Improvement:** Explore improvements for each process based on the outcomes of this assessment tool. Each of the processes below should be flowcharted in its current state. Once you have flowcharted the current state of your processes and determined your Change Ideas, use the PDSA Cycle Worksheet to run tests of change and to measure.

### Primary Care Practice Know Your Processes

<table>
<thead>
<tr>
<th>Processes</th>
<th>Works Well</th>
<th>Small Problem</th>
<th>Real Problem</th>
<th>Totally Broken</th>
<th>Cannot Rate</th>
<th>We're Working On It</th>
<th>Source of Patient Complaint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering Phones</td>
<td></td>
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<tr>
<td>Appointment System</td>
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<tr>
<td>Messaging</td>
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<tr>
<td>Scheduling Procedures</td>
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<tr>
<td>Order Diagnostic Testing</td>
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<tr>
<td>Reporting Diagnostic Test Results</td>
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<tr>
<td>Prescription Renewal</td>
<td></td>
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<tr>
<td>Making Referrals</td>
<td></td>
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<tr>
<td>Pre-authorization for Services</td>
<td></td>
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<tr>
<td>Billing/Coding</td>
<td></td>
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<tr>
<td>Phone Advice</td>
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<tr>
<td>Assignment of Patients to Your Practice</td>
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<tr>
<td>Orientation of Patients to Your Practice</td>
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<tr>
<td>New Patient Work-ups</td>
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<tr>
<td>Minor Procedures</td>
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<tr>
<td>Education for Patients/Families</td>
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<tr>
<td>Prevention Assessment/Activities</td>
<td></td>
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<tr>
<td>Chronic Disease Management</td>
<td></td>
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<tr>
<td>Palliative Care</td>
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</tr>
</tbody>
</table>
2.1
Finance Collaborative Pre-Work (survey)


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What is the identified “population of focus”? (We suggest selecting a single provider, along with the care team that works with him/her and the panel of patients for whom s/he is responsible. If it makes more sense in your organization to select a team of providers, that is also appropriate)

Please provide the following information as it relates to the Population of Focus defined above. If you do not have some of the information or it is difficult to obtain, enter “N/A”

<table>
<thead>
<tr>
<th>Staffing (number of full-time equivalents)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td></td>
</tr>
<tr>
<td>NP/PA</td>
<td></td>
</tr>
<tr>
<td>RN</td>
<td></td>
</tr>
<tr>
<td>MA/NA</td>
<td></td>
</tr>
<tr>
<td>LPN</td>
<td></td>
</tr>
<tr>
<td>Secretary/front desk</td>
<td></td>
</tr>
<tr>
<td>Other, specify</td>
<td></td>
</tr>
</tbody>
</table>

Count full time staff that are directly involved in patient interactions.

**Definition of fulltime:**
- Hours per week
- Hours per day

<table>
<thead>
<tr>
<th>Patient panel size (number of unique patients seen in the last 18 months)</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Office Encounters in Last Year in Last Month</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td></td>
</tr>
<tr>
<td>NP/PA</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RVU'S Last Year Last Month</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Billable</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

**Total Annual Practice Expenses**
- Patient Care Staff, as defined above, including benefits
- Administrative and Business Office Staff
- Overhead
- Cost per Visit
- Cost per Patient
- Cost per RVU

**Practice Revenues**
- Total Patient Charges
- Total Collections
- Other Income
- (source)

**Average Patients seen per Hour per Provider**
- MD
- NP/PA
- Other

**Length of Time Between Request for Appointment and Third Next Available Time Slot**
- MD
- NP/PA
<table>
<thead>
<tr>
<th>Cycle Time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average wait time before going to an exam room</td>
<td></td>
</tr>
<tr>
<td>Average wait time in exam room</td>
<td></td>
</tr>
<tr>
<td>Total average wait time</td>
<td></td>
</tr>
<tr>
<td>Average time with provider</td>
<td></td>
</tr>
<tr>
<td>Total time from arrival to departure</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Practice Hours of Operation:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td></td>
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<tr>
<td>T</td>
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<tr>
<td>W</td>
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<tr>
<td>SA</td>
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<tr>
<td>SU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you use Group Visits?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you use Email? If yes, purpose.</td>
<td></td>
</tr>
<tr>
<td>Visits</td>
<td></td>
</tr>
<tr>
<td>Prescription refill</td>
<td></td>
</tr>
<tr>
<td>Scheduling</td>
<td></td>
</tr>
<tr>
<td>Test results</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

| Do you formally assess staff satisfaction? |  |
| Do you use a cost accounting system? Which? |  |
| Do you use an automated scheduling system? Which? |  |
| Do you use a practice management system? Which? |  |
| What percent of changes are submitted electronically? |  |
| Do you use an automated registry? Which? |  |
| Do you use an EMR? Which? |  |

2.1 Building Your Community (online resource)


2.2 National Disease Guidelines (online resource)

National Guideline Clearinghouse™ [Web page]

2.2
National Voluntary Consensus Standards for Ambulatory Care (measures)
## Asthma/Respiratory Illness

<table>
<thead>
<tr>
<th>Measure Title</th>
<th>Measure Description</th>
<th>IP Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asthma assessment</strong></td>
<td>Percentage of patients who were evaluated during at least one office visit for the frequency (numeric) of daytime and nocturnal asthma symptoms.</td>
<td>AMA/PCPI&lt;sup&gt;7,8&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Management plan for people with asthma</strong></td>
<td>Percentage of patients for whom there is documentation, that a written asthma management plan was provided either to the patient or the patient’s caregiver OR at a minimum, specific written instructions on under what conditions the patient’s doctor should be contacted or the patient should go to the emergency room.</td>
<td>IPRO</td>
</tr>
<tr>
<td><strong>Use of appropriate medications for people with asthma</strong></td>
<td>Percentage of patients who were identified as having persistent asthma during the measurement year and the year prior to the measurement year and who were dispensed a prescription for either an inhaled corticosteroid or acceptable alternative medication during the measurement year.</td>
<td>NCQA&lt;sup&gt;7,9&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Asthma: Pharmacologic therapy</strong></td>
<td>Percentage of all patients with mild, moderate, or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment.</td>
<td>AMA/PCPI&lt;sup&gt;7,8&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Inappropriate antibiotic treatment for adults with acute bronchitis</strong></td>
<td>Percentage of patients who were diagnosed with bronchitis and were dispensed an antibiotic on or within three days after the episode date.</td>
<td>NCQA&lt;sup&gt;7,9&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Appropriate treatment for children with upper respiratory infection</strong></td>
<td>Percentage of children who were given a diagnosis of upper respiratory infection (URI) and were not dispensed an antibiotic prescription on or 3 days after the episode date.</td>
<td>NCQA&lt;sup&gt;7,9&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Chronic Obstructive Pulmonary Disease (COPD) – Assessment of oxygen saturation</strong></td>
<td>Percentage of patients with chronic obstructive pulmonary disease (COPD) with oxygen saturation assessed at least annually.</td>
<td>AMA/PCPI&lt;sup&gt;7,8&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>COPD – Spirometry evaluation</strong></td>
<td>Percentage of patients with COPD who had a spirometry evaluation documented.</td>
<td>AMA/PCPI&lt;sup&gt;7,8&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>COPD – Inhaled bronchodilator Therapy</strong></td>
<td>Percentage of symptomatic patients with COPD who were prescribed an inhaled bronchodilator.</td>
<td>AMA/PCPI&lt;sup&gt;7,8&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

---

<sup>1</sup> Intellectual Property owner. For the most current specifications and supporting information please refer to the IP owner.

- **AMA/PCPI** – American Medical Association Physician Consortium for Performance Improvement ([www.physicianconsortium.org](http://www.physicianconsortium.org))
- **IPRO** – IPRO Inc. ([www.ipro.org](http://www.ipro.org))
- **NCQA** – National Committee for Quality Assurance ([www.ncqa.org](http://www.ncqa.org))
- **ICSI** – Institute for Clinical Systems Improvement ([www.icsi.org](http://www.icsi.org))
- **RHI** – Resolution Health, Inc. ([www.resolutionhealth.com](http://www.resolutionhealth.com))
- **CMS-SCRIPT** – The SCRIPT measures were developed by the Coalition for Quality in Medication Use funded by CMS and are in the public domain. Since the project has concluded and the Coalition is no longer available to maintain the measure, NQF has identified a developer who is willing to maintain and update the measure to remain current.

<sup>2</sup> Previously endorsed by NQF in *National Voluntary Consensus Standards for Ambulatory Care: An Initial Physician-focused Performance Measure Set*.

<sup>3</sup> Data source – EHRS, retrospective record review or prospective flow sheet

<sup>4</sup> Data source – Administrative/electronic data (visit and pharmacy encounter data or claims).
<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>MEASURE DESCRIPTION</th>
<th>IP OWNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate testing for children with pharyngitis</td>
<td>Percentage of patients who were diagnosed with pharyngitis, prescribed an antibiotic and who received a group A streptococcus test for the episode</td>
<td>NCQA/AMA/PCPI</td>
</tr>
<tr>
<td><strong>BONE and JOINT DISEASE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osteoarthritis: Functional and Pain Assessment</td>
<td>Percentage of patients with osteoarthritis who were assessed for function and pain</td>
<td>AMA/PCPI</td>
</tr>
<tr>
<td>Osteoarthritis: Assessment for Use of Anti-inflammatory or Analgesic OTC Medications</td>
<td>Percentage of patient visits with assessment for use of anti-inflammatory or analgesic OTC medications</td>
<td>AMA/PCPI</td>
</tr>
<tr>
<td>Low Back Pain: Use of Imaging Studies</td>
<td>Percentage of patients with new low back pain who received an imaging study (plain x-ray, MRI, CT scan) conducted on the Episode Start Date or in the 28 days following the Episode Start Date.</td>
<td>NCQA</td>
</tr>
<tr>
<td>Osteoporosis management in women who had a fracture</td>
<td>Percentage of women 65 years and older who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat or prevent osteoporosis in the six months after the date of fracture.</td>
<td>NCQA</td>
</tr>
<tr>
<td>Arthritis: Disease Modifying Anti-rheumatic Drug Therapy in Rheumatoid Arthritis</td>
<td>Assesses whether patients diagnosed with rheumatoid arthritis have had at least one ambulatory prescription dispensed for a disease modifying anti-rheumatic (DMARD).</td>
<td>NCQA</td>
</tr>
<tr>
<td><strong>DIABETES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye Exam</td>
<td>Percentage of adult patients with diabetes aged 18-75 years who received a dilated eye exam or seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist or imaging validated to match diagnosis from these photos during the reporting year, or during the prior year, if patient is at low risk* for retinopathy. *Patient is considered low risk if the following criterion is met: has no evidence of retinopathy in the prior year.</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Foot Exam</td>
<td>Percentage of adult patients with diabetes aged 18-75 years who received a foot exam (visual inspection, sensory exam with monofilament, or pulse exam).</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Hemoglobin A1c Testing</td>
<td>Percentage of adult patients with diabetes aged 18-75 years receiving one or more A1c test(s) per years.</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Hemoglobin A1c management</td>
<td>Percentage of adult patients with diabetes aged 18-75 years with most recent A1c level greater that 9.0% (poor control).</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Hemoglobin A1c Test for Pediatric Patients</td>
<td>Percentage of pediatric patients with diabetes with a HBA1c test in a 12-month measurement period.</td>
<td>NCQA</td>
</tr>
<tr>
<td>Blood Pressure management</td>
<td>Percentage of adult patients with diabetes aged 18-75 years with most recent blood pressure less than 140/80 mm Hg.</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Urine protein screening</td>
<td>Percentage of adult diabetes patients aged 18-75 years with at least one test for microalbumin during the measurement year; or who had evidence of medical attention for existing nephropathy (diagnosis of nephropathy or documentation of microalbuminuria or albuminuria).</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>Lipid Profile</td>
<td>Percentage of adult patients with diabetes aged 18-75 years receiving at least one lipid profile (or ALL component tests).</td>
<td>Alliance/NCQA</td>
</tr>
<tr>
<td>MEASURE TITLE</td>
<td>MEASURE DESCRIPTION</td>
<td>IP OWNER</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td><strong>HEART DISEASE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Coronary Artery Disease (CAD): Symptom and Activity Assessment</strong></td>
<td>Percentage of patients with coronary artery disease who were evaluated for both level</td>
<td>AMA PCPI/Acc/AHA²,³</td>
</tr>
<tr>
<td><strong>CAD: ACEI/ ARB Therapy</strong></td>
<td>of activity and anginal symptoms during one or more office visits.</td>
<td></td>
</tr>
<tr>
<td><strong>CAD: Antiplatelet Therapy</strong></td>
<td>Percentage of patients with coronary artery disease who were prescribed antiplatelet</td>
<td>AMA PCPI/Acc/AHA²,³</td>
</tr>
<tr>
<td><strong>Ischemic Vascular Disease (IVD): Use of Aspirin or another Antithrombotic</strong></td>
<td>Ischemic Vascular Disease (IVD): Patients who have documentation of use of aspirin</td>
<td>NCQA²,³</td>
</tr>
<tr>
<td><strong>CAD: Beta-Blocker Therapy-Prior MI</strong></td>
<td>Percentage of patients with prior MI at any time who were prescribed beta-blocker</td>
<td>AMA PCPI/Acc/AHA²,³</td>
</tr>
<tr>
<td><strong>Acute Myocardial Infarction (AMI): Persistence of Beta-Blocker Treatment</strong></td>
<td>Percentage of patients whose days’ supply of beta blockers dispensed is &gt;=135 days</td>
<td>NCQA²,³</td>
</tr>
<tr>
<td><strong>CAD: Beta-Blocker Treatment after a Heart Attack</strong></td>
<td>Patients who have a claim indicating beta blocker therapy or who received an</td>
<td>NCQA²,³</td>
</tr>
<tr>
<td><strong>CAD: BP Management</strong></td>
<td>ambulatory prescription for beta-blockers rendered within 7 days after discharge.</td>
<td></td>
</tr>
<tr>
<td><strong>CAD: Drug Therapy for Lowering LDL-Cholesterol</strong></td>
<td>Percentage of patients with coronary artery disease who were prescribed a lipid –</td>
<td>AMA PCPI/Acc/AHA²,³</td>
</tr>
<tr>
<td><strong>IVD: Complete Lipid Profile and LDL Control &lt;100</strong></td>
<td>lowering therapy (based on current ACC/AHA guidelines)</td>
<td></td>
</tr>
<tr>
<td><strong>CAD: Percentage of members who have optimally managed modifiable risk</strong></td>
<td>Percentage of members who have optimally managed modifiable risk factors (LDL,</td>
<td>Health Partners</td>
</tr>
<tr>
<td><strong>Heart Failure (HF): Assessment of Activity Level</strong></td>
<td>Percentage of patient visits or patients with HF with assessment of activity level.</td>
<td></td>
</tr>
<tr>
<td><strong>HF: Assessment of Clinical Symptoms of Volume Overload (Excess)</strong></td>
<td>Percentage of patient visits or patients with HF with assessment of clinical</td>
<td>AMA PCPI/Acc/AHA²,³</td>
</tr>
<tr>
<td><strong>HF: Left Ventricular Function Assessment</strong></td>
<td>symptoms of volume overload (excess).</td>
<td></td>
</tr>
<tr>
<td><strong>Paired measures:</strong> Lipid management : LDL-C &lt; 130²**</td>
<td>Percentage of adult patients with diabetes aged 18-75 years with most recent</td>
<td>Alliance/NCQA²,³</td>
</tr>
<tr>
<td>Lipid Management: LDL-C &lt; 100²</td>
<td>low-density lipoprotein- cholesterol (LDL-C) less that 130 mg/dL.</td>
<td></td>
</tr>
<tr>
<td>HEART DISEASE</td>
<td>Percentage of patients 18-75 years of age with diabetes (type 1 or 2) whose most</td>
<td></td>
</tr>
<tr>
<td></td>
<td>recent LDL-C test result during the measurement year was &lt;100 mg/dL.</td>
<td></td>
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<tr>
<td></td>
<td>Percentage of adult patients with diabetes aged 18-75 years with most recent low-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>density lipoprotein- cholesterol (LDL-C) less than 130 mg/dL.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of patients 18-75 years of age with diabetes (type 1 or 2) whose most</td>
<td></td>
</tr>
<tr>
<td></td>
<td>recent LDL-C test result during the measurement year was &lt;100 mg/dL.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of adult patients with diabetes aged 18-75 years with most recent low-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>density lipoprotein- cholesterol (LDL-C) less than 130 mg/dL.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of patients 18-75 years of age with diabetes (type 1 or 2) whose most</td>
<td></td>
</tr>
<tr>
<td></td>
<td>recent LDL-C test result during the measurement year was &lt;100 mg/dL.</td>
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</tr>
<tr>
<td>MEASURE TITLE</td>
<td>MEASURE DESCRIPTION</td>
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</tr>
<tr>
<td>HF: ACEI/ ARB Therapy</td>
<td>Percentage of patients with HF who also have left ventricular systolic dysfunction (LVSD) who were prescribed ACE inhibitor or ARB therapy.</td>
<td>AMA PCPI/ ACC/AHA²³</td>
</tr>
<tr>
<td>HF: Patient Education</td>
<td>Percentage of patients who were provided with patient education on disease management and health behavior changes during one or more visit(s).</td>
<td>AMA PCPI/ ACC/AHA²³</td>
</tr>
<tr>
<td>HF: Beta-blocker therapy</td>
<td>Percentage of patients with HF who also have LVSD who were prescribed beta-blocker therapy.</td>
<td>AMA PCPI/ ACC/AHA²³</td>
</tr>
<tr>
<td>HF: Warfarin Therapy Patients with Atrial Fibrillation</td>
<td>Percentage of patients with HF who also have paroxysmal or chronic atrial fibrillation who were prescribed warfarin therapy.</td>
<td>AMA PCPI/ ACC/AHA²³</td>
</tr>
<tr>
<td>HF: Weight Measurement</td>
<td>Percentage of patient visits for patients with HF with weight measurement recorded.</td>
<td>AMA PCPI/ ACC/AHA²³</td>
</tr>
</tbody>
</table>

### HYPERTENSION

**Blood pressure (BP) measurement**
Percentage of patient visits with blood pressure measurement recorded among all patient visits for patients aged greater than or equal to 18 years with diagnosed hypertension⁵
AMA/PCPI¹⁸/ACC/AHA

**Plan of care**
Percentage of patient visits during which either systolic blood pressure >140 mm Hg or diastolic blood pressure ≥ 90 mm Hg, with documented plan of care for hypertension⁶
AMA/PCPI¹⁸/ACC/AHA

**Controlling high blood pressure**
Percentage of patients with last BP <140/90 mm Hg⁶
CMS/NCQA⁷⁹

### MEDICATION MANAGEMENT

**Documentation of medication list in the outpatient record**
Percentage of patients having a medication list in the medical record³
CMS/SCRIPT

**Documentation of allergies and adverse reactions in the outpatient record**
Percentage of patients having documentation of allergies and adverse reactions in the medical record³
CMS/SCRIPT

**Therapeutic monitoring – annual monitoring for patients on persistent medications**
The percentage of patients 18 years and older who received at least 180-day supply of medication therapy for the selected therapeutic agent and who received annual monitoring for the therapeutic agent⁵
NCQA⁷⁹

<table>
<thead>
<tr>
<th>a. Annual monitoring for patients on angiotensin converting enzyme (ACE) inhibitors/angiotensin receptor blockers (ARBs)</th>
<th>a. Percentage of patients on ACE inhibitors or ARBs with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Annual monitoring for patients on digoxin</td>
<td>b. Percentage of patients on digoxin with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year</td>
</tr>
<tr>
<td>c. Annual monitoring for patients on diuretics</td>
<td>c. Percentage of patients on a diuretic with at least one serum potassium and either a serum creatinine or a blood urea nitrogen therapeutic monitoring test in the measurement year</td>
</tr>
<tr>
<td>d. Annual monitoring for patients on anticonvulsants</td>
<td>d. Percentage of patients on any anticonvulsant for phenytoin, phenobarbital, valproic acid or carbAMA/zepine with at least one drug serum concentration level monitoring test for the prescribed drug in the measurement year</td>
</tr>
</tbody>
</table>

⁵ Data source – electronic data (i.e., claims or encounter data for visits, laboratory tests and pharmacy) or medical record review.
<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>MEASURE DESCRIPTION</th>
<th>IP OWNER¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>e. Annual monitoring for patients on statins</td>
<td>e. Percentage of patients on any statin (HMG CoA Reductase Inhibitors) with both an ALT and an AST liver enzyme test in the measurement year</td>
<td></td>
</tr>
<tr>
<td>f. Annual monitoring—combined Rate</td>
<td>f. The sum of the five numerators divided by the sum of the five denominators</td>
<td></td>
</tr>
<tr>
<td>Drugs to be avoided in the elderly</td>
<td>a. Percentage of patients ages 65 years and older who received at least one drug to be avoided in the elderly in the measurement year⁵</td>
<td>NCQA⁶,⁹</td>
</tr>
<tr>
<td></td>
<td>b. Percentage of patients 65 years of age and older who received at least two different drugs to be avoided in the elderly in the measurement year⁵</td>
<td></td>
</tr>
</tbody>
</table>

**MENTAL HEALTH and SUBSTANCE USE DISORDERS**

<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>MEASURE DESCRIPTION</th>
<th>IP OWNER¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depressive Disorder: Diagnostic Evaluation</td>
<td>Percentage of patients with a diagnosis of major depressive disorder who met the DSM–IV™ criteria during the visit in which the new diagnosis or recurrent episode was identified</td>
<td>AMA, PCPI²,³</td>
</tr>
<tr>
<td>Major Depressive Disorder: Suicide Risk Assessment</td>
<td>Percentage of patients who had a suicide risk assessment completed at each visit</td>
<td>AMA, PCPI²,³</td>
</tr>
<tr>
<td>New Episode of Depression: (a) Optimal Practitioner Contacts for Medication Management²</td>
<td>a. Percentage of patients who were diagnosed with a new episode of depression and treated with antidepressant medication, and who had at least three follow-up contacts with a practitioner during the 84-day (12-week) Acute Treatment Phase.</td>
<td>NCQA²,⁴</td>
</tr>
<tr>
<td></td>
<td>b. Percentage of patients who were diagnosed with a new episode of depression, were treated with antidepressant medication and remained on an antidepressant drug during the entire 84-day Acute Treatment Phase.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Percentage of patients who were diagnosed with a new episode of depression and treated with antidepressant medication and who remained on an antidepressant drug for at least 180 days.</td>
<td></td>
</tr>
<tr>
<td>Diagnosis of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents</td>
<td>Percentage of patients newly diagnosed with attention deficit hyperactivity disorder (ADHD) whose medical record contains documentation of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) or Diagnostic and Statistical Manual for Primary Care (DSM-PC) criteria being addressed.</td>
<td>ICSI</td>
</tr>
<tr>
<td>Management of attention deficit hyperactivity disorder (ADHD) in primary care for school age children and adolescents</td>
<td>Percentage of patients diagnosed with attention deficit hyperactivity disorder (ADHD) and on first-line medication whose medical record contains documentation of a follow-up visit twice a year.</td>
<td>ICSI</td>
</tr>
<tr>
<td>ADHD: Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication.</td>
<td>a. <em>Initiation Phase</em>: Percentage of children 6 – 12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for and ADHD medication and who had one follow-up visit with a practitioner with prescribing authority during the 30-Day Initiation Phase.</td>
<td>NCQA²,⁴</td>
</tr>
<tr>
<td></td>
<td>b. <em>Continuation and Maintenance (C&amp;M) Phase</em>: Percentage of children 6 – 12 years of age as of the Index Prescription Episode Start Date with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days.</td>
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<td>MEASURE TITLE</td>
<td>MEASURE DESCRIPTION</td>
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</tr>
<tr>
<td>Bipolar Disorder and Major Depression: Assessment for Manic or hypomanic behaviors</td>
<td>Percentage of patients treated for depression who were assessed, prior to treatment, for the presence of current and/or prior manic or hypomanic behaviors.</td>
<td>STABLE&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td>Bipolar Disorder and Major Depression: Appraisal for alcohol or chemical substance use</td>
<td>Percentage of patients with depression or bipolar disorder with evidence of an initial assessment that includes an appraisal for alcohol or chemical substance use</td>
<td>STABLE&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td>Bipolar Disorder: Appraisal for risk of suicide</td>
<td>Percentage of patients with bipolar disorder with evidence of an initial assessment that includes an appraisal for risk of suicide.</td>
<td>STABLE&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td>Bipolar Disorder: Level-of-function evaluation</td>
<td>Percentage of patients treated for bipolar disorder with evidence of level-of-function evaluation at the time of the initial assessment and again within 12 weeks of initiating treatment</td>
<td>STABLE&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td>Bipolar Disorder: Assessment for diabetes</td>
<td>Percentage of patients treated for bipolar disorder who are assessed for diabetes within 16 weeks after initiating treatment with an atypical antipsychotic agent</td>
<td>STABLE&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
| Initiation and Engagement of Alcohol and Other Drug Dependence Treatment | a. Percentage of adults aged 18 and over diagnosed with AOD abuse or dependence and receiving a related service who initiate treatment  
b. Assessment of the degree to which members engage in treatment with two additional AOD treatments within 30 days after initiating treatment. | NCQA/WC |

**OBESITY**

<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>MEASURE DESCRIPTION</th>
<th>IP OWNER</th>
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</thead>
<tbody>
<tr>
<td>Body mass index (BMI) in adults &gt; 18 years of age</td>
<td>Percentage of adults with BMI documentation in the past 24 months&lt;sup&gt;3&lt;/sup&gt;</td>
<td>NYC-DHMH</td>
</tr>
<tr>
<td>BMI 2 through 18 years of age</td>
<td>Percentage children, 2 through 18 years of age, whose weight is classified based on BMI percentile for age and gender&lt;sup&gt;3&lt;/sup&gt;</td>
<td>NICHQ</td>
</tr>
</tbody>
</table>

**PRENATAL CARE**

<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>MEASURE DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>Screening for Human Immunodeficiency Virus (HIV)</td>
<td>Percentage of patients who gave birth during a 12-month period who were screened for HIV infection during the first or second prenatal care visit.</td>
<td>AMA PCPI&lt;sup&gt;2,3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Anti-D Immune Globulin&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Percentage of D-negative, unsensitized patients who gave birth during a 12-month period who received anti-D immune globulin at 26-30 weeks gestation.</td>
<td>AMA PCPI&lt;sup&gt;2,3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Blood Groups (ABO), D (Rh) Type</td>
<td>Percentage of patients who gave birth during a 12-month period who had a determination of blood group (ABO) and D (Rh) type by the second prenatal care visit.</td>
<td>AMA PCPI&lt;sup&gt;2,3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Blood Group Antibody Testing:</td>
<td>Percentage of patients who gave birth during a 12-month period who were screened for blood group antibodies during the first or second prenatal care visit.</td>
<td>AMA PCPI&lt;sup&gt;2,3&lt;/sup&gt;</td>
</tr>
<tr>
<td>MEASURE TITLE</td>
<td>MEASURE DESCRIPTION</td>
<td>IP OWNER¹</td>
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</tr>
<tr>
<td>PREVENTION, IMMUNIZATION AND SCREENING—TOBACCO CESSION</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Measure pair</strong></td>
<td>a. Percentage of patients’ charts showing either that there is no tobacco use/exposure or (if a user) that the current use was documented at the most recent clinic visit³</td>
<td>ICSI</td>
</tr>
<tr>
<td></td>
<td>b. Percentage of patients with documented tobacco use or exposure at the latest visit who also have documentation that their cessation interest was assessed or that they received advice to quit³</td>
<td></td>
</tr>
<tr>
<td>Smoking Cessation – medical assistance²</td>
<td>a. Percentage of patients who received advice to quit smoking⁶</td>
<td>NCQA⁷,⁸</td>
</tr>
<tr>
<td></td>
<td>b. Percentage of patients whose practitioner recommended or discussed smoking cessation medications⁶</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Percentage of patients whose practitioner recommended or discussed smoking cessation methods or strategies⁶</td>
<td></td>
</tr>
</tbody>
</table>

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⁶ Data source – patient survey.
<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>MEASURE DESCRIPTION</th>
<th>IP OWNER1</th>
</tr>
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<tbody>
<tr>
<td>Measure pair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Tobacco use assessment²</td>
<td>a. Percentage of patients who were queried about tobacco use one or more times during the 2-year measurement period²</td>
<td>AMA/PCPI7,8</td>
</tr>
<tr>
<td>b. Tobacco cessation intervention²</td>
<td>b. Percentage of patients identified as tobacco users who received cessation intervention during the 2-year measurement period²</td>
<td></td>
</tr>
</tbody>
</table>

**PREVENTION, IMMUNIZATION AND SCREENING—GENERAL PREVENTION**

| Counseling on physical activity in older adults | a. Percentage patients 65 years of age and older who reported: discussing their level of exercise or physical activity with a doctor or other health provider in the last 12 months5 | NCQA7,9   |
| a. Discussing physical activity |                                                                                     |           |
| b. Advising physical activity |                                                                                     |           |
| Urinary incontinence management in older adults² | a. The percentage of patients 65 years of age and older who reported having a urine leakage problem in the last six months and who discussed their urinary leakage problem with their current practitioner6 | NCQA7,9   |
| a. Discussing urinary incontinence |                                                                                      |           |
| b. Receiving urinary incontinence treatment |                                                                                     |           |
| b. The percentage of patients 65 years of age and older who reported having a urine leakage problem in the last six months and who received treatment for their current urine leakage problem6 |                             |

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## PREVENTION, IMMUNIZATION AND SCREENING—SCREENING

<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>MEASURE DESCRIPTION</th>
<th>IP OWNER</th>
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</thead>
<tbody>
<tr>
<td>Breast cancer screening£</td>
<td>Percentage of eligible women 50 to 69 years of age who receive a mammogram in a two year period$^5$</td>
<td>CMS/NCQA$^7,9$</td>
</tr>
<tr>
<td>Cervical cancer screening£</td>
<td>The percentage of women 18 to 64 years of age, who received one or more Pap tests during the measurement year or the two years prior to the measurement year$^5$</td>
<td>NCQA$^7,9$</td>
</tr>
<tr>
<td>Chlamydia screening in women</td>
<td>Percentage of eligible women who were identified as sexually active who had at least one test for chlamydia during the measurement year$^5$</td>
<td>NCQA$^7,9$</td>
</tr>
<tr>
<td>Colorectal cancer screening£</td>
<td>The percentage of adults 50 to 80 years of age who had appropriate screening for colorectal cancer (CRC) including fecal occult blood test during the measurement year or, flexible sigmoidoscopy during the measurement year or, double contrast barium enema during the measurement year or, colonoscopy during the measurement year or, the four years prior to the measurement year or, the nine years prior to the measurement year$^5$</td>
<td>NCQA$^7,9$</td>
</tr>
</tbody>
</table>
| Fall risk management in older adults | a. Percentage of patients age 75 and older who reported that their doctor or other health provider talked with them about falling or problems with balance or walking$^6$
   b. Percentage of patients age 75 and older who reported that their doctor or other health provider had done anything to help prevent falls or treat problems with balance or walking$^6$ | NCQA$^7,9$ |
| Osteoporosis screening       | The percentage of female patients age 65 and older who reported receiving a bone density test (BMD) to check for osteoporosis$^5$                                                                                     | NCQA$^7,9$ |

## PREVENTION, IMMUNIZATION AND SCREENING—IMMUNIZATION

<table>
<thead>
<tr>
<th>MEASURE TITLE</th>
<th>MEASURE DESCRIPTION</th>
<th>IP OWNER</th>
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</thead>
<tbody>
<tr>
<td>Childhood immunization status£</td>
<td>The percentage of children 2 years of age who had four DtaP/DT, three IPV, one MMR, three H influenza type B, one hepatitis B, one chicken pox vaccine (VZV) and four pneumococcal conjugate vaccines by their second birthday. The measure calculates a rate for each vaccine and two separate combination rates$^5$</td>
<td>NCQA$^7,9$</td>
</tr>
<tr>
<td>Flu shots for adults ages 50 to 64£</td>
<td>Percentage of patients age 50 to 64 who report having received an influenza vaccination during the past influenza vaccination season$^6$</td>
<td>NCQA$^7,9$</td>
</tr>
<tr>
<td>Flu Shot for Older Adults£</td>
<td>Percentage of patients age 65 and over who received an influenza vaccination from September through December of the year$^6$</td>
<td>CMS/NCQA$^7,9$</td>
</tr>
<tr>
<td>Influenza vaccination£</td>
<td>Percentage of patients who received an influenza vaccination$^2$</td>
<td>AMA/PCPI$^7,8$</td>
</tr>
<tr>
<td>Pneumococcal vaccine needed for all adults aged 65 years or older</td>
<td>Percentage of adults age 65 to 67 years who have not received an pneumococcal vaccine$^4$</td>
<td>RHI</td>
</tr>
<tr>
<td>Pneumonia vaccination status for older adults</td>
<td>The percentage of Medicare patients 65 years of age and older who ever received a pneumococcal vaccination$^6$</td>
<td>NCQA$^7,9$</td>
</tr>
<tr>
<td>MEASURE TITLE</td>
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</tr>
<tr>
<td>Pneumonia vaccination²</td>
<td>Percentage of patients who ever received a pneumococcal vaccination²</td>
<td>CMS/NCQA⁷,⁹</td>
</tr>
</tbody>
</table>
2.2 Redesign and Finance Measures


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### REDESIGN AND FINANCE MEASURES

Last revised 10/8/2005

#### CORE MEASURES

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>DEFINITION</th>
<th>MEASUREMENT APPROACH</th>
<th>GOAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Processes and Outcomes</strong></td>
<td>National outcomes measures per chronic condition</td>
<td>Teams will specify the condition(s) for which they are tracking national measures and will report on all core measures for that condition</td>
<td>As defined by HDC 2005</td>
</tr>
<tr>
<td><strong>1 Office visit cycle time</strong></td>
<td>N: Total elapsed minutes from patient arrival at the health center to patient departure for patient visits sampled in the reporting period D: Number of visits sampled</td>
<td>Sample a minimum of 10-15 patients per week using a patient visit cycle tool to capture the various components of total time the patient spent in the office. Sample at various times and on various days to allow for segmentation of analysis. Include all time from patient arrival until patient departure.</td>
<td>45 minutes</td>
</tr>
<tr>
<td><strong>1a Value-added time as percent of total cycle time</strong></td>
<td>N: Total value-added time D: Visit cycle time Multiply by 100 to obtain a percent.</td>
<td>The patient visit cycle tool should include a breakdown of time intervals in order to be able to identify value-added time components as well as non-value-added time. Examples of Non-value-added time include: Time waiting before going to an exam room Time waiting in exam room Time filling out paperwork Examples of Value-added time include: Time spent with provider Educational time spent with any member of the care team Office visit cycle time begins at the time of arrival and ends when patient leaves office. It is the sum of non-value-added time plus value-added time.</td>
<td>75%</td>
</tr>
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</tr>
<tr>
<td><strong>2a</strong> Time to 3rd Next Available Appointment</td>
<td><strong>N</strong>: Sum of number of days between the day a patient makes a request for an appointment with a provider and the third available appointment for a non-urgent/emergent visit with that provider, for each of the providers sampled during the reporting period</td>
<td><strong>Sample each provider(s) the same day of the week, once a week.</strong></td>
<td><strong>0 days</strong></td>
</tr>
<tr>
<td>OR</td>
<td><strong>D</strong>: Number of providers sampled during the reporting period</td>
<td><strong>Count number of days between a request for an appointment (e.g. enter dummy patient) with a provider and the third next available appointment for a physical or return exam for that provider.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(When Advanced Access is implemented and Time to 3rd Next Available Appointment is less than 1 day, use...)</strong></td>
<td></td>
<td><strong>Count all calendar days, including weekends, holidays, and days off.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>2b</strong> Future Appointment Capacity</td>
<td><strong>N</strong>: Number of open appointment slots during the week after next</td>
<td><strong>Do not count any saved appointments for urgent visits.</strong></td>
<td><strong>20% increase</strong></td>
</tr>
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<td></td>
<td><strong>D</strong>: Total number of scheduled appointment slots during that week</td>
<td><strong>On Friday, count the number of open appointment slots during the next week for the providers at the site. Divide this by these providers’ number of scheduled appointments slots during that next week.</strong></td>
<td></td>
</tr>
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<td></td>
<td><strong>Multiply by 100 to obtain a percent.</strong></td>
<td></td>
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<tr>
<td><strong>3</strong> No show rate</td>
<td><strong>N</strong>: Number of patients who miss a scheduled appointment</td>
<td><strong>Count all of the patient appointments that are missed during the month.</strong></td>
<td><strong>50 % reduction</strong></td>
</tr>
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<td></td>
<td><strong>D</strong>: Number of scheduled appointment slots, whether scheduled in advance or not</td>
<td><strong>Count the total number of scheduled appointment slots during the same period.</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>Multiply by 100 to obtain a percent.</strong></td>
<td><strong>If a full month’s data cannot be captured, use a one week sample.</strong></td>
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<tr>
<td><strong>4</strong> Number of Patient Care Encounters per FTE Provider</td>
<td><strong>N</strong>: Number of patient encounters during the reporting period</td>
<td><strong>Record each patient care visit regardless of type. Do not include encounters for enabling services.</strong></td>
<td><strong>365</strong></td>
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<td></td>
<td><strong>D</strong>: Sum of the number of FTE MD’s plus FTE advanced practice providers</td>
<td><strong>Use the UDS definition for counting full-time equivalents. Count the FTE’s dedicated to clinical care. This includes administrative time, such as charting, that is associated with patient care.</strong></td>
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<td>5</td>
<td><strong>Panel Size per FTE Provider</strong>&lt;br&gt;(weighting is not defined)</td>
<td>N: Number of unique patients seen in the 12 months ending with the reporting period&lt;br&gt;D: Sum of number of FTE MD's plus FTE advanced practice providers&lt;br&gt;<strong>Count all unique users during the 12 months prior to the reporting period in accordance with the UDS definition.</strong>&lt;br&gt;FTE's as in #4</td>
<td>1700</td>
</tr>
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<td>6</td>
<td><strong>Net Revenue per Patient Encounter</strong></td>
<td>N: Total charges in the reporting period for the provider(s) at the site, minus contractual adjustments plus bad debt plus write-offs plus sliding fee adjustments&lt;br&gt;D: Total patient encounters&lt;br&gt;<strong>Add all the charges for services rendered during the reporting month by all provider(s) at the site and subtract (contractual adjustments plus bad debt plus write-offs plus sliding fee adjustments)</strong></td>
<td>$110</td>
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<td>7</td>
<td><strong>Total Operating Expenses per Patient Encounter</strong></td>
<td>N: Sum of all operating expenses incurred by the site during the reporting period&lt;br&gt;D: Total patient encounters&lt;br&gt;<strong>If the practice operates on a cash basis, calculate total direct and indirect expenses paid by the site during the reporting period. If the practice operates on an accrual basis, use the expenses accrued for the site during the reporting period. Expenses should include the salaries, benefits, and taxes for all employees, including the providers. They should also include direct cost of supplies, contracted services, insurance, etc., as well as any allocated expenses for shared services such as billing and collection, administrative overhead, facilities, shared support staff, etc. If any costs cannot be attributed directly to the site, allocate these costs on a per visit basis, based on total practice costs per visit and the number of visits at the site.</strong></td>
<td>$100</td>
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<td>8</td>
<td><strong>Percent Self-pay Collections</strong></td>
<td>N: Sum of all monies collected at the time of patient visits during the reporting period&lt;br&gt;D: Total dollars of potential collections at the time of patient visits during the reporting period&lt;br&gt;<strong>Add all the monies collected at the time of the patient visits during the reporting period. Add all of the self-pay amounts, along with co-pay, deductible, and sliding fee amounts for all of the visits in the month.</strong></td>
<td>85%</td>
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<td>9</td>
<td><strong>Voluntary Staff Turnover Rate</strong></td>
<td>N: Number of voluntary terminations, layoffs) in the reporting period&lt;br&gt;D: total number of employees in the microsystem at the beginning of the reporting period&lt;br&gt;<strong>Count all voluntary terminations within the microsystem team. Voluntary terminations exclude terminations for cause, reductions in force and layoffs. Count all employees, whether full or part time</strong></td>
<td>&lt;10%</td>
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<td>10</td>
<td><strong>Percent of Patients Who Would Recommend the Health Center</strong></td>
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<td></td>
<td><strong>N</strong>: Number of patients who respond positively to the survey question &quot;I would recommend this health center to my family and friends&quot;</td>
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<td><strong>D</strong>: Number of patients who complete the survey</td>
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<td>Multiply by 100 to get a percent.</td>
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<td></td>
<td>Sample 15 patients per week using the PEERS survey, another internal survey instrument, or a unique survey that includes the statement &quot;I would recommend this health center to my family and friends&quot; or question &quot;Would you recommend this health center to your family and friends?&quot;. Add the number of positive responses. A positive response on a scale of Strongly agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree includes Strongly Agree or Agree. If the health center survey includes only a yes or no response, count the number of Yes responses.</td>
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<td></td>
<td>95%</td>
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2.3

Chronic Disease Registries: A Product Review (online resource)

Created for the California Health Care Foundation, Oakland CA.
Available at: http://www.chcf.org/topics/chronicdisease/index.cfm?itemID=102741.

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2.3
Chronic Disease Electronic Management System (CDEMS) (online resource)


No Web site copyright information available.
2.3
Executive Review of Improvement Projects (white paper)


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Executive Review of Improvement Projects:  
A Primer for CEOs and other Senior Leaders

James Reinertsen  
Michael Pugh  
Tom Nolan

Background

It has been said that currency of leadership is attention. If that is true, then leaders who wish to transform their organizations should channel their attention to the key leverage points for the quality transformation, and use their chosen leverage points well.

Improvement projects are important processes in the overall transformation of institutions. Well-chosen projects, with high aims for improvement, capable project leadership and teamwork, and good organizational support, can raise the standard of care in the project area or department, promote spread throughout the organization, and demonstrate the values and behaviors that will drive the transformation. If a project produces real results—i.e. sustained improvement of a breadth and depth that makes both patients and caregivers notice—it sends a signal that will be heard throughout the organization that quality improvement is not just a sidebar activity. If, on the other hand, projects produce superficial results, or tepid results are over-praised, or those working in projects cannot connect them to overall organizational strategies, this also sends a signal—one that will hinder, rather than accelerate the transformation. For these reasons, projects are key leverage points—high visibility moments—in the long-term transformation process.

Executive review of projects can be a critical factor in whether the projects will help, or hurt, the transformation. The first step is for executives to make the decision to channel attention to project reviews, and to budget the time in their own schedules for this activity. The next step is to learn how to do a good project review—the principal focus of this brief practical guide. It’s not enough to give projects your time. You must also know how to use that time well—so that your reviews help, rather than hurt.

Purpose of Senior Leader Project Review

The purpose of reviews of projects by CEOs and other executives should be clear:

1. To learn whether the project is on track, or is likely to fail
2. If the project is not achieving the intended results, to understand why:
   a. Lack of organizational will?
   b. Absence of strong enough ideas for improvement?
   c. Failure to execute changes?
3. To provide guidance, support, and stimulus to the project team on will, ideas, and execution
4. To decide whether the project should be stopped.
Process of Review

Good process review doesn’t happen by walking into the team meeting and asking, “how’s it going?” Maximum impact for your time comes from some pre-meeting preparation, a well-executed meeting process, and a system for post-meeting communication. It might be helpful to think of these phases in the form of a checklist, to be completed for each project review that you conduct.

Pre-meeting preparation
- Know the context for the project, and be prepared to remind the team why the project is important, and how it fits into the overall goals and system-level measures of the organization. Example: An organization goal is to reduce hospital mortality rates (HSMR). The project is aimed at improving inpatient flow. As CEO, you should be prepared to answer the question, “Why are we doing this project, and how does it relate to our strategic goals?”
- Read the project report prior to the meeting. A good general rule for reports is: “If even the CEO can understand the aims, measures, and results, it’s a good report.”
- Communicate with the project leader to establish a meeting agenda and expectations: no big presentations, review of aims, measures, results, prognosis, ideas for next cycles of improvement.

Meeting itself
- Start the review by clarifying the aim: “What, exactly, are you trying to accomplish in this project?” Look for aims set at the level of best practice, or raising the bar, rather than more conservative goals.
- Then ask about the measurements: “Please summarize for me the measures you’re using to know whether you’re moving towards your aim.” Look for a few solid measures, well defined, with comparative data available.
- Within 3 to 5 minutes of the project review, you should move to reviewing the data. “So let’s look at your results so far.” Look for clear graphic displays (graphs should be clear, sample size identified, time series.) Spend considerable time on these results—enough to establish that you understand the numbers, but more important, that you really care about getting results.
- Share with the team two to three good elements of the project and provide encouragement. E.g. “Excellent use of stratification in breaking this project up into manageable chunks.”…. Or… “You’ve already completed 16 improvement cycles? That’s almost one every 2 days. Wow!”
- Discuss trends and prognosis with the project team. “OK, given your progress to date, and the ideas you’re planning to try, make a prediction: Are you going to achieve this project’s aim?”
- If there is any uncertainty about the project’s prognosis, try to determine whether the failure mode is primarily related to Will, Ideas, or Execution. Indicators of each of these failure modes include:
  - Will:
    - Resources necessary to the project’s success are not made available
- A few loud nay Sayers are blocking implementation and spread of good ideas
- Absence of any obvious connection between this project and key strategic goals
- Lack of executive and board attention to this project
- Line managers appear to be on the sidelines, not responsible for project success

**Ideas:**
- The project team has not gone outside the organization, or outside health care, to find the best ideas
- Few cycles of improvement have been attempted
- “Big Ideas” appear to be absent—changes being tested are safe, incremental, not radical redesigns
- The team can’t tell you who has the best results in the world on this topic

**Execution:**
- Project setup, and project management appear to be weak
- Preparation for spread is not part of the project from the inception
- The project team can not articulate a coherent change leadership framework being used by the project
- The project gets good results on pilots, but never seems to scale up

☐ If it appears that Will is the problem, this is often something that the CEO or other senior executive can make a major impact on. You can make resources available, deal with the few loud voices, channel attention to the importance of this project, make the connections to key strategies, and assign responsibility to line managers.

☐ If Ideas are the problem, ask questions that will stimulate the search for ideas.
  - “What ideas do you have for further improvement?”
  - “Where are you looking for new ideas?” (Encourage them to look far and wide, including outside of health care)
  - “Who’s the very best in the world at this? How could we find out?”
  - Give explicit permission, and broad encouragement, to try small-scale tests of big ideas. “It sounds as if you have a number of good ideas already. How could you test one of those ideas, and have an answer by the end of the week?” Senior executives doing a good review have to be comfortable pushing and supporting innovation and small tests.

☐ If Execution is the problem, it is a good opportunity for you to teach good project management and change leadership skills to the project team, and to learn about the larger organization’s barriers to execution in its culture, information systems, human resource policies, and other areas.

☐ Finish the meeting by asking: “Where do you need help from me?” Projects often encounter significant barriers within the organization, and it’s important for the executive doing the review to understand how she can help the team reach its goals.
Meeting follow-up

☐ Set a reminder to call or email the team leader in a week, and periodically thereafter, asking for the results of tests of change. By doing so, your “attention” to the team will extend over a much longer time period, reinforce the importance of the team’s work, and encourage many more cycles of improvement.

☐ Communicate to the team what you have done in response to their requests for help. This communication could be at the next project review that you do, but it might be timelier if it were simply an email or other communication to team members.

Common fears, and antidotes

CEOs and other executives sometimes avoid doing project reviews because of fears such as:

1. “I don’t know much about clinical medicine,” (or whatever the content of the project is). The good news about the above template for doing a review is that you can do it, and do it well, without being a content expert. You need not fear embarrassment on this matter.

2. “I don’t know how to interpret run charts and control charts.” What if I ask a stupid question?” There are only two answers to this fear: knowledge (learn the basics of QI so that you can ask meaningful questions about the results) and humility (don’t be afraid to show your ignorance, and to be taught by your team members.)

3. “I’m concerned that by doing these reviews I’m stepping into the area of responsibility of one of my direct reports.” This is a legitimate concern, if you were to assign yourself to do every project review. Obviously, you shouldn’t be doing your direct reports’ jobs for them, and you shouldn’t do every review. But wouldn’t it be a good idea to show them a model for how to do the reviews? And demonstrate what it is you want them to emphasize and encourage?

Health Disparities Collaboratives.
2.3
Quantitative Diabetes Monthly Report Template (worksheet)


**Quantitative Diabetes Monthly Report Template**

<table>
<thead>
<tr>
<th>Month</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
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<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
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</thead>
<tbody>
<tr>
<td>Pilot Population Size - # of diabetes patients in registry</td>
<td>18&lt;and&gt;70</td>
<td>&gt;55</td>
<td>&gt;40 for statin calculation</td>
<td>&gt;30 for aspirin calculation</td>
<td># of Patients with HbA1c &lt; 7</td>
<td>% of Patients with HbA1c &lt; 7</td>
<td># of Patients with BP &lt; 130/80</td>
<td>% of Patients with BP &lt; 130/80</td>
<td># of Patients with Retinal Exam</td>
<td>% of Patients with Retinal Exam</td>
<td># of Patients with Foot Exam</td>
<td>% of Patients with Foot Exam</td>
<td>Goal for % of Patients with HbA1c &lt; 7</td>
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**Notes:**
1. The pilot population should be your adult patients with diabetes (Type 1 or 2).
2. The age ranges for sub-populations are based on randomized controlled trials’ study populations. You can use your clinical judgement as to who is appropriate for specified care.
3. All measures assume that you are looking back one year from the reporting month to gather data.
4. For measures that require a clinical outcome (lab value, etc), you look back one year and use the most recent value.
### Computation of Key Measures

#### Put Your Center Name Here

<table>
<thead>
<tr>
<th>Month</th>
<th># with Documented self-management goal</th>
<th>% with Documented self-management goal</th>
<th># of current smokers</th>
<th>% of current smokers</th>
<th># with LDL &lt; 100</th>
<th>% of patients with LDL &lt; 100</th>
<th># of patients with 2 HbA1cs in last year</th>
<th>% of patients with 2 HbA1cs in last year</th>
<th>Goal for % with Documented self-management goal</th>
<th>Goal for % current smokers</th>
<th>Goal for % LDL &lt; 100</th>
<th>Goal for % of patients with 2 HbA1cs in last year</th>
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<th># with Depression Screen in last 12 months</th>
<th>% with Depression Screen in last 12 months</th>
<th># of pts 18 to &lt;70 not on ACE/ARB</th>
<th>% of pts 18 to &lt;70 not on ACE/ARB with Microalb Screen</th>
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<th>% of pts 40 and older on statins</th>
<th># of pts 30 and older taking aspirin</th>
<th>% of pts 30 and older taking aspirin</th>
<th># of pts with an annual dental exam</th>
<th>% of pts with an annual dental exam</th>
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<th>Goal for % of patients taking aspirin</th>
<th>Goal for % of patients with dental exam</th>
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% of pts 18 to <70 not on ACE/ARB with Microalb Screen in nlast 12 months

% of pts 55 and older on ACE/ARB
% of pts with an annual dental exam
2.3
Narrative Monthly Report Template (worksheet)


Narrative Monthly Report for the Month of ________________

Organization: _________________________       Date:___________________
Practices Reporting: ____________________________

I.   Aim:

Description of Pilot Team Population of Focus:  EXAMPLE: Diabetes

II.   Measures *NOTE, unless your goals change, you only need to fill this section out the first time & then save the info on this reporting form.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Definition of Measure</th>
<th>Goal</th>
<th>Sampling Plan for Measure</th>
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<tr>
<td>EXAMPLE A1c</td>
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<td>&lt;7</td>
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III.   Annotated Graph(s) of Key Measures *(see attached page or Excel file)*

IV.   Brief Description of PDSA Cycles *(annotate cycles on chart)*

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Key Change made</th>
<th>Describe Change You Tested</th>
<th>What part of toolkit &amp; tools did you use, if any?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EXAMPLE</td>
<td>Foot Checks</td>
<td>MA for Dr. Smith asked 5 patients to remove shoes and socks</td>
<td>Section 3.5 Tools: “Understanding Goal Setting &amp; Action Planning”</td>
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Adapted from the Institute for Healthcare Improvement’s Breakthrough Series – www.ihi.org – 617.754.4800
V. Summary of Results *what went well, & what didn't. Any questions for the coaches?
3.1

High Functioning Clinical Teams are Extremely Efficient (presentation)


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Objectives

♦ Explain what care teams are

♦ Explain the attributes of a care team

♦ Explain how care teams can reduce demand and increase supply

♦ Develop a care team
A care team is the right mix of people coming together with the right tools to deliver the right care for a defined population of patients.
Attributes of a Highly Functional Care Team (p< .01)
♦ Clear expectations and available tools
♦ Easy to understand and discuss processes of care
♦ Information is available when needed
♦ Everyone on the staff is valued; Respect and sharing
♦ Feedback of performance and opportunities to grow
♦ Positive attitudes of co-workers

(24 Practices) from John H. Wasson - Dartmouth
Do Patients Notice Good Teams?

Perfect Care (Patient Perspective) Correlated with Teamwork (Clinical Staff Perspective) for Ten Office Practices

R = 0.77; p = 0.01

From John H. Wasson MD - Dartmouth
Does Patient Perception Matter?

From John H. Wasson MD - Dartmouth
“Not perfect” in Patient Perception Looks Scary

From John H. Wasson MD - Dartmouth
Why do this?

♦ Up to 40% of the work we do is rework:
  - Hand-offs
  - Repetitive patient calls & messages

♦ Staff salary & benefits makes up 70% of overhead
High functioning teams can accomplish more in less time
- Better balance between work and life
- Reduced overhead

Advanced access is less work for us and serves our patients well
Process for making an appointment

From Catherine Tantau, ctantau@gv.net
## Rx refill process

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<th>Step</th>
<th>Feet</th>
<th>Time</th>
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<tbody>
<tr>
<td>Secretary takes message</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Message placed in Rx bin</td>
<td>3</td>
<td>0.1</td>
</tr>
<tr>
<td>Waits in Rx Bin</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>Sec'y takes Rx bin &amp; pulls cht</td>
<td>75</td>
<td>30</td>
</tr>
<tr>
<td>Charts put in RN Rx refill area</td>
<td>25</td>
<td>0.5</td>
</tr>
<tr>
<td>Charts wait in RN area</td>
<td>0</td>
<td>90</td>
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<tr>
<td>RN sorts by doctor</td>
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<td>5</td>
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<tr>
<td>RN sorts by &quot;Urgent&quot;</td>
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<td>10</td>
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<tr>
<td>Urgent go to MD's nurse</td>
<td>15</td>
<td>1</td>
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<tr>
<td>MDs nurse places urgent in the chart rack of the next patient room</td>
<td>20</td>
<td>2</td>
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<tr>
<td>MD reviews between patients</td>
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<tr>
<td>MD finds nurse</td>
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<td>2</td>
</tr>
<tr>
<td>MD communicates plan for Rx</td>
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<td>0.5</td>
</tr>
<tr>
<td>Nurse carries Rx to nursing area</td>
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<td>0.1</td>
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<tr>
<td>Rx waits until nurse can phone pharmacy</td>
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<tr>
<td>Nurse phones pharmacy</td>
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<tr>
<td>Non-urgent are placed on MD's desk</td>
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<td>0.5</td>
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<tr>
<td>Rx waits on MD desk until end of session</td>
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<td>MD reviews Rx</td>
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<td>MD puts Rx in nurse &quot;To do&quot; pile</td>
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<tr>
<td>Rx waits in &quot;to do&quot; pile</td>
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<td>840</td>
</tr>
<tr>
<td>Nurse sorts by pharmacy</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Nurse makes pharmacy calls</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Charts placed in &quot;To be filed&quot; bin</td>
<td>25</td>
<td>0.5</td>
</tr>
<tr>
<td>Charts wait in &quot;To be filed&quot; bin</td>
<td>0</td>
<td>480</td>
</tr>
<tr>
<td>Charts filed</td>
<td>75</td>
<td>30</td>
</tr>
</tbody>
</table>

**Urgent totals** | **278** | **735.2**

**Non-urgent totals** | **253** | **1855**
Optimize the Care Team to Increase Supply

- Ensure that all roles in the practice are maximized to meet all patient needs
- Co-locate staff
- Cross-train staff
- Reduce variation
  - Provider styles
  - Rooms
  - How we talk to patients
- Use standard protocols to optimize use of other providers
- Separate flows for paper, patients, etc.
How Can a Team Reduce Demand?

- Promote self-care – Nurse interaction in office or on phone with some patients
- Alternatives to face-to-face (phone contact if a visit is not clinically necessary)
- Nurse visit for BP check, sore throat, weight management, smoking cessation (allowing for State Licensure and individual capability)
- Provider extends re-visit intervals
- “Max-pack” visits
How do you Get There?

- Ideally, start with resource planning
- Then define the team necessary to meet the needs of your patients
- All staff meet regularly
- Get the data you need to inform you of your results
  - What is your team’s demand?
  - What is your team’s capacity?
  - Where is the constraint?
Objectives

- Apply the change concepts of Optimizing the Care Team from the Care Model
- Use the “key changes” from the Care Model
Delivery System Design

Improve efficiency
Strategy: *Improve Efficiency*

**Change Concept**
- Optimize the Care Team and Staff
Change Concept: *Optimizing Care Team and Staff*

**Key Changes**

- Match the work to the individual’s licensure and capability
- Cross train staff
- Define and develop the team as unit
Content review: Traditional Roles in Clinical Office Practices

- Roles held by tradition
- Authority held by few
- Function
- Focus
- Members of the team
Redesign Concepts for Care Teams

- Co-location of people and resources
- Cross-functioning and cross-training of staff
- Self-organization & sharing of work
- Weekly team meetings
- “Visit planning”
- Self-measurement for improvement
- Care team huddles
Assess Your Current Team

What are current roles & responsibilities of team members?

Review hours of operation

• Typical hours of operation
• Staff
  • Who, what capabilities, times they work
• Capacity of the clinicians
• Where are your constraints?
• Who is doing what work now?
• What would be the ideal match between individuals and work?
<table>
<thead>
<tr>
<th>Task</th>
<th>Who does it now</th>
<th>In a perfect world who would do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book appts</td>
<td>RN’s and clerical</td>
<td>Clerical support</td>
</tr>
<tr>
<td>Take incoming calls</td>
<td>Everyone</td>
<td>Clerical support</td>
</tr>
<tr>
<td>Chart prep</td>
<td>MA’s</td>
<td>Clerical support</td>
</tr>
<tr>
<td>Triage</td>
<td>RN’s and MD’s</td>
<td>RN’s</td>
</tr>
<tr>
<td>Med refills requests</td>
<td>RN, MD, clerical</td>
<td>Clerical with MD sig.</td>
</tr>
<tr>
<td>Check in</td>
<td>Receptionists</td>
<td>Receptionists</td>
</tr>
<tr>
<td>Suture removal</td>
<td>MD</td>
<td>RN</td>
</tr>
<tr>
<td>Dressing change</td>
<td>MD</td>
<td>MA</td>
</tr>
<tr>
<td>Flu shots</td>
<td>RN</td>
<td>MA</td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Define the Activities:

Visit and Non-Visit

Do you need more information? The next step? Data collection sheets, by role, by session, by day. Insert the activities from the Activity Survey Here. See pages 31 and 32 for examples of completed data sheets.

Activities are combined by role from the data collected in Step 4. This creates a master list of activities by role. Fill in the NUMBER OF TIMES PER SESSION (AM AND PM) THAT YOU PERFORM THE ACTIVITY. Make a mark by the activity each time it happens, per session. Use one sheet for each day of the week.

<table>
<thead>
<tr>
<th>Role</th>
<th>Date</th>
<th>AM</th>
<th>PM</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Non-Visit Activities</td>
<td></td>
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<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Example

<table>
<thead>
<tr>
<th>Role</th>
<th>RN</th>
<th>Date</th>
<th>AM</th>
<th>PM</th>
<th>Day of Week: Monday</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fridge Patient Concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Patient Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Direct Patient Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Visit Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow up Phone Calls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Review and Notify Patients of Lab Results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>Complete Forms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>37</td>
</tr>
<tr>
<td>Call in Prescriptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Miscellaneous:</td>
<td></td>
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</tbody>
</table>

| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total | 85 | 83 | 111 |
What Should the Care Team be Doing?

**Explore the Mismatch:**
- Between role and activity
- State/Professional guidelines and current role
- Between activity and patient needs
- Between volume of resources and
- Between staffing and demand by hour of day, days of week, month of year

**Things to look for:**
- Where do you see variation?
- Are the right people doing the right things?
- Are roles commensurate with education, training and licensure?
- Are staff trained to the highest level of capability?
- Are there systems to support and monitor performance?
Examples of Waste at the Constraint (Providers)

◆ Interruptions and distractions (telephone, nurses, messages, etc.)
◆ Providing care, answering phone calls, completing paperwork or other items that others such as nurses could perform
◆ Waiting for medical records
◆ Waiting to get patients in rooms
Examples of waste at constraint (Front office)

- Multiple repeat patient phone calls due to
  - office policy of “we need five days notice for Rx refills”
  - Access delays
    - Provider schedule is not available
    - Sorting calls by “urgent” vs “routine”
- Inaccurate PCP listed
- Every patient signs waiver form at every visit
Building the “Right” Team

“A team is a small number of people with complimentary skills who are committed to a common purpose, set of performance goals, and an approach for which they hold themselves mutually accountable.”

Wisdom of Teams by Katzenbach

© 2004 Institute for Healthcare Improvement
High functioning team

- Defined patient population
- Vertical slice of the office
- Defined team members
- Defined back-up
- Data to inform team of their results

Dartmouth - Microsystems

© 2004 Institute for Healthcare Improvement
Vertical slice of office

- Their own space
- Data on their processes & outcomes
- Their own patients

© 2004 Institute for Healthcare Improvement
An office practice

MD/NP/PA

Nurse/MA

Receptionist

MD/NP/PA

Nurse/MA

Receptionist

MD/NP/PA

Nurse/MA

Receptionist
Mutual Accountability

- Know what’s expected
- Capability
- Feedback
- Volunteer
Successful team behaviors

♦ Daily:
  ♦ Review day’s schedule
    • Is there anyone on the schedule who should not be/
    • Anticipate equipment needs, visit length problems
  ♦ Manage all patient demand within the team – e.g.
    see all visit demand that day

♦ Weekly
  ♦ Review future schedule for gaps in capacity
    • “I’m at a conference next Wednesday all day”
  ♦ Review team data: access delays, cycle time, clinical process & outcomes
  ♦ Define # of new patients (if any) team can accept
More team behaviors

♦ Create and manage a contingency plan list
  ♦ For the expected “unexpected”
    • 15 min visit for chest pain, rectal bleeding, three kids
  ♦ Gaps between capacity and demand
  ♦ Coordinating team activities across the practice
    • “We need to hold three appointments for Dr. Jones’s patients as she’s on the labor deck probably all day.”
Successful practice behaviors

♦ Correctly identify provider/team on patient charts and in “the system”
♦ Separate work flow for various teams
  ♦ Separate check in and check out window
  ♦ Separate phone number
  ♦ Teams wear color stickers
    • “We’re the Red team”
♦ Triage becomes work flow backup for absent providers/teams
Resources

- Advanced access:
  - www.ihi.org/IHI/Topics/OfficePractices/Access
- Presentation is on Gordon’s web site: www.idealhealthnetwork.com
Improving Chronic Illness Care. Project Planning Form.

## Project Planning Form
Integrating Chronic Care and Business Strategies in the Safety Net

### Practice: ________________  Page ____ of ____

<table>
<thead>
<tr>
<th>Component of CARE MODEL:</th>
<th>Health Organizational System</th>
<th>Self-Management Support</th>
<th>Decision Support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delivery System Design</td>
<td>Clinical Information System</td>
<td>Community Resource &amp; Policy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Steps</th>
<th>Description of change and steps to accomplish</th>
<th>Responsibility</th>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
3.1 AND 4.1
Primary Care Practice High Level Flowchart (worksheet)


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Processes

- Deming has said, “If you can’t draw a picture of your process you can’t improve anything.” He is referring to the improvement tool of process mapping. With your interdisciplinary team, create a high level flow chart of the appointment process or the entire treatment experience. Start with just ONE flow chart. Eventually you will wish to create flowcharts for many different processes in-and-between your practice. Keep the symbols simple!
- Review the flowchart to identify unnecessary rework, delays and opportunities to streamline and improve.

Primary Care Practice High Level Flowchart

![Flowchart Diagram]

Symbol Key:
- Process beginning or end
- Activity step
- Decision points
- Process flow direction
- Waits and delays
- Connector (e.g. off page)
3.1
Converting Guidelines to Practice (guide)


Converting Guidelines to Practice

Organizing your team based on the tasks required in the guidelines is a helpful place to start. For example, to screen for neuropathy in patients with diabetes, a monofilament sensation test is evidence-based practice. Ensuring that all patients with diabetes receive this test annually requires team effort. Here is how one Washington State primary care practice implemented the guideline:

<table>
<thead>
<tr>
<th>Guideline Processes for Diabetic Foot Exams</th>
<th>Person Responsible</th>
<th>When/How/Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot sticker placed on front of chart for all patients with diabetes</td>
<td>Front Desk</td>
<td>At check-in/on MD’s advice/after a new diagnosis</td>
</tr>
<tr>
<td>Determine date of last foot exam</td>
<td>Medical assistant or person doing vitals</td>
<td>Taken from flow sheet in chart. Annual exam unless otherwise noted. Flowsheet placed on front of chart.</td>
</tr>
<tr>
<td>Shoes and socks removed (if due)</td>
<td>Medical assistant or person doing vitals</td>
<td>Date of last exam triggers removal of socks and shoes</td>
</tr>
<tr>
<td>Explanation of foot exam (when needed)</td>
<td>Medical assistant or person doing vitals</td>
<td>As shoes and socks are being removed and other vitals being assessed</td>
</tr>
<tr>
<td>Monofilament placed on top of chart</td>
<td>Medical assistant or person doing vitals</td>
<td>To make sure right equipment is at hands of provider</td>
</tr>
<tr>
<td>Sensate test performed</td>
<td>Trained provider (RN, PA, NP, MD)</td>
<td>Results recorded on flowsheet</td>
</tr>
</tbody>
</table>

3.1 AND 4.1
Plan Do Study Act Worksheet


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**PLAN- DO-STUDY ACT WORKSHEET**

The Cycle for Learning and Improvement

**MODEL FOR IMPROVEMENT**

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Date</th>
</tr>
</thead>
</table>

**Objective:**

**PLAN:**

Questions:

Predictions:

Plan for change or test: who, what, when, where

Plan for collection of data: who, what, when, where

**DO:** carry out the change or test; collect data and begin analysis.

**STUDY:** complete analysis of data; summarize what was learned.

**ACT:** are we ready to make a change? Plan for the next cycle.

Adapted from the Institute for Healthcare Improvement’s Breakthrough Series – [www.ihi.org](http://www.ihi.org) – 617.754.4800

©1999, Institute for Healthcare Improvement
3.1
Plan Do Study Act Self Management Support Example

Catahoula Parish Community Health Center.
Plan-Do-Study-Act (PDSA) Self Management Support Example.
Created as part of ICIC Breakthrough Series Collaborative Training and Materials. Learning Session One.

This is an example of real PDSA cycles from Catahoula Parish Community Health Center. The change that they are testing is that involving patients in their care will improve it. This test is based on a powerful concept that outcomes in chronic illness care are dependent on patient's ability to be managers of their own care. This example also shows how the data changed over time.

The tests begin with working out the system of doing goal setting within their team and in the flow of the office visit. You can see that having the MD wasn’t a sustainable system. After two PDSAs with the MD doing goal setting, they moved to the RN doing it during rooming, and they eventually settled on making sure all staff could do goal-setting. After making refinements in the new system, the team is ready to use the system throughout the clinic and trained all of their providers in the use of the goal sheet.
At this time they have begun to implement a change. (Staff training is an indicator of implementation) they still had only 10% of patients with a self-management goal. Since the team was monitoring their data, they knew they had to take a different approach to help more patients become involved in their care.

The team then decided to use their clinical information system and reach out to patients who were missing a key clinical activity, a test for lipid levels in the blood (cholesterol.) They adapted their process to this outreach method, and by the end of that series of tests, 70% of patients had self-management goals.
3.1
Cross Train Staff
(guide)


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Cross-Train Staff

Cross-training enables staff to assume different duties as needed. The ability of a clinic to respond to expected or unexpected surges in demand or unexpected, yet predictable events depends to a large extent on the flexibility of the staff to adjust their responsibilities during these periods.

Cross-training does not negate the concept of each care team member working to his or her highest level. It provides another option to smooth the flow and support the providers.

To develop a flexible and effective care team, provide some degree of cross-training so that the team as a whole can respond quickly to minute-to-minute variations in demand and supply, or to unexpected events. The following are examples of useful cross-training for care teams:

- A float team that is trained to cover responsibilities throughout the clinic when needed
- Scheduling staff that can clean instruments and set up rooms for procedures
- Nursing staff that can do scheduling, if necessary
- Scheduling or reception staff that can obtain patient information and assign patients to exam rooms
- Check-in and check-out staff that can fill in for each other

Institute for Healthcare Improvement.  
3.1 Team Effectiveness Exercise (survey)


© Julie J. Mohr, MSPH, PhD, 11/2001, Revised 2/21/03.


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Team Effectiveness Exercise

Effective teamwork is important to collaborative improvement. For the Learning Community, have all members of your Quality Allies project team complete this qualitative analysis about your team’s perceptions of the organization. Summarize the results and discuss it with your team at a team meeting. If you are comfortable doing so, include a summary on your storyboard.

How is Teamwork?

1) In this office, I always have the opportunity to do what I do best everyday.  
   (4) Strongly Disagree   (3) Disagree   (2) Agree   (1) Strongly Agree

2) In the last seven days, I have received recognition or praise for doing good work.  
   (4) Strongly Disagree   (3) Disagree   (2) Agree   (1) Strongly Agree

3) Our office staff works like a team. We have high levels of trust and collaboration. We appreciate complementary roles and recognize that all contribute to a shared purpose.  
   (4) Strongly Disagree   (3) Disagree   (2) Agree   (1) Strongly Agree

4) I would recommend this office practice as a great place to work.  
   (4) Strongly Disagree   (3) Disagree   (2) Agree   (1) Strongly Agree

For the Care of a Typical Patient, Please Describe:

5) How often a year does this team meet to discuss changes in the processes or personnel to make patient care better?  
   0   1   2   3   4   5   6   7 or more

6) How long are these meetings?  
   15 min   30 min   45 min   60 min   more   not applicable

7) In general, how useful are these meetings?  
   Very useful   so-so   not very useful   not applicable

Part 2: How is Your Information?

8) How easy is it to ask anyone a question about the way we care for patients?  
   (4) Very Easy   (3) Easy   (2) Difficult   (1) Very Difficult

9) Technology in this office smoothly links patient care with a rich information environment. The information environment is designed to support the work of the clinical team.  
   (5) Strongly Disagree   (4) Disagree   (3) Unsure   (2) Agree   (1) Strongly Agree
Part 3: How is Patient Engagement?

10) Our team can identify patients by their ability to manage and control health problems. The team does everything it can to make sure that patient self-management is as good as possible.
(5) Strongly Disagree  (4) Disagree  (3) Unsure  (2) Agree  (1) Strongly Agree

Part 4: Leadership and Change

11) The role of leaders is to balance setting and reaching collective goals and to empower individual autonomy and accountability through building knowledge, respectful action, reviewing and reflecting*. In our organization (circle one):
   a) Leaders often tell me how to do my job and leave little room for innovation and autonomy. Overall, they don’t foster a positive culture.
   b) Leaders struggle to find the right balance between reaching performance goals and supporting and empowering the staff.
   c) Leaders maintain constancy of purpose, establish clear goals and expectations, and foster a respectful positive culture. Leaders take time to build knowledge, review and reflect, and take action about Microsystems* and the larger organization.
   d) Can’t rate

12) The larger organization should look for ways to support the work of the Microsystems and coordinate the hand-offs between Microsystems. Rate your organizational support and circle one of the following:
   a) The larger organization isn’t supportive in a way that provides recognition, information, and resources to enhance my work
   b) The larger organization is inconsistent and unpredictable in providing the recognition, information and resources needed to enhance my work
   c) The larger organization provides recognition, information, and resources that enhance my work and makes it easier for me to meet the needs of patients
   d) Can’t rate

* A “Microsystem” is a term some improvement experts use to describe the group of people that work together to create or do something useful. In healthcare, the Microsystem often describes all the people that have to work together to make a patient well, including the patient, doctor, nurse(s), and sometimes other staff and family. This survey is taken from the Clinical Microsystem Assessment Tool, © Julie J. Mohr, MSPH, PhD, November 2001, Revised 2/21/03.
3.2
Panels and Panel Equity (guide)


PANELS AND PANEL EQUITY

Our patients are very clear about what they want:

- the opportunity to choose a primary care provider
- access to that PCP when they choose
- a quality healthcare experience
- a good value for their health care dollar

World class access is requires optimal continuity and sufficient flexible capacity to respond to our patients’ desires. The best access systems make continuity a system property and reduce backlogs to open the capacity on the provider’s schedule. In addition, appointment types and times often are reduced in order to reduce excessive triage, queues and delays for appointments. Appointment types are changed from sorting by clinical condition to sorting by the presence of absence of the chosen PCP or specialist. Once backlogs are reduced, in order to keep demand and supply in equilibrium, contingency plans are introduced to maintain the daily equilibrium and unnecessary visits are reduced to maintain that equilibrium over extended time.

Just as these principles work for an organization or a practice, they need to work for the individual providers. If demand is truly greater than supply (a provider or practice has exhausted all methods to reduce demand and increase supply both appropriately and effectively), then this mismatch is ultimately dangerous for the practice. We have found that in most practices demand and supply are in equilibrium. Occasionally they are not. When this occurs in the organization as a whole, the organization cannot keep up with the demand and backlogs or deflections of patients occur. When this occurs in an individual practice, patients overflow to practice partners and this has potentially serious consequences.

Backlogs are not the best method to determine if demand is greater than supply since often the backlog is stabilized indicating equilibrium. Hence, we need better methods to determine demand and supply. We recommend the determination of daily true demand over time for each PCP and the department, with a comparison to the potential supply in the practice and an analysis of the deployment of that supply to meet the predicted demand by day of week.

DEMAND AND PANELS

An important factor in the determination of demand is the size of the panel. The panel size does dictate the demand that is created external to the practice itself. Other factors include:

- Mood and attitude of a population (do our patients trust us to provide appropriate care when needed or desired?)
- Scope of the physicians practice. Is this a full service practice or are there restrictions?
- In addition to the external determinants of demand there are internal factors as well: primarily the internally generated visit return rates and the individual style of the PCP.
In order for a provider to see her patients when they choose, she must have a panel size that permits and facilitates that. Thus, panel size and a "right-sized panel" are crucial determinants of access success. An "over-full" panel with its consequent demand creates false expectations in the market for our patients and may make the task of the physician and her support team impossible. When panels are "over-full" and patients are systematically deflected to others in the practice or to other venues for care (Urgent Care or the Emergency Department), patient satisfaction cascades downward as does provider satisfaction while costs and rework increase. In both capitated and fee for service models, the effect is the same: more unnecessary visits due to mismatches, less satisfying visits for both providers and patients alike, more unnecessary tests, less valuable visits, and growth opportunities for the practice are constrained. The effect of deflections within a practice is also harmful as the other providers on the team observe the over-full provider’s patients filling their schedules with less than robust visits, generating lower RVU’s and making it difficult for them to see their own patients or growing their own panel.

Thus, some degree of panel equity is essential for successful and sustainable access improvement. An “over-full” panel harms the over-full provider as well as the practice partners and patients.

**PRIMARY CARE PANELS**

In some cases the determination of panel is relatively easy; calculate the number of enrolled patients or members. In other environments, primarily fee for service or mixed payer models, the task is more complex. We have found that determining the number of unique patients who have accessed the group within the last 18 months is the best surrogate measure. Unique patients reflect the number of unique individuals who have accessed any one of the providers within that time frame. The number of actual visits is not important in this calculation since we are looking at volume of patients served not volume of visits.

With this determination, a baseline “target panel size” can be derived by dividing this number by the number of full time equivalent providers. Key discussions should include decisions about how to calculate for non-physician providers and the determination of what constitutes a full time PCP equivalent. If demand and supply are in equilibrium this target panel size calculation then helps a practice determine which providers are potentially over-full and which providers have room to grow their panels.

At the level of the individual provider practices, demand as determined from the panel size, can be calculated and compared to the expected supply. This allows us to identify potential mismatches in demand and supply. Keep in mind that demand arises externally from the population of patients (panel) that has chosen this provider and internally by the PCP’s practice style and the rate and frequency of return visits.
Thus, calculations of demand are directly related to panel size. In a system where providers are expected to do all today’s work today for their panel and there is PCP accountability for quality standards, identification of panel is crucial.

When determining panel size there are important considerations:

- **Panel Adjustments.** Demand from a panel of 2000 eighteen year olds is quite different than demand from a panel of 2000 eighty year olds. We recognize that at the level of the individual practice, a panel determined by baseline number of patients alone may not be sufficient. Thus, for panel equity and accountability, adjustments may be made to the base panel number. For example, the application of adjustments based on age and gender have been used by many groups to more accurately reflect projected utilization and activity. An example is attached.

  At the level of the organization or department adjusted panels need to be equal to the number of patients. If they are not, it is extremely difficult to compare one practice to another. In this situation where “credit” is given for specific characteristics of the population without having the adjusted panels equal the patient panels, the adjusted panels numbers quickly become inflated and useless. There are simple mathematical calculations that ensure a zero sum panel adjustment: age and gender cells are determined (males 0-11 months, for example), visit rates over a determined period of time are determined for each cell, these rates are divided by the overall average visit rate to give the relative risk of utilization number for each cell and then patients in these cells are credited to each provider according to the aggregate numbers from the accumulated cells. In this way total patients equal adjusted patients and a relative panel based on risk of utilization is derived. A target panel of adjusted patients can be determined as described above and the over full and under filled providers are identified.

  We have found that the simplest adjustments are the best. Adjustments for age and gender capture most of the risk for outpatient utilization. Other adjustments in addition to age and gender can be made but must be made equitably for the entire practice or organization.

- **Scope of Practice.** When determining the “correct panel size” for a PCP, the scope of a provider’s practice may be an important consideration. Providers with a broader scope of practice may require a smaller panel. For example a PCP practice that includes obstetrics.

- **Time in the Office.** Individual panels should be adjusted for time in the office. For example a 0.6 clinical FTE should have a 0.6 panel.

- **Help in the Office.** Those offices that provide additional assistance for the providers (extra exam rooms, an EMR, technology, more support staff, staff that directly help in the management of patients such as behaviorists, diabetic educators, case managers, etc) often find their PCP’s can manage a larger patient panel.
PANEL EQUITY AND COMPENSATION

Up to this point, we have assumed that we need to create panel equity within a practice. In practices where PCP’s are paid a fixed salary (with consideration given for some minor oscillations for tenure within the Medical Group, some variable pay based on patient satisfaction, some “quality” considerations etc), generally, panel size and access expectations have been allowed to float. We have found both capitated and many fee for service organizations compensate their providers with a relatively fixed salary. In these environments, practice style often determines workload; the provider has a fixed salary and a fixed encounter expectation. The number of patient visits and patient return rates are provider driven, (“my patients are sicker and take more time, therefore, I can only see 18 patients in a day” or “my patients are sicker and need to come back more often than others”). When an access standard is introduced and fixed; do all today’s work today, the equation changes. With a fixed salary and now a fixed access expectation, the panel needs to be fixed against it. Thus, panel size is not only crucial operationally but optimally is equitable. Practice style then is forced to float; a provider's patients may be sicker and come in more often but that provider will see all that call today. Thus, equitable and agreed upon panel adjustments must be introduced.

In environments where salary has been allowed to float, variable pay based on “productivity” of either encounters or other surrogates such as RVU’s or revenue production-then the panel size can float as well, even if the access standard is fixed. Some providers either want to or have the skills to effectively manage a larger panel of patients. A word of caution; all systems of production incentive based purely on encounters, either in capitated environments or in fee for service salaried practices, tend to increase visits and increase low value RVU visits or unnecessary visits within the system. Increasing unnecessary visits and low value RVU visits have adverse effects on access improvement filling future capacity and stifling growth. One of the high leverage changes recommended for access improvement is the reduction of unnecessary visits. In managed capitated environments this makes sense. In fee for service environments where the production incentives are based directly or indirectly on RVU, the incentive to reduce demand for unnecessary visits still holds. When unnecessary visits are reduced and each visit is maximized in its efficiency (do more with each visit), then the RVU value of each visit increases. With the reduction of total visits, more capacity is opened for new patients who bring a higher value RVU. In incentive systems where the volume of encounters is rewarded there is no incentive to reduce unnecessary visits. Under these circumstances both access improvement and the management of individual panels becomes difficult. Incentives are not aligned.

Thus, if an access standard is fixed within an organization and salary is allowed to float, then the panel size does not have to be equitable but, in fact, can be chosen by the provider based on her determinations of personal supply, desire and skill. In addition, to ensure balance, we have seen successful groups set an access standard and combine it with a patient satisfaction standard, and clinical quality standards (compliance with prevention guidelines, measures of other clinical quality indicators). In these kinds of settings a PCP is “paid” for an adjusted panel size while maintaining access, patient satisfaction and clinical quality standards set by the organization. Quality, access and patient satisfaction are a given expectation, within the context of a panel.
One of the choices for someone not meeting these standards might be a reduced panel size and consequent reduced compensation.

Groups are advised to identify an acceptable panel range for a PCP. This range would include a lower limit of panel size to assure the group that every PCP is managing a panel large enough to support their presence within the group.

RIGHT SIZE THE PANEL

If a PCP has an over-full panel this can place a serious drag on the practice. Here is some strategies to right size the panel:

**Soft Strategies:**

- Close the panel and let the natural attrition take it course. This can be difficult for payers and others. On the other hand, an over-full panel helps no one. Many groups have found creative methods to overcome this barrier.
- Preclude the over-full provider from seeing any patients from either the absent providers (T appointments) and any patients from outside the practice (N appointments).
- Provide more assistance to the provider. Effective assistance strategies include; more exam rooms, more clinical/medical assistant help, more RN support, dictation, and help with tasks that could be done by a non-physician.
- A script for patients of the over-full provider who see a new under-filled provider in the practice. This would occur when the over-full provider is gone. This script might softly encourage those patients to switch PCP’s and can be used at the time the appointment is booked and when the patient comes in for their appointment.
- A letter to patients of the over-full provider informing them of new providers in the practice. This letter simply announces the new PCP. Some patients will opt to be re-assigned for a variety of reasons.

**Hard Strategies:**

- Formulation of a plan to move patients from the over full panel to others in the practice. A direct conversation with patients of the over-full provider during the transition to ease the switch.
- A letter from the over-full provider to her patients stating that “I have taken on new responsibilities and have made the difficult choice to reduce my practice”. Giving patients some choice about who they might empanel with or advising them of a colleague in the practice you have chosen, can be accomplished in this letter. Keep in mind that PCP’s and their patients have a very tough time with this option. It should be used as the last option if the preceding strategies have not been sufficient.
SUMMARY
Understanding and analyzing individual panels is a critical issue. Right sizing panels is often necessary when balancing the workload for a busy practice and to ensure we are able to meet our commitments to patients for access, quality care and a satisfying healthcare experience. Below is a simple Age and Gender Panel Adjustment methodology referred to in this paper.

WEIGHTED PANEL ADJUSTMENTS
Age and Gender
Methodology
Historical visit activity was used to develop a formula to apply age and gender weighted adjustments to Primary Care panels. The formula works in such a way that the total of individual patients equals the number of “adjusted” patients. This method is called a zero-sum gain. Keep in mind these are weighted adjustments. They do not indicate actual visit frequency or utilization.

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Age (Mos)</th>
<th>Rel. Wt.</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>11</td>
<td>5.02</td>
<td>4.66</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
<td>23</td>
<td>3.28</td>
<td>2.99</td>
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<tr>
<td>2</td>
<td>24</td>
<td>35</td>
<td>2.05</td>
<td>1.97</td>
</tr>
<tr>
<td>3</td>
<td>36</td>
<td>47</td>
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<td>4</td>
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<td>59</td>
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<td>60</td>
<td>119</td>
<td>0.98</td>
<td>1.00</td>
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<td>10-14</td>
<td>120</td>
<td>179</td>
<td>0.74</td>
<td>0.79</td>
</tr>
<tr>
<td>15-19</td>
<td>180</td>
<td>239</td>
<td>0.54</td>
<td>0.72</td>
</tr>
<tr>
<td>20-24</td>
<td>240</td>
<td>299</td>
<td>0.47</td>
<td>0.70</td>
</tr>
<tr>
<td>25-29</td>
<td>300</td>
<td>359</td>
<td>0.60</td>
<td>0.82</td>
</tr>
<tr>
<td>30-34</td>
<td>360</td>
<td>419</td>
<td>0.63</td>
<td>0.84</td>
</tr>
<tr>
<td>35-39</td>
<td>420</td>
<td>479</td>
<td>0.66</td>
<td>0.86</td>
</tr>
<tr>
<td>40-44</td>
<td>480</td>
<td>539</td>
<td>0.69</td>
<td>0.89</td>
</tr>
<tr>
<td>45-49</td>
<td>540</td>
<td>599</td>
<td>0.76</td>
<td>0.98</td>
</tr>
<tr>
<td>50-54</td>
<td>600</td>
<td>659</td>
<td>0.87</td>
<td>1.10</td>
</tr>
<tr>
<td>55-59</td>
<td>660</td>
<td>719</td>
<td>1.00</td>
<td>1.20</td>
</tr>
<tr>
<td>60-64</td>
<td>720</td>
<td>779</td>
<td>1.17</td>
<td>1.31</td>
</tr>
<tr>
<td>65-69</td>
<td>780</td>
<td>839</td>
<td>1.36</td>
<td>1.46</td>
</tr>
<tr>
<td>70-74</td>
<td>840</td>
<td>899</td>
<td>1.55</td>
<td>1.60</td>
</tr>
<tr>
<td>75-79</td>
<td>900</td>
<td>959</td>
<td>1.68</td>
<td>1.70</td>
</tr>
<tr>
<td>80-84</td>
<td>960</td>
<td>1019</td>
<td>1.70</td>
<td>1.66</td>
</tr>
<tr>
<td>85+</td>
<td>1020</td>
<td>9999</td>
<td>1.57</td>
<td>1.39</td>
</tr>
</tbody>
</table>

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3.2
Practice Supply Worksheet


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Practice Supply Worksheet

Submitted by: ©2003, Trustees of Dartmouth College, Batalden, Godfrey, Nelson Hanover, New Hampshire USA
<table>
<thead>
<tr>
<th>Clinical Group</th>
<th>Clinical FTE *face-to-face pt. time</th>
<th>Sessions/Week</th>
<th>Hours/Week</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>List each person by name</td>
<td>Insert Clinical FTE by each individual</td>
<td>Insert # of sessions/week by individual</td>
<td>Insert # hours/week by individual</td>
<td>Insert total hours by group/week</td>
</tr>
<tr>
<td>Physicians</td>
<td></td>
<td></td>
<td></td>
<td>Physician Total:</td>
</tr>
<tr>
<td>NP/PA</td>
<td></td>
<td></td>
<td></td>
<td>NP/PA Total:</td>
</tr>
<tr>
<td>RN</td>
<td></td>
<td></td>
<td></td>
<td>RN Total:</td>
</tr>
<tr>
<td>MA/LVN/LNA</td>
<td></td>
<td></td>
<td></td>
<td>MA/LVN/LNA Total:</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td>Other Total:</td>
</tr>
</tbody>
</table>

Once you have completed the Practice Supply Worksheet, review the practice supply by day of the week and by sessions to identify variation in supply of the practice. Once you have identified certain days or sessions that do not have consistent numbers of providers, the schedules should be adjusted to smooth out supply.
3.2
Daily Demand
(guide)

Institute for Healthcare Improvement. Daily demand.

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Daily Demand

Definition: Daily number of patient requests for appointments.

The wait time for an appointment is the difference between when the demand for that appointment is declared and when the supply is applied. Therefore, when trying to improve delays for appointments, it is important to understand supply as measured by capacity and demand for appointments.

Demand is defined as the daily number of patient requests for appointments, no matter when the appointment is actually scheduled. It can be measured by the individual provider, rolled up to the department level, and even aggregated at the clinic level. It can also be measured by the day, and by the week. Demand data is most useful when compared with supply for appointments data. Demand should not be confused with the number of visits made or appointments completed.

Demand for appointments comes from two sources: internal and external. External demand is generated by patients requesting an appointment, or being referred for an appointment. External sources are phone calls, walk-ins, faxes, emails, and deflections to urgent care. Internal demand is generated by the practice itself in the form of return appointments and planned visits.

Formula: Demand = External Demand + Internal Demand

Goal
Less than Daily Capacity

Data Collection Plan

On at least the same week each month, for each provider, collect data on the daily demand for appointments as described below.

Add together the following components of daily demand by provider:

- Daily appointment requests called in to the office (regardless of the day to which the appointment is actually assigned)
- Patient walk-ins, whether seen today, given a future appointment, or referred elsewhere
- Patients requests for an appointment through other methods such as email, fax, or centralized appointing
- Patient requests for appointments that were not actually scheduled, but sent elsewhere for care (for example, Urgent Care)
- Referrals from other areas such as specialty clinics, emergency rooms, and hospital discharges
- Follow-up appointments or returns generated today
Sample Graph

Use **Improvement Tracker** to enter, save, and graph your team's data.

3.3 AND 3.4
Shared Care Plan
(patient material)

PeaceHealth. Shared Care Plan Personal Health Record.

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YOUR PERSONAL HEALTH RECORD

The Shared Care Plan

It's your health—
you can take charge!

This Print Version belongs to:

Additional copies available at
www.SharedCarePlan.org
Welcome to Your Personal Health Record

What is the Shared Care Plan?
The Shared Care Plan is a free, easy-to-use, Personal Health Record that lets you keep track of vital health information in case of an emergency. You can also share this information with your family, physicians and other people you feel should have access to this information. For more information about the Shared Care Plan, please visit www.SharedCarePlan.org or call (360) 756-6840 or (888) 503-6843.

Electronic Shared Care Plan
If you would like to have an electronic Shared Care Plan housed on a secure Website please go to www.SharedCarePlan.org/signup. There, the information you enter online will be accessible to you and the people you specify from any Web ready computer around the world. The information can also be printed out as needed. There is also a pocket-sized summary that will easily fit in a wallet which is especially useful when traveling.

Critical Information Available in an Emergency
The SCP is a place to record key information that medical personnel need access to in an emergency. If you carry your SCP with you or let your emergency contact know where it is, the information is available to emergency personnel. This means that even if you are unable to communicate, your critical information is still available to health care professionals.

How can I make the most of my Shared Care Plan?
Fill out as much information as you can in your Shared Care Plan. If there are things you don’t know, ask for that information from your clinic(s) at your next visit. Bring a copy of your Shared Care Plan with you to all of your health care appointments. Ask your Care Team members (anyone such as doctors, nurses, therapists, pharmacists, care-givers, family or friends who help you in your journey towards better health) to look at your Shared Care Plan for a current picture of your health and to help you keep the information accurate, up-to-date, and complete. You can also work together to define problems, set priorities, establish goals, create treatment plans, and solve problems. Also, keep a copy of your Advance Directives (if you have these) with your Shared Care Plan at all times. This way your wishes will be known and the legal documents immediately available in the case of an emergency.

How can I get another copy of this paper version of the Shared Care Plan?
You can find downloadable versions of the Shared Care Plan online in both Microsoft Word and Adobe PDF formats. There is also an English/Spanish version available. Go to www.SharedCarePlan.org for more information.

How do I put this booklet together?
The paper Shared Care Plan is designed to be printed double-sided and folded like a booklet although you can print it regularly as well. Refer to your printer’s documentation for specific instructions. Generally, you select File and then Print. In the print dialog box, choose “odd pages” next to the word “Print.” After the pages have printed, flip them over and print the even pages this time. Fold the printed pages in half to form a booklet. You may have to select “Reverse pages” for one of these steps.
## Care Team

### Emergency Contacts

*Your Emergency Contact is the person you would like called first should you have an emergency. Your Backup Emergency Contact is the person you would like called if your primary Emergency Contact is unavailable.*

<table>
<thead>
<tr>
<th>Contact</th>
<th>Name</th>
<th>Phone Number</th>
<th>Alternate Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Contact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Backup Emergency Contact</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Care Team Members

*Care Team Members are people and/or organizations who help you manage your health. Anyone who you feel has a role in your health care can be part of your Care Team.*

<table>
<thead>
<tr>
<th>Appointments</th>
<th>Name</th>
<th>Phone #</th>
<th>Fax #</th>
<th>Role/Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

### Insurance Providers

*Record here any insurance policies you use for your health care.*

<table>
<thead>
<tr>
<th>Type of Insurer</th>
<th>Carrier Name</th>
<th>Policy Number</th>
<th>Group Number</th>
<th>Phone Number</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Medical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Medical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prescription Drug</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
About Me

I want the person working with me to know...
This section is for you to record important details about your health and life that will help health care professionals understand your needs.

This is the most important information you need to know about me: __________________

I have challenges with: □ Vision □ Hearing □ Speech □ Mobility □ Transportation □ Other
My primary language is: □ English □ Español □ Other ________________
I need a translator: □ Yes □ No
Comments __________________________________________________________

My blood type is: □ O+ □ O- □ A+ □ A- □ B+ □ B- □ AB+ □ AB-
I have special dietary needs: □ Yes □ No
Comments __________________________________________________________

My religion/spirituality impacts my health care: □ Yes □ No
Comments __________________________________________________________

I have: □ Advance Directives □ POLST □ Power of Attorney
Comments __________________________________________________________

I live: □ Alone □ With a partner/spouse □ With family □ Other
□ With others □ In assisted living □ In a nursing home
Comments __________________________________________________________

I learn best by: □ Reading □ Being spoken to □ Being shown
□ Listening to tapes □ Seeing pictures/videos □ Other
Comments __________________________________________________________

I have access to the Internet: □ Yes □ No
Comments __________________________________________________________

Additional information
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

CONFIDENTIAL
# Diagnoses

**My Chronic and Long-Term Diagnoses**

*This is a list of all the conditions you have been diagnosed with and are managing.*

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Description</th>
<th>Date Diagnosed</th>
<th>Diagnosed By</th>
<th>Comments</th>
</tr>
</thead>
</table>

**Diagnosis**

**Description**

**Date Diagnosed**

**Diagnosed By**

**Comments**
Next Steps

Where I am – My concerns
This section helps you identify the types of problems or concerns you are currently facing as you manage your health. Sharing your concerns helps your Care Team assist you with Next Steps.

☐ My ability to manage my chronic condition(s)  ☐ Emotional Issues  ☐ Spiritual support
☐ Thinking/memory problems  ☐ Financial issues  ☐ Access to health care
☐ Family issues  ☐ End of life issues  ☐ Other
Details __________________________________________________________________________________
________________________________________________________________________________________

Where I want to be – Life goals
A Life Goal is a motivating reason you are working toward better health.

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<th>Goal Description</th>
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How I’m getting there – Next steps
Next Steps are small, short-term steps that you are ready and willing to take towards obtaining your life goals.

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Be sure to reward yourself along the way!

CONFIDENTIAL
**Health Log**

**Health Indicators**
This is the place to record health indicators such as blood pressure, cholesterol and weight, the goal values that you want to reach or maintain and to monitor them over time.

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### Medications

**Prescribed medications**
*These are medications that a health care professional has advised you to take, including medications, vitamins and supplements available over-the-counter.*

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<th>Start Date</th>
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**CONFIDENTIAL**
### Additional Medications

Add here any other medications that you are taking and that no health care professional has advised you to take, including herbal supplements, vitamins, etc.

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### Discontinued Medications

This is a list of all medications that you are no longer taking.

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<th>Start Date</th>
<th>Stop Date</th>
<th>RX By</th>
<th>Generic (Brand) Name and Strength</th>
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Comments:
## Reactions

### Allergies/Intolerances

These are substances (drug, food, or otherwise) that cause a bad reaction when you take, inhale or in some way come in contact with them.

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<tr>
<th>Substance</th>
<th>Date Occurred</th>
<th>Type</th>
<th>Documented By</th>
<th>Reaction</th>
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### Contraindications

These are substances (both drugs and food) that interact badly with your condition or medications that you are already taking.

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History

Procedures and Surgeries
Here you can keep track of any procedures and surgeries you have had. These can range from a biopsy to a cat scan to a mammogram.

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<th>Description</th>
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Hospital Visits
Here you can keep track of any hospital visits you have had. Include visits to the emergency room and longer in-patient stays for observation and so forth, but you do not need to duplicate stays listed under surgeries.

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Immunizations
Immunizations are vaccines taken to prevent illness. It is important to keep a record of these in case you are ever exposed to a serious contagious disease.

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<th>Vaccine</th>
<th>Dose # in Series</th>
<th>Date</th>
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<th>Dose # in Series</th>
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3.3

Health Literacy and Patient Safety: Manual for Clinicians (online resource)


Helping Patients Manage Their Chronic Conditions (online resource)


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3.3
Depression Management Tool Kit (online resource)

3.3
Spanish PHQ-9 Survey (online resource)

MacArthur Initiative on Depression & Primary Care.
Patient Health Questionnaire PHQ-9 for Depression (Spanish) [Web page].
Available at: http://www.depression-primarycare.org/clinicians/toolkits/materials/forms/phq9/.

Web site © 2003-2006 3CM™.
3.4
Organizing the Planned Visit (guide)


Organizing the Planned Visit

1. Assign Team Roles and Responsibilities

Be sure to identify the logistical and clinical tasks that necessary for the preparation and execution of the visit. For example, the following questions might need to be addressed: who is going to call the patient to schedule the visit? Do lab tests need to be ordered in advance? If the patient has diabetes, who will take off shoes and socks? Who will examine the feet? Who will review the patient’s self management goals? Who will print off the patient encounter form for use during the visit? All tasks need to be delegated to specific team members so that nothing is left to chance.

2. Call a Patient in for a Visit

Develop a script for the call, and decide who on the team will make the call. Set the tone and expectations for what the visit will address. The following is a sample script you can adapt to your setting.

“Hello Ms. Smith. This is Karen calling from Dr. Brown’s office. He is interested in making sure all of his patients with chronic conditions are receiving the best possible care. He has asked me to have you come in for visit to discuss your (insert condition here). If you have other health concerns, we may have to address those at a future visit. By focusing on just your (condition here) both you and he can better manage your health. Can we set up a time that is convenient for you? When you come please bring all your current medications (and anything else pertinent to the condition). Thank you. We will call you a day before the visit to make sure you are still able to come.”

Experience indicates that “cold” calls may frighten patients. Introducing the idea of a planned visit at an earlier patient-initiated visit or even having the physician call my mitigate patient concern.

If you choose to mail an invitation to patients, be sure to track who responds and who doesn’t. Less than 50% of patients will respond to a letter. You should plan to contact non-responders in another way.

3. Deliver Clinical Care

In preparation for the visit, print a summary/encounter form from your registry (the most efficient method) or pull the chart in advance so that you can review the patient’s care to date. Document what clinical care needs to be done during the visit.
4. Determine How to Meet Regularly

At least until new roles are well integrated into the normal work flow, many practices have team huddles for 5-10 minutes in the morning to review the schedule and identify chronic care patients coming in that day for an acute care visit. Decide how best to meet as a team to manage these patients. Determine the best intervals and timing for these meetings and stick to them. They help the team stay focused on the redesign in your practice and create a sense of “one for all” spirit in practice.
3.4
System Changes and Interventions: Planned Care (presentation)


System Changes and Interventions: Planned Care

Mike Hindmarsh

Improving Chronic Illness Care, a national program of The Robert Wood Johnson Foundation

IDCOP National Summit
Chicago
May 13-15, 2002
Delivery System Design

- Define roles and delegate tasks amongst team members.
- Use planned visits to support evidence-based care.
- Build effective case management skills into practice.
- Assure continuity by the primary care team.
- Assure regular follow-up.
# Roles in Team Care

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<th>ROLE</th>
<th>PRIMARY CARE PROVIDER</th>
<th>PRIMARY CARE NURSING STAFF</th>
<th>MEDICAL SPECIALIST</th>
<th>CLINICAL CARE MANAGER</th>
<th>RESOURCE COORDINATOR</th>
<th>CLERICAL STAFF</th>
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Group Visits: A Primer

- Patients brought in by clinically relevant groups
- Patients can receive:
  - Specialty service as needed/available
  - One-on-one with medical provider
  - Medication counseling
  - Self-management support training
  - Social support
- Multiple Models for Group Visits
What is a Planned Visit?

• A Planned Visit is an encounter with the patient initiated by the practice to focus on aspects of care that typically are not delivered during an acute care visit.

• The provider’s objective is to deliver evidence-based clinical management and patient self-management support at regularly scheduled intervals without the “noise” inherent in the acute care visit.
What does a Planned Visit look like?

• The provider team proactively calls in patients for a longer visit (20-40 minutes) to systematically review care priorities.

• Visits occur at regular intervals as determined by provider and patient.

• Team members have clear roles and tasks.

• Delivery of clinical management and patient self-management support are the key aspects of care.
How do you do a Planned Visit?

You Plan It!
Step One: Example Senior Care Polypharmacy

- Choose a patient sub-population, e.g., all patients >75 on five or more medications
- Have programming support person or pharmacy generate list of patients and medications
- MD reviews list for patients at highest risk (see handouts)
Step Two: Patient Outreach

- RN/LPN/MA checks to see if patient is on any registries
- Have PCR call patient and explain the need for planned visit
- Allow patient to choose day and time for visit
- Ask patient to bring in bag of all medications they are taking (including OTCs and herbals)
Step Three: Preparing for the Visit

• RN/LPN/MA prints any relevant patient summaries from registries and attaches to front of chart

• MD reviews medications prior to visit, and consults with pharmacy as needed
Step Four: The Visit

- Review patient’s medication regimen
- Identify and eliminate unnecessary drugs
- Adjust remaining medications as needed
- Problem solve adherence issues with patient
- Create an patient action plan
- Schedule follow-up
Follow-up

- Does not need to be in-person visit (use phone, email)
- Check adherence to action plan
- Problem solve as needed
- Schedule additional follow-up as needed
3.4
Diabetes Standing Orders
(worksheet)

Providence St. Peter Family Medicine Residency Program.
Standing Orders: Diabetes Mellitus Type II. Available at:

Used by permission of Devin Sawyer, MD, March 2007.
**STANDING ORDERS**  
**DIABETES MELLITUS – Type II**  

Patient Name: __________________________  DOB: __________________  Date: __________________

<table>
<thead>
<tr>
<th>Performed?</th>
<th>Action</th>
<th>Result</th>
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</thead>
<tbody>
<tr>
<td>Y</td>
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<td></td>
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<tr>
<td>N</td>
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</table>

**PHYSICAL EXAM**
- Weight and BMI every visit
- Blood Pressure every visit
- Foot check every 4 months (on back of form)

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<th>Wt:</th>
<th>Ht:</th>
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<tbody>
<tr>
<td>lbs</td>
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<td>inches</td>
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</table>

**LABORATORY TESTS**
- HbA1C every 4 months, or __________________________
- Fasting Lipid profile every 1 year, or __________________________
- Urine Microalbumin/Creatinine ratio every 1 year, or __________________________
- Creatinine every 1 year, or __________________________

**IMMUNIZATIONS**
- Flu Shot (Influenza) every 1 year
- Td every 10 years
- Pneumococcal Vaccine 1 time dose
- Revaccinate 1 time if the patient is: > 65 years old and if the 1st dose was given at < 65 years and greater than 5 years ago

**REFERRALS**
- Ophthalmology dilated exam every 1 year
- Diabetes education (Boldt Diabetes Center) offer every 1 year, if poor glycemic control.
- Diabetes group visit (SPFP) – offer every 4 months.

**SELF MANAGEMENT GOAL SETTING & SUPPORT**
- Set Self-Management Goal with patient and record on CDEMS form including likelihood of success score (LOS score)
- Complete MA call back card for 2 to 3 weeks to review and refine self management goal

<table>
<thead>
<tr>
<th></th>
<th>Goal:</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>• What/Where: __________________________</td>
</tr>
<tr>
<td></td>
<td>• How much: __________________________</td>
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<td></td>
<td>• When: __________________________</td>
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<td>• How often: __________________________</td>
</tr>
<tr>
<td></td>
<td>• Score: __________________________</td>
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</table>

**Pedometer**

*Would you like to discover how active you are? Do you see yourself using a pedometer?*

**OTHER**
- Update CDEMS form and enter data
- Schedule appointment with PCP within 1 week (15 min. EST.)
- Diabetes education material offered
- Call back card for planned visit in 4 months
- Discuss smoking cessation if indicated

MA/RN Signature: __________________________  Date: __________________

PCP Signature: __________________________  Date: __________________
3.4

Open Access - Open Office (patient material)


Used by permission of Devin Sawyer, MD, March 2007.
Open Access – Open Office
Example Mailer

DON’T FORGET:

WHAT:
St. Peter Family Medicine “Open Access – Open Office”

WHY:
To get your questions answered by Dr. Sawyer & Dr. Campbell. 
(For help with questions see inside)

WHEN:
Tuesday, May 11th, 2004. From 4 p.m. to 6 p.m. stop by any time.

WHERE:
St. Peter Family Medicine
525 Lilly Road NE
Olympia, WA 98506
(360) 493-7230

Bring Your Spouse/Partner

To Our Patients With Diabetes:

1. My questions are?
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

   (Or some things to think about)

2. My Medicines?
   Why? / What? ________________________________________________
   Side Effects? ________________________________________________
   “Natural” Medicines? _________________________________________

3. My Labs?
   HbA1c – What is it?
   Urine Protein – Why check it?
   Good Cholesterol (lipid profile) and Bad Cholesterol

4. Food choices?
   Changing what I eat? _________________________________________
   Should I keep a diary? _______________________________________

5. Choosing to Move?
   How can I get more physical activity into my life?

6. Am I depressed?
   Have I been feeling down or is it depression?
   Why am I so worn down from my usual activities?
   What can I do about it?

Any question is fair game!
3.4
Front Desk Collections Flow Chart (guide)


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Community Health Center, Inc.
Medical Collection Procedures

"Payment is Expected at the Time of Service"

All Medical patients are to be checked for outstanding CHC balances at the time of scheduling.

- An outstanding balance means any amount owed to any CHC component (Medical, Dental, Mental Health)
- Each patient's guarantor must also be checked at the time of scheduling for any outstanding balances.

Patient will be REMINDED that all balances, patient or guarantor, should be paid prior to the scheduled visit.

Patient should be REMINDED to bring payment for the current visit or proof of insurance at the time of scheduling.

When the patient presents for the appointment, the following MUST occur for:

- **Insured Patients:**
  - Insurance coverage must be verified
  - Procedure Eligibility must be verified
  - Any co-payment must be collected

- **Self Pay Patients:**
  - Any Patient OR Guarantor balances for any CHC component should be collected.
  - Deposit for the current visit should be collected

If payment cannot be made by the patient at the time of visit, only the provider can override and see the patient, after which the provider will complete the appropriate override form and notify patient accounts.

The patient should be offered to:

- meet with the Access to Care offices to qualify them for assistance
- meet with the office manager to set up a reasonable payment plan
- reschedule the appointment for a later time or date to allow time to pay any outstanding balances
3.4
Huddle Sheet (worksheet)
Huddle Sheet

- What can we proactively anticipate and plan for in our work day/week? At the beginning of the day, hold a review of the day, review of the coming week and review of the next week. Frequency of daily review is dependent on the situation, but a mid-day review is also helpful.
- This worksheet can be modified to add more detail to the content and purpose of the huddles.

<table>
<thead>
<tr>
<th>Practice: __________________________________________ Date: __________</th>
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**Aim:** Enable the practice to proactively anticipate and plan actions based on patient need and available resources, and contingency planning.

**Follow-ups from Yesterday**

<table>
<thead>
<tr>
<th>“Heads up” for Today: (include special patient needs, sick calls, staff flexibility, contingency plans)</th>
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<tbody>
<tr>
<td>Meetings:</td>
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<table>
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<tr>
<th>Review of Tomorrow and Proactive Planning</th>
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<tbody>
<tr>
<td>Meetings:</td>
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© 2001, Trustees of Dartmouth College, Godfrey, Nelson, Batalden, Institute for Healthcare Improvement
Adapted from the original version, Dartmouth-Hitchcock, Version 2, February 2005
3.4
Getting Paid: Maximizing Collections (presentation)


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Getting Paid: Maximizing Collections

RedeFin II
April 13, 2005
Some Basics

- Written policies and procedures approved by the Board
- Make sure everyone understands the message
- Clearly define the center’s obligations and the patient’s responsibilities
- Assign accountability for collections
- Train staff on collection processes and techniques
- Report collections percentages/dollars to provide feedback to staff
- Use technology to prompt staff action
When the Appointment gets Scheduled…

- Verify demographics
- Obtain insurance information
- Discuss financial responsibility and the center’s policy regarding provision of care
- Review account history if possible at that time
Before the Patient Gets There…

- Review account history
- Verify coverage
- If there are issues detected…
  - Get a financial counselor set up to talk to the patient upon arrival
When the Patient Arrives...

- Have trained financial counselors available for identified patients
- Have patient sign a statement of financial responsibility
- Let the patient know his outstanding balance
- Be prepared to deny services for chronic non-payers
- Collect any outstanding balances, co-pays
Before the Patient Leaves…

- Establish a formal check-out process, including having someone accompany the patient to check-out if needed
- Input charges and generate a demand bill
- Collect amounts due from patients. Attempt to collect the entire account balance, but collect something
- Use staff trained in collection practices
- Have a sufficient cash drawer; take credit cards
- Employ strict cash-handling procedures
- Set up a payment plan with a written agreement, if necessary, before the patient leaves
Once the Patient is Gone…

- Send patient statements on a monthly basis
- Send dunning notices at 30, 60, 90, 120 days past due
- Account for each billing form each day
AR Management Change Concepts

- For patients,
  - Establish expectation of payment and enforce it
  - Collect payments at time of service
  - Regularly send accurate statements on balances due
  - Have written payment plan agreements

- For payors,
  - Be consistent in practice with all payers
  - Track AR aging and tie this to collection practices
  - Adopt written collection policies and procedures and enforce them
  - Use dedicated and trained collection staff that have defined accountability for amounts to be collected
  - Resolve denials quickly and track them to resolution
  - Involve patients in the insurance collection process
Cash Management Matters

- Employ strict cash handling procedures
- Balance cash drawers daily
- Deposit cash receipts daily
- Issue a receipt for every in-office payment
- Segregate cash handling, payment posting and deposit preparation
- Stamp all checks “for deposit only” immediately
- Use written procedures for handling write-offs and refunds/ segregate posting
- Monitor and balance petty cash regularly
3.4
Group Visit Starter Kit (guide)


Group Visits: Introduction

This Group Visit Starter Kit is designed for health care teams who want to begin offering group visits for their patients. It contains information on:

- What are group visits
- Why they are useful
- How to plan and implement the visits
  - Task list and timeline
  - Who does what
  - Sample letter for patients
  - Sample agendas
- Information on a “Patient Workbook” for the participants
  - Group visit norms
  - Vitals record for patients
  - Clinic information sheet
- A list of resources to help you get started
  - Sources for patient education materials
  - Resources within the Cooperative
  - Tips on facilitating groups
- Comparison of group visit models
- References
- Business Operations:
  - Group Visit Business Process
  - Coding and Billing Group Visits

Information to prepare this notebook was received from Collene Hawes and the Olympic District, Kate Lorig of the Stanford Patient Education Research Center and John Scott of Kaiser-Colorado. Thanks to all the clinics and individuals who have shared materials and tools they have used. Portions of this work first appeared in or are derived or adapted from the Chronic Disease Self-Management Program. Those portions are Copyrighted 1999 by Stanford University.
What is a “Group Visit”?  

The term is applied to a wide variety of visits designed for groups of patients, rather than individual patient-provider appointments. This Starter Kit describes the Cooperative Health Care Clinic (CHCC) model developed by the Kaiser Colorado staff. We will refer to it simply as a “group visit”. Group visits were pioneered with frail elderly patients who were high utilizers of primary care.

In this model, the health care team facilitates an interactive process of care delivery in a periodic group visit program. The team empowers the patient, who is supported by information and encouraged to make informed health care decisions. The group visit can be conceptualized as an extended doctor’s office visit where not only physical and medical needs are met, but educational, social and psychological concerns can be dealt with effectively.

Invitations are extended by the health care team to specific patients on the basis of chronic disease history and utilization patterns. The patients typically remain in the same group together. Members may be added to groups if the group size decreases.

Variations of this group visit format have been used for disease or condition specific populations, such as:
- Diabetes
- Hypertension
- Orthopedic procedures
- Heart failure
- Cancer
- Asthma
- Depression
- Fibromyalgia
- Hormone replacement therapy
- Chronic pain
- Hearing impaired population


Additionally, some clinics find it is helpful to periodically provide a group meeting for new patients as an orientation to the clinic, or to initiate a new clinical guideline.

Another group visit model, Drop-In Group Medical Appointments (DIGMA) follows a distinctly different methodology and will not be discussed here.
Why Have Group Visits?

Evidence from a randomized trial of group outpatient visits for chronically ill older HMO members in the Colorado Kaiser program indicates that group visits had the following impacts:

- 30% decrease in emergency department use
- 20% decrease in hospital use / re-admissions
- Delayed entry into nursing facilities
- Decreased visits to sub-specialists
- Increased total visits to primary care
- Decreased same day visits to primary care
- Increased calls to nurses
- Fewer calls to physicians
- Increased patient overall satisfaction with care
- Increased physician satisfaction with care
- Decreased cost PMPM by $14.79

In focus groups, members have told us that they value
- trusting relationships with their provider
- hands-on care
- time with the provider.

Group visits are a way to address those needs.

Members who have participated in group visits report that
- they know each other better
- they know that they are not the only ones facing a particular disease or situation
- they learn new information
- they have an opportunity to ask questions, and
- they enjoy one another’s company.

Summary

Group visits offer staff a new and more satisfying way to interact with patients that makes efficient use of resources, improves access, and uses group process to help motivate behavior change and improve outcomes.
Planning and Implementing Group Visits

Two Months Before the First Group Visit

Initiating a group visit requires some planning and coordination. Thankfully, many other providers have already tested the idea and materials are available to assist. The team may want to consider using the expertise of the Practice Improvement Consultants or Care Management Directors as they get their first group visit up and going. (for more resources, see page 26.)

It is important to begin planning at least two months before the first visit is scheduled to occur. Make sure that you have support from the leadership at your site. With the leadership, discuss what outcomes you want from your group visits. Some suggestions include patient and provider satisfaction, achievement on clinical standards of care and utilization. Determine a measurement plan.

At a team meeting, determine the population you would like to invite for group visits. Remember that between 30 and 50% of patients are amenable to participation in group appointments, so determine if the population you wish to include is at least 50 patients, or the group that results from your invitation may be too small to make the visit efficient for your team. Chronic illness registries and reports of patients with frequent visits can be used for this purpose. At this first team meeting, review the letters of invitation, standard agenda for the first meeting, and the roles of the team members. A task list and timeline is provided in the following section. Give top priority to scheduling the primary care provider, the nurse and an MA to assist with vitals during the “break” in the group visit. Don’t forget to schedule the room.

One Month Before the First Group Visit

When a list of potential patients is obtained, the team should quickly review the list for patients who wouldn’t be appropriate in a group. The typical exclusions are patients who are terminally ill, have memory problems, severe hearing problems, have difficulty with English or are out of the area for significant portions of the year. Create your mailing list and letters now. Plan to have letters reach patients about one month before the first session. The letter is viewed most positively if it is personally signed by the primary care provider, and followed up one or two weeks after the mailing with a personal phone call from the nurse who will be attending the group visits.

It is a good idea to have a second team meeting during this time. The materials for the patients to have at the first session should be reviewed. Each patient will be provided with a folder or three ring binder to bring with them to each visit. Review any assessments or documentation tools you wish to use. Discuss how the calling is going (or went) and who is expected to attend. Review the agenda and roles of the team. Some clinics like to provide coffee or a snack for the break in the visit. Arrange this as needed, as well as the materials for the folders, binders, a flip chart, BP cuffs and stethoscopes. It is a good idea to use nametags, especially for the first few visits.
About one week before the first session, enlist someone to call the attendees and remind them of their appointment. These calls should describe the purpose of the visit, what is likely to occur at the visit and encourage the patient to attend. The caller should reinforce that this is an actual medical appointment, not a class or workshop, and people are expected to call and cancel if they cannot attend. Discuss the issues of co-pay and parking as necessary. It is important to reinforce that this is a medical appointment, and that the standards for canceling appointments are expected. Many teams request the charts of those who will be attending and review them for preventive care needs or other concerns.

### Supplies for a Group Visit
- Charts
- BP cuffs & stethoscopes
- Specialty Tools (ex: monofilaments for diabetes foot exam)
- Forms (sign-in sheets, order forms, etc.)
- Pens
- Nametags
- Flip charts and markers

### Don’t hog the airtime!
If the facilitator has been talking about him/herself for more than one minute, it’s time to stop!

The day of the first session, prepare the room well in advance, as some patients will arrive early. Tables should be set up in a horseshoe with the open end pointing toward the speaker. Start on time to set up the expectation that the visit has a beginning and an ending. At least one team member should be in the room to greet patients. Help patients to write the name they wish to be called in very large letters on their nametag.

The primary care provider should open the meeting with a sincere welcome. All staff and team members are introduced. The patients are then given a format to follow for introductions. It is very important to include sharing in the introduction, as this will help to form the supportive relationships between the group members. For older patients, reminiscence can be very helpful. The primary care provider should model the introduction. The provider should introduce himself or herself again using the exact format they want the participants to use. For example, “My name is (use the name you wish to be addressed by). My favorite childhood toy was my bicycle. We used to ride all around our neighborhood in Des Moines, Iowa on our bikes.” This modeling will help other participants to be brief. If participants begin to tell extended stories, the provider might need to gently interrupt by saying something like “Thank you, ___. We need to make sure we have time to hear from everyone.” The introductions should take about 15 minutes.
After the introductions, the provider gives an overview of the group visit (30 minutes). Allow lots of time for interaction and questions. Review the group norms, which cover the expectation of confidentiality for the group.

We all like food
Consider offering simple refreshments.

In some groups, the members will take on the responsibility and offer to bring items to share.

Before the break, the provider and nurse should explain what will happen. The nurse will start at one end of the horseshoe and take vitals, and the physician will start on the other, and cover any individual issues. Some groups have found it helpful to have a medical assistant begin taking vitals in addition to the nurse. Vitals are recorded for the patients in their notebooks, and for the medical record. All team members should be assessing patients for those who may need an individual visit at the end of the group session.

After the break (15 minutes), the group should reconvene for an open question and answer period. The provider may need to prompt this session and encourage participation at first. Often asking what people have heard or seen on the news or in the newspaper will get the questions rolling. The provider should involve the team as much as possible and refer questions to the nurse, to demonstrate to the patients that the team works together.

Group Interaction is Powerful

Health care professionals are often tempted to use group visits as an opportunity to lecture patients – to tell patients everything they think patients should know about the disease process, treatment, etc. This can seriously undermine the success of the group visit.

Resist the temptation to take over and lecture! Trust the group to lead the way. The role of the health care team is to facilitate the group interaction.

After the question and answer period, the group discusses what topic they would like to discuss in the next group visit (typically one month in the future.) Writing down a list of all the ideas on a flip chart can be a very helpful technique. Providers find that patients typically bring up topics that the provider team also feels are important, and rarely suggest frivolous topics. If they do, other participants usually discourage the idea. Some provider teams may want to get a quick reaction from the participants about what they liked about the meeting. Thank the participants for coming.

Tips for Using Flipcharts

- Write in clear large letters
- Use Bullets for lists
- Use alternating colors to clearly separate items
Individual appointments then follow at 10 minute intervals. The nurse and provider may both have individual appointments. After 30 minutes of appointments, the provider is rewarded for the group visit by having 30 minutes of discretionary time.

After the first group visit, the team may want to have a short debriefing meeting. Discuss what went well and what didn’t go so well. As you discuss things you might want to do differently, remember that the basic format of the group has been tested in clinical trials, and deviations from the outline may not have the same positive results.

Providers have found that few materials should be prepared in advance of the group visit. Quickly reviewing the materials that patients have available (Healthwise for Life or the pamphlet service) is generally all that is required. What the patients want to hear about is the basic information they need to know and how others have dealt with the situation.

Providers should strive for each session to be interactive. An appendix contains helpful information to deal with difficult people and situations that may arise in a group session.

**Happy Endings**

It’s important to end each session with a strong, clear closing statement. Think about the difference between the following closures:

Example #1: “This was a great session. You all did a wonderful job discussing issues of medication management and thinking of creative solutions to the problems that some of you have experienced. I really appreciate your openness and your willingness to share. At the next meeting, we will be discussing ways to increase activity levels. Thanks for coming and we’ll see you all on March 12th.”

Example #2: “Well, I guess that’s it. I can’t think of anything else. OK, then. Bye.”

**Let the group answer questions**

When questions arise, health care professionals tend to want to give the answers. Instead, learn to leverage the power of the group.

“Has anyone else experienced this problem? What worked for you?”

This increases the participants’ confidence in their own problem solving ability.

**Monthly Follow-Up**

The team should hold a brief meeting each month to review the participants’ requested topic and determine how to address it. Kaiser Colorado has found that it is best to have most of the presentations and discussion done by members of the primary care team. Review the roles of the team members and anything that the team would like to try differently for the upcoming session.
## Task List and Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
<th>Responsibility</th>
<th>Done</th>
<th>Comments</th>
</tr>
</thead>
</table>
| **Two months before first session** | Meet with leadership  
Determine goals and measurement |                |      |          |
|                             | Team meeting (1 hour or less)  
Determine type of group visit (ex: frail elderly)  
Discuss plans and team member roles  
Review agenda and letters |                |      |          |
|                             | Schedule room (2 ½ hour block) |                |      |          |
|                             | Schedule provider (2 ½ hour block) |                |      |          |
|                             | Schedule RN (2 ½ hour block) |                |      |          |
|                             | Schedule MA for vitals during “break” |                |      |          |
|                             | Obtain list of potential participants |                |      |          |
|                             | Review list for inappropriate invitees | Provider |      |          |
| **One month before first session** | Send out invitation letters to 40-50 people |                | RN  |          |
|                             | Call all patients who received letter (2 weeks after mailing) | RN  |      |          |
|                             | Team meeting (45 minutes or less)  
Review agenda and roles, attendees, patient notebooks |                |      |          |
|                             | Arrange refreshments, if desired |                |      |          |
|                             | Create records for patients (folder/notebook for 25 per group) |                |      |          |
| **One week before** | Create roster of attendees and sign-in sheet |                |      |          |
|                             | Review charts for potential immediate needs |                |      |          |
|                             | Call attendees to remind them of their appointment |                |      |          |
| **Day of Visit** | Set up room (horseshoe) |                |      |          |
|                             | Materials to room (patient folders, coffee, BP cuffs,  
stethoscopes, flip chart, nametags, tissues) |                |      |          |
|                             | Be in room early to greet patients |                |      |          |
|                             | Hold visit |                |      |          |
|                             | Debrief after visit:  
What went well? What didn’t go as well? |                |      |          |
| **Monthly** | Plan next group visit |                |      |          |
Who Does What

Each team should review the tasks and roles and determine how best to use their team. The result might look something like this:

**LPN/MA**

1. Pull charts 3-5 days before the group visit.
2. Remind primary care provider about the upcoming group visit
3. As agreed upon by team, perform chart review
4. Give results of chart review to provider

**Day of Group visit**
1. Check room set-up
2. Take charts and supplies to room
3. Perform vitals, exams and immunizations as needed
4. Data entry into registry if appropriate

**PCR**

1. Reminder phone calls to patients
2. Check on room reservation
3. Make sure name tags are ready

**Day of Group Visit**
1. Print 4 labels for each patient, attach one to TRF, give others to LPN/MA
2. Print out registries for patients if appropriate
3. Complete Last Word functions as appropriate

**MD**

1. Participate in planning of the visit with the team, following suggestions of participants
2. Review charts, identify problems for review with individual patients

**Day of Group Visit**
1. Conduct discussion and group visit
2. During break, review individual needs and make 1:1 individual appointments for after the visit
3. Document visits

**RN**

1. Coordinate the planning of the visit with the team
2. Coordinate materials and information for the visit

**Day of Group Visit**
1. Circulate in room during break, performing vital signs and identifying patients who need individual attention.
2. After visit, follow up with patients via telephone as needed
Who Does What (continued)

Others: Pharmacist, Behavioral Health, Nutrition, Physical Therapy

It is sometimes helpful to provide access to other specialists during the group visits. It is important that the team adequately brief anyone brought into the group visit so they adhere to the high degree of interactivity encouraged in the group. Discourage these guest presenters from lecturing to the patients or providing them with excessive prepared materials.

A good model for these presentations is for the physician, nurse, or presenter to have the group list all the questions they have right before the presenter speaks. If these are listed on a flip chart, they can be checked off as they are discussed. The presenter can suggest topics that the patients may not be aware of if they are not included on the list.
Date

Dear ,

I want to invite you to participate in a new way of delivering medical care. This program is designed specifically for (describe group: patients with ____________, patients over 65). By choosing to participate you will be asked to

• Become a member of a small group of patients with ___. This group will meet every month with me to address medical and other issues of concern to you.
• Help us develop the program for your particular group.
• Help evaluate the success of the program in meeting your needs.

Most of the time when you come in to the clinic, you are ill or have a specific problem that we need to talk about. Discussions about managing or improving your health are often hard to fit into these short visits. The purpose of this group is improved health. In the group we will discuss ways you can maintain or improve your health and make sure you are up-to-date with care recommended for you.

The first group visit will be held _____ (day and date) from _____ am or pm. These group visits will be held at _________. We encourage you to bring a family member with you. Because this visit includes a medical evaluation, a co-pay will be collected if you usually pay for medical care.

If you are interested, please RSVP by _______ (date) to _______ (name) at _______ (phone number). If you are not interested, you will continue to receive usual health care.

PCP
Group Visit
Agenda for First Session

15 minutes  **Introductions/Welcome**
Physician opens the session.
All team members present are introduced.
Introductions follow around the room, with sharing included. Example for older patients: Give your name as you would like to be called, and share your favorite childhood game (or where you were on Pearl Harbor Day, or favorite childhood holiday memory, etc.)

30 minutes  **Group Visits**
What are they?
Why are we doing it?
What should you expect?
Questions from the group
Group Visit Norms
Review folder/notebook

15 minutes  **Break**
Physician starts on one side, nurse on other.
Take blood pressures, ask about specific concerns for the day (look for patients who need 1:1 visits).
Refill meds.

15 minutes  **Questions and Answers**
Ask for any questions the group has about their health, the visit, etc.

15 minutes  **Planning**
Topic for next month
Announce time and date

30 minutes  **1:1 visits with provider as needed**

30 minutes  **Provider discretionary time**
Group Visit
Agenda Template

15 minutes  **Introductions/Welcome**
   Physician opens the session.
   All team members present are introduced.
   Introductions follow around the room, with sharing included.

30 minutes  **Topic of the Day**
   Physician and nurse provide information, interacting with the participants whenever possible.
   Some suggestions to make the session interactive include asking:
   “Has anyone here ever had this problem?”
   “How has anyone dealt with this situation before?”
   “What have you heard about ______ ?”
   Always intersperse the presentation with questions from the group

15 minutes  **Break**
   Physician starts on one side, nurse on other.
   Take blood pressures, ask about specific concerns for the day (look for patients who need 1:1 visits).
   Refill meds.

15 minutes  **Questions and Answers**
   Ask for any questions the group has about their health, the visit, recent topics in the news, etc.

15 minutes  **Planning and Closing**
   Determine topic for next month
   Thank everyone for coming, providers proceed to 1:1 visits

30 minutes  **1:1 visits with provider**

30 minutes  **Provider discretionary time**
Materials and Resources for Patient Folders/Notebooks

Assessments

For some types of group visits, the clinic may want to have the participants complete a questionnaire or health assessment before the group visit. It is highly recommended that when teams consider using assessments that they utilize instruments developed by Group Health Cooperative and in accordance with relevant roadmaps and guidelines. Contact Health Improvement Programs at 206-326-2803 or 8-330-2803 for assistance in locating GHC developed and/or approved health assessment tools.

Curricula

It is very tempting for the team to develop detailed lessons plans and curricula, but this is not recommended. Researchers have found that groups of patients will choose the topics that health professionals want to discuss, and by leaving the choice of discussion topic up to the participants, the group forms closer bonds and develop a sense of self-confidence. A great deal of the information that patients find helpful is hearing how other people have handled similar situations. The information that patients want from professionals tends to be basic information, and it is rarely necessary to research a topic or refer to books to work with patients. If this is necessary, it can be accomplished in the period between meetings, since the participants should be setting the topic for the upcoming meeting in the preceding one. Some groups have found it helpful to keep a checklist of topics they would like to cover and periodically review the checklist.

Patient Education Materials

If you wish to choose and order patient education materials for your group visits, you can use the Health Information Services Patient Education Catalogue. The MMS in your clinic has a copy. You can also order the Catalogue and many of the materials on-line through the Copy Center at http://incontext.ghc.org/asd/forms/rdf_form.html. The order number for the Catalogue is DM1798.

If you’d like assistance choosing patient education materials or samples of materials, please call Health Information Services at 206-326-2807 or -2814 (8-330-2807 or -2814). The HIS staff is very experienced and would be happy to help you.

Remember to use materials prepared for use in GHC, because you will avoid the need to explain discrepancies in standards for care. Carefully review any materials supplied by outside organizations.

Clinic Brochures

You may wish to include brochures giving patients information about your clinic and home numbers to call for appointments, prescriptions, and other needs. These brochures are printed twice a year in April and October; ordering takes place in March and August/September. Contact your Area Manager if you wish to order brochures for your groups. Clinic-specific information is also available on Group Health’s external website at www.ghc.org.
Self Management Support Services

For information or assistance in promoting and utilizing GHC health improvement services within your group visits, contact Health Improvement Programs (HIP) at 206-326-2803 (8-330-2803). Examples of GHC program support your patients can receive include exercise classes, self-management support workshops, behavior change support phone calls, action plan follow-up phone calls, and Free & Clear. In addition, HIP can often find resources in the community to meet special individual or group needs.

Living Well with Chronic Conditions Workshops

The “Living Well with Chronic Conditions” workshop is a series of six weekly sessions that teach patients how to manage symptoms commonly associated with chronic conditions so that they can live a more full and active life. The six week workshop leads patients through hands-on skill building, specifically:

• setting goals
• making action plans
• managing emotions that are commonly present with chronic conditions
• increasing exercise
• improving nutrition
• making treatment decisions
• managing medications
• communicating and working as a partner with the healthcare team
• planning for the future.

A randomized controlled trial found that people who took the workshop had improved health status (decreased fatigue, less disability and improved role function) and improved health behaviors (increased exercise and improved communication with providers). The study also showed that people who took the workshop had fewer annual hospital days compared with those who didn’t.

The “Living Well with Chronic Conditions” workshops are offered at 9 Group Health sites statewide. For more information please contact Jamie Hunter-Mitchell, “Living Well with Chronic Conditions” Program Coordinator, by phone at 206-326-2905 (8-330-2905) or by e-mail at huntermitchell.j@ghc.org.

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Group Visit Norms

We will...

♦ Encourage everyone to participate.

♦ State our opinions openly and honestly.

♦ Ask questions if we don’t understand.

♦ Treat one another with respect and kindness.

♦ Listen carefully to others.

♦ Respect information shared in confidence.

♦ Try to attend every meeting.

♦ Be prompt, so meetings can start and end on time.
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DEALING WITH THE DIFFERENT TYPES OF PEOPLE/SITUATIONS IN GROUP SETTINGS

This information is provided courtesy of the Stanford Patient Education Research Center that maintains the copyright. It has been adapted for use in group visits at Group Health Cooperative.

The following descriptions of different types of people and potentially difficult situations are presented here to stimulate your thinking about how you might handle these effectively during a group session that you are leading. Being prepared ahead of time may even help you prevent such problems. Each situation is different; therefore, use your best judgement to determine what suggestions might be effective in real situations.

If a difficult situation persists, discuss it with your co-workers. Together, you will get the support you need and can decide how best to handle the problem.

The Too-Talkative Person

This is a person who talks all the time and tends to monopolize the discussion.

The following suggestions may help:

• Remind the person that we want to provide an opportunity for everyone to participate equally.
• Refocus the discussion by summarizing the relevant point, then move on.
• Spend time listening to the person outside the group.
• Assign a buddy. Give the person someone else to talk to.
• Use body language. Don't look toward the person when you ask a question. You may even consider having your back toward the person.
• Talk with the person privately and praise him/her for contributions, and ask for help in getting others more involved.
• Thank the person for the good comment, and tell him/her that you want everyone to have a turn at answering the question.
• Say that you won't call on someone twice until everyone has had a chance to speak once first.

The Silent Person

This is a person who does not speak in discussions or does not become involved in activities.

The following suggestions may help:

• Watch carefully for any signs (e.g., body language) that the person wants to participate, especially during group activities like brainstorming and problem solving. Call on this person first, but only if he/she volunteers by raising a hand, nodding, etc.
• Talk to them at the break and find out how they feel about the group session.
• Respect the wishes of the person who really doesn't want to talk; this doesn't mean that they are not getting something from the group.

The "Yes, but..." Person
This is the person who agrees with ideas in principle but goes on to point out, repeatedly, how it will not work for him/her.

The following suggestions may help:

- Acknowledge participants' concerns or situation.
- Open up to the group.
- After three "Yes, but's" from the person, state the need to move on and offer to talk to the person later.
- It may be that the person's problem is too complicated to deal with in the group, or the real problem has not been identified. Therefore, offer to talk to the person after the session and move on with the activity.
- If the person is interrupting the discussion or problem-solving with "Yes, but's," remind the person that right now we are only trying to generate ideas, not critique them. Ask him/her to please listen and later we can discuss the ideas if there is time. If there is no time, again offer to talk to the person during the break or after the session.

The Non-participant

This is the person who does not participate in any way.

The following suggestions may help:

- Recognize that the people in the group are variable. Some may not be ready to do more than just listen. Others may already be doing a lot, or are overwhelmed. Some may be frightened to get "too involved." Still others may be learning from the sessions, but do not want to talk about it in the group. Whatever the reason, do not assume the person is not benefiting from the group in some way, especially if he/she is attending each session.
- Do not spend extra time trying to get this person to participate.
- Congratulate those participants who do participate.
- Realize that not everything will appeal to everyone in the same way or at the same time.
- Do not evaluate yourself as a leader based on one person who chooses not to participate in activities.

The Argumentative Person

This is the person who disagrees, is constantly negative and undermines the group. He/she may be normally good natured but upset about something.

The following suggestions may help:

- Keep your own temper firmly in check. Do not let the group get excited.
- If in doubt, clarify your intent.
- Call on someone else to contribute.
• Have a private conversation with the person; ask his/her opinion about how the group is going and whether or not he/she has any suggestions or comments.

• Ask for the source of information, or for the person to share a reference with the group.

• Tell the person that you'll discuss it further after the session if he/she is interested.

The Angry or Hostile Person

You will know one when you see one. The anger most likely has nothing to do with the leader, group or anyone in the group. However, the leader and groups members are usually adversely affected by this person, and can become the target for hostility.

The following suggestions may help:

• Do not get angry yourself. Fighting fire with fire will only escalate the situation.

• Get on the same physical level as the person, preferably sitting down.

• Use a low, quiet voice.

• Validate the participant's perceptions, interpretations, and/or emotions where you can.

• Encourage some ventilation to make sure you understand the person's position. Try to listen attentively and paraphrase the person's comments in these instances.

• If the angry person attacks another participant, stop the behavior immediately by saying something like, "There is no place for that kind of behavior in this group. We want to respect each other and provide mutual support in this group."

• When no solution seems acceptable ask, "At this time, what would you like us to do?" or "What would make you happy?" If this does not disarm the person, suggest that this group may not be appropriate for him/her.

The Questioner

This is the person who asks a lot of questions, some of which may be irrelevant and designed to stump the leader.

The following suggestions may help:

• Don't bluff if you don't know the answer. Say, "I don't know, but I'll find out."

• Redirect to the group: "That's an interesting question. Who in the group would like to respond?"

• Touch/move physically close and offer to discuss further later.

• When you have repeated questions, say, "You have lots of good questions that we don't have time to address during this session. Why don't you look up the answer and report back to us next week."

• Deflect back to topic.

The Know-It-All Person
This is the person who constantly interrupts to add an answer, comment, or opinion. Sometimes this person actually knows a lot about the topic, and has useful things to contribute. Others, however, like to share their pet theories, irrelevant personal experiences and alternative treatments, eating up group time.

The following suggestions may help:

• Restate the problem.
• Limit contributions by not calling on the person.
• Establish the guidelines at the start of the session and remind participants of the guidelines.
• Thank the person for positive comments.
• If the problem persists, invoke the rule of debate: Each member has a right to speak twice on an issue but cannot make the second comment as long as any other member of the group has not spoken and desires to speak.

The Chatterbox

This is a person who carries on side conversations, argues points with the person next to him/her or just talks all the time about personal topics. This type of person can be annoying and distracting.

The following suggestions may help:

• Stop all proceedings silently waiting for group to come to order.
• Stand beside the person while you go on with workshop activities.
• Arrange the seating so a leader is sitting on either side of the person.
• Restate the activity to bring the person back to the task at hand or say, "Let me repeat the question."
• Ask the person to please be quiet.

The Crying Person

Occasionally, a group discussion may stimulate someone in the group to express their feelings of depression, loss, sorrow or frustration by crying. People cry for many reasons. They may feel that someone finally understands what it's been like, which makes them feel safe to express emotions they have been suppressing for a while. Crying is usually a release that promotes emotional healing. To allow a person to cry is helpful; it may also help to bring the group closer together providing mutual support to one another. Your role is to convey that is okay to cry, so the person does not feel embarrassed in front of the group.

The following suggestions may help:

• Always have a box of tissues handy and pass it to the person.
• Acknowledge that it is all right to cry — having a health problem is difficult, then continue on with the class.
• If the person is crying a lot, one leader may want to accompany the person out of the class to see if anything needs to be done. The other leader should continue on with the rest of the group.
Generally, if no one tries to stop the crying, within a short period of time, it will play itself out. Tension will be released and the person will feel better and the participants will feel closer to the person.

At the break or after the session, ask if the person is okay now and if he/she needs help with anything. Reinforce to the person that crying is a perfectly normal, healthy behavior, and that he/she is not the first to cry in this class. In fact, it has happened quite often and probably will in the future.

**The Suicidal Person**

Rarely, you may encounter someone who is very depressed and is threatening to take his/her own life or expresses severe hopelessness or despair.

- Talk to the person privately. One professional can accompany the person out of the room, and perform a further assessment of suicide risk. Refer to the Group Health “Strategies for Managing Suicidal Patients” and the “High Risk Patient Flow Chart” from the Depression Registry, which can be located on the intranet.
- Engage Behavioral Health Services.

**The Abusive Person**

This is someone who verbally attacks or judges another group member.

The following suggestions may help:
- Remind the group that all are here to support one another.
- Establish a group rule and remind everyone that each person is entitled to an opinion. One may disagree with an idea someone has but under no circumstances will personal attack be appropriate. If the abuse continues ask the person to leave.

**The Superior Observer**

This is a person with a superior attitude who says he/she is present out of curiosity, and that he/she already knows everything about their health and is coping well.

The following suggestions may help:
- If the person knows a lot and is doing well, you may want to have them provide examples of what they do at selected times for the group.
- A person may also act superior if he/she feels uncomfortable and not a part of the group. If so, include him/her in some way.
- If the person wants to be ignored, then ignore them. They will get bored and leave or start to participate.
The Person in Crisis

The person in "crisis" is the one with the problems, who wants help and/or just needs to talk about these problems.

The following suggestions may help:

- Listen attentively, be empathetic, use open-ended questions, and use reflective listening.
- If after five minutes it is obvious that the person will need more time to "unload," talk to person during the break or afterwards, as you will have to go on with the group activities.
- Don't take up session time and energy with the very "needy" person because it takes time away from the other participants who can be helped. Refer them to appropriate services, such as social work or behavioral health.
Resources

The following resources are available to help you get started.

- Mary McGregor (206-326-3424, 8-330-3424), Dorothy Talbot (206-326-3806, 8-330-3806) and Barbara Fugleberg (253-383-6197, 8-490-6197) are Practice Improvement Consultants in the Puget Sound Regional Division. They are available to provide consultation and coaching for teams.

- June BlueSpruce (206-901-7366, 8-600-7366) is a Project Manager with the Internal Collaborative and the Practice Innovations Department. She works primarily with teams involved in the Learning Collaborative, but may also be available to consult with other teams.

- Connie Davis is Associate Director of the MacColl Institute (206-287-2554, 8-220-2554) and is involved in helping organizations across the country learn to utilize group visits. She is available for consultation as her other obligations permit.

- Linda Madsen (206-326-2803, 8-330-2803) is the Senior Manager for Health Improvement Programs and she or members of her staff are available to consult with teams regarding self-management support strategies and available resources.

- There are several different videos of the Colorado Kaiser Cooperative Health Care Clinics available. Copies of videos about the DIGMA-style group visits used by Kaiser Northern California are also available. Contact the Kathleen Hill Library to arrange to borrow the videos. To order on InContext, go to InContext>Departments>libraries>Kathleen Hill Library>Library Collections>list of audio and videotapes.

- The District Care Management Directors are also available for support. East King –Snohomish: Cara Robinson Seattle: Karen Wulff Tahoma Kitsap: Patty Reinkensmeyer Olympia: Collene Hawes
OVERVIEW:

Group Visits are conducted by one or more practitioners or a Practice care team from different specialties, or the same specialty, who together treat and/or assess a group of patients. The following is a general overview of Group Visits.

These are general instructions only. Because of system capabilities and billing requirements, it is the department's/clinic's responsibility to consult with Contracts and Coverage, Centralized Business Operations (CBO) and other departments as needed to ensure compliance and appropriate business processes are followed. Refer to department/clinic specific procedures.

OUTPATIENT NON-FACILITY BASED PROCEDURE:

1. Appointing

All providers involved in the Group Visit may appoint the patient(s). Use appointment type "GV" for providers who can bill for their services. All others providers will use RSO.

Example A: A Family Practice physician, a Family Practice RN and a Family Practice MA are seeing a group of patients. All three can appoint (if they have individual templates), the physician would be the only who would use appointment type GV. The RN and the MA would use RSO.

Example B: A Family Practice physician, a Family Practice RN and Mental Health provider are seeing a group of patients. All three can appoint (if they have individual templates), the physician would use appointment type GV and the mental health provider would use appointment type MHG. The RN would use RSO.

2. Check-in

All providers using appointment type "GV" or "MHG" can check the patient in. In the above example, only the physician and the mental health provider would check-in the patient.

3. Service Capture

Only visits by providers who checked the patients in may be service captured. In the above example, services would only be captured for the Family Practice Physician in example A and the Family Practice Physician and mental health provider in example B.
4. **Copays**

Copays will need to be waived when appropriate. The providers involved will need to determine which copay(s) need to be waived. See procedure BPP: CS 3.00, Service Recovery Adjustment (Waiving Copays). In the above examples, the Family Practice Physician in example A would not waive a copay, however in example B the Family Practice Physician and the mental health provider would need to decide who would not collect a copay.

5. **Individual Visit**

During a group visit it may be decided that a patient needs to have a one on one with the provider following the group visit. If this happens the follow steps must occur:

- Appoint patient with the appropriate provider
- Check-in the patient on the providers schedule
- The copay (if applicable) from the group visit can be used for the individual visit
- After the copay (if applicable) is moved delete the encounter for the group visit
- Complete service capture for the one on one visit as appropriate

**NON-FACILITY BASED URGENT CARE/FACILITY BASED ED PROCEDURE:**

N/A

**FACILITY BASED INPATIENT/OUTPATIENT PROCEDURE:**

N/A
Coding and Billing Group Visits

Background

This document gives coding and billing information for the Cooperative Health Care Clinic (CHCC) model for providing group visits at Group Health. In the CHCC model the health care team facilitates an interactive process of care delivery in a periodic group visit program. The health care team extends invitations to specific patients on the basis of chronic disease history and utilization patterns. The patients typically remain in the same group together and meet on a monthly basis.

CHCC model group visits at GHC follow a standard format:
1. Introductions / welcome
2. Topic of the Day – information and interaction
3. Break – physician and nurse meet briefly with each patient to take BP, elicit specific concerns of the day, refill medications, and assess for patients who need a one-on-one visit with the practitioner.
4. Questions and answers – this is a continuation of Topic of the Day
5. Planning and Closing – determine topic for next month

At the conclusion of the group visit the physician may meet with select patients for one-one-one appointments.

Coding Group Visits

The different models of group visits may require different coding approaches, and each model should be evaluated against CPT coding and documentation guidelines. As with all office visits, industry-standard coding rules and standards for medical record documentation apply to group visits.

The following instructions apply to the CHCC model described above.

E/M Coding – Group Visits

- Since CPT does not specifically provide codes for group visits, we must use E/M visit codes to describe the services provided. The CHCC model, as described above, meets the criteria for coding a level two office visit (99212) for an established GHC patient.
- **In order to code 99212 for a group visit the medical record documentation must include two of the three key components required for this E/M code**: 1) a problem focused history, 2) a problem focused exam, 3) straightforward medical decision making. We suggest the use of the SOAP format for documentation.
- If the documentation does not meet the CPT criteria for code 99212, the CPT guidelines should be reviewed for selection of a more appropriate code.
- E/M codes may only be used if the physician is present during the entire group visit and either documents the care or reviews and signs off on the documentation.
E/M Coding – One-on-one visits on the same day as a group visit
• A department can assign only one E/M code for a particular patient on the day of the group visit. If a patient is appointed to see the physician for a one-on-one visit at the conclusion of the group visit, do not code the group visit. Follow CPT guidelines to **code the one-on-one visit only**.

Diagnostic Coding
• Select the ICD-9 code that reflects the primary reason for the patient visit. This code should be designated as the primary diagnosis by placing a “1” or a “P” next to it on the TRF. If additional problems, symptoms or chronic diseases were addressed during the visit, add these conditions as secondary diagnoses. **All diagnoses must be documented in the medical record.**

Please contact your Coding Consultant if you have questions about how to code group visits.
## Comparison of Group Visit Models

<table>
<thead>
<tr>
<th></th>
<th>Cooperative Health Care Clinic</th>
<th>DIGMA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal</strong></td>
<td>Increase provider satisfaction caring for frail elderly</td>
<td>Improve access to care</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>RCT:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• decr. ER visits</td>
<td>anecdotal data:</td>
</tr>
<tr>
<td></td>
<td>• decr. specialist visits</td>
<td>• decr. costs</td>
</tr>
<tr>
<td></td>
<td>• decr. hospital admits</td>
<td>• incr. access</td>
</tr>
<tr>
<td></td>
<td>• incr nurse visits and nurse calls</td>
<td>• incr. patient satisfaction</td>
</tr>
<tr>
<td></td>
<td>• decr. calls to MD</td>
<td>• incr. provider satisfaction</td>
</tr>
<tr>
<td></td>
<td>• decr. cost $14.79 PMPM</td>
<td>peer support</td>
</tr>
<tr>
<td></td>
<td>• same or slight decr. primary care visits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• incr. preventive care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• incr. advanced directives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• incr. provider satisfaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• incr patient satisfaction</td>
<td></td>
</tr>
<tr>
<td><strong>Patients</strong></td>
<td>Elderly with one or more outpatient visits/month</td>
<td>Established patients of the DIGMA provider</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Could be homogenous (same diagnosis, for example),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• heterogenous (any issue)</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td>HMO (Kaiser Colorado)</td>
<td>HMO (Kaiser specialty and primary practices, California)</td>
</tr>
<tr>
<td><strong>Intervention</strong>: Interval</td>
<td>Monthly group meetings of cohort of 25 patients (ave. attendance is 10-15)</td>
<td>Varies: start with one a week or one a month, 10-16 patients/DIGMA</td>
</tr>
<tr>
<td><strong>Intervention</strong>: Staffing</td>
<td>Primary Care Provider RN Occas. Ancillary staff (pharmacy, PT, dietician)</td>
<td>Primary Care Provider Behavioral Health (could be SW or RN with group skills) MA or LPN for vitals at check in</td>
</tr>
<tr>
<td><strong>Intervention</strong>: Schedule</td>
<td>15 min. warm-up (social topics) 30 min presentation (very little prepared in advance) 15 min “break” (providers circulate and triage) 15 min. Q&amp;A 15 min planning next session 30 min allotted for brief 1:1 with MD 30 min held for MD discretion</td>
<td>BH begins 90 minute session, asks for those who can’t stay full hour. MD works with them first. Work around room with provider doing most exams in the room, describing care and providing information for all. MD documents in the room while BH continues with group discussion.</td>
</tr>
<tr>
<td><strong>Intervention</strong>: Topics</td>
<td>In the first year, six topics determined by provider (evidence-based clinical priorities, such as immunizations, advanced directives), six topics determined by group.</td>
<td>As determined by needs of those in group.</td>
</tr>
<tr>
<td><strong>Citation</strong></td>
<td><strong>Cooperative Health Care Clinic</strong></td>
<td><strong>DIGMA</strong></td>
</tr>
<tr>
<td>--------------</td>
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<td>-----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Noffsinger E. Increasing quality of care and access while reducing costs through drop-in group medical appointments. <em>Group Practice Journal</em> 1999;48(1);12-18.</td>
</tr>
<tr>
<td><strong>Materials available?</strong></td>
<td>Yes contact John Scott, MD at Kaiser Colorado 303-657-6808 GHC has videos and GHC adapted manual</td>
<td>Yes Dr. Noffsinger is now a consultant, phone 831-427-1011 or 831-458-3388, email <a href="mailto:thedigmamodel@aol.com">thedigmamodel@aol.com</a> Kaiser Permanente has adapted the DIGMA model and made a video about how to do it; GHC has copies of the videos</td>
</tr>
</tbody>
</table>
References


3.4
Group Visit Financials
(worksheet)


Used by permission of Devin Sawyer, MD, March 2007.
### 2006 National Physician Fee Schedule Relative Value File

*CPT codes and descriptions only are copyright 2005 American Medical Association. All Rights Reserved. Applicable FARS/DFARS Apply. Dental codes (D codes) are copyright 2002 American Dental Association. All Rights Reserved.*

---

<table>
<thead>
<tr>
<th>HCPCS</th>
<th>DESCRIPTION</th>
<th>NOT USED FOR</th>
<th>FULLY IMPLEMENTED</th>
<th>CONVERSION</th>
<th>Group Visit</th>
<th>Normal Office</th>
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<tr>
<td></td>
<td></td>
<td>MEDICARE</td>
<td>NON-FACILITY</td>
<td>TOTAL</td>
<td>Payment</td>
<td>Payment</td>
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<tr>
<td></td>
<td></td>
<td>PAYMENT</td>
<td></td>
<td></td>
<td># Patients</td>
<td>RVUs per</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Per Hr</td>
<td>Per Hr</td>
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<tr>
<td>99201</td>
<td>Office/outpatient visit, new</td>
<td>0.97</td>
<td>36.177</td>
<td>35.09</td>
<td>36.177</td>
<td>35.09</td>
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<td>99202</td>
<td>Office/outpatient visit, new</td>
<td>1.72</td>
<td>36.177</td>
<td>62.22</td>
<td>36.177</td>
<td>62.22</td>
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<td>99203</td>
<td>Office/outpatient visit, new</td>
<td>2.56</td>
<td>36.177</td>
<td>92.61</td>
<td>36.177</td>
<td>92.61</td>
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<td>Office/outpatient visit, new</td>
<td>3.62</td>
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<td>130.96</td>
<td>36.177</td>
<td>130.96</td>
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<td>Office/outpatient visit, new</td>
<td>4.60</td>
<td>36.177</td>
<td>166.41</td>
<td>36.177</td>
<td>166.41</td>
</tr>
<tr>
<td>99211</td>
<td>Office/outpatient visit, est</td>
<td>0.57</td>
<td>36.177</td>
<td>20.62</td>
<td>36.177</td>
<td>20.62</td>
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<tr>
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<td>Office/outpatient visit, est</td>
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<td>36.177</td>
<td>36.90</td>
<td>36.177</td>
<td>36.90</td>
</tr>
<tr>
<td>99213</td>
<td>Office/outpatient visit, est</td>
<td>1.39</td>
<td>36.177</td>
<td>50.29</td>
<td>36.177</td>
<td>50.29</td>
</tr>
<tr>
<td>99214</td>
<td>Office/outpatient visit, est</td>
<td>2.18</td>
<td>36.177</td>
<td>78.87</td>
<td>36.177</td>
<td>78.87</td>
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<tr>
<td>99215</td>
<td>Office/outpatient visit, est</td>
<td>3.17</td>
<td>36.177</td>
<td>114.68</td>
<td>36.177</td>
<td>114.68</td>
</tr>
</tbody>
</table>

**Case Mix**

What variables are at play in the % of patients expected in each CPT? What Cost (time, supplies, volume) will result?

The above example uses standard Medicare rates before GPCI local adjustment. It compares typical Medicare revenue paid per hour in traditional office care with group visit reimbursement. You can adjust the patients per hr to model different combinations.

**Payor Mix**

Want variables are at play in the % of patients in each plan? What does that do to the case mix?

You have to assume the payor mix for traditional and group visits to reflect how you would actually fill the spaces to have the most accurate modeling; this includes assumptions of demand.

**PUT IT ALL TOGETHER:** Based on case mix and payor mix, what projected revenue can you expect?

This is a simple model illustrating how payor mix affects total reimbursement for E&M codes. The example starts with a mix of 90% Commercial and 10% Medicare. You can change the % to model different outcomes and also factor in demand and no-show data.

---

**Total Payment: $319,821**
3.5
Action Plan (guide)


Action Plan (Example)

1. **Goals:** *Something you WANT to do:*
   Begin exercising________________

2. **Describe:**
   - **How:** Walking
   - **Where:** Around the block
   - **What:** 2 times  
   - **Frequency:** 4 x/wk
   - **When:** after dinner

2. **Barriers:** have to clean up; bad weather

4. **Plans to overcome barriers:**
   ask kids to help; get rain gear

5. **Conviction 8 & Confidence 7 ratings**
   (0 - 10)

6. **Follow-Up:** next visit – 2 months
1. **Goals:** *Something you WANT to do:*

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. Describe
   How: ____________________________________________________________________
   Where: ___________________________________________________________________
   What: ______ Frequency: ______
   When: ____________________________________________________________________

3. Barriers: __________________________________________________________________

4. Plans to overcome barriers: ________________

5. Conviction ___ & Confidence ___ ratings (0 - 10)

6. Follow-Up: __________________________________________________________________
3.5

Agenda Setting Tool: Bubble Diagram (patient material)


If you have DIABETES, here are some things you can talk about with your health care provider

→ Choose to talk about changing any of these and add other concerns in the blank circles.

- Blood Pressure monitoring
- Taking medications to help control blood pressure
- Skin care
- Avoiding strokes or heart disease
- Diet
- Losing weight
- Depression 🙁
- Smoking ✅
- Daily foot care
3.5
World Education
(online resource)

Health & Literacy Special Collection [Web page].

*No Web site copyright information available*
3.5 Diabetes Initiative (online resource)


Web site © 2002-2006 The Diabetes Initiative, a national program of The Robert Wood Johnson Foundation.
3.5

“5 A’s” Behavior Change Model


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5 A’s Behavior Change Model
Adapted for Self-Management Support Improvement


**Assess:**
Beliefs, Behavior & Knowledge

**Advise:**
Provide specific Information about Health risks and Benefits of change

**Arrange:**
Specify plan for Follow-up (e.g., Visits, Phone calls, Mailed Reminders)

**Assist:**
Identify personal Barriers, Strategies, Problem-solving techniques and Social/Environmental Support

**Agree:**
Collaboratively set goals Based on patient’s interest and confidence in their ability to change the behavior.

**Personal Action Plan**
1. List specific goals in behavioral terms
2. List barriers and strategies to address barriers.
3. Specify Follow-up Plan
4. Share plan with practice team and patient’s social support

**Improvement Goal:** All chronic illness patients will have a Self-Management (SM) Action Plan informed by and including all the 5 A’s elements (Assess, Advise, Agree, Assist, Arrange). The 5 A’s Behavior Change Model is intended for use with the Improving Chronic Illness Care Chronic Care Model (CCM).

Ideas are for teams to test in their own setting. Add to this list as you experiment with PDSA cycles and hear about strategies that have worked well for other teams.
<table>
<thead>
<tr>
<th>Five A’s</th>
<th>Patient Level (patient-provider interaction)</th>
<th>Office Environment (standard operating procedure)</th>
<th>Community/Policy (community org. and both internal system and external community policy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Concept</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assess</td>
<td></td>
<td></td>
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<tr>
<td>CCM element:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have patient periodically complete valid health behavior surveys and provide them with feedback.</td>
<td>- Try brief behavior survey in a) waiting room, b) on computer.</td>
<td>- Select or develop HRA survey.</td>
<td>Community:</td>
</tr>
<tr>
<td></td>
<td>- Assess patient knowledge about their chronic condition.</td>
<td>- Employ conviction and confidence rulers.</td>
<td>- Conduct needs assessment in partnership with community groups (eg. include formative eval with potential users and non-users, small-scale recruitment studies to enhance methods.)</td>
</tr>
<tr>
<td></td>
<td>- Ask patient, “what about Self-Management (SM) is most important to talk about today?”</td>
<td>- Revise self-care surveys to make appropriate.</td>
<td>- Work on state health dept or other coalition to develop community health behavior survey or assess barriers to change.</td>
</tr>
<tr>
<td></td>
<td>- Ask patient, “what are your most challenging barriers?”, recognizing physical, social and economic barriers.</td>
<td>- Add fields to the medical record to record behavior status for smoking; weight, exercise.</td>
<td>- Share data on BRFSS items or other behaviors with other organizations.</td>
</tr>
<tr>
<td></td>
<td>- Provide patient with personalized feedback and results.</td>
<td>-Add behaviors to the problem list for patient.</td>
<td>Internal system policy</td>
</tr>
<tr>
<td></td>
<td>- Assess conviction and confidence regarding target behaviors.</td>
<td>- Prompt staff to collect or update key behaviors status at each visit.</td>
<td>- Employ longitudinal patient assessment system (eg. using interactive computer technology).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Have computer in waiting room for HRA assessment with print outs for providers and/or patients.</td>
<td>- Make screening on all 4 health behaviors a vital sign; and require reporting on all patients at some frequency.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Pilot approaches to providing feedback to patients--check for understanding.</td>
</tr>
<tr>
<td>Five A’s Change Concept</td>
<td>Patient Level (patient-provider interaction)</td>
<td>Office Environment (standard operating procedure)</td>
<td>Community/Policy (community org. and both internal system and external community policy)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------</td>
<td>---------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Advise</td>
<td>- Relate patient symptoms or lab results to their behavior, recognizing patient’s culture or personal illness model.</td>
<td>- Develop list of benefits of behavior change/risk reduction.</td>
<td>- Reinforce/ Recognize/ Reward staff for documented advice to change behavior.</td>
</tr>
</tbody>
</table>
| CCM element:            | - Inform patient that behavioral issues are as important as taking medications. | - Develop list of common symptoms that exercise, losing weight or stopping smoking can improve. | **External policy:**
|                         | - Provide specific, documented behavior change advice in the form of a prescription. | - Arrange prompt system to remind physicians to advise behavior change. | - Recommend or lobby purchasers, health plan, and government to reimburse 5 A’s/SM Action Planning. |
|                         | - Share evidence-based guidelines with patients to encourage their participation. | - Provide prompt to have physician advise on importance of calling if any trouble taking medication as prescribed. | **Internal system policy:**
|                         |                                                                          |                                                                         | - **Reward staff for documented advice to change behavior.** |

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<table>
<thead>
<tr>
<th><strong>Five A’s</strong> Change Concept</th>
<th><strong>Patient Level</strong> (patient-provider interaction)</th>
<th><strong>Office Environment</strong> (standard operating procedure)</th>
<th><strong>Community/Policy</strong> (community org. and both internal system and external community policy)</th>
</tr>
</thead>
</table>
| **Agree** CCM element: Use shared decision-making strategies that include collaborative goal setting. | - Have patient develop specific, measurable, feasible SM goal for behavior change.  
- Provide options and choices among possible SM goals.  
- Do above with input from family or spouse, and with support/assistance from caregiver.  
- Share perspectives with patient on what is most important short-term goal--agree on a specific target.  
- Present evidence on benefits and harms to patient and let them decide on course. | - Make sure patient SM goals are in chart and all team members refer to them.  
- Provide staff with training in patient-centered counseling or empowerment training, which may include videos on motivational interviewing or goal setting. | - Meet with organizations to identify agreed upon self-management support (patient education) priorities for coming year. |
| | - Have patient develop specific, measurable, feasible SM goal for behavior change.  
- Provide options and choices among possible SM goals.  
- Do above with input from family or spouse, and with support/assistance from caregiver.  
- Share perspectives with patient on what is most important short-term goal--agree on a specific target.  
- Present evidence on benefits and harms to patient and let them decide on course. | - Make sure patient SM goals are in chart and all team members refer to them.  
- Provide staff with training in patient-centered counseling or empowerment training, which may include videos on motivational interviewing or goal setting.  
- Have in-service from expert on shared decision making.  
- Incorporate videos on patient role or choice into practice, and have patients see prior to consultation.  
- Develop multi-modal intervention to promote practice change rather than one utilizing single strategy. | - Meet with organizations to identify agreed upon self-management support (patient education) priorities for coming year.  
- Create field or permanent space in medical record for behavioral goals.  
- Develop assessment method to determine that goals were set in a collaborative fashion.  
- Require peer observation and feedback on real or simulated patients at a minimum of every 4 months. |
| | | | - Recognize providers who have completed training in motivational interviewing; Bayer course on collaboration; etc. |

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<table>
<thead>
<tr>
<th><strong>Five A’s</strong></th>
<th><strong>Patient Level</strong></th>
<th><strong>Office Environment</strong></th>
<th><strong>Community/Policy</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Change Concept</strong></td>
<td>(patient-provider interaction)</td>
<td>(standard operating procedure)</td>
<td>(community org. and both internal system and external community policy)</td>
</tr>
<tr>
<td><strong>CCM element:</strong></td>
<td>- Implement patient discussion of SM Action Plan a) during PCP visit, b) immediately before or after with nurse.</td>
<td>- Adapt SM Action Plan for your setting, specifically focusing on the 4 s’ (size, scope, scalability and sustainability) in planning any office restructuring.</td>
<td>- Get list of your patients who have used resources--get their feedback.</td>
</tr>
<tr>
<td>Use effective self-management support strategies that include action planning and problem solving.</td>
<td>- Refer patient to evidence based education or behavioral counseling—individual or group.</td>
<td>- Develop specific plan to enhance SM resources--by addressing the REAIM dimensions—to make sure you are addressing all key issues for panel wide or community impact.</td>
<td>- Compile list of recommended quality resources that can be shared with staff and patients.</td>
</tr>
<tr>
<td>Help patients create specific strategies to address issues of concern to them.</td>
<td>- Elicit patient’s views and plans regarding potential resources and support within family and community.</td>
<td>- Make sure blank action plan forms are in each exam room.</td>
<td>- Evaluate adverse outcomes and quality of life for program revision and cost-benefit analysis.</td>
</tr>
<tr>
<td></td>
<td>- Use planned interactions to support evidence-based care.</td>
<td></td>
<td>- Recognize/reward teams that have higher levels of documented action plans.</td>
</tr>
<tr>
<td></td>
<td>- Give care that patients understand and that fits with their cultural background.</td>
<td></td>
<td><strong>External policy:</strong></td>
</tr>
<tr>
<td></td>
<td>- during follow-up visits, review progress, experience, concerns; renegotiate goals and revise action plan.</td>
<td></td>
<td>- Add behavior change counseling to HEDIS criteria for each behavior for adult patients who receive such counseling.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Also, make problem-solving, shared decision-making, or approved SM support programs a HEDIS criteria.</td>
</tr>
<tr>
<td>Five A’s Change Concept</td>
<td>Patient Level (patient-provider interaction)</td>
<td>Office Environment (standard operating procedure)</td>
<td>Community/Policy (community org. and both internal system and external community policy)</td>
</tr>
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</tr>
<tr>
<td><strong>Arrange</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCM elements:</td>
<td>- Give patient copy of SM Action Plan.</td>
<td>- Develop collaborative process that can</td>
<td>- Invite community program representatives to</td>
</tr>
<tr>
<td></td>
<td>- Follow-up call to patient within a week</td>
<td>facilitate communications and support with</td>
<td>present at patient group visit, diabetes</td>
</tr>
<tr>
<td></td>
<td>after visit as “booster shot” for SM</td>
<td>other practices.</td>
<td>class, or health fair.</td>
</tr>
<tr>
<td></td>
<td>Action Plan.</td>
<td>- Develop follow-up checklist/prompt to</td>
<td>- Follow-up with community programs to see how</td>
</tr>
<tr>
<td></td>
<td>- E-mail follow-up or brief letter</td>
<td>make sure follow-up is provided.</td>
<td>many patients attended and to get information</td>
</tr>
<tr>
<td></td>
<td>restating plan and inviting questions.</td>
<td>- Include blank on action plan form for</td>
<td>on their progress.</td>
</tr>
<tr>
<td></td>
<td>- Arrange for patient to contact specific</td>
<td>follow-up date.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>community resources that could support</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>their goals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Follow-up with goals set in action plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>at each non-acute visit.</td>
<td></td>
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<tr>
<td>Community:</td>
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</tr>
<tr>
<td></td>
<td>- Invite community program representatives</td>
<td></td>
<td></td>
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<td></td>
<td>to present at patient group visit, diabetes</td>
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<td></td>
<td>class, or health fair.</td>
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<td></td>
<td>- Follow-up with community programs to see</td>
<td></td>
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<td></td>
<td>how many patients attended and to get</td>
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<td></td>
<td>information on their progress.</td>
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<tr>
<td>Internal system policy:</td>
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<td>- Employ longitudinal patient monitoring</td>
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<td>and feedback systems related to their SM</td>
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<td>goals.</td>
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<td>- Provide time or incentives for follow-</td>
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<td>External policy:</td>
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<td>- Recognize/Reward social and economic</td>
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<td>environment in which these health systems</td>
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<td>- Reimburse follow-up phone calls, e-mail</td>
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<td>contacts, etc., outside of face-to-face</td>
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4.1
Change Flow Chart (guide)


Are your process measures improving?

Yes!
Good work! Are your outcome measures improving?

Yes!
Good work! Are your system changes sustainable?

Yes!
Great work! Keep it up!

No?
Utilize process mapping tools to identify waste and redesign processes to be more efficient

Yes?
Review stepped care protocol and intensify care management support

No?
Overcome clinical inertia by treating to target and/or intensifying care management

No?
Are you treating to target by intensifying management when the goal is not achieved?

Yes!
Make sure the changes you are making are in alignment with the CCM

No.
Systematically engage all patients in your new model of care
4.1
How Hot Are Your Improvement Action Plans (worksheet)


How are Your Improvement Action Plans (PDSAs)?

Ideal Improvement Action Plans:
• come from input from all team members
• take current barriers into account
• are very specific change ideas to try (through ramps of PDSAs) that build to implementation and big rewards
• are assessed for confidence that they can be executed
• are reviewed on a regular basis to keep the action going

Your Action Plans Heat Score

1. Do you have an action plan (at least one proposed PDSA or ramp of PDSAs) in each component of the chronic care model? (Self-Management Support, Delivery System Design, Decision Support, Clinical Information Systems, Community, and Health-Care Organization).

Score: _______ 3 degrees for each component of the chronic care model that has at least one bona-fide PDSA (or ramp of change).
Maximum score = 18 degrees

2. Is each member of your team in charge of at least 1 PDSA?

Score: _______ 5 degrees for each team member who is responsible for executing at least one PDSA.
Maximum score = 20 degrees per team.

3. Did your action plans (PDSAs) address barriers or challenges?

Score: _______ 5 degrees for any PDSA that remembered to address perceived barriers or challenges to trying a new process.
(Example: “Setting a goal will take too much time in a visit” – time the process in your PDSAs)
Maximum score = 20 degrees.

4. Are you confident that you can execute your improvement action plans?

Score: _______ 5 degrees for each team member who scores at least a 7 on a scale of 1-10, that all PDSAs or PDSA ramps will get started in the time frame given in your action plans.
Maximum score = 20 degrees

5. Do you have a way to keep the action going?

Score: _______ 10 degrees if you have a team meeting or conference every week to study, act, and then plan next PDSAs. 5 degrees if there is a plan to engage senior leader or spread leader in a milestone review. 5 degrees if senior leader or spread leader is scheduled to come to any team meeting. Maximum score = 20 degrees.

Results: Add up your score, and place at the top of one page of your action plan (by team name). Look at the back of this page to see how hot your action plan is.
90-98 degrees - Sizzling Hot!

80-89 degrees - Hot! What is one thing that could make your team sizzle?

70-79 degrees - Warm, but could be hotter. What are 3 things you could do to accelerate improvement in this next action period?

60-69 degrees - Too comfortable. Need to turn up the heat everywhere to accelerate improvement.

Below 60 degrees - Too cool to make a big difference.
4.1
Community (presentation)


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Patty Kelly-Flis, BSN, BA, CPC
Consultant with the RI DPCP
Quality Systems Coordinator for the Rhode Island Chronic Care Collaborative
Care Model

Community Resources and Policies

Self-Management Support

Delivery System Design

Decision Support

Clinical Information Systems

Health System Organization of Health Care

Informed, Activated Patient

Prepared, Proactive Practice Team

Productive Interactions

Functional and Clinical Outcomes
What is Community?

Everything outside of your organization
Identifying resources/partners

• Understand to get something, something needs to be shared
• Resources are actually partners
• What is around you? Churches, Community organizations, large meeting areas, parks and recreation, Health Department, Department of Health and Human Services, Schools, YMCA, to name a few
What they want in return

• To engage a partner, you need to find out what they want/need

• Examples:
  YMCA- they want business, they need to have people sign up for their programs to make money and stay in business
  Church groups- they want their people to be healthy, so education/programs are what they are usually looking for
Continued examples

Parks and Recreation Department-what people to use their facilities, so usually they are more of a resource for walking paths, activities that are happening there

Large meeting areas: these are good for programs that you may want to run and need spaces-look for rooms at corporations, libraries, schools, to name a few- sometimes they want $$ for the space other times they just offer the space for free.
• Department of Health—Especially the Diabetes Prevention and Control program
  – They want: Data, Data, Data
  – They each have their own plans for what they need to do in their state—meet with them see how you can fit into their plan
  – They offer resources—handouts, linkages with other organizations that may be of assistance, $$ (not many), resource links, some have programs that you can access, others only have the ability to get you handouts, data and information
• Schools-
  – They are looking for ways to keep their kids healthy, so offering education, programs and information may be a help
  – What they have for you: audiences, kids and parents, rooms, outdoor spaces, maybe indoor spaces, resource to disperse information to a large population-(flyers to all kids in the school), school nurse may be helpful in identifying students in need of care
• Senior Centers-
  – They are in need of educational programs, exercise programs, things for the seniors to do
  – What they have to offer: a population at risk, captive audience that are looking for “free” things, audience is looking for access to care that is not going to exhaust their resources
Working with a partner

Steps:
1. Identify a potential partner/resource
2. Determine what they are in need of
3. Determine what you may be able to do to help their need, but also serve something you need
4. Arrange a meeting with someone who can speak for the organization
5. Pitch the idea to them
6. Do what you said you would do
7. Stay in contact with them
So how does it relate to PDSA

• Testing in this area may be difficult to quantify, it may be difficult to do small tests of change, it may be difficult to identify the population, but it is possible to track something!
PDSA example

Plan—You need to get resource materials for your diabetic patients but you do not know what is available. You have identified that the Diabetes Prevention and Control program in your state may be a resource to you.

• You go to their website to look at what they are doing right now, what they are working on, what do they have to offer.

• You determine that you can offer them some data that may help them. You are working on the collaborative and all the DPCP’s are aware of the HDC.

• You contact the person identified on the web site as the contact person. Set up an appointment to speak with them.

• You come prepared to discuss your population and what you are in need of
PDSA continued

- You predict that the person at the DPCP will be able to give you materials that you will be able to give to your patients.
- The meeting will probably last 30 min. and you will come away with resources, they will come away with information you provided (number of diabetic patients, average HbA1c, number of patients with 2 HbA1c’s to name a few points)
Do

- The meeting happens
- The person can only give you 20 minutes
- The person indicates that they are very limited in funding and can give you information about what resources are out there but can not actually give you handouts
Study

• What happened?
  – It did not go as you planned, it did not result in the outcomes you planned on
  – But they did offer you other resources, materials, organizations to contact, and other health centers in the state that have participated in the collaborative that could be resources to you
Act

• The PDSA did not go as planned, but you have places to go
• Roll the PDSA into the next PDSA-reaching out to one of the resources offered to you from the meeting,
Identify the resources in your community

Who is out there?
Who do you contact?
What do you need to have to meet with them?
What are you looking for in return?
What resources are you missing out there??
Questions ????
4.2
Pay For Performance: An Introduction (guide)


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PAY FOR PERFORMANCE: AN INTRODUCTION

Concerns over quality in the US health care system have long been the subject of debate at the national policy level and personal anecdotes at the local level. The landmark report published in 2001 by the Institute of Medicine, “Crossing the Quality Chasm”, highlighted a number of these issues and also cited the need to transform physician payment methodologies in order to truly transform the quality of our nation’s health care. Current physician payment systems are simply not designed to promote quality or better outcomes. Both theory and history support this claim. New methods for paying physicians are needed so that providers are appropriately rewarded for providing high-quality care and promoting better outcomes for their patients. The growing trend toward systems of Pay for Performance reflects the industry’s attempt to start rewarding providers for quality care.

Pay for Performance initiatives across the US take a variety of forms, but it is clear that the number of such initiatives is growing. More than 100 programs are now operational. Those national programs of particular note include the Bridges to Excellence program, the Rewarding Results program, and Medicare’s demonstration project, although there are many successful local and regional initiatives as well.

• The Bridges to Excellence program is an initiative of large employers (including GE, UPS, Humana, Ford), health plans (including Aetna, Tufts Health Plan), and physician groups in the three large urban markets of Boston, Cincinnati and Louisville. Payment is made for quality in three areas:
  • Diabetes care—up to $80 per patient
  • Cardiovascular care—up to $160 per patient
  • Patient care management systems—up to $50 per patient for systems to reduce errors and improve quality

◊ The Rewarding Results program is an initiative begun by The Robert Wood Johnson Foundation and the California HealthCare Foundation. It is coordinated through organization called IHA and includes several of the large payor groups: Cigna, PacifiCare, HealthNet, BCCA. Bonuses are paid to providers based on quality indicators. These include measures of patient satisfaction, investment in information technology, and seven clinical indicators: childhood immunization status, cervical cancer screening, breast cancer screening, asthma medication, LDL < 130, A1c testing and control in diabetes, URI treatment in children.

◊ Medicare has recently initiated a pilot program to reward physicians for providing quality care and investing in new technology to better track patients. The pilot is geared toward large groups, 10 of which were selected for the initial phase, and is based on 32 measures included among those endorsed by the joint working group of CMS and the AMA.

The Pay for Performance programs that are in place take a variety of forms and differ in:

➢ The set of performance measures being used
➢ How the health plan collects the performance data
➢ How the health plan determines its performance targets or benchmarks
➢ How the health plan will reward providers for meeting or exceeding performance targets.
The performance measures fall into several categories:

- Utilization/cost management (e.g., average number of emergency department visits per patient per year)
- Clinical quality/effectiveness (e.g., the percentage of patients with asthma on controller medications)
- Patient satisfaction (e.g., the percentage of patients who would recommend the physician to a family member or friend)
- Administrative (e.g., the practice's level of information technology, including use of a registry)
- Patient safety (e.g., the percentage of patients questioned about allergic drug reactions).

While the measures and their targets vary by program, many measures are based on nationally recognized sources, such as Health Plan Employer Data and Information Set (HEDIS) or the Consumer Assessment of Health Plans (CAHPS), as well as on the AMA Consortium measures endorsed by the National Quality Forum. Performance targets either compare the participant group to itself, establishing a defined subset as the target (e.g., two standard deviations from the mean, the top quartile or the 90th percentile, or a specified improvement percent) or compare the participant group to external benchmarks (e.g., data from national surveys or specialty society goals).

Data sources for the measures being used also vary and include health plan's administrative data; medical and pharmacy claims data, and encounter data generated in the physician's practice.

Payment in pay for performance programs can be made on the basis of meeting individual measures targets or on the basis of some sort of weighted combination of individual measures into a single value to determine whether the provider qualifies. Payment may be incremental using “new money” or may take the form of a withhold, holding some percent of all providers’ payment back, then paying out monies only when a provider meets performance targets. A study done by Med-Vantage found that payments for performance ranged from 1 percent to 40 percent of a practice’s total annual revenue, with an average of 10-percent.

Because of the growing trend toward pay for performance programs, the AMA has recently adopted a series of principles to guide these programs. They should:

- Ensure quality of care
- Foster the relationship between patient and physician
- Offer voluntary physician participation
- Use accurate data and fair reporting
- Provide fair and equitable program incentives

**REFERENCES**

*Click here to view or download tools pertaining to ‘P4P’ from the HDC website Library.*
4.2
Pay for Performance: A Decision Guide for Purchasers (guide)


Pay for Performance: A Decision Guide for Purchasers

Prepared for:
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Acknowledgment

This Guide is intended to be used by public and private purchasers of health care services, including health plans, who are considering sponsorship of a pay-for-performance (P4P) initiative. Twenty questions, identified in collaboration with purchasers, are presented for consideration along with options and any available evidence for each. The authors gratefully acknowledge the valuable comments made by 10 public and private purchasers, who generously contributed their time and expertise in reviewing a formative draft.

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## The P4P Checklist: 20 Questions For Purchasers To Consider

### Phase 1. Contemplation
- √ Question 1. Is our community ready?
- √ Question 2. Should we partner with other purchasers or go it alone?
- √ Question 3. When and how should we engage providers in P4P discussions?

### Phase 2. Design
- √ Question 4. Which providers should we target first? Hospitals or physicians? Specialists or primary care providers?
- √ Question 5. For physicians, what are the advantages and disadvantages of targeting individual clinicians versus medical groups? In the case of hospitals, what are the advantages and disadvantages of targeting individual hospitals versus hospital systems?
- √ Question 6. Should provider participation be voluntary or mandatory?
- √ Question 7. Should we use carrots or sticks—bonuses or penalties—or a combination?
- √ Question 8. How should the bonus be structured?
- √ Question 9. Should we use relative or absolute performance thresholds?
- √ Question 10. What are our options for phasing in pay for performance?
- √ Question 11. Where do we find the money?
- √ Question 12. How much money should we put into performance pay?
- √ Question 13. What measure characteristics make them attractive candidates for inclusion in an initial measure set?

### Phase 3. Implementation
- √ Question 14. How do we address providers’ concerns about whether risk adjustment adequately captures the severity of illness of their patients?
- √ Question 15. If we currently sponsor a private or public report card, will P4P offer more of an incentive? If we are considering both a public report and P4P, which should we pursue first?
- √ Question 16. Should we tailor pay for performance for subsets of a particular group of providers, e.g., safety-net hospitals?
- √ Question 17. How should we think about pay for performance and its relationship to benefit design, including tiered networks?
- √ Question 18. Is there any special advice for Medicaid agencies and Medicaid managed care plans interested in pay for performance?

### Phase 4. Evaluation
- √ Question 19. How can we tell if the P4P program is working?
- √ Question 20. What unintended consequences should we look for?
Introduction

Recent surveys suggest that the number of pay-for-performance (P4P) initiatives nationwide sponsored by a variety of health plans, employer coalitions, and public insurance programs now exceeds 100. Through these various programs, most physicians and hospitals in the United States currently face or are in discussions with local purchasers about some form of pay for performance. The sponsors of these incentive programs state that either rewarding or improving quality of care is a primary goal; the other goal is usually controlling costs either directly or indirectly by reducing errors and inappropriate utilization.

We define “pay for performance” broadly and include any type of performance-based provider payment arrangements including those that target performance on cost measures. Despite the growing use of P4P initiatives, there is little evidence on how best to design incentive programs in the health sector. Perhaps as a result of the paucity of evidence, there is tremendous variety in the approaches used in existing incentive programs.

Existing P4P initiatives are sponsored by government purchasers—Medicare and Medicaid—as well as private employers, coalitions of employers, and health plans. We use the term “purchasers” to refer to all these potential sponsors. Although this Guide is developed for a purchaser audience, we note that some P4P programs have been initiated by providers.

There are many decisions that go into the design of a P4P program, and each decision affects the likelihood that a program will achieve its goals. In this Guide, we isolate and sequence 20 questions purchasers face in considering pay for performance, review options and any available evidence—from empirical evaluations and economic theory—that may inform future decisionmaking, and discuss potential effects and unintended consequences. We group questions into one of four phases through which a purchaser considering P4P might evolve: contemplation, design, implementation, and evaluation.

We recognize that pay for performance is only one among many possible and valuable strategies that purchasers may undertake to improve the quality and affordability of health care. Purchasers contemplating P4P need to consider the appropriate role and limitations of payment incentives in comparison to other potential strategies including physician and patient education, private and public report cards, disease management, and technical assistance.

Finally, we must note that, while P4P programs create explicit incentives to reward or improve performance, the pre-existing, underlying payment system exerts its own set of (mostly implicit) incentives. For example, fee-for-service payment creates an incentive to increase utilization while capitation payment involves incentives to reduce services. Purchasers must account for the pre-existing payment system incentives when contemplating additional ones. Also, the value of a P4P program will be a function of both gains in the quality of care and the total costs of the program, including additional payments to providers (if any) and the costs of implementation and monitoring.
**Phase 1. Contemplation**

Purchasers contemplating the adoption of pay for performance should initially consider the three key questions discussed in this section:

1. Is our community ready?
2. Should we partner with other purchasers or go it alone?
3. When and how should we engage providers in P4P discussions?

**Question 1. Is our community ready?**

P4P initiatives are currently underway in a number of different types of communities, involving large and small purchasers, for-profit and not-for-profit providers and all types of market structures. The Centers for Medicare & Medicaid Services (CMS) demonstration project with Premier, Inc. hospitals, for example, includes urban, rural, and even critical access hospitals (see: www.cms.hhs.gov/HospitalQualityInits/35_HospitalPremier.asp).

Although there have been no studies of the type of community in which P4P is most likely to succeed, two factors are likely to be important: sponsor influence and the pre-existing capacity of local providers to engage in quality measurement and improvement.

Pay for performance is most likely to be effective when it is introduced by a powerful stakeholder in the market. Purchasers representing a large share of targeted providers’ patients are better positioned to introduce significant changes in behavior than those representing a small share of patients. For example, in Hawaii, other than Kaiser, the Hawaii Medical Service Association (HMSA) covers almost all patients with commercial insurance. Large market share facilitated HMSA’s introduction of a P4P program in 1998, well before most other purchasers were even considering this option. State Medicaid agencies, which cover roughly half of long-term care spending, would be similarly positioned to implement meaningful incentives for facilities such as nursing homes.

In an equal and opposite way, highly organized providers with high market share are more able to resist changes in incentives that they do not like. The presence of powerful providers does not rule out P4P, however, but implies that the purchaser must consider the provider groups’ input.

Another major factor that can facilitate or inhibit a P4P initiative is the local market capacity for quality measurement and improvement. There may be little value in establishing ambitious performance targets based on process or outcome measures if providers have weak information systems and poor office systems for managing patient care. Purchasers in such communities might initially focus on rewards based on measures that do not require well-developed information system capacity, such as patient ratings of their experience with care or measures of infrastructure (so-called structural quality measures).

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1 Critical access hospitals are rural, acute-care hospitals that are eligible for cost-based reimbursement by Medicare based either on State designation as a “necessary provider” or distance from the nearest acute-care facility.
For example, the Bridges to Excellence program and the California Integrated Healthcare Association (IHA) both reward physicians for information technology adoption, in addition to other dimensions of quality. The Medicare Payment Advisory Commission (MedPAC) also has taken this position in its recommendation that CMS focus on encouraging information technology adoption as a first step in introducing P4P for physicians in traditional Medicare. In Massachusetts, under the Massachusetts Healthcare Quality Partnership, capacity building to support P4P has focused on quality measurement and data aggregation across a set of participating health plans. Similarly, purchasers in communities where quality information is scarce might initially focus on rewards for reporting of measures as was done by CMS in the Hospital Quality Alliance (HQA) program.

Question 2. Should we partner with other purchasers or go it alone?

Purchasers face tradeoffs in the decision of whether to coordinate with other purchasers or undertake their own P4P program. Reasons that a purchaser might find coordination for P4P desirable include:

- The purchaser’s market share is small, such that any unilaterally imposed incentive would likely have little or no effect.
- Providers will be frustrated with multiple, uncoordinated data requests from different sources.
- If the purchaser acts on its own, other purchasers will benefit from the P4P program without directly participating and there may be a “free-rider” problem because of overlapping networks.

For these reasons, purchasers may want to coordinate with each other and a broader group of stakeholders to establish agreements about what quality indicators to collect. While there may be substantial benefits from coordination, purchasers will need to consider carefully the antitrust implications of doing so [see box].

Aside from minimizing antitrust issues, some purchasers may be prepared to “go it alone” for the following reasons:

- For a commercial health plan, P4P could be used as a differentiating factor in attracting business from employers and enrollees.
- Purchasers can align their program with their own or broader ongoing data collection and quality improvement efforts. For example, purchasers could design their P4P programs around the data collected by hospitals on cardiac and lung patients for the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), for the Centers for Disease Control and Prevention (CDC) on hospital-acquired infections, and for various specialty societies about procedures such as coronary bypass. Similarly, existing public reports of provider performance sponsored by the CMS, JCAHO, the Leapfrog Group, and others could be used as low cost data sources for pay for performance.

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**ii** This means without coordinating with other purchasers in the market. See Question 3 for issues in collaborating with providers.
Antitrust Issues: A Consultation With Federal Trade Commission Staff

Joint decisions between or among otherwise competing payers that relate to what/how they will pay providers under a P4P (or any other) program always raise an antitrust issue, though not necessarily an antitrust problem. How these types of agreements among competitors are analyzed under the antitrust laws is discussed at considerable length in the joint Federal Trade Commission/Department of Justice Antitrust Guidelines for Collaborations Among Competitors (see: www.ftc.gov/os/2000/04/ftcdojguidelines.pdf) and in the Commission’s decision in Polygram Holding, Inc., 5 Trade Reg. Rep. (CCH) ¶15,453 (FTC 2003) (see: www.ftc.gov/os/2003/07/polygramopinion.pdf) (affirmed by the Court of Appeals, Polygram Holding, Inc. v. FTC, 416 F.3d 29 (D.C. Cir. 2005). In addition to consulting these resources for further information, seeking advice from competent antitrust counsel would be advisable if payers are contemplating acting jointly, particularly regarding payment/provider contracting issues.

Development or adoption of uniform P4P quality/performance standards and data reporting requirements—rather than actual payment terms by payers under such programs—would appear to be less problematic and easier to justify as pro-competitive. There are potential justifications for such joint activity that relate to the inability of small, individual payers to do this effectively on their own. Competitors working together to make P4P programs possible, more efficient, or less onerous to providers may be more likely to be considered a legitimate justification for joint behavior under antitrust law because of potentially pro-competitive effects in the marketplace.

Overall, from an antitrust perspective it is far less risky to develop or adopt a set of “best practice” standards for P4P programs and allow individual payers to decide whether or not to use the “gold standard” in their programs, rather than agreeing to do so (particularly regarding terms of paying providers). Similarly, adopting uniform standards for data compilation and reporting, so that all programs would have access to a broader data source to evaluate their respective programs, would appear to have far less potential for raising anti-competitive concerns. It is important to note, however, that even otherwise potentially efficient and arguably pro-competitive agreements among competitors regarding this type of activity still could raise antitrust concerns where the competitors together have market power and thus are able to compel acceptance of their standards by providers in the market.

Note: Views expressed by members of the FTC staff do not necessarily represent those of the Federal Trade Commission or of any individual commissioner.

Question 3. When and how should we engage providers in P4P discussions?

Basic options for provider-engagement include information only, advice, and shared decisionmaking. Providers are both a potential ally and a potential source of resistance to P4P. Understandably, providers may have particular concerns about the quality of the data and the validity of measures created using the data. Historically, providers have been very skeptical about data produced by outside stakeholders such as government agencies or employer
Physicians also have expressed concern over their ability to influence many outcomes measures of quality—such as smoking cessation or control of high blood pressure—because of the substantial role played by patient actions and preferences.

Attempting to meet provider concerns in the development of a P4P program could improve the effectiveness of the effort and its long-term chances but may also slow down the initiative if there is substantial resistance. The existence of provider-sponsored quality measurement programs—e.g., the Society of Thoracic Surgeons’ coronary bypass database—suggests that at least some providers value performance measurement for internal quality improvement purposes. They may not as a whole, however, advocate payments in which some are winners and some are losers. Further, they may not trust groups that are not clinical to develop valid metrics and truly focus on quality (rather than cost). Involving providers early could help purchasers identify performance indicators or measurement systems that meet providers’ standards for validity and could facilitate cooperative relations needed to maintain provider participation.

In several communities, public reporting and P4P programs have been successfully developed using a multi-stakeholder approach that involved key providers. The California IHA program is a leading example of this approach. Individual health plans also have successfully involved providers in the development of their P4P programs, despite the sometimes contentious environment that surrounds contracting. In Washington State, for example, the Premera Blue Cross health plan worked closely with the major clinics that provide care to its enrollees to develop performance reporting on both cost and quality measures, and then to use the same performance data to support financial rewards. In the development of the program, the participating physicians often supported tougher standards than the plan initially proposed.

“Allowing physicians to be involved at every step of the program’s development has been critical to our ability to set meaningful performance goals and truly engage the clinics in quality improvement.”

Mark Sollek, MD, Medical Director, Premera Blue Cross plan of Washington State

**Phase 2. Design**

In this section, we discuss Questions 4-13, which purchasers need to address once they have decided that they will undertake a P4P initiative. They are:

4. Which providers should we target first? Hospitals or physicians? Specialists or primary care providers?
5. For physicians, what are the advantages and disadvantages of targeting individual clinicians versus medical groups? In the case of hospitals, what are the advantages and disadvantages of targeting individual hospitals versus hospital systems?
6. Should provider participation be voluntary or mandatory?
7. Should we use carrots or sticks—bonuses or penalties—or a combination?
8. How should the bonus be structured?
9. Should we use relative or absolute performance thresholds?
10. What are our options for phasing in P4P?
11. Where do we find the money?
12. How much money should we put into performance pay?
13. What measure characteristics make them attractive candidates for inclusion in an initial measure set?

**Question 4. Which providers should we target first? Hospitals or physicians? Specialists or primary care providers?**

A recent study suggested that the majority of P4P programs now target both primary care physicians (PCPs) and specialists and about 25 percent target hospitals.¹ Three key factors help determine which types of providers should be the initial focus of P4P programs:

- **Most significant performance (quality or cost) problems.** All else equal, payment incentives should be introduced where the greatest gains may be achieved. Uncovering local quality problems might require claims data analysis but also could be informed by reviewing existing data such as HEDIS® data (health plan report cards); the Dartmouth Atlases, which report a variety of utilization, cost, and quality measures by geographic area; and the National Healthcare Quality Report (NHQR),²⁰ which annually tracks nearly 200 measures on a nationwide basis and includes measures of care in a variety of settings. In addition, the online State Snapshots based on the NHQR identify potential areas for quality improvement in every State in the Nation.

- **Share of covered services delivered by different categories of providers.** If few covered beneficiaries ever use a type of provider (e.g., rehabilitation facilities), then the value of changing practice patterns may be small.

- **Available performance measures and existing data for each type of provider.** A prerequisite for P4P is that there must be valid and reliable performance measures to capture the relevant dimensions of provider behavior and/or patient outcomes. The existence of a set of validated measures is important, not only for the effective design of the payment system but also for securing the support of providers. There has been a great deal of collective investment in quality measurement focused on certain areas, e.g., preventive care. For some specialist physicians and hospital departments, however, there are few accepted measures of clinical quality of care. Structural measures—such as those found in the NCQA’s Physician Practice Connections tool—and patient experience measures—such as CAHPS®—may be applicable to a wide range of physician specialties.

Resources for identifying performance measures that are in use and have been validated include:

- Joint Commission on Accreditation of Healthcare Organizations.
- National Quality Measures Clearinghouse.
- National Quality Forum.
National Committee for Quality Assurance.
Hospital Quality Alliance.
Ambulatory Care Quality Alliance.

In addition, the CAHPS® family of measures offers several validated instruments for measuring patient experience with physicians, medical groups, hospitals, hemodialysis centers, and nursing homes in addition to health plans.

“Purchasers should be actively looking to augment these [nationally accepted] measure sets particularly in many specialty areas. P4P should apply to all high-volume specialists and not purely PCPs. Most of the real cost and quality drivers involve chronic disease processes that are more often managed by specialists.”

Nicholas Bonvicino, MD, MBA, Senior Medical Director
Clinical Network Management, Horizon Blue Cross Blue Shield of New Jersey

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**Question 5. For physicians, what are the advantages and disadvantages of targeting individual clinicians versus medical groups? In the case of hospitals, what are the advantages and disadvantages of targeting individual hospitals versus hospital systems?**

Some payers may have a choice of whether to institute P4P at the level of an individual hospital or physician rather than a hospital system or medical group.iii There are pros and cons of targeting incentives at the individual provider versus the medical group or hospital system.

The advantages of targeting incentives at the individual provider are:

- Incentive schemes that directly link payment to those responsible for improving care provide stronger motivation than incentives linked to group behavior. If an individual physician is paid a bonus for the quality of care provided to her own patients, she has more opportunity to influence the chances that she receives a bonus than if she is 1 of 10 physicians whose practice patterns are aggregated for bonus determination.
- Measuring and rewarding performance at the individual physician or hospital level may provide more actionable feedback than relying on more aggregate data and may enhance accountability.

The advantages of targeting incentives at the medical group or hospital system are:

- Many believe that system failures are the key to quality problems and that system reforms are needed to overcome the problems.21 Moreover, many medical groups and independent

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iii Some purchasers may want to consider rewarding clinical teams rather than contracting entities, such as medical groups or independent practice associations, because many chronic care models rely on the concept of a clinical team as the locus of care management. Although such an approach would be more consistent with how care is delivered, it would likely pose challenges for data collection and payment since these entities are not generally recognized for contracting or billing purposes.
practice associations would argue that they exist in large part to improve the coordination and quality of care. Providing incentives to “systems” so they can invest in improvement would be more consistent with this idea than paying individuals. For example, Blue Cross Blue Shield of Alabama and the Dean Health Plan in Wisconsin offer incentives for the adoption of electronic medical records (EMRs). Given the investment required to introduce an EMR, targeting individual physicians with an incentive is less likely to drive behavior than targeting groups. This “bigger is better” notion may not extend to hospital systems, where the evidence suggests that the advantages of larger scale operations are limited.

- Rewarding groups of providers may be advantageous is related to errors in the measurement of performance. In some instances, particularly where the clinical process or outcome of interest occurs relatively rarely, there will be random variation in performance (and therefore payment), unrelated to the actions of the provider. With larger numbers of patients, there is less of this type of uncontrollable variation. This problem will be of greater concern for outcome measures generally but can be relevant for process measures that apply to small populations.

**Question 6. Should provider participation be voluntary or mandatory?**

Many pilot P4P and public reporting programs, such as the CMS/Premier demonstration, are voluntary, which is generally preferred by providers. The major advantage of a voluntary program is the relative ease with which it can be implemented because not all providers need be ready and willing to participate. Voluntary programs will be likely to attract those providers who expect to perform well—usually those that are already performing well—while the poor performers remain on the sideline, which may limit the potential of a voluntary program to improve care among poor or mediocre performers.

Other programs mandate participation in the sense that it becomes a requirement for contracting, such as with most P4P programs implemented broadly (as opposed to pilots) by health plans. The main advantage of a mandatory program is fairness and the ability to promote quality across the market or network. (We note that a mandatory program where P4P takes the form of a bonus may be, in practice, exactly the same as a voluntary program because not all providers will find it worthwhile to respond.)

In practice, the decision of whether to make a program voluntary or mandatory is intertwined with considerations of data availability, the respective clout of providers relative to purchasers in the community, and the basic structure of the P4P program. A mandatory withhold, for example, appears much different from a mandatory bonus, as described above.

**Question 7. Should we use carrots or sticks—bonuses or penalties—or a combination?**

There is disagreement among researchers and industry leaders on whether threats or rewards are more effective motivators. Some analysts argue that penalties may be more effective motivational tools than bonuses because people view potential losses differently from potential gains. Although some documented evidence supports this theory, the conclusions are
somewhat mixed. Others argue that providers dislike penalty-based approaches and, when faced with such negative incentives, they “game” the system.

In practice, only a few P4P programs—such as the new general practitioner contract in the United Kingdom (UK) and the CMS/Premier hospital P4P demonstration—incorporate penalties for consistent poor performance. And even these programs plan for only very rare use of the penalties. In the first year of the UK program, almost 90 percent of physicians attained the program’s maximum rewards, to a large extent because performance goals were set very low.

Similarly, in the CMS/Premier demonstration, CMS agreed that there would be no penalties in the first 2 years and that the penalty threshold for the third year would be set as quality at or below the 10th percentile of performance in the baseline year. Avoiding the penalty requires a relatively low level of quality improvement and all providers have at least 2 years to accomplish this goal.

The impact of these strategies on quality of care is not yet known. Use of penalties to set a floor for performance expectations may prove to be an effective strategy. As overall performance improves, the floor could be moved upward over time.

**Question 8. How should the bonus be structured?**

The answer to this question in part depends on the overarching aim—to reward high-performing providers versus to encourage improvement.

At least four options in designing a bonus exist (see Table 1):

- Rewarding only those providers that meet or exceed a single threshold of performance.
- Differentially rewarding providers for achievements along a continuum of performance thresholds.
- Rewarding providers that meet or exceed a single threshold of performance combined with incentive rewarding of those that improve, regardless of whether they meet the threshold.
- Rewarding providers in a continuous manner in proportion to their achievement.

The most common approach to P4P is to set a single benchmark level of performance that represents “good” quality and pay a bonus to providers that meet or exceed this threshold. As noted in Table 1, in its first year, the PacifiCare of California Quality Incentive Program rewarded all medical groups that exceeded a single threshold, which was pegged at the previous year’s 75th percentile for each measure. This approach is consistent with a strategy to reward high-quality providers (rather than to improve performance) and has the advantage of simplicity. This approach does not uniformly provide incentives for improvement, however. High-quality providers may receive bonuses without making any improvements, and low-quality providers may find the single threshold too difficult to meet and opt not to engage. Some early empirical evidence on the impact of recently implemented P4P programs supports this understanding.
Table 1. Four strategies for designing a bonus structure, with purchaser examples

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Example</th>
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</thead>
<tbody>
<tr>
<td>Bonus to providers that meet or exceed single benchmark level of performance, one benchmark for all providers</td>
<td>• PacifiCare of California Quality Incentive Program, year 1: All medical groups that score above the prior-year 75th percentile of performance in the network receive per member per month bonus.</td>
</tr>
</tbody>
</table>
| Graduated or tiered bonus based on more than one level of performance | • PacifiCare of California Quality Incentive Program, year 2: All medical groups that score between the prior-year 75th and 85th percentile of performance in the network receive 50 percent of the bonus potential; providers scoring above the 85th percentile receive full bonus.  
• Bridges to Excellence Physician Office Link: Physicians receive per patient bonus for meeting a set of standards related to office systems that promote quality care; incremental rewards are associated with higher levels of achievement (basic, intermediate, advanced). |
| Combination of bonus for meeting threshold and bonus for improvement | • Premera Blue Cross of Washington State: Rewards clinics based on process and outcome measures of quality (as well as other efficiency- and access-related metrics). Points, which determine each clinic's allocation, are awarded based both on rank among peers and improvement. |
| Continuous rewards | • Hudson Health Plan (a Medicaid managed care plan in New York): Pays $200 for every 2-year-old who receives all recommended immunizations on time. |

As an alternative, purchasers may wish to consider tiered awards, in which differential incentives are offered to providers at different performance levels, such as 70 percent compliance, 80 percent compliance, 90 percent compliance. The more thresholds, the greater the likelihood that providers at different levels of quality performance will have an incentive to engage and improve. Again using the PacifiCare example, in the second year, it offers the full bonus to groups whose performance is above the prior year’s 85th percentile level and 50 percent of that amount to groups that perform above the prior year’s 75th percentile but below the 85th percentile.

Alternatively, purchasers might explicitly tie payment to improvement either in addition to or instead of a benchmark level of attainment. Premera Blue Cross of Washington State rewards clinics based both on their rank among peers and the degree of improvement over the prior year.

For measures that reflect concerns about underuse of effective services (e.g., retinal exams for patients with diabetes), another alternative would to pay an additional fee for each appropriately managed patient or for each “recommended” service that the purchaser is targeting. Unlike setting a bonus threshold at a single level, under the additional fees-for-service model, physicians always do better financially by bringing more patients into compliance with the standard.
Although the incentive properties of rewarding improvement or using additional fees each time a service is performed are preferable to a single fixed threshold, some may object in principle to rewarding physicians at levels of performance that are below acceptable norms (whatever these are.) To accommodate such concerns purchasers could set a minimum threshold—such as 60 percent adherence to the evidence-based guideline in question—below which physicians are ineligible for any payment.

**Question 9. Should we use relative or absolute performance thresholds?**

Asked another way, should the incentive be structured such that all providers could theoretically receive some reward, or should we structure the program such that there are only a limited number of winners?

In contrast to Question 8, which examines the relationship between performance and payments, Question 9 addresses whether providers compete against one another or are held to some external standard. Many current P4P programs pay bonuses based on the ranking of performance relative to other providers in the network. For example, Anthem Blue Cross Blue Shield of New Hampshire rewards physicians whose performance on clinical quality measures places them in the top two quartiles of the distribution (with larger bonuses for the top quartile). This type of reward structure is sometimes referred to as a *tournament*.

Tournaments may be desirable for the following reasons:

- Relative performance measures can filter out common sources of uncontrolled variation in performance. For example, if a purchaser who wanted to target flu shots for improvement compared an individual physician’s performance in 2004 against 2003, the physician’s quality might appear to have declined in 2004 due to a decrease in vaccination rates, even though these lower rates primarily reflected vaccine shortages over which the physician had no control. However, examining the change in vaccination rates over time nationally or among physicians in the same market would produce a different picture of physician efforts to improve quality.

- Tournaments provide strong incentives to improve continuously because there is no level at which it is guaranteed that a provider will be ranked sufficiently high to receive a reward.

- Because not everyone receives a bonus, a tournament program with the same maximum bonus potential for those who will receive one will cost less than a program where all providers could get the bonus.

Important disadvantages of tournament-style rewards also exist, such as these:

- Because providers cannot be certain beforehand what level of performance must be achieved to result in a bonus payment, they may judge investments in quality improvement to be unacceptably risky.

- Providers that have already determined how to deliver good-quality health care along the targeted dimensions will be at an advantage (the same is true with a non-tournament program with a single high threshold). Providers that are ranked low among their peers are less likely
to find it worthwhile to strive for these bonuses because of the low likelihood of surpassing the competition. This rewarding of historical investments in quality, although possibly justified, may not yield as much quality improvement across the population as other approaches.

- When providers know their payment may be determined by relative performance, they may be less willing to engage in one of the most commonly used quality improvement models—the local collaborative in which successful local providers advise and assist less successful ones.

For questions 8 and 9, purchasers need to decide whether the primary goal of their P4P program is to improve the quality of care delivered by all eligible providers or to begin paying more to high-quality providers than to low-quality providers. These objectives are not incompatible, but some approaches to P4P (in particular, using tournaments or high fixed benchmarks) will favor the latter. Alternatively, the approach of paying additional fees-for-service achieves both goals, since higher performing providers receive more fees but all providers have a reason to improve.

**Question 10. What are our options for phasing in P4P?**

Most purchasers that have introduced P4P have started in a limited way and expanded over time. Advantages for phasing in P4P are that it permits testing of measures before full scale implementation, gives providers time to gear up for a P4P initiative; and enables purchasers to evaluate the small scale impact before applying it to the larger group of providers.

Options for phasing in P4P include the following:
- Pilot test a payment scheme in a limited geographic area.
- Focus on specific provider types or clinical areas.
- Begin with pre-existing, national measure sets and add measures over time.
- Rely on existing data (most likely billing data) and incorporate additional data as needed over time.
- Begin with a voluntary system.
- Begin with private quality reports and introduce incentives over time.
- Begin with a modest benchmark for performance and raise the standard over time.
- Begin with requiring or rewarding data collection and reporting and introduce performance incentives over time.

The CMS experience with hospital incentives illustrates one approach to phasing in a P4P effort. CMS introduced a pay-for-reporting program to encourage hospital participation in the Hospital Quality Alliance, in which participating hospitals receive 0.4 percent of their payment update if they publicly report a set of quality measures; non-participating hospitals lose this revenue stream. Because of the large market share represented by Medicare, more than 98 percent of hospitals nationwide report on the set of measures.

**Question 11. Where do we find the money?**

Potential sources of funds for a P4P initiative include:
- New money.
• Redirection of annual payment updates.
• Reallocation of payment among providers, e.g., through a combination bonus-penalty payment scheme.
• Cost savings resulting from improved quality and special cases of shared savings.
• For Medicaid, disproportionate share funds, and for the special case of Medicaid managed care, preferential auto-assignment formulas, which provide financial incentives in the form of greater volume of patients.

Many private payers that have introduced P4P programs frame the bonus potential as “increased” payments to providers, but it is difficult to imagine sustaining such increases given the recent double-digit growth rates in spending. If performance pay is to account for more than a small share of provider compensation in the near term, there will have to be significant redistribution (winners and losers); savings will be needed to at least partially offset the additional costs associated with improving quality; or, most likely, the funds will come from cumulatively directing all or a portion of annual updates to incentive pay. From an employer perspective, the possibility of offsetting savings should account for increased employee productivity.

Whether improved quality will pay for itself in financial terms is an issue of some debate. In general, however, it is clear that the question of whether the costs of quality improvement will be offset by savings (e.g., from reduced hospitalizations) will first depend on whether the incentive seeks to remedy misuse, underuse, or overuse. Even within each of these categories, however, there will be differences by clinical area. For incentives to correct underuse of cancer screening, for example, most of the health and financial gains are long term, so a positive financial return in the short term is unlikely. Reducing underuse of prescription drugs and educational services for patients with chronic illnesses and substantial risks of high-cost hospitalizations or procedures may be more likely to yield savings in the near term.

At present, for many of the most commonly used measures of quality (e.g., HEDIS® measures), the promise that improvement will result in cost offsets sufficient to ensure financial sustainability of pay for performance is uncertain at best. In light of these clinical realities and current budgetary constraints, purchasers might choose to explicitly incorporate cost-saving measures into their P4P programs. For example, the Wellpoint Physician Quality Incentive Program rewards physicians for generic prescribing and administrative efficiency measures such as electronic claims filing. The Integrated Healthcare Association in California is also currently evaluating the inclusion of an aggregate cost-efficiency measure in its P4P program. On the other hand, there is some risk that orienting a P4P program toward cost control may undermine the credibility of the quality improvement aspects of pay for performance.

**Question 12. How much money should we put into performance pay?**

There is no single answer to the question of how much money is needed. Some P4P schemes have provided as little as $2 per visit and had an impact, while others offering bonuses of up to $10,000 had no effect. One can, however, identify a number of factors relevant to the decision about how large performance pay needs to be (see diagram).
Factors Affecting the Necessary Size of Incentive

Local mediators of the cost of improvement:
- Other incentives in place (especially general approach to payment)
- Patient characteristics (e.g., education)
- Organizational capabilities (e.g., information technology)
- Market factors (e.g., availability of diagnostic resources)
- Provider characteristics (especially current level of performance)

Fundamental characteristics of clinical condition or activity:
Feasibility and national average cost of improvement

Optimal magnitude of incentive

Key issues include the following:

- **Characteristics of the clinical condition or treatment.** Some changes are easier to achieve than others. It is easier to get patients to take flu shots than to quit smoking. Some interventions are less costly than others, even among screening tests. For instance, Pap smears are much less expensive than colonoscopies. Improving performance in areas with good feasibility and low cost should require smaller incentives than improving results in other areas.

- **Other incentives already in place.** For example, if medical groups are capitated for their services, then incentives to increase screening tests would need to be larger than in a fee-for-service system in which providers already receive basic fees for the associated visits and procedures.

- **Organizational capabilities.** Larger groups may have the resources to hire a dedicated asthma patient educator and ensure excellent communication between pulmonologists and primary care providers, while smaller groups and solo practices may find patient education and inter-provider communication more difficult.

- **Patient and market variables.** Providers with highly educated patients traditionally experience better patient adherence and cooperation, which may affect their performance ratings. Rural diabetics may have a harder time getting eye exams than their urban counterparts because of a dearth of local ophthalmologists. Market share of the payer may also be a factor in determining the necessary size of the bonus, particularly if investments in infrastructure or training are needed to achieve the quality goal. A purchaser with large market share, like Medicare, may be able to promote change with a relatively smaller proportional bonus compared to a purchaser with small market share.

In light of all the uncertainty on this topic, it is not surprising that the P4P programs in place today—most of which are fairly new—typically place 5 percent or less of contracted revenues at risk for performance, although there is some indication that the amounts at risk are increasing.\(^1\)
In the case of hospital programs, the percentages are often lower. For example, the CMS/Premier demonstration involves a reward of 1 to 2 percent for top-performing hospitals.

Another perspective on how much to pay to improve performance can be found by considering shared savings where savings are anticipated from quality improvement. This approach has been used by purchasers such as the Alliance of Wisconsin as well as the Bridges to Excellence program. For example, if hospitals reduce complication rates among patients receiving a particular procedure and those avoided complications save the purchaser $10,000 in additional treatment costs, the hospital might receive 50 percent or $5,000 of those savings.

**Question 13. What measure characteristics make them attractive candidates for inclusion in an initial measure set?**

Measure types span structure, process, and outcome and include technical (clinical) as well as interpersonal attributes of care. Developing a robust measure set is crucial to P4P success. Not surprisingly, surveys of providers indicate that performance measurement that lacks clinical face validity or sufficient scope and sophistication will be poorly received and actively resisted.¹², ¹³

Table 2 lists characteristics to consider in evaluating candidate quality indicators. One major issue is whether the indicator generates information about a single condition (e.g., use of appropriate antibiotics in pneumonia) or is relevant to a broad population (e.g., rates of medication errors). Although measures that apply to larger numbers of patients are attractive, the disadvantage of this approach is that precise measurement definitions and standards are less often available for process or outcome measures of this type; valid measurement may require adjustment for differences in the types of patients across providers (and methods for such adjustment may not be developed for some measures). On the other hand, precisely defined, condition-specific measures suffer from a general lack of availability for many diseases and treatments.

**Table 2. Indicator characteristics to consider in developing a measure set**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Does the indicator measure care that is a priority for quality improvement?</td>
</tr>
<tr>
<td>2.</td>
<td>Does the indicator apply to a single disease or across multiple patient groups?</td>
</tr>
<tr>
<td>3.</td>
<td>Does the indicator generate information about cost efficiency, health care processes, outcomes, or structure?</td>
</tr>
<tr>
<td>4.</td>
<td>Does the indicator reflect technical competency or patient experiences with care?</td>
</tr>
<tr>
<td>5.</td>
<td>Is the indicator actionable?</td>
</tr>
<tr>
<td>6.</td>
<td>Is there a valid source for the data needed to calculate the indicator? What is the cost of acquisition and validation of those data?</td>
</tr>
<tr>
<td>7.</td>
<td>Is the indicator nationally accepted or locally developed?</td>
</tr>
</tbody>
</table>

Other considerations include the following:
- Providers generally prefer process measures, which assess whether the right clinical decision was made and the appropriate diagnostic test or treatment was used, rather than outcomes, which are more strongly influenced by patient factors beyond a provider’s control.¹², ¹³, ¹⁸
• Structural measures—such as the volume of procedures a provider performs or their capacity for computerized order entry—have been favored by some purchasers because they do not require collection of detailed clinical data and can be measured by survey. This approach largely avoids the issue of patient differences, but structural measures are often only weakly related to outcomes. In addition, this strategy runs counter to the idea that incentives should be established to encourage suppliers to find the most effective and efficient production systems on their own.

• Some purchasers may wish to reward the reduction of disparities in the quality of care or access. Reductions in differences in quality would not be appropriate quality measures to use as the basis of rewards because differences could be reduced by decreasing the quality of the better served group. Instead, purchasers could provide incentives for improving care to the underserved group.

Decisions about measures require evaluation of sources of data. The main sources, in order of increasing expense of data collection, are:

• Pre-existing administrative databases (generally created through the submission of claims and/or discharge abstracts) or data that have been collected for another purpose such as accreditation.
• Provider surveys.
• Patient surveys.
• Medical record abstractions.

Each data source comes with its own set of strengths and limitations:

• Administrative data are readily available and algorithms for using them to examine the quality of care are established, although providers may not believe those algorithms yield valid performance measures.⁴⁹, ⁴⁰

• Administrative data are a reasonably good source of process information, although this is less true in the hospital setting, in part because hospitals are typically paid a set fee per day or per discharge so that details about individual therapies that a patient received while admitted are not captured.

• Administrative data yield fewer outcome measures than medical records and contain few of the variables perceived as necessary for risk adjustment of those outcomes.¹⁹, ⁴¹ It is noteworthy that an increasing number of health plans capture pharmacy claims and lab results in their electronic data systems, which strengthen a purchaser’s ability to judge quality of care through claims data.

• In general, provider acceptance of the validity of the data is least for administrative data and greatest for medical record data.¹²

• Chart abstraction, done correctly, can address many of the limitations of administrative data, but it is expensive. In the future, information technologies may be adopted that greatly reduce the cost of collecting the data generally sought through chart abstraction, but implementation of electronic medical records with such capabilities has been slow.

• Provider surveys are the most feasible way of collecting information on structural measures (e.g., whether a hospital has computerized order entry) but are limited by the reliability of self-report and the fact that standardized methods for auditing them are not yet available.
• Patient (or family) surveys are the source for information about patients’ experiences, and there are validated survey measures that could be readily used for almost any provider type. Patients are less reliable sources for technical information about their own diagnoses and care.42, 43

Another major tension in measure selection is the choice between using nationally adopted indicators versus developing local measures. When feasible, it is clearly preferable to use measures endorsed by CMS, JCAHO, National Committee for Quality Assurance, the Hospital Quality Alliance, the Ambulatory Quality Alliance (AQA) or the National Quality Forum (NQF). However, the number and scope of measures available from these sources is limited. There are more indicators endorsed by NQF, but the work of developing measurement specifications is ongoing, so one cannot implement all NQF measures at the current time.4v (Table 3 presents specific examples of various types of quality measures currently used by purchasers.)

Table 3. Types of quality measures, with purchaser examples and specific measure used

<table>
<thead>
<tr>
<th>Type of measure</th>
<th>Purchaser example and measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>• Empire Blue Cross Blue Shield: Leapfrog Group measures including computerized physician order entry and staffing of intensive care units with intensivists.</td>
</tr>
<tr>
<td>Process</td>
<td>• Integrated Healthcare Association, year 1: Hemoglobin (Hb)A1c testing, LDL cholesterol testing, childhood immunizations, cervical cancer screening, and mammography.</td>
</tr>
<tr>
<td>Health outcome</td>
<td>• Premera Blue Cross of Washington State: HbA1c, LDL cholesterol, and blood pressure control, among other measures.</td>
</tr>
<tr>
<td>Patient experience</td>
<td>• Integrated Healthcare Association, year 1: 40 percent of P4P is based on the following patient satisfaction measures: 1) satisfaction with specialty care, 2) timely access to care, 3) doctor-patient communication, and 4) overall ratings of care.</td>
</tr>
<tr>
<td>Locally developed measures</td>
<td>• Hawaii Medical Services Association: Locally developed measure of surgical complications.</td>
</tr>
<tr>
<td>Nationally developed measures</td>
<td>• Empire Blue Cross Blue Shield: Leapfrog Group measures.</td>
</tr>
</tbody>
</table>

Note: Some purchasers may use a mix of various types of measures.

On the other hand, local development of measures may be advantageous for two reasons: 1) developing measures that are relevant to a local population and delivery system may be an effective means for engaging providers, and 2) there may be important local public health priorities for which nationally vetted measures do not exist.

iv Summaries of NQF reports on issues in developing quality measurement specifications and recent NQF-endorsed consensus standards may be found at www.qualityforum.org.
“[W]e do not yet have many quality areas with generally accepted measures established. Pioneers in this work will have to validate their own measures much of the time.”

James Mortimer, former President, Midwest Business Group on Health

Phase 3. Implementation

Questions 14-18 need to be addressed in the implementation of a P4P program:

14. How do we address providers’ concerns about whether risk adjustment adequately captures the severity of illness of their patients?

15. If we currently sponsor a private or public report card, will P4P offer more of an incentive? If we are considering both a public report and P4P, which should we pursue first?

16. Should we tailor P4P for subsets of a particular group of providers, e.g., safety-net hospitals?

17. How should we think about P4P and its relationship to benefit design, including tiered networks?

18. Is there any special advice for Medicaid agencies and Medicaid managed care plans interested in P4P?

Question 14. How do we address providers’ concerns about whether risk adjustment adequately captures the severity of illness of their patients?

Providers who treat a larger proportion of higher risk or less adherent patients may receive lower ratings on process and outcome measures, despite making equal efforts to practice high-quality care. Thus, providers legitimately want to make sure that a P4P program accounts fairly for patient differences. Risk adjustment models to correct patient outcome estimates (usually mortality rates) for underlying differences in patient populations have been under development for many years. Nonetheless, providers worry about the adequacy of risk adjustment. Furthermore, refusal to address such concerns may threaten the legitimacy and sustainability of any incentive program.

Risk adjustment is generally less effective when administrative data are used because detailed clinical information (e.g., blood pressure) is typically unavailable. Analysts have shown, however, that in some cases the addition of a few simple clinical variables to administrative data would be sufficient to make risk adjustment comparable to that which can be achieved with the sophisticated databases many specialty societies have developed. This is especially the case in States such as California that are adding “condition present on admission” indicators to their administrative data to distinguish pre-existing comorbidities from treatment-related complications.

A P4P sponsor could engage providers in the design of a clinical data collection system that is either consistent with one of the growing number of national databases (specialty societies, CDC,
JCAHO, others) or a less burdensome augmentation of administrative databases and test whether
the additional data actually make a difference in the distribution of rewards.

Finally, some approaches to P4P will be less sensitive to differences in patient characteristics
than others. In particular, if a purchaser decides to reward providers for improvement relative to
their own baseline rather than for meeting a common standard, risk adjustment will be less of an
issue than if a tournament approach is used where only the top ranked providers receive a bonus.

**Question 15. If we currently sponsor a private or public report card, will P4P offer
more of an incentive? If we are considering both a public report and P4P, which
should we pursue first?**

No studies have compared the effects of report cards relative to P4P. There is evidence that
providers respond to public reports about their performance, although hospital executives
have indicated that their response to public reporting may wane over time, especially if there are
no supporting financial incentives. Thus, the approaches may best be viewed as
complementary, rather than mutually exclusive.

Public reporting may be part of a phase-in strategy for P4P; this appears to be the strategy chosen
by CMS in the case of the Hospital Quality Alliance data, although the specifics of a P4P
program for hospitals have not yet been determined. An advantage of this approach is that it
gives providers time to improve their data collection and become more proficient in using
methods of performance measurement before the measures become economically significant.
This may facilitate the use of a measure set of greater scope than would be acceptable to
providers if P4P were to start with the initial measurement period.

In some cases, public reporting and P4P may differ somewhat in focus. For example, research
has shown that it is preferable not to include a large number of technical quality measures in a
public report card if the goal is to affect consumer choice. So a report card might display a few
composite measures of evidence-based care and patient experience, while the P4P program could
separately target specific processes and outcomes where the purchaser has identified a shortfall
in quality.

**Question 16. Should we tailor P4P for subsets of a particular group of providers,
e.g., safety-net hospitals?**

Providers treating patient populations that are low income and/or have low educational
attainment or literacy may be disadvantaged by a “one size fits all” approach to P4P because
these communities have poorer health behavior than others (patient differences could also affect
patient experience of care, for example, because of cultural issues). To the extent that a payer is
concerned about improving performance of all providers or is particularly interested in reducing
disparities in the quality of care, a more targeted approach might be warranted.

Purchasers could tailor a P4P initiative in a variety of ways:

- Purchasers could make the reward larger for some providers—either those providers with the
  lowest performance ratings or, for example, safety-net providers. One argument for
increasing payments is that the costs of improving care will be greater for some providers because of geographic, linguistic, financial, and other barriers that they or their patients face or a lack of infrastructure and poor human resource capacity for quality improvement.

- Purchasers could provide capital grants and/or technical assistance to poor-performing providers again as a way of offsetting their presumed higher costs of complying with performance standards. Independent Health in New York, for example, assists providers serving large numbers of Medicaid patients in planning quality improvement programs.

- Purchasers could allow performance measures to vary across providers. Again, Independent Health involved providers with large numbers of Medicaid patients in the selection of site-specific quality metrics.50

A final strategy for tailoring P4P would be for purchasers to set lower performance standards for certain kinds of providers that have lower performance or fewer resources—for example, small practices or rural hospitals. To illustrate, a plan might provide a bonus to all urban hospitals that give at least 90 percent of their patients beta-blockers after a heart attack but advise rural hospitals (who in this example are assumed to have lower rates of beta-blocker usage) they need only achieve 80 percent adherence to receive a bonus. The important argument against this approach is that it will institutionalize disparities in quality. For this reason, approaches that differentially empower low-resource providers and those serving disadvantaged populations are preferred.

**Question 17. How should we think about P4P and its relationship to benefit design, including tiered networks?**

P4P programs have been implemented in the context of health maintenance organizations (HMOs), point-of-service plans, preferred provider organizations, indemnity plans, and consumer-directed health plans.1 In principle, provider incentives can be established independently of benefit design, but in practice there will be important interactions to consider, including assignment of accountability and alignment of physician and patient incentives.

The first consideration is assigning accountability. In many HMO arrangements, patients must select a physician or medical group to act as a primary care “home” and possibly as a gatekeeper for referrals. These providers will then be a natural unit of accountability for the quality of primary prevention and chronic illness management. In contrast, in a setting where patients do not have identified or assigned primary care providers, attributing responsibility becomes somewhat more complex, but not insurmountably so.

Two basic strategies for attribution of responsibility for the quality of care of individual patients based on contact have been used in practice, each with advantages and disadvantages: 1) all physicians with a minimum level of contact are accountable for a patient’s care; or 2) a primary responsible physician is determined retrospectively based on contact.

With regard to the first approach, if multiple physicians share responsibility for delivering a specific test or service, all have a reason to ensure quality, but shirking of responsibility also might occur. In addition, physicians might order redundant tests or services if they do not receive information about services provided by the other physicians.
With regard to the second strategy, a key disadvantage is that during the course of the year, physicians will be uncertain as to whether any given patient will affect their performance estimate because attribution is determined retrospectively.

The second important connection between P4P and benefit design is the *congruence of physician and patient incentives*. Although there is no empirical evidence of a connection, it is logical to conclude that patient and provider incentives each will be more powerful if they are aligned. For example, some purchasers in the Bridges to Excellence Diabetes Care Link program offer their employees rewards for participating in improving the management of their diabetes.\(^5\) Similarly, purchasers who have constructed or are considering tiered provider networks may want to consider focusing on the same sets of performance measures for P4P to intensify the impact.\(^v\)

**Question 18. Is there any special advice for Medicaid agencies and Medicaid managed care plans interested in P4P?**

In many States—including Michigan, Pennsylvania, and New York—Medicaid agencies offer auto-assignment and/or financial bonuses to managed care organizations that perform well on clinical quality and patient satisfaction measures. Medicaid managed care organizations also have implemented P4P. For example:

- The Local Initiative Rewarding Results program in California offers financial rewards based on the quality of ambulatory care for MediCal beneficiaries.
- Hudson Health Plan, a Medicaid managed care plan in New York, also has a number of P4P initiatives including rewards for childhood immunization and effective management of patients with diabetes.
- The Neighborhood Health Plan of Rhode Island uses P4P to target asthma care.
- In North Carolina, the Primary Care Case Management program has introduced both financial bonuses and recognition for physicians that either reach a best practice performance goal (85th percentile of baseline performance) or improve by 20 percent and exceed the median level of baseline performance. Performance measures in the first incentive year (through June 2006) are related to care for asthma, diabetes, and prescribing patterns.

Purchasers such as Medicaid and Medicaid managed care plans face many of the same obstacles discussed above, particularly with regard to the need to protect safety-net providers and their patients (see Question 16). In addition, constrained Medicaid budgets have resulted in below-market provider reimbursements so that program participation is an ongoing concern. These issues highlight the need to involve providers early and continuously in the development and evolution of an incentive program. The experiences of two New York Medicaid plans corroborate this observation. The Hudson Health Plan focused intently on provider communication. Health Now management developed its initial P4P program internally, albeit with the intention of creating a program that providers would find easy to understand and implement. A survey by the Center for Health Care Strategies found better provider acceptance

\(^v\) Some measures, however, may be appropriate for tiering but not for P4P—for example, the volume of certain kinds of procedures.
of the Hudson Health program than the Health Now program, and Health Now has moved to increase provider participation in the redesign of its program.\textsuperscript{50}

In addition, because of particular concerns with patient adherence in populations with low literacy and other challenges, Medicaid programs and plans may find it particularly beneficial to emphasize patient incentives alongside provider incentives, which is likely to improve provider perception of the P4P program as well. Patient incentives are currently in use by some Medicaid managed care plans to encourage appropriate use of services such as adolescent wellness visits and prenatal care.\textsuperscript{50} Executives at CalOptima, a Medicaid managed care program in California, believe that participants in a beneficiary incentive program in which department store gift cards are offered for adherence to preventive care recommendations are more likely to receive appropriate immunization and prenatal care.\textsuperscript{50}

Medicaid programs may wish to consider P4P in one market in which they are the dominant payer and thus could have substantial impact: nursing home care. Legislation passed in 2005 in Ohio outlines such a program and sets aside 2 percent of average payments to be allocated to the best-performing facilities with regard to a set of structure, process, and outcome measures of quality (and casemix). Performance data on nursing homes are currently being collected and publicly reported by CMS; these data would be a natural platform for P4P. In addition, CMS has recently begun designing a nursing home P4P demonstration project, which may provide both momentum and information for State Medicaid agencies interested in implementing programs of their own.\textsuperscript{52}

Finally, Medicaid programs will need to consider regulatory requirements, particularly if they intend to receive a Federal match for the payment incentive (see box).

### Programmatic Issues for State Medicaid Programs Considering Pay for Performance

The method by which a State may choose to accomplish its quality-based purchasing program can vary greatly because of the variety of approaches available to a State to administer its Medicaid and State Children’s Health Insurance Programs. In general, States have broad flexibility, within established Federal regulations, to decide on medically necessary services that will be covered and rates that will be paid to providers or plans. CMS may review these plans through a State plan or a Medicaid demonstration project application or amendment and through various other mechanisms.

In general, if the pay-for-performance program is a part of a fee-for-service delivery system, a State may include its initiative in its State plan. While the requirements for payment for managed care are somewhat more complicated, CMS will work with States to determine the proper method to implement such an initiative. A waiver under Sections 1115, 1915(b), or 1915(c) of the Social Security Act may be necessary when the initiative will not be statewide; will impact the amount, duration, and scope of benefits; will affect the comparability of benefits across the eligible population; or will restrict beneficiary choice of provider.

**Source:** Jean Moody-Williams, Centers for Medicare & Medicaid Services.
Phase 4. Evaluation

P4P programs are a work in progress and, because there is little evidence as to the effects of specific approaches, will need to be monitored and improved on an ongoing basis. Although evaluation will naturally follow implementation, the two questions in this section need to be asked during the design phase to assure that the implementation of the program will support meaningful evaluation. They are:

19. How can we tell if the P4P program is working?

20. What unintended consequences should we look for?

Question 19. How can we tell if the program is working?

Learning about the impacts of a P4P program can be particularly challenging because a multitude of additional forces simultaneously affect the quality of patient care and costs. Ideally, purchasers would implement P4P in one market or sub-market and track the same performance measures on a set of comparison providers. Some large purchasers and CMS may be in a position to implement P4P in this way, but most purchasers will not design their programs as controlled trials. Therefore, some care is needed to disentangle the effects of the program from other trends. At a minimum, purchasers should collect baseline data on the targeted quality measures (this will be a critical part of implementation too, of course, because providers without a clear understanding of their performance can hardly be expected to respond optimally to P4P). Then, as performance data are collected for payment purposes, the main effect of the program can be evaluated in terms of the change in performance, preferably compared either to some comparable but unaffected population or the trend in performance prior to implementation.

Purchasers will have to decide how rigorous an evaluation needs to be to ascertain whether a program is working and how to improve it. To adhere strictly to scientific standards of evidence may be too costly and produce evidence too late to be useful for decisionmaking. On the other hand, erroneous conclusions that may be drawn from anecdotal or incomplete information may have substantial costs as well.

Question 20. What unintended consequences should we look for?

In addition to the hoped-for effects of the program, purchasers will need to monitor, and try to minimize, unintended negative consequences. Three important negative effects to look for are patient selection, diversion of attention away from other important aspects of care, and widening gaps in performance among providers.

- **Patient selection.** Providers may avoid sicker patients in the belief that risk adjustment is not adequate and that caring for such patients will reduce their measured performance. Surveys done after New York instituted public reporting for coronary bypass found that two-thirds of cardiac surgeons admitted to avoiding the most severely ill patients.53 To minimize the potential for the P4P program to result in selection of the “easiest” patients or exclusion of high-risk or non-adherent patients, purchasers can focus on structural or process measures of quality. Risk adjustment of performance measures, particularly those that relate to patient...
outcomes such as complication or readmission rates, should help to minimize selection incentives as long as providers believe the risk adjustment is adequate. In addition, including explicit reporting of casemix data—which would show providers who are avoiding or accepting the more difficult cases—or providing differential rewards for meeting performance goals with more difficult patients could increase providers’ willingness to take on these cases. Another possibility would be to collect and report information about patients who change from one provider to another. A provider who was avoiding sicker patients would be identified by the high casemix scores of patients leaving his practice.

- **Diverting attention from other aspects of care.** Targeting specific performance measures may focus provider attention on the conditions or care processes for which there is measurement and payment, to the detriment of performance in other areas. At a minimum, this problem suggests the need for careful measure selection and attention to interrelationships among targeted and untargeted domains of performance. Rewarding providers for performance on some broader measures of outcome, such as patient experience or decubitus ulcer (bed sore) rates and pain scores in hospitals, would mitigate this problem as well.

- **Widening performance gaps.** This may be particularly likely to occur if the purchaser chooses to reward only providers that meet a high standard of performance or those that are the highest ranked among peers. If P4P results in a substantial redistribution of resources then some providers may actually worsen with respect to quality of care. This will be a particular concern if those providers serve large numbers of beneficiaries/enrollees or are part of the safety net, and/or if there are not enough suitable choices for the population that receives care from these poor-performing providers. If these adverse consequences are anticipated or noted, purchasers can consider the solutions described in Question 16 above.

These examples give important clues about what evidence to seek in evaluating programs for unintended consequences. Clinician feedback should be sought about unexpected problems with the measures used, including difficulties with both access to care and pressure to offer inappropriate care. Since such data would come from clinician surveys (and unhappy clinicians would be expected to be motivated to respond), getting this feedback should not be too burdensome. Similarly, purchasers should consider tracking a set of performance indicators that are outside of the P4P program to better understand both negative and positive spillover effects from the program onto untargeted clinical domains. Finally, evaluation of the program should not just look at average performance but at the effects of P4P on different parts of the delivery system including providers with high and low baseline performance.
A Final Note—Sustaining Quality Improvement

Even the best-designed P4P program will require maintenance. For example, if the program uses fixed targets, the targets will need to be advanced as providers improve. We note, however, that if providers see that targets are fully adjusted to reflect gains in prior year performance, incentives to improve quality in the current period may be dampened. For most measures, there are also natural “ceiling” effects that will lead to diminished opportunities to improve quality over time. As adherence rates to evidence-based guidelines approach 100 percent, the incremental cost of improving quality is likely to increase as only the cases that failed to respond to initial quality improvement efforts remain.

As clinical evidence about best practices changes, structural (e.g., information technology requirements) and process measures will also need to be updated. Purchasers will have to balance the need to keep P4P programs effective by retiring measures that are no longer useful against the concern that P4P programs provide some stability so that providers can undertake larger investments with the expectation that the reward structure will not be dramatically altered in the short run (and hence a reasonable return on investment can be expected). To this end, explicitly including providers in the decisions about measure selection and retention may be desirable. One approach that has been adopted by some programs, including the California IHA, is to commit to medium-term plans (2 or 3 years) with regard to measure sets and introduce measures in a “testing set” prior to their full inclusion.

To the extent possible, purchasers should use their P4P programs to promote continuous innovation rather than institutionalize a single approach to delivering high-quality care. This concern might be addressed by rewarding, at least in part, outcome measures. Vigorous attempts to keep structure and process measure targets up-to-date with the latest technology will also reduce system rigidity, but political and bureaucratic barriers to change will be inherently limiting.
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The CAHPS Improvement Guide


The CAHPS® Improvement Guide
Practical Strategies for Improving the Patient Care Experience

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Introduction and Overview

Health plans and medical groups have become increasingly interested in quality of care data that they can use to spur and guide improvement efforts. One important source of such information is consumers and patients, who can report on their direct experiences with health care services. Reports that reveal how consumers perceive the quality of their care can offer useful information for evaluating and improving performance — particularly in areas where consumers or patients are the only ones who can accurately judge how well the health care organization is doing. The most widely used instrument for collecting reports and ratings of health care services from the consumer’s perspective is the CAHPS® Health Plan Survey.

Purpose of this Guidebook

The extensive and growing use of CAHPS surveys to assess the quality of health plans and medical groups has created a demand for practical strategies that organizations can use to improve the aspects of performance measured by CAHPS. This Guidebook is designed to help meet this need by describing specific strategies for improving the experience of care. It is aimed at executives, managers, physicians, and other staff who are responsible for measuring performance and improving the quality of health care services. Over time, the Guidebook may be updated to include new improvement strategies and offer additional resources.

Development of this Guidebook was supported by the Centers for Medicare and Medicaid Services (CMS), but the quality improvement (QI) strategies described here are intended to help all health plans and medical groups, regardless of their patients’ source of coverage.

A Quick Overview of CAHPS

In 1995, the federal Agency for Healthcare Research and Quality (AHRQ) initiated the CAHPS program to develop surveys that venture beyond the measurement of patient satisfaction to elicit reports from consumers and patients about their experiences with health care services. Over the past several years, CAHPS has evolved into a coordinated set of survey instruments and reports designed to measure and communicate information on important aspects of health care quality from the consumer’s point of view.

This guidebook focuses on the first CAHPS product, the CAHPS Health Plan Survey, which has been in use nationwide since 1997. New CAHPS products include surveys for assessing the experiences of patients with behavioral health organizations. Surveys on patients’ experiences with medical groups, hospitals, and individual providers are currently being developed and tested.

Overview of the CAHPS Health Plan Survey

The Health Plan Survey includes instruments for gathering information from adults about their experiences with care as well as instruments designed to allow parents or guardians to report on their children’s experiences with care. These instruments can be used with all types of health insurance enrollees (Commercial, Medicaid, and Medicare) and across the full range of health care delivery systems, from fee-for-service to managed care plans. Health plans and other sponsors often add supplemental questions to these instruments to meet other information needs (for example, to collect data on the experiences of adults receiving mental health services).
or to comply with the National Committee for Quality Assurance’s (NCQA) requirements for reporting CAHPS results as part of HEDIS (the Health Plan and Employer Data and Information Set). Versions of the CAHPS Health Plan Survey have been developed and validated in numerous languages, including Spanish.

According to the National CAHPS Benchmarking Database (NCBD), the CAHPS Health Plan Survey is now administered routinely to enrollees of health plans covering an estimated 125 million Americans. (See Table 1.)

**What Does the CAHPS Health Plan Survey Measure?**

To facilitate the reporting of results, CAHPS survey questions are organized into several major groups, called composites. In the CAHPS Health Plan Survey, the composites summarize enrollees’ experiences in the following three domains:

<table>
<thead>
<tr>
<th>Domain</th>
<th>Composite</th>
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<tbody>
<tr>
<td>Access</td>
<td>Getting Needed Care</td>
</tr>
<tr>
<td></td>
<td>Getting Care Quickly</td>
</tr>
<tr>
<td>Interpersonal Care</td>
<td>How Well Doctors Communicate</td>
</tr>
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<td></td>
<td>Courteous and Helpful Office Staff</td>
</tr>
<tr>
<td>Plan Administrative</td>
<td>Customer Service</td>
</tr>
<tr>
<td>Services</td>
<td>Claims Processing(^1)</td>
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</tbody>
</table>

The CAHPS Health Plan Survey also includes four items that ask respondents about their overall ratings of the care they have received:

<table>
<thead>
<tr>
<th>Ratings of Care</th>
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<tbody>
<tr>
<td>Personal Doctor or Nurse</td>
</tr>
<tr>
<td>All Health Care</td>
</tr>
<tr>
<td>Specialist Seen Most Often</td>
</tr>
<tr>
<td>Health Plan</td>
</tr>
</tbody>
</table>

Appendix A lists the rating questions and all of the items included in each reporting composite for the core CAHPS Health Plan Survey;\(^2\) as well as the supplemental items included in the “claims processing” category. The table also shows the response options associated with each item in the survey instrument.

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\(^1\) “Claims processing” is not technically a composite, but this category represents a set of measures collected by nearly all health plans for HEDIS reporting (i.e., supplemental measures required for those plans reporting CAHPS 3.0H).

\(^2\) The core survey is the instrument intended for use with adults enrolled in commercial managed care plans.
Why Is It Important to Improve CAHPS Scores?

The CAHPS surveys and reports are based on extensive research to learn what really matters to health care consumers. If a health plan scores poorly on CAHPS measures, it is not doing well in selected areas that are important to consumers.

Poor performance can have serious ramifications for health plans and providers. In a national study of Medicare managed care plans, Medicare beneficiaries’ overall ratings of their health plans were significantly related to voluntary disenrollment rates ($r=-0.55$) (Terry et al. 2003). The mean voluntary disenrollment rate was four times higher for plans in the lowest 10 percent of overall plan ratings as measured by the CAHPS Health Plan Survey than for plans in the highest 10 percent of overall CAHPS ratings. This is an important finding, especially considering the fact that the CAHPS ratings were obtained by surveying current enrollees and did not include any enrollees who had already exited from their plan. Other studies have shown that poor scores on consumer surveys are related to trust in doctors and the intention to switch doctor and plan (Keating et al. 2002).

CAHPS survey measures also are associated with other aspects of care. For example, CAHPS scores have been shown to be significantly associated with several HEDIS measures of clinical care. A study of patients hospitalized for a heart attack in New Hampshire showed that patients with more positive reports about their care experiences had better health outcomes a year after discharge (Fremont et al. 2001). This study does not prove that poor interpersonal care necessarily results in worse outcomes, but it does indicate that an organization with poor patient reports has problems that affect outcomes.

The cost implications of these types of associations have not been rigorously assessed, but it is likely that the costs associated with poor patient-centered care are substantial.

Who Collects and Reports Results of the CAHPS Health Plan Survey?

Sponsors of the CAHPS Health Plan Survey include government purchasers, private organizations (including employers), and health plans.

CMS as a Major Sponsor

The Centers for Medicare and Medicaid Services (CMS) is a major sponsor of the CAHPS Health Plan Survey. Since 1998, it has collected CAHPS data from members of all Medicare HMOs (also known as Medicare+Choice Organizations) in order to assess their experiences; it has collected data from beneficiaries in the traditional Medicare program since 2001. These results are shared with the health plans as well as with beneficiaries, who are encouraged to use the information to help choose the plan that best meets their needs. (See results available to the public at www.medicare.gov.)

In addition to reporting the results to the public, CMS is increasingly using data from Medicare Managed Care CAHPS in its quality assessment and improvement initiatives:

To Learn More About CAHPS

For more information about the CAHPS program and products, please visit www.cahps-sun.org, a Web site maintained by the CAHPS Survey Users Network (SUN). If you register with the SUN, this site will allow you to download a free copy of the CAHPS Health Plan Survey and Reporting Kit, which includes the survey instruments, technical instructions, and recommendations related to reporting results of the Health Plan Survey. The site also offers guidance related to planning, managing, and evaluating a CAHPS project.
The Medicare Managed Care Performance Assessment (PA) Project

The Medicare Managed Care Performance Assessment (PA) project represents an effort to move away from solely examining an organization’s structure and processes and better assess the overall performance of Medicare managed care contractors. It also provides Medicare+Choice Organizations (M+COs) with more powerful tools for improving their performance.

The PA project reports present comparative data from multiple performance measure sets including, but not limited to, HEDIS, HOS (the Medicare Health Outcomes Survey), and CAHPS. It also includes certain financial measures used by State regulators that oversee the financial well-being of managed care organizations. These reports help CMS staff assess the performance of Medicare managed care plans and assist the M+COs in monitoring and improving their own performance.

The Quality Assessment and Performance Improvement (QAPI) Program

The purpose of this program is to help Medicare managed care plans conduct performance improvement projects that achieve, through ongoing measurement and intervention, demonstrable improvement (defined as “significant improvement sustained over time”) in aspects of clinical care and non-clinical services that can be expected to have a beneficial effect on health outcomes and enrollee satisfaction. CMS standards expect that an organization will:

- Continuously monitor its own performance on a variety of dimensions of care and services for enrollees,
- Identify its own areas for potential improvement,
- Carry out individual projects to undertake system interventions to improve care, and
- Monitor the effectiveness of those interventions.

Past QAPI projects have used CAHPS data to measure plan performance and improvement over time.

Other Sponsors and Users of CAHPS Data

Other sponsors and users include:

- **States**: Over half of all state Medicaid programs are now using the CAHPS Health Plan Survey to monitor the performance of managed care plans and primary care coordination programs serving enrollees in Medicaid and State Children Health Insurance Programs (SCHIP). Some release the information in public reports.

- **The Department of Defense**: The Department of Defense administers the CAHPS Health Plan Survey to evaluate the performance of its TRICARE health benefit plans.

- **Public and private employers**: A growing number of private and public employers, including the US Office of Personnel Management, use results of the CAHPS Health Plan Survey to make contracting decisions and to facilitate consumer choice of plans.

- **NCQA**: The National Committee for Quality Assurance (NCQA) in Washington, DC, requires CAHPS data from health plans seeking accreditation or participating in the public reporting of HEDIS.
Who’s Responsible for Results of the CAHPS Health Plan Survey?

While the CAHPS Health Plan Survey is administered at the health-plan level, the results cover the performance of both the health plan and the medical groups that care for the health plan’s enrollees. That is, some items in the CAHPS Health Plan Survey pertain to functions performed at the plan level (e.g., administrative services), while others address experiences at the level of care delivery (e.g., doctor communications). Consequently, before you can determine how to improve performance, it is important to distinguish who is accountable for the various aspects of performance being measured. The following table summarizes responsibility at the composite level.

Table 3. Who Is Accountable for CAHPS Performance?

While the locus of accountability will vary by organization, this table identifies which CAHPS domains and composites are associated primarily with the health plan and which are associated primarily with the provider network. For some aspects of care measured by the CAHPS Health Plan Survey, accountability for performance rests with both the plan and the provider network. The interventions and improvement strategies presented in the fourth section of this Guide are identified as the responsibility of either the plan, provider group, or both.

<table>
<thead>
<tr>
<th>Reports on Care</th>
<th>Who Is Accountable?</th>
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<tbody>
<tr>
<td><strong>Domain</strong></td>
<td><strong>Composite</strong></td>
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<td>Access</td>
<td>Getting Needed Care</td>
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<td>Getting Care Quickly</td>
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<td>Interpersonal Care</td>
<td>How Well Doctors Communicate</td>
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<td>Courteous and Helpful Office Staff</td>
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<th>Ratings of Care</th>
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<td>Personal Doctor or Nurse</td>
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<td>Specialist Seen Most Often</td>
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<td>All Health Care</td>
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<td>Health Plan</td>
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In those cases where accountability for CAHPS reports and ratings lies with the provider network, it is important to recognize that health plans still play a major role because they can influence the performance of medical groups through incentive programs and educational interventions designed to change provider behavior. Health plans can also develop systems for medical groups that help them deliver care more effectively and efficiently.
A Guide to the Guidebook

As illustrated on the following page, the Guidebook is organized into four sections:

- **Section 1** reviews five behaviors common to health care organizations that have been effective in improving their CAHPS-related performance.
- **Section 2** discusses ways to analyze data from the CAHPS Health Plan Survey in order to identify opportunities to improve experience with care.
- **Section 3** walks through the basic steps of a CAHPS-related quality improvement process.
- **Section 4** presents nearly 20 strategies that health care organizations can implement in order to help improve consumers’ and patients’ experiences with care. Some strategies are more appropriate for health plans, while others are intended for medical groups. But nearly all require some level of cooperation among plans and the providers in their network.

The strategies address each of the CAHPS reporting composites (including claims processing), as well as supplemental items related to home health and preventive care services for Medicare beneficiaries. To help you find the most pertinent ideas, a table at the beginning of this section shows which strategies you can use to address specific problem areas (by category and by measure). This table also indicates whether health plans or medical groups (or both) would be accountable for the problem area, and therefore responsible for implementing the strategy.

The summaries of each strategy cover the following questions:

- What is the problem that is shaping the patient’s or member’s experience with the health care organization?
- What is the practice that can help address this problem? What is its purpose? What benefits does it offer to patients, providers, and plans? How has it been implemented?
- What are the published results of an evaluation (if any)?
- What are some key resources for more information on the strategy?

In addition, at the end of this guidebook, there is a complete bibliography with additional citations and resources related to the quality improvement initiatives.
A Guide to the Guidebook

Section 1. Setting the Stage: An Infrastructure that Supports Improved Performance

Section 2. Identifying Opportunities to Improve

For each opportunity:

Section 3. Implementing the CAHPS Improvement Cycle

Plan Strategy

Reassess & Respond

Monitor Strategy

Develop and Test Strategy

Section 4. Ideas for Improving Experiences with Care

- Getting Needed Care
- Getting Care Quickly
- How Well Doctors Communicate
- Customer Service
- Claims Processing
- Home Health and Preventive Services
Improving CAHPS scores often requires new tools and may challenge existing practices in your organization. It also takes time to work through the quality improvement (QI) process, i.e., to identify weaknesses, develop and apply solutions, and refine your strategies until they have a measurable and sustainable impact. Because of these challenges, it can be useful to start by assessing whether your organization operates in a manner that is associated with the successful implementation of CAHPS-related QI programs.

This section briefly reviews five behaviors common among organizations that are committed to improving their performance:

1. Focusing on microsystems (“where the action is”)
2. Cultivating and supporting QI leaders
3. Training staff in QI concepts and techniques
4. Paying attention to customer service
5. Recognizing and rewarding success

Once they become part of the organization’s culture, these behaviors often play a large role in supporting and driving successful efforts to improve members’ and patients’ experiences with health care. If any are missing or inadequate in your organization, you may want to think about ways to introduce them. At the very least, recognize the impact of their absence on efforts to improve CAHPS performance and plan accordingly. You may, for example, need to devote resources to training team members in basic statistical techniques, or set aside time to educate and build support among physicians or board members.

To help you learn more about these issues, a list of Key Resources is provided at the end of this section.
Focusing on Microsystems ("Where the Action Is")

One way for health plans and medical groups to strengthen their QI programs is to think of the organization as a system, or more specifically, as a collection of interrelated “microsystems.” The term “microsystems” refers to the multiple small units of caregivers, administrators, and other staff who produce the “products” of health care – i.e., who deliver care and services on a daily basis. A unit could be a team of primary care providers, a group of lab technicians, or the staff of a call center.

The concept of microsystems in health care organizations stems from research findings indicating that the most successful of the large service corporations maintain a strong focus on the small, functional front-line units who carry out the core activities that involve interaction with customers (Quinn 1992; Quinn, Baruch et al. 1997). Adapting that organizational theory to the health care setting, health services researchers suggest that a microsystem would consist of the following elements (Nelson and Batalden 1999; Berwick 2002):

- A core team of health professionals
- A defined population of people or patients for whom they provide care
- An information environment to support actions of caregivers and patients
- Support staff, equipment, and office environment

These elements work together to perform related clusters of tasks. For a health plan, such tasks could include:

- Enrollment of members
- Disenrollment
- Claims processing
- Member services
- Supporting tasks (e.g., gaining knowledge of patients and populations; measurement of health, health status, and costs of care; measurement of microsystem performance)

For a medical group, tasks could include:

- Assignment of a person to a caregiver
- Orientation to the practice and its services
- First visit, initial assessment, and care planning
- Delivery of health care services: acute, chronic, and preventive

The goal of the microsystem approach is to foster an emphasis on small, replicable, functional service systems that enable front-line staff to provide efficient, excellent clinical and patient-centered care to patients (Nelson and Batalden 1999). To develop and refine such systems, health care organizations start by defining the smallest measurable cluster of activities. Once the microsystems have been identified, a practice or plan can select the best teams and/or microsystem sites to test and implement new ideas for improving work processes, and can then roll out effective changes to the broader organization over time. (Please see Section 3 for more on the role of microsystems in the CAHPS improvement cycle.)
Cultivating and Supporting QI Leaders

Many health care organizations are highly resistant to change. Employees are not encouraged to solve problems on their own, nor do they challenge the status quo. Most are accustomed to following standard operating procedures even when the policies and procedures may seem ineffective and outdated. Given the life and death issues confronted every day in most health care organizations, this risk-averse behavior is neither surprising nor hard to understand.

Because of this pervasive attitude, the search for better solutions and creative new approaches to long-standing problems requires strong and consistent encouragement and support. In order to achieve the goals of better performance on CAHPS measures, it can be useful for health plans and provider networks to cultivate strong leaders throughout their organizations. Leaders are those who can communicate a compelling vision, motivate clinicians and other staff to lower their resistance to change, and effectively and willingly participate in the redesign of new systems of care. Ideally, all levels of staff in the organization should become adept at leading change, making changes, and managing change.

Sources of Leadership

Leadership for quality improvement can emanate from multiple sources: the board, the CEO and senior leadership team, and mid-level managers. Leaders may obtain their power from the authority of a title, through mastery of knowledge, or through the strength of personality or persuasive abilities.

Senior Leadership: Studies suggest that leadership from the top is a key factor in determining whether clinicians and others support and participate in QI efforts (Weiner, Shortell et al. 1997). Senior leaders set the tone and establish the policies and organizational structure that can either strengthen or undermine QI efforts.

Mid-level Management: Because the CAHPS Health Plan Survey asks about processes of care at both the plan and medical group level, the success of efforts to improve CAHPS scores often depends on the involvement, or at least cooperation, of clinicians and medical group staff. Medical group physicians and mid-level managers can also encourage cross-functional improvements in a group practice or ambulatory care site by selecting interdisciplinary team members and physicians with a special interest in QI.

The Board: Finally, strong board leadership can play a crucial role in QI. With the high turnover rates in plan and medical group senior executives, the board can help sustain a corporate culture focused on quality and provide “constancy of purpose” (Weiner, Shortell et al. 1997).

Key Tasks for Leaders at Every Level

Those who study effective leadership have identified ten practices that leaders at all levels can implement to produce and maintain an environment that emphasizes and encourages quality improvement (Langley, Nolan et al. 1996):

1. Link QI goals to the organization’s mission and strategic plan (in other words, integrate improvement planning with business planning).

2. Establish and communicate the purpose of the organization.

3. Adopt and encourage a view of the organization as a system (see the discussion of Microsystems on Page 10).
Attributes of Service-Oriented Leaders

Effective leaders maintain a focus on the needs of those they serve and their employees. Such leaders exhibit many of the following characteristics:

- Energetic, creative
- Participatory, caring
- Listening, coaching and teaching
- Motivating by mission
- Leading by means of personally demonstrated values
- Not...

Not...

- Stately, conservative
- Removed and elitist
- Supervising and managing by command and control methods
- Motivating by fear
- Relying on institutional policies that are meaningless or outdated


4. Use measurement and management’s attention to keep the organization focused on the goals of QI efforts.

5. Allocate financial and other resources (e.g., staff) to QI endeavors.

6. Align incentives and performance appraisals to stimulate QI (i.e., create reward and recognition programs that reinforce the values and goals of the organization; see page 10).

7. Design and manage a system for gathering improvement information.

8. Remove barriers, which could be a function of finances, policies, system failures, internal politics, unsuitable attitudes, or legitimate concerns of personnel.

9. Become directly involved in continuous improvement projects, perhaps by managing individual and team improvement activities.

10. Market and advertise the QI work to the board, staff, and community through interpersonal communication, newsletters, and the media.

While some of these activities may be more appropriate for senior leaders, most can be applied throughout the health care organization.

Training Staff in QI Concepts and Techniques

One requirement for successful QI initiatives is a staff that is familiar with the reasoning that underlies these efforts and comfortable using the required tools and techniques. Many resources and educational programs are available to help organizations accomplish this. Here is a quick review of the kind of investment in training that you might want to make as you lead your health care organization down the path described in this Guidebook. At the end, you will find a list of pertinent readings and other resources.

Since training programs should address the “why” of QI as well as the “what” and the “how”, you may want to start by educating clinical and administrative staff on the central precepts of QI and how it can benefit the organization and its members/patients. It can be especially useful to share information on how others have used this approach to improve patients’ experiences with care and what their responses have been. For example, in a recent survey of physicians,
over three-quarters of those who had been affected by patient satisfaction surveys reported that the impact on the quality and efficiency of their practice has been positive (Haas, Cook et al. 2000; Reed, Devers et al. 2003). Strategies to improve patient satisfaction and involvement can also have an important effect on clinical outcomes and physician satisfaction (see box at right).

Once assigned to CAHPS-related QI teams, staff members will need basic training in specific QI concepts (such as microsystems, change concepts, small tests of change, and the diffusion of innovation) and methods. (Section 3 of this Guidebook discusses several of these concepts and methods in the context of the improvement cycle.) Depending on their role in the team, many staff will also benefit from more advanced training in the effective use of statistical methods, graphic analysis, and multidisciplinary teams. Teams that have had basic training in QI techniques and group work or team building are usually able to achieve success much faster than teams that have had no previous training or experience. However, sometimes teams focus on the training as the “end goal,” making it important to set clear aims for the success of any QI project at the outset.

It is important to note that physicians are unlikely to be familiar with QI methods. While many professionals and managers receive some kind of QI training in their basic education, most physicians do not. Doctors are trained to succeed as individuals but not as members of a team despite the reality that almost everything they aspire to accomplish is dependent on successful relationships with other staff and their patients.

Example of Impact of Improving Patient Satisfaction and Involvement

In the 1980’s, Greenfield and Kaplan (Greenfield, Kaplan et al. 1985) designed a randomized controlled trial to assess the impact of increased patient involvement in care. The patients were visiting a clinic that specialized in ulcer disease.

During a 20-minute session before their regularly scheduled visit, patients in the experimental group received help in reading their medical record and were coached to ask questions and negotiate medical decisions with their physicians. The intervention relied on a treatment algorithm as a guide. Patients in the control group received a standard educational session of equal length.

Six to eight weeks after the trial, patients in the experimental group reported fewer limitations in physical and role-related activities, preferred a more active role in medical decision-making, and were as satisfied with their care as the control group. Analysis of audiotapes of physician-patient interactions showed that patients in the experimental group were twice as effective as control patients in obtaining information from physicians.

Results of the intervention included the following:

- Increased involvement in the interaction with the physician
- Fewer limitations imposed by the disease on patients’ functional ability
- Increased preference for active involvement in medical decision-making
- Improved patient and physician satisfaction with the encounter

“Nothing about medical school prepares a physician to take a leadership role with regard to changes in the system of care.”

(Berwick and Nolan 1998)
Useful Resources on Training

Organizations that Offer Training and Related Resources:

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<th>Address</th>
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<th>Website</th>
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<tr>
<td>American Association of Health Plans (AAHP)</td>
<td>1129 20th Street, NW</td>
<td>(202) 778-3200</td>
<td>(202) 331-7487</td>
<td><a href="http://www.aahp.org">www.aahp.org</a></td>
</tr>
<tr>
<td>American Medical Group Association (AMGA)</td>
<td>1422 Duke Street, Alexandria, VA 22314-3430</td>
<td>(703) 838-0033</td>
<td>(703) 548-1890</td>
<td><a href="http://www.amga.org">www.amga.org</a></td>
</tr>
<tr>
<td>American Society for Quality</td>
<td>600 North Plankinton Avenue, Milwaukee, WI 53203</td>
<td></td>
<td></td>
<td><a href="http://www.asq.org">www.asq.org</a></td>
</tr>
<tr>
<td>Baldrige National Quality Program</td>
<td>National Institute of Standards and Technology (NIST)</td>
<td>100 Bureau Drive Stop 1020, Gaithersburg, MD 20899-1020</td>
<td>(301) 975-2036</td>
<td><a href="http://www.quality.nist.gov">www.quality.nist.gov</a></td>
</tr>
<tr>
<td>Institute for Clinical Systems Improvement (ICSI)</td>
<td>8009 34th Avenue South</td>
<td>(952) 814-7060</td>
<td>(952) 858-9675</td>
<td><a href="http://www.icsi.org">www.icsi.org</a></td>
</tr>
<tr>
<td>The Institute for Healthcare Improvement (IHI)</td>
<td>275 Longwood Avenue, 4th Floor, Boston, MA 02215</td>
<td>(617) 754-4800</td>
<td></td>
<td><a href="http://www.ihi.org">www.ihi.org</a></td>
</tr>
<tr>
<td>Medical Group Management Association (MGMA)</td>
<td>104 Inverness Terrace East, Englewood, CO 80112-5306</td>
<td>(303) 799-1111</td>
<td>(303) 643-4439</td>
<td><a href="http://www.mgma.org">www.mgma.org</a></td>
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General Resources on the Rationale for a QI Approach:


Other Useful Resources:

www.ImprovingYourMedicalCare.org

*The Memory Jogger Series*, A Pocket Guide of Tools for Continuous Improvement and Effective Planning, published by Goal QPC. These pocket guides are designed for use on the job and provide information about basic quality improvement tools, management, and planning tools.
Paying Attention to Customer Service

The ability of health plans and medical groups to deliver high-quality clinical and administrative service to their members and patients depends in part on their understanding of basic customer service principles and their ability to integrate these principles into clinical settings. This section briefly reviews why excellent service is so critical and suggests some steps for achieving better service at the physician, group, and plan level.

Why Worry About Customer Service?

There are several reasons for health care organizations to pay attention to customer service:

- First, better service translates into higher satisfaction for the patient – and subsequently, for the employer who pays most of the bills.
- Second, as in any other service industry, a satisfied (and loyal) member or patient creates value over the course of a lifetime. In the context of health care, this value may manifest itself in the form of repeat visits, trusting relationships, and positive word-of-mouth. A dissatisfied member or patient, on the other hand, generates potential new costs. Patients who are not happy with their plan or clinician may not follow clinical advice, can develop worse outcomes, and are likely to share their negative stories with friends and family members.
- Third, existing patients and members are an invaluable source of information that can help health care organizations understand how to improve what they do and reduce waste by eliminating services that are unnecessary or not valued.

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Excellence is an art won by training and habituation. We are what we repeatedly do. Excellence, then, is not an act, but a habit.

— Aristotle

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Finally, poor customer service raises the risk of a negative “grapevine effect.” Over 50 percent of people who have a bad experience will not complain openly to the plan or the medical group. But research shows that nearly all (96 percent) are likely to tell at least 10 other people about their bad experiences (American Society for Quality 1999).

Health care organizations also need to pay attention to customer service because service quality and employee satisfaction go hand-in-hand. It is almost impossible to find high employee satisfaction in organizations that have low patient satisfaction. And organizations that place a premium on customer service tend to have high employee satisfaction as well.

Employees often are frustrated and angry about the same things that bother patients and members: chaotic work environments, poor systems, and ineffective training. No amount of money, signing bonuses, or other tools currently used to recruit hard-to-find staff will offset the negative impact of these problems on staff. The real cost of high turnover may not be the replacement costs of finding new staff but the expenses associated with lost organizational knowledge, lower productivity, and decreased customer satisfaction.

**Some Advice on Achieving Better Customer Service**

The most successful service organizations pay attention to the factors that ensure their success: investing in people with an aptitude for service, technology that supports front-line staff, training practices that incorporate well-designed experiences for the patient or member, and compensation linked to performance. In particular, they recognize that their staff value being able to achieve good results, and they equip the staff to meet the needs of members and patients. For health plans, this could mean developing information systems that allow staff to answer members’ questions and settle claims quickly and easily; for provider organizations, it could mean providing the resources and materials that clinicians need to provide high-quality care in a compassionate, safe environment.

Experts on delivering superior customer service suggest that health care organizations adopt the following set of principles (Leebov, Scott et al. 1998):

1. Hire service-savvy people.
2. Establish high standards of customer service.
3. Help staff hear the voice of the customer.
4. Remove barriers so staff can serve customers.
5. Reduce anxiety to increase satisfaction.
6. Help staff cope better in a stressful atmosphere.
7. Maintain your focus on service.
Many customer-service programs have been developed for companies outside of health care. Although the strategies are similar, Leebov and Scott have adapted this work for health care settings in ways that increase its credibility and buy-in, especially from clinical staff. Their books and articles are packed with practical, step-by-step instructions about how to identify and solve customer service problems through the health care delivery system.

**For More Details**

Some of the strategies in Section 4 elaborate on the principles cited on the previous page. See:

- Idea D.1: Listening Posts
- Idea D.5: Standards for Customer Service

To learn more about all of these principles, please refer to the following books:


**Recognizing and Rewarding Success**

The pursuit of better performance benefits greatly from positive incentives, whether at the organizational level or the individual level. Rewards can be financial or non-financial, but what matters is that they are directly linked to either the effort to improve or, ideally, the actual improvement.

**External Rewards**

The last several years have seen a growing interest in the idea of rewarding health care organizations that exhibit good quality or a commitment to improving their performance. Until recently, most of these rewards have come in the form of public recognition. For example:

- The Pacific Business Group on Health, a large business coalition in California, awards a “Blue Ribbon” to the health plans that meet specified performance standards each year.
- The National Business Coalition on Health, an organization of nearly 90 employer-led coalitions in the United States, recently initiated an annual “Innovation Awards” program in which health plans compete for recognition in several categories, such as consumer education and disease management. A panel of experts evaluate the entries that health plans submit; winners are recognized at the annual NBCH conference.

Superior performance also receives public recognition through the growing use of health plan and provider organization “report cards.” Many large employers, local buying coalitions, and government purchasers (such as Medicare and state Medicaid agencies) are producing printed and Web-based reports with comparative information on the quality of health care organizations (mostly plans and hospitals). Their goal is to provide employees and beneficiaries with better information for making health care decisions.
These public reports often highlight organizations that achieve better results than others on standardized measures such as CAHPS and HEDIS. While the impact of public reporting has not been extensively evaluated, there is some evidence that making performance information public stimulates quality improvement activities in areas where performance is reported to be low (Hibbard, Stockard et al. 2003).

More recently, purchasers and payers have explored ways of offering either increased market share or higher financial payments for good quality:

- Both General Motors (GM) and the Buyers Health Care Action Group (a purchaser coalition based in the Twin Cities) have programs to direct employees to higher quality plans and providers. GM sets lower employee contributions for plans with higher quality scores. The Twin Cities group similarly adjusts employee premiums according to cost tiers that enable consumers to identify quality differences among care systems.

- In California, a multi-stakeholder leadership group called the Integrated Healthcare Association (IHA) has initiated a statewide “pay for performance” program. In this program, six health plans will use common measures to evaluate the performance of their contracted physician groups serving commercial HMO enrollees, and develop individual bonus programs that will pay significant financial incentives based on that performance.

- The “Bridges to Excellence” program is a national group of employers, physicians, health plans and patients committed to realigning everyone’s incentives around higher quality. Bridges to Excellence will encourage increased accountability and quality improvements through the release of comparative provider performance data, as well as through higher payments to providers that meet specified quality goals.

- The Central Florida Health Care Coalition plans to set payments to individual physicians according to their performance on a combination of patient survey scores and clinical quality measures.

**Internal Rewards**

External reward systems motivate the leadership and the staff of an organization to focus on quality. Internal reward systems pay close attention to the front-line staff and middle managers who do what is necessary to achieve the external rewards. Reward and recognition programs usually include formal programs, day-to-day feedback, and informal recognition programs.

**Formal Programs**

Examples of formal programs include:

- Staff Recognition awards that focus on different behaviors, i.e., service excellence, clinical competence, teaching, and mentoring

- Years of service awards: 5, 10, and 25 years

**Day-to-Day Feedback**

Managers provide consistent and timely feedback to employees about their performance. Experts confirm that providing praise in a timely manner does have a positive effect on employee motivation and sense of belonging. Some organizations develop formal coaching programs to assist managers in coaching and providing feedback to their employees and peers.

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“Creating loyalty means giving employees more for their labor than just a paycheck. Both research and personal experience tell us that people work for a sense of accomplishment and the recognition of others”.

(Gelinas and Bohlen 2002)
Informal Recognition Programs (e.g., R.E.W.A.R.D.)

Many employees go above and beyond their assigned duties to assist patients, other staff, clinicians, and the community. It is important to encourage the recognition of these individuals for their customer service, teamwork, integrity, or overall positive attitude. Research indicates that informal recognition by managers is a key motivating factor for effective job performance (McElroy 2001).

One example of an informal program is called R.E.W.A.R.D., which stands for Recognition of Employees When Achievement & Responsibility is Displayed:

**How to Recognize**

Some organizations create a J.A.C.K. In-The-Box, where J.A.C.K. stands for Job Acknowledgement Care Kit. The JACK In-The-Box provides a number of rewards that can be used for instant recognition when situations “pop” up. These can include gift certificates, time off, extra vacation days, or other small tokens of appreciation scaled to fit the accomplishment.

Draw on your understanding of the person you want to recognize when selecting the recognition item. Some people like public recognition of their efforts; if you are not sure, ask the person what he or she would be comfortable with.

**When to Recognize**

There are no rules about how often recognition should take place. Ideally, recognition should take place as soon as possible, whenever you want to say “Thanks” or “Congratulations”

**What to Recognize**

People can be recognized for many things. Here are just a few:

- Exceptional job performance
- Excellent team work
- Outstanding customer service
- Extraordinary performance of regular duties in a particularly difficult circumstance
- Extremely good performance of regular duties over a long period of time

**Rewards That Go Beyond the Individual**

Rewards can also be actions and changes that support the entire organization and help transform the culture. Examples include the following:

- Improve your systems to “make it easy to do the right thing” and improve quality of life for front-line staff.
- Make sure people have the aptitude, training, and the resources they need to do a job well done.
- Give star performers the opportunity to attend conferences of their choice and/or receive tuition reimbursement for courses that advance their expertise.
- Tell stories, create legends and celebrate “heroes.”
- Help people get recognition internally and externally through presentations at meetings and conferences, newsletters, and local media.
- Recognize people personally for behavior consistent with the organization’s stated philosophy and rules.
- Use thank you notes, voice mailboxes that allow patients to compliment staff, and public postings of thank-you letters from grateful patients and families.
- Be aggressive about the management of excellence.
- Show respect for people. Start everything on time.
- Invite front-line staff to meet with senior management and the board routinely to improve communication and trust in management.
A “Good Catch” (i.e., the person took the initiative to nip a problem in the bud or avoid a disaster)

Active participation in projects

Applying new skills and knowledge

Meeting goals and targets

Displaying commitment and loyalty to the organization

Demonstrating innovation through new ideas and initiatives

Orientation

Orientation of new employees is the best place to begin the education about the culture of your organization. It is also an excellent way to highlight how the internal reward and recognition system is linked to the philosophy of care and organizational standards.

The objective of orientation should be to do the following:

Instill a feeling of self-worth

Create a sense of belonging

Develop an attitude of pride and confidence in oneself and the organization

Spark a desire to succeed

Enhance the relationship between the employee and the organization

Compensation and Benefits

Compensation and benefits can be designed to reinforce the desired behaviors and performance standards of the organization. Compensation levels can be linked to meeting service-oriented performance standards, coaching and mentoring goals for managers, and other indirect reward activities such as completing performance reviews on time.

Cafeteria-style benefit packages help meet the needs of a diverse workforce without creating a sense of inequity in your workforce. Some organizations offer unusual benefits such as pet insurance, health club memberships, flexible spending accounts for medical and childcare expenses and even home financing assistance and education.

In summary, there are many effective ways to reward and recognize employees. The most important consideration in the design of your program is to make sure your program supports your organization’s culture and philosophy of care.

“Most people can’t sleep the night before their first day of a new job. They probably decided two weeks in advance what they’d wear. They can’t wait to get started, meet new people, see everything, do great things. After all of the anticipation, their first day is usually a big yawn. They find themselves hidden away in a room somewhere filling out forms. What a mistake! First impressions are lasting.”

For More Information


Section 2: Using CAHPS to Identify Opportunities for Improvement

CAHPS data can help you pinpoint opportunities for improvement at both the health plan level and the medical group level. However, it is not sufficient to simply look for the composites with low scores. You need to know how your scores compare to those of other organizations and which issues are most relevant to consumers.

This section explains how to interpret what CAHPS data tell you about your organization’s strengths and weaknesses. It also suggests ways to consult other sources of performance data in your organization and conduct further analyses that can confirm or more precisely define the problem(s) you wish to focus on. Specifically, this section presents five ways in which you can analyze your performance:

- Analyze performance compared to benchmarks
- Identify key drivers of poor performance
- Analyze performance at a more detailed level
- Identify changes, or trends, in performance
- Consider other indicators of performance

In some cases, you may be able to obtain sufficient information from using just a few of these methods. However, each one should offer progressively greater insight into the data. Where possible, the discussion includes examples of how actual health plans and provider organizations have analyzed their CAHPS survey data.

Analyze Performance Compared to Benchmarks

A review of your CAHPS survey results will yield little useful information about opportunities for improvement unless you are able to answer the question, “compared to what?” Thus, before you can identify specific problem areas, formulate an improvement plan, and select appropriate strategies, you have to look at your results in the context of appropriate and relevant benchmarks.

In addition to examining the comparison norms that your survey vendor may have provided, you can use any of three major sources of national CAHPS benchmarks to assess your survey results:

- National CAHPS Benchmarking Database
- National Committee for Quality Assurance’s (NCQA) Quality Compass
- CMS’s CAHPS Survey Results for Medicare Managed Care Plans and the Traditional Medicare Program

National CAHPS Benchmarking Database

Funded by the Agency for Healthcare Research and Quality (AHRQ), the National CAHPS Benchmarking Database (NCBD) is the national repository of CAHPS survey data. All sponsors of CAHPS surveys that are administered independently according to CAHPS survey specifications are invited to participate in the NCBD. Participating sponsors include state...
Medicaid agencies, State Children’s Health Insurance Programs (SCHIP), public and private employers, individual health plans, Medicare, and the Department of Defense.

Commercial, Medicaid, and SCHIP sponsors submitting data to NCBD receive a free, customized report that compares their own results to the following:

- National results for adults
- Results for the plan model type
- Results for the local sponsor’s market

All results are case mix-adjusted to account for differences in respondent age, education, and self-reported health status. Detailed bar charts display results for each of the CAHPS composites, individual items, and ratings. The intent of these comparisons is to help plans identify potential strengths and weaknesses in their performance and to target areas for quality improvement. A sample bar chart from an NCBD report is shown in Figure 1.

Further information on the NCBD is available on the NCBD Web site (http://ncbd.cahps.org).

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**Figure 1. Sample Comparative Bar Chart from an NCBD Report**

**Getting Needed Care**

This chart displays the data for "Getting Needed Care", an aggregate of survey questions 7, 9, 24, and 26. Results for the individual questions are displayed on each of the following pages.

<table>
<thead>
<tr>
<th>Plan</th>
<th>A big problem</th>
<th>A small problem</th>
<th>Not a problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan A (n=1713)</td>
<td>6%</td>
<td>18%</td>
<td>75%</td>
</tr>
<tr>
<td>Plan B (n=542)</td>
<td>6%</td>
<td>15%</td>
<td>80%</td>
</tr>
<tr>
<td>Plan C (n=405)</td>
<td>11%</td>
<td>18%</td>
<td>76%</td>
</tr>
<tr>
<td>Plan D (n=495)</td>
<td>9%</td>
<td>16%</td>
<td>75%</td>
</tr>
<tr>
<td>Plan E (n=544)</td>
<td>9%</td>
<td>22%</td>
<td>68%</td>
</tr>
<tr>
<td>Plan F (n=460)</td>
<td>9%</td>
<td>22%</td>
<td>70%</td>
</tr>
<tr>
<td>Plan G (n=337)</td>
<td>11%</td>
<td>20%</td>
<td>62%</td>
</tr>
<tr>
<td>Plan H (n=403)</td>
<td>11%</td>
<td>20%</td>
<td>68%</td>
</tr>
<tr>
<td>Plan I (n=478)</td>
<td>6%</td>
<td>16%</td>
<td>78%</td>
</tr>
<tr>
<td>Plan J (n=473)</td>
<td>9%</td>
<td>12%</td>
<td>83%</td>
</tr>
</tbody>
</table>
Section 2: Using CAHPS to Identify Opportunities for Improvement

NCQA Quality Compass

The National Committee for Quality Assurance (NCQA) maintains a database of CAHPS survey data obtained from health plans that have submitted their results for accreditation or as part of their annual reporting of HEDIS measures. The NCQA Quality Compass database includes both summary level and respondent level data. Several combinations of data files are available for purchase. You can use these data files to create reports that address your specific needs.

In addition to the Quality Compass database, NCQA also publishes an annual *State of Health Care Quality* report that provides regional CAHPS benchmarks, but only for rating items and report composites (not individual items). This annual report also provides trend data for these measures, but only at the national level.

Case Example: Comparing Harvard Pilgrim’s CAHPS Results to National and Regional Benchmarks

Harvard Pilgrim Health Care is a large managed care organization based in Boston, Massachusetts. The plan has implemented and used CAHPS for several years, both to comply with NCQA accreditation requirements as well as to monitor and improve performance on key aspects of the enrollee experience.

In analyzing its 2001 CAHPS results, Harvard Pilgrim found that some of its CAHPS scores lagged behind either or both national and regional averages. The chart below shows the plan’s composite scores compared to benchmarks obtained from the NCQA’s Quality Compass 2001. The comparison indicates lower than regional performance for the “Getting Care Quickly” and “How Well Doctors Communicate” composites.

![Figure 2: HPHC Performance on CAHPS Composites Compared with National and Regional Averages (NCQA Quality Compass 2001)](chart)

Source: Harvard Pilgrim Health Care, 2002
**CMS’s CAHPS Survey Results for Medicare Managed Care Plans and the Traditional Medicare Program**

Since 1998, CMS has been collecting CAHPS survey data each year for all managed care plans serving Medicare beneficiaries. More recently, CMS began collecting data for its traditional Medicare program as well. Selected results of these surveys are available to plans, providers, and the public through the Medicare Compare Web site (www.medicare.gov).

The Agency also provides its managed care plans with a detailed print report and a CD-ROM containing their Medicare Managed Care CAHPS (MMC-CAHPS) results at the contract level. Starting in 2003, CMS will provide an on-line interactive system for viewing CAHPS results (see more details in the box on page 30).

Like the previous reports, the MMC-CAHPS reports show how the results for each of the Medicare managed care plans within a state compare to state, regional, and national averages. They also provide national benchmarks based on the performance of plans in the 90th percentile. The report includes detailed bar charts as well as an executive summary with highlights of the health plan’s “strengths” and “opportunities for improvement,” defined as CAHPS scores that are statistically higher or lower, respectively, than the state average.

---

**Identify Key Drivers of Poor Performance**

Once you have completed the basic analysis to identify areas of relative weakness, the next stage is to figure out what specific problems are behind the poor performance.

**What Influences Overall Ratings?**

There are many ways to identify areas for which you want to develop improvement activities. These include how common the problem is, how different your plan or medical group score is from others, existing opportunities for improvement activities, and how important the issue is. One way to assess the “importance” of an issue is to assess how strongly a particular rating is associated with a patient’s overall rating of their care or health plan. This is an indirect way of assessing how important different issues are to your enrollees.

A statistic commonly used to assess such associations is called a correlation coefficient. A correlation can range from –1.0 to +1.0. If the correlation is between zero and 1, then the overall rating (e.g., how would you rate your care?) is positively influenced by the responses to the problem question (e.g., did you have a problem getting care you needed?). A correlation coefficient of 1.0 means the overall rating is perfectly correlated with the problem question. If the correlation is zero, the two are independent, i.e., not related.

Using correlations to determine what specific issues are related to overall ratings is sometimes referred to as “key driver” analysis. This type of analysis can be conducted on large or small samples of data. It is important to analyze your own data for such correlations, because they can be different for each sample.
As an example, Table 4 below presents correlations between the CAHPS composites and the overall ratings of doctor, care, and plan for the 1999 Medicare managed care survey data. (Appendix B shows the correlations between responses to specific CAHPS items and the overall ratings using the same data.) The white boxes indicate composites that appear to be important predictors of ratings because the correlation coefficients are greater than 0.45. Determining what is a high or low correlation is often a matter of judgment, and should be informed by looking at analyses of several different samples to see how they compare.

### Table 4. What Drives Ratings? An Example from Medicare

Correlations between CAHPS Composite Scores and Overall Ratings for Medicare Managed Care Respondents*

<table>
<thead>
<tr>
<th>Composite</th>
<th>Doctor Rating</th>
<th>Care Rating</th>
<th>Plan Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Needed Care</td>
<td>0.31</td>
<td>0.45</td>
<td>0.38</td>
</tr>
<tr>
<td>Getting Care Quickly</td>
<td>0.31</td>
<td>0.43</td>
<td>0.30</td>
</tr>
<tr>
<td>Getting Care</td>
<td>0.15</td>
<td>0.24</td>
<td>0.30</td>
</tr>
<tr>
<td>Health Plan Information and Customer Service</td>
<td>0.15</td>
<td>0.27</td>
<td>0.51</td>
</tr>
<tr>
<td>Customer Service Helpful</td>
<td>0.19</td>
<td>0.32</td>
<td>0.59</td>
</tr>
<tr>
<td>Courtesy and Respect of Doctor’s Office Staff</td>
<td>0.35</td>
<td>0.49</td>
<td>0.32</td>
</tr>
<tr>
<td>Communication with Providers</td>
<td>0.51</td>
<td>0.67</td>
<td>0.40</td>
</tr>
<tr>
<td>Getting Special Services through the Health Plan</td>
<td>0.21</td>
<td>0.33</td>
<td>0.41</td>
</tr>
</tbody>
</table>

* The plan-level composites listed in Table 4 and Appendix B are different than the reporting composites for the CAHPS Health Plan Survey because the analyses are based on associations between plan scores, in contrast to analyses that examine relationships among responses by the same individual.

Source: 1999 Medicare Managed Care CAHPS Survey

### A Graphic View of Improvement Opportunities

Although you can use correlation scores to help identify specific composites or questions for focusing improvement efforts, a graphic that displays both the level of a problem and the correlation can make it easier to set priorities. For example, Figure 3 on the next page plots the value of each composite score (transformed to a 0 to 100 scale) and its correlation coefficient for the Rating of Overall Health Care. By looking at this picture, one can quickly judge that “customer service” would be an important area to focus on.

These kinds of analyses and graphical representations of relationships are not difficult to do, but they do require time and access to statistical support. Many survey vendors are capable of providing these services as part of the CAHPS data collection and reporting process.
Figure 3: Priority Matrix of CAHPS Composites
Based on Correlation of Composites
to Rating of Overall Health Care

Top Priority
Low achievement scores on composites highly correlated with rating of overall health care.

High Priority
Already doing very well on composites highly correlated with rating of overall health care. Could decide to try to do even better

Medium Priority
Low achievement scores on composites only slightly associated with ratings of overall health care.

Low Priority
Doing very well on composites not highly correlated with rating of overall health care.

Customer Service
How Well Doctors Communicate
Getting Needed Care
Courteous and Helpful Office Staff
Getting Care Quickly

* An achievement score is ranked “high” when score is 85 or higher.
** An association with Overall Health Care is ranked “high” when correlation is .45 or higher.
**Analyze Performance at a More Detailed Level**

When diagnosing or targeting problems, it is often helpful to take a closer look at the details underlying your CAHPS results. This section discusses how you can conduct more detailed analyses of performance at the level of population sub-groups and at the level of provider sub-groups.

**Analyses with Population Sub-Groups**

You can use simple cross-tabulations and statistical tests for differences in proportions to identify important differences in care experiences across different population sub-groups. For example, analyzing your CAHPS results by the age, gender, race, or health status of survey respondents can reveal groups of consumers or patients with particular problems that are not obvious when looking only at the overall results at the level of the plan or provider group. Additionally, many of the items used as “screener” questions in CAHPS (e.g., “In the last 12 months, did you see a specialist?”) can be useful for defining population sub-groups for broader analysis, i.e., not just to analyze the items to which the particular screener was attached. This type of detailed analysis can also point you towards potential paths for designing improvement strategies and targeting intervention efforts, so that you can focus resources in a way that achieves maximum benefit.

Examples of key population sub-groups that can be defined using standard CAHPS items include:

<table>
<thead>
<tr>
<th>Population Sub-Group</th>
<th>Examples/Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male/Female</td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>Young adults, adults, older adults, elderly, etc.</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Options include tracking the survey version used, if translations are available, or response of “translated the questions into my language” in the item on how someone helped you complete the survey</td>
</tr>
<tr>
<td>English/Non-English, if known</td>
<td>Options include an additional item added to sampling frame file that vendor can later append to results file or adding a supplemental survey item</td>
</tr>
<tr>
<td>Tenure with health plan</td>
<td>Question 4 on CAHPS 3.0H (HEDIS version of CAHPS)</td>
</tr>
<tr>
<td>Tenure with provider, if available</td>
<td>Options include an additional item added to sampling frame file that vendor can later append to results file or adding a supplemental survey item</td>
</tr>
<tr>
<td>Health care utilization</td>
<td>Saw a specialist, sought phone advice, made a routine appt, had an illness or injury that needed care right away, used emergency room (0, 1, &gt;1), number of visits to doctor’s office</td>
</tr>
<tr>
<td>Plans services utilization</td>
<td>Sent claims, sought information, called customer service, complained, experienced paperwork</td>
</tr>
<tr>
<td>Rating of health</td>
<td></td>
</tr>
</tbody>
</table>
CMS Offers Interactive Tool to Analyze Results by Characteristics

CMS’s Health Plan Management System (HPMS), which is available to Medicare managed care plans, includes an on-line interactive module for viewing results from the Medicare Managed Care CAHPS (MMC-CAHPS) surveys. (See http://www.cms.gov/healthplans/hpms/). This new tool will allow health plans, CMS staff, and researchers to either explore MMC-CAHPS information from a prior year (data is available from 1998 on) or explore current data in new ways.

The CAHPS Module of the HPMS includes the following features:

- **Summary:** Provides an overview of plan-level and state-level information regarding composite ratings, overall ratings, preventative care rates and response rates.
- **Survey Results:** Allows users to view detailed results and frequency tables and download complete health plan reports as PDF files.
- **Special Analyses:** Allows users to view:
  - survey results by beneficiary characteristics such as age, gender, race, and health status;
  - comparisons of managed care to fee-for-service results at the national and state level;
  - a report describing response patterns to the MMC-CAHPS survey of current members; and
  - reports of selected analyses by the MMC-CAHPS team (covering topics such as the reports and ratings of vulnerable sub-populations and the stability of the CAHPS rating over time).

More sophisticated analysts may want to consider using multiple regression techniques to identify population differences in care experiences and/or ratings. In a series of regression equations, the dependent variable would be the individual rating item responses or dichotomized report item responses (e.g., Problem vs. No Problem, Always or Usually vs. Sometimes or Never), while the independent variable would be dummy variables for the population sub-groups (as listed above). This approach also permits the use of interaction terms (e.g., age/sex, health care utilization, and health rating).

**Analyses of Provider Sub-Groups**

Another approach involves analyzing your CAHPS data at the medical group or practice site level. This type of “sub-plan” analysis usually requires additional sampling of enrollees or patients in order to have enough survey responses to be able to meaningfully compare CAHPS scores across specific groups or practice sites. This is especially true if medical groups or practice sites differ either in the population sub-groups they serve or in how they serve various population sub-groups. (Keep in mind that some sub-groups may not be large enough to allow for analyses of performance at the level of the delivery system or medical group.) Although additional data collection is required, the extra cost and effort could be worth it, as illustrated by the example of Harvard Pilgrim Health Care in the box at right.
Table 5. Analyzing Medical Group Performance at Harvard Pilgrim

As noted earlier, Harvard Pilgrim found that some of its CAHPS scores lagged considerably behind both national and regional averages as well as some of its key competitors in the Massachusetts market. By analyzing the data more finely at the medical group level, Harvard Pilgrim discovered that one particular medical group’s CAHPS scores were lower than those of the rest of the plan’s provider network.

As shown in the table below, this particular medical group’s scores for 2001 had declined significantly from 2000 levels in several areas. Based on these findings, Harvard Pilgrim decided to target its initial intervention activities with this medical group rather than throughout the entire provider network. See the case example on page 44 to learn more about this intervention and its results.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Care Quickly (% Always/Usually)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get help when called during regular office hours</td>
<td>85.5</td>
<td>-2.0</td>
<td>83.5</td>
<td>-8.3</td>
</tr>
<tr>
<td>Get appointment for regular/routine care</td>
<td>76.8</td>
<td>-7.3</td>
<td>69.5</td>
<td>-13.8</td>
</tr>
<tr>
<td>Get appointments for illness/injury</td>
<td>87.5</td>
<td>-8.3</td>
<td>79.2</td>
<td>-9.5</td>
</tr>
<tr>
<td>Wait at doctor’s office or clinic more than 15 minutes (% Never/Sometimes)</td>
<td>69.7</td>
<td>10.7</td>
<td>80.4</td>
<td>4.0</td>
</tr>
<tr>
<td>How Well Doctors Communicate (% Always/Usually)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctors/health providers listen carefully</td>
<td>89.2</td>
<td>-2.2</td>
<td>87.0</td>
<td>-6.4</td>
</tr>
<tr>
<td>Doctors/health providers explain things understandably</td>
<td>92.4</td>
<td>-2.0</td>
<td>90.4</td>
<td>-6.8</td>
</tr>
<tr>
<td>Doctors/health providers show respect</td>
<td>90.8</td>
<td>-0.4</td>
<td>90.4</td>
<td>-5.8</td>
</tr>
<tr>
<td>Doctors/health providers spend enough time</td>
<td>84.6</td>
<td>-1.5</td>
<td>83.1</td>
<td>-3.1</td>
</tr>
<tr>
<td>Courteous and Helpful Office Staff (% Always/Usually)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office staff treated with respect</td>
<td>95.0</td>
<td>0.9</td>
<td>95.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Office staff helpful</td>
<td>89.8</td>
<td>0.7</td>
<td>90.5</td>
<td>-2.0</td>
</tr>
</tbody>
</table>

Identify Changes in Performance Over Time

Whether you are comparing your CAHPS scores to data from external sources or investigating performance at the sub-population or sub-plan level, it can be useful to track whether and how performance has changed over time. Monitoring progress from year to year can help substantiate whether a perceived problem area is real or just a one-time dip, and can also reveal whether or not actions taken to address problems are having the desired effect. For the purposes of quality improvement, the collection of data should be both frequent and targeted so that you can assess the impact of interventions over time.

Of course, the ability to track performance over time requires the use of periodic and consistent surveys. When measures change, it may be difficult to identify trends. Because of changes in three of the four items in the “Getting Care Quickly” composite, for example, Harvard Pilgrim was unable to follow through on a planned intervention to reward a medical group’s performance based on trend analyses for this measure.

Table 6. CAHPS Performance Trends at HPHC

At Harvard Pilgrim, analyses indicated that some of the plan’s CAHPS scores were trending down while national scores, on which the NCQA accreditation benchmarks are based, were trending up. For example, for both the plan and the medical group referred to in Table 5, the composite score for “How Well Doctors Communicate” declined significantly from 2000 to 2001, after having risen between 1999 and 2000. This change signaled a need to further explore this aspect of the group’s performance. A discussion with the medical group about the reasons for their dramatic decline reinforced the plan’s decision to focus an intervention on this area of the group’s performance.

See the case example on page 44 to learn more about this intervention and its results.
Consider Other Indicators of Performance

As a supplement to the CAHPS survey results, you may want to consult other data sources related to service quality to gain a more complete picture of performance or to verify suspected problem areas. Examples of these other data sources include enrollee complaint and grievance data, topic-specific survey data, and feedback from your staff about recurring problem areas.

One benefit of performance indicators from data sources such as complaints and grievances is that you can typically see the impact of changes in process more quickly than you can with CAHPS survey data obtained once a year. This is due to the lag time associated with the CAHPS survey administration process, as well as the 12-month reference period for survey respondents. The ability to use multiple data sources to corroborate changes in performance, in the form of improvements or declines, will greatly enhance the accuracy of performance monitoring and the effectiveness of interventions over time.

Getting Behind the Numbers: Focus Groups and Interviews

In the face of uncertain or ambiguous survey results, a common tendency for many quality improvement managers is to decide to do yet another survey. But sometimes you have to get the story “behind the numbers” and learn more about the problem through focus groups or key informant interviews. These qualitative techniques, applied in groups or individually with staff, members, and patients, can provide insights that cannot be achieved through data analysis alone.

For example, if a medical practice received poor scores on the question,

“In the last... months, when you called during regular office hours, how often did you get the help or advice you needed (for your child)?”

the QI team might assume that the problems is related to waiting on hold for too long. Through staff interviews, patient interviews, and perhaps a “walkthrough” of the phone system, you may identify other problems. Perhaps the voice message has a lengthy set of choices that have nothing to do with patient needs, or the practice does not have enough phone lines so patients...
get a busy signal. The problem may also stem from inefficient phone triage or poor communication between the people taking the messages from patients and the clinical staff. The appropriate intervention would depend on the precise nature of the problem.

Similarly, if a health plan scored low on the question,

“With the choices your (child’s) health plan gave you, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?”

the team might discover through interviews or focus groups with members and staff that the problem is related to the size or composition of the provider network. Or you may find that the score is driven by dissatisfaction with the provider directory. For example, a printed directory may be outdated by the time it goes to press. Or it may not include sufficient information to help people make informed choices, such as hours of operation, location of practices on public transportation lines, or languages spoken by the professional staff. The intervention to fix a wrong-sized provider network is totally different than the one required to provide a more member-centered provider directory.

For more information on the use of focus groups and interviews, as well as a list of pertinent resources, see Idea D.1: Listening Posts in Section 4 of this Guidebook.
Section 3: Implementing the CAHPS Improvement Cycle

The analyses suggested in Section 2 can help you better understand the nature of any CAHPS-related performance problems and identify specific opportunities to improve services and care. Once you have completed these analyses, the next step is to identify and implement one or more appropriate strategies for addressing these problems.

It is important to remember that the effort to improve performance is not a linear process with a beginning and end, but a cyclical process that leaves room for testing, tweaking, and expanding interventions along the way. The following graphic lays out the basic elements of this cycle.

This section offers a brief overview of the four steps laid out in this cycle. For detailed examples of how organizations are implementing this cycle, see the Institute for Healthcare Improvement’s public Web site (www.QualityHealthCare.org). Under Topics, click on Office Practices: Access: Improvement Stories.
Plan Strategy

The first stage in the cycle is to prepare for change by bringing together the people who need to be involved, setting goals (or, if interventions have already been put in place, confirming that the goals have not changed), and investigating your options. As you complete each round of the improvement cycle, this stage becomes the point at which you adjust your plans and refine or add interventions.

Create a Team

The “right” team can play a major role in determining the success of a quality improvement initiative. The key is to carefully select people with the right skill set and mindset for quality improvement – people who are opinion leaders, are respected by their peers, and have appropriate expertise for the purposes of the intervention.

That said, it is better to choose people who are enthusiastic about the chance to improve care, even if they lack some of the formal skills or responsibilities. Sometimes staff are selected for a team because of their titles or their clinical or administrative expertise, even though they are clearly not convinced that quality improvement is effective or that patient opinions matter. These teams are rarely successful because they spend most of their time debating about whether they should even be involved or they simply do not show up or do the work.

Also, it is important to recognize that a team may consist of only one or two people, especially in a smaller medical practice where each staff person may have multiple responsibilities. This approach is fine, as long as it is a conscious decision rather than an oversight.

In larger organizations, effective performance improvement teams typically include:

- A senior leader responsible for providing resources, removing barriers, and publicizing the work of the team through the organization;
- A physician or nurse leader if the intervention involves any aspect of clinical care;
- A team leader who is usually someone with administrative or clinical responsibility at the microsystem level. This person could be a nurse, a practice manager, a pharmacist, or the supervisor of a call center, depending on the focus of the team;
- A data analyst to track the performance measures and share them with the team and senior leader; and
- Other team members who represent the different disciplines or types of staff who own a “piece of the problem”.

Once the team has been established, its job is to initiate the process of improving performance by developing answers to the following questions (Langley, Nolan et al. 1996):

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?
- How can we test and refine interventions over time?

Resources on Teamwork


Lawrence D. From Chaos to Care: The Promise of Team-Based Medicine, Cambridge, Massachusetts: Perseus Publishing, 2002.

Establish/Confirm Goals

The team’s first task is to establish an aim or goal for the improvement work. By setting this goal, you will be better able to clearly communicate your objectives to all of the sectors in your organization that will be needed to support or help implement the intervention.

The goal should reflect the specific aspects of CAHPS-related performance that the team is targeting. It should also be measurable and feasible. One of the limitations of an annual CAHPS survey as a measurement tool is the lag time between the implementation of changes, the impact on people’s experiences, and the assessment of that impact. For that reason, the team needs to define both ultimate goals as well as incremental objectives that can be used to gauge short-term progress.

For example, a team concerned about improving performance on the “getting care quickly” composite may set a one-year goal of a 10 percent increase in its composite score. At the same time, it could specify goals for the number of days it takes to get an appointment for a non-urgent visit, or the length of time that patients wait to see a clinician. Similarly, a team focusing on overall ratings may set goals for complaint rates for the plan as a whole or for individual medical groups, which can be tallied and reviewed on a monthly basis.

Investigate Potential Interventions

With objectives in place, the next task of the team is to identify possible interventions and select one that seems promising.

How to Find Possible Solutions

Section 4 of this Guidebook reviews a number of different strategies that health care organizations can use to improve different aspects of their CAHPS performance. This digest of QI ideas offers an excellent starting point, but it is by no means comprehensive. There are many sources for new ideas or different ways of doing things both within and outside of health care. Consequently, QI teams should make an effort to develop and cultivate systematic ways of identifying effective solutions.

Examples of Aims for Improving Access to Clinics

Collaborative teams working on improving access to care established the following aims for their project:

- 50% reduction in current waiting time (in days) to see a urologist
- Same-day access to primary care physicians
- Decrease the office visit cycle time to 30 minutes or 1.5 times the actual time spent with the clinician

All improvement requires making a change but not all changes lead to improvement.

Innovation: It’s Only New to You

In health care, innovation does not necessarily refer to the creation of new ideas but to the introduction of previously unknown ways of providing care or services. A new idea might result in a new treatment for a disease or new form of technology such as the MRI. But innovation in health care can also happen when an idea from another industry is applied in a completely different way in a health care organization.

“Innovation is the conception, early adoption and implementation of significant new services, ideas, or ways of doing things in order to improve or reform services or ideas and ways of doing things.” — Everett Rogers, Diffusion of Innovation
New ideas and innovative solutions can be found at conferences or workshops; in the academic literature, the media, and/or the popular press; and through the identification of benchmark practices in health care as well as from other industries, i.e., non-competitive benchmarks. Another important source of ideas and strategies is patients and their families – whether through direct interviews, focus groups, or Patient and Family Advisory Councils.

Another useful way to develop and learn innovative approaches is by participating in a learning collaborative or an action group. Sometimes organizations send a well-chosen team to participate in learning collaboratives and then have the team set up a “shadow collaborative” at home to help foster the spread of innovation.

Another effective tactic is to travel to other places. Resistant or hesitant staff members are often “unfrozen” by visiting another highly respected site that has successfully implemented a similar project or by visiting an industry or company outside of health care to get new ideas. Some health plans, for example, have learned how to improve their call center operations by sending staff to visit mail-order catalog houses or brokerage firms.

**How to Choose an Intervention**

In order to decide which new ideas or benchmark practices to implement, the QI team needs to consider several factors:

- **Compatibility with the organization and local culture:** Serving Cuban coffee in the waiting room of the clinics of a Miami health plan may be very member-friendly, for example, but it is not likely to be viewed with the same enthusiasm by plan members in Arizona or Massachusetts.

- **Technical merit:** The ideas that are most likely to be adopted are those that provide significant advantages over existing practices for both patients and providers – whether in the form of increased efficiency, higher patient and employee satisfaction, or improved outcomes. All QI efforts ultimately have to answer the question: “What’s in it for me?” Most of the ideas presented in Section 4 of this Guidebook meet these criteria, in that they make life better for all involved.
Fit with the problem: The best intervention will be one that suits the specific problem you need to address (or can be tailored as needed). To ensure a good fit, the QI team should seek input from both affected staff as well as patients or members. If you ignore either source of information in your planning, you may choose an intervention that will not fix the real problem.

Develop and Test Strategy

Once you have selected an intervention, the next stage of the cycle is to develop and test specific changes. It helps to think of this stage as a number of “mini-cycles” within the larger improvement cycle, in the sense that the team is likely to go through multiple iterations of testing and refining before the specific changes add up to a real intervention. These mini-cycles are often referred to as PDSA, which stands for Plan, Do, Study, and Act. To learn more about this approach, see the Institute for Healthcare Improvement’s public Web site at www.QualityHealthCare.org.

Some of the tasks involved in this process include:

- Selecting measures to monitor progress
- Developing changes using selected intervention
- Conducting small tests of change
- Adapting changes to organizational context
- Identifying and dealing with barriers

Select Measures to Monitor Progress

When a team establishes its goal, it typically specifies one or more performance metrics that will allow it to assess whether a change actually leads to improvement. These measures should be clearly linked both to the larger goal and to the intervention itself. For example, if the goal is to speed specialist referrals, you could measure the time it takes to get a response from the specialist’s office or an approval from the health plan. See Table 7 on the next page for a detailed example of measures and goals for an intervention to improve asthma care.

Once you have established practical measures, you will be able to produce visual displays of your performance over time by tracking the metric on control or run charts. Control and run charts are helpful tools for assessing the impact of process improvement and redesign efforts on a regular basis – monthly, weekly, or even daily. In contrast to tables of aggregated data (or summary statistics), which present an overall picture of performance at a given point in time, run and control charts offer a ongoing record of the impact of process changes over time.

An example of a control chart is presented on page 41. This example is drawn from an on-line data management system developed by Quality Data Management, Inc. The graphic shows different data collection points plotted over time for a survey question related to patients’ ability to reach the practice by phone. By measuring and tracking results to this question at regular and frequent time intervals, managers can discern how process improvement interventions relate to changes in survey results. If an intervention appears to have positive results, it can be continued and sustained; if not, it can be modified or discontinued.
### Table 7. Example of Goals for an Intervention to Improve Asthma Care

**Asthma Population**

**Monthly Measures and Goals Appropriate for a Collaborative**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Monthly Population Statistic</th>
<th>Typical Levels</th>
<th>Appropriate Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptom-free days (Incidence of daytime wheeze and nighttime cough in past 2 weeks)</td>
<td>Average for asthma population</td>
<td>&lt;60%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Functionality measure</td>
<td>Average for asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment of health status Lost time from work or school</td>
<td>Percent reporting improvement Days per 100 asthma patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Balancing Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency department visits for asthma</td>
<td>Percent of asthma population</td>
<td>3-5%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Asthma hospital days for asthma patients</td>
<td>Total days per 1,000 patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total medical costs per patient</td>
<td>Median of asthma population</td>
<td>10% reduction</td>
<td></td>
</tr>
<tr>
<td>Patient satisfaction with asthma care</td>
<td>Percent of patients rating very good</td>
<td>50-80%</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>Number of clinic visits</td>
<td>Visits per 100 asthma patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital admissions for asthma</td>
<td>Percent of asthma population</td>
<td>&gt;3%</td>
<td>&lt;2%</td>
</tr>
<tr>
<td><strong>Patient Behavioral Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of self-management plan</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of flow meters at home</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone-based medication change</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Process Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment with maintenance anti-inflammatory medication</td>
<td>Percent of asthma population</td>
<td>&lt;70%</td>
<td>100%</td>
</tr>
<tr>
<td>Written asthma action plan</td>
<td>Percent of asthma population</td>
<td>&lt;50%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Patients with self-management goals</td>
<td>Percent of asthma population</td>
<td>&lt;50%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Patients completing assessment tool</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of standardized educational materials</td>
<td>Percent of physicians in office</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from the Institute for Healthcare Improvement’s Breakthrough Collaborative College 2001
Develop Changes Using Selected Intervention

Depending on the nature of the intervention, you may want to break it down into a set of related but discrete changes. For example, if the team decides to implement a new specialist referral process, you could begin by making changes to the procedures used to communicate with the specialist’s office. The communication process with the health plan might then be the target of a separate change.

Conduct Small Tests of Change

Small tests of change help refine improvements by incorporating small modifications over time. Because interventions are tested by one or two staff at a time with just a few patients, you can easily modify them to resolve problems as you receive feedback from patients and/or staff. Look for staff who are open to new ways of doing things to conduct the tests.

Small tests of change are very powerful for several reasons:

- They allow for incremental modifications of interventions to fix problems, which helps the larger implementation run smoothly.
- You don’t have to convince an entire unit or team to try a new idea. New ideas can be quickly tested and then implemented if they prove to be effective with volunteers who are ready to try new strategies.
- Failures are low-risk because you have not tried to change the entire culture.
- You create enthusiasm and positive “word-of-mouth” for early successes.
- It is easier to accumulate evidence for implementation when people are engaged in making something work rather than focused on the “failure analysis”.

![Figure 5: Example of a Control Chart](image)
Example of Implementing a “Small Test”

A Kaiser clinic in Atlanta wanted to implement “doc talk” cards to improve communication with patients (see Idea C.2: Tools to Help Patients Communicate in Section 4), but the staff and doctors were resistant, fearing that it would create an even bigger demand for time with the physician. The clinic administrator found one receptionist and one doctor who were willing to pilot the concept.

What They Did: The receptionist gave out index cards to the doctor’s patients and asked them to write down their questions. When the receptionist and doctor realized that patients did not know how to organize their questions, they added topics to the cards (e.g., “Symptoms,” “Medications,” “Tests”) to help patients focus their concerns. In other settings, staff have also used questions, such as, “What are your top three questions for your doctor today?”.

What Happened: The patients and their doctor found this method very helpful at maximizing the time they had in the visit. Word of mouth about the success of this approach spread quickly to the rest of the practice. Soon enough, the other doctors in the practice were knocking on the administrator’s door wanting to use the “doc talk” cards and upset because they hadn’t been invited to try them. The administrator had gained support for the method, resolved problems with the cards quickly, and rolled out the new system in a quarter of the time it usually took to implement changes in the practice.

Adapt Changes to Organizational Context

Most improvement strategies require some adaptation to the culture of the organization. Patient-centered improvement strategies have to take into account the needs of patients and their families as well as the staff. Moreover, front-line staff will frequently resist new ideas if they are not allowed to modify them and test their own ideas.

The adages about “not invented here” and “sometimes you have to do something once so you never do it again” are alive and well in the culture of healthcare. To succeed in implementing improvement strategies, it is wise to let staff adapt change concepts in small tests of change rather than insist they be followed like a recipe.

Identify and Deal with Barriers

As part of its work, the team will need to take a hard look at the psychological, physical, and procedural barriers it has to address in order to accomplish its aim. Barriers to improvement come in many guises. Psychological barriers such as fear of change, fear of failure, or fear of loss of control or power can be significant impediments to overcome. Other common barriers include:

- Lack of training in customer service, quality improvement methods, or clinical areas such as doctor-patient communication;
- Inadequate staffing levels;
- Poor information technology systems; and
- Outdated or misguided organizational policies. For example, many organizations are so concerned about violating HIPAA regulations that they do not want to give information to a patient about their own care for fear of violating patient confidentiality.
Despite the serious nature of some of these barriers, few are large enough to bring a project to a halt. Typically, they are cited as excuses for two of the fundamental barriers to change: the fear of new ways of doing things and the fear of failure.

The team also needs to identify factors that could facilitate their work. Facilitators can include financial or non-financial incentives, such as gain sharing for staff if a specific target is met or better quality of life for the staff when a problem is fixed. Other facilitators include picking an aim that is part of the organization’s strategic plan or one that will improve other goals the staff care about, such as clinical outcomes. Sometimes, the facilitator is the ability of a change to help achieve secondary goals. For example, improvements in doctor-patient communication may decrease medication errors, or the development of shared care plans may improve clinical outcomes and reduce no-shows for appointments or procedures.

**Monitor Strategy**

Building off of the development and testing of specific changes, the third stage involves implementing the intervention (i.e., the combination of discrete changes) and evaluating progress against the interim measures as well as the goals of the QI project. Did the intervention succeed in reducing the time required to see a specialist? Are members and patients reporting better experiences with regards to getting care quickly? The case example on the next page illustrates how Harvard Pilgrim Health Care tracked and evaluated the impact of one medical group’s interventions to improve performance on the “doctor communication” composite.

This part of the improvement cycle is really the ongoing work of health care and where your teams will spend most of their time. There are no set rules about how long this part of the cycle takes. It depends in part on how frequently you monitor your CAHPS scores and other QI measures.

However, it is important not to let the work go on too long without ongoing measurement in order to make sure you are making progress toward achieving your aims. Most monitoring takes place on a monthly to quarterly basis.
Case Example: A Combination of Strategies Improves Performance at Harvard Pilgrim

As described in Section 2 of this guide, Harvard Pilgrim Health Care had decided to focus an intervention on a particular medical group based on its analyses of CAHPS performance at the plan and medical group level. The plan’s strategy was to offer the group a financial bonus for achieving targeted performance levels on two composites by 2003.

In response to this incentive, along with other market influences, the medical group went through a process of identifying the factors underlying their performance and designing an ambitious set of interventions to address them. Some of these interventions have been implemented, while others are still in development. Interventions that contributed to performance in the Doctor Communication area include the following:

- Concerned about disruptions in doctor-patient relationships due to physician turnover and dissatisfaction levels among the physicians (which, according to published studies, are associated with dissatisfaction levels among patients), the group implemented changes designed to improve physician satisfaction and reduce turnover. These changes included different staffing levels, a redesign of the care delivery model, and better practice supports.

- To support better physician-patient relationships, the redesign of care delivery also focused on increasing the percent of patients who have a personal relationship with their PCP and their PCP’s team (nurse practitioner, OB-GYN). The group transitioned to a different primary care model where patients are much better able to see their own doctor, rather than a practice partner.

As shown in the table below, these interventions have contributed to improvements in the group’s performance in the Doctor Communication measures.

In 2003 and 2004, the group is implementing additional practice changes, including online scheduling, open access, email consultation, and a shared patient health record. (See Section 4 for a discussion of these ideas.) Harvard Pilgrim anticipates further improvements in the group’s scores over time as a result of these new interventions.

**Doctor Communication Composite Top Box Scores Over Time**

<table>
<thead>
<tr>
<th>Medical Group versus Benchmarks: 1999-2003</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart.png" alt="Graph showing improvement in Doctor Communication Composite Top Box Scores Over Time" /></td>
</tr>
<tr>
<td><strong>Goal = 2001 NE Region 90th percentile (93.9)</strong></td>
</tr>
<tr>
<td><strong>Intervention with Medical Group</strong></td>
</tr>
<tr>
<td><strong>Measurement Year</strong></td>
</tr>
<tr>
<td><strong>NE Average</strong></td>
</tr>
<tr>
<td><strong>- HPHC</strong></td>
</tr>
<tr>
<td><strong>- Medical Group</strong></td>
</tr>
</tbody>
</table>

Source: Harvard Pilgrim Health Care, 2003
Reassess & Respond

The fourth stage of the cycle is the point at which the team reviews the impact of the intervention to see if its goals were met, and conducts a new set of analyses of its CAHPS performance. The purpose of this effort is to get some sense of what worked, what did not work, and what further or new interventions may be needed.

To the extent that the intervention was successful, the team should also be thinking about ways to sustain the improvements over time. One important step that is often neglected is the communication of successes throughout the organization – to organizational leaders as well as clinical and administrative staff. By cultivating discussion of successful projects, the team helps to reinforce the culture of quality improvement, build credibility for the intervention, reward those involved, and foster the spread of effective innovations.

The organization’s leaders can also promote the work of specific QI teams through the use of media and through interpersonal communication. Successful innovations can be highlighted in staff newsletters and in staff and board meetings. Leaders can also reinforce the importance of the project by sitting in on QI team meetings or visiting the practice site or unit involved in the project.

A related practice is the communication of changes beyond the walls of the organization to members or patients. By telling people about innovative practices – whether through newsletters, Web sites for members, or handouts in the office – you can raise the standard of expectations.

The Role of Social Interaction in the Spread of Innovation

What’s the most effective way to spread a message? Research on the diffusion of innovation has found that social interaction plays a crucial role. Most people do not evaluate the merits of an innovation on the basis of scientific studies; they depend on the subjective evaluations of “early adopters” and model their behaviors after people they respect and trust (Rogers 1995). For that reason, choosing the right team members and opinion leaders is critical to efforts to diffuse innovation.

Opinion Leaders: People within an organization who informally influence the actions and beliefs of others. They are not necessarily people with executive titles.

Depending on the project, you may want to try to identify the opinion leaders that would be helpful to involve (assuming they are open to change and new ideas). Interpersonal communication works best when the people communicating the message are respected opinion leaders within the same staff group whose behavior they are trying to change. For example, an innovation to change the behavior of receptionists will often move quickly if it is lead by a respected receptionist or office manager. This same person would probably not be as effective at getting physicians in a medical group to change their communication style with patients.

Ask people whose opinion they respect. Who do they follow when they have adopted new clinical or improvement practices? Who do your staff look to when they want advice or information about the organization?
**Key Resources**

**Institute for Healthcare Improvement – www.ihi.org**

The Institute for Healthcare Improvement (IHI) is a not-for-profit organization driving the improvement of health by advancing the quality and value of health care. IHI offers resources and services to help healthcare organizations make dramatic and long-lasting improvements that enhance clinical outcomes and reduce costs. It offers training programs, conferences, publications, conference calls, and opportunities to participate in collaborative projects to improve the delivery of care.

**www.improveyourmedicalcare.com** – This Web site introduces medical practices to a collaborative program intended to help them assess and improve their ability to deliver high-quality care, particularly to patients with chronic diseases. The training program is sponsored by the Dartmouth Hitchcock Medical Center and the Institute for Healthcare Improvement (IHI).

**Recommended Reading on QI Techniques**


**Recommended Reading on the Dissemination of Innovative Practices**


Section 4: Things You Can Do to Improve Your CAHPS Scores

As the third section of this guidebook explains, one of the first tasks of the QI team is to identify strategies with the potential to address any weak spots in CAHPS-related performance. To give you a head start, this section presents over 20 ideas for improving the patient’s and consumer’s experience of care as measured by the CAHPS surveys. The descriptions in this section are intended to give you enough information to determine whether the strategy is pertinent and worth further investigation. Specifically, they should help you to develop a better understanding of the following:

- The strategy’s connection to the patient’s or member’s experience with health care services
- Its goals and likely benefits
- Barriers to its implementation
- Its impact (when possible)

In addition, the guidebook provides a list of pertinent resources, including books, Web sites, and journal articles, that you can consult for more information.

These ideas represent a range of possible solutions. Some are easy and inexpensive to implement, while others are much more logistically complex and require a significant investment of money, resources, and time. If you find a strategy that seems appropriate but overwhelming, it’s fine to “start small” — perhaps by tackling one component of the strategy, or even by stepping back to assess your organization’s readiness for the change. In addition, some strategies are likely to address the performance issue directly, while others may have an indirect impact. Some may allow you to see results right away, whereas others may take months or even years to make a measurable difference.

As you review your options, consider the immediate and long-term goals of your organization, as well as its constraints. You may also want to explore ways to stage the implementation of one or more strategies to make them more feasible.

Perhaps most importantly, these strategies are directed at two different stakeholders: health plans and medical groups. As discussed in the introduction to this guidebook, both the plan and the medical practice can contribute to performance on each of the CAHPS Health Plan Survey composites, but primary responsibility can be assigned to one or the other. One way to think about this is that both are in the “car,” but one is the driver and the other is a passenger — helping to navigate but not at the wheel.

Thus, both health plans and provider groups have to make changes to improve patients’ experiences with a given aspect of care, even though one may be more “responsible” than the other for that element of health care services. Health plans, for example, often play an important role in equipping providers with the skills and tools they can use to improve communication with patients — even though it’s the provider who does the communicating.

In the table on the next two pages, you can see which strategies are most appropriate for each set of stakeholders (“1” indicates primary responsibility; “2” indicates secondary responsibility). When you turn to the individual descriptions, look for a round icon that indicates who is expected to participate in the strategy. If both plans and groups are involved, the one likely to take on primary responsibility for design and implementation is indicated in bold type.
**How the Ideas Are Organized**

The improvement strategies are grouped into six headings that represent the five CAHPS reporting composites as well as the supplemental items for HEDIS and Medicare beneficiaries:

- Getting Needed Care
- Getting Care Quickly
- How Well Doctors Communicate
- Customer Service (combines two composites—Courteous and Respectful Office Staff and Health Plan Customer Service—with the HEDIS items about complaints)
- Claims Processing (from CAHPS 3.0H, the HEDIS version of the CAHPS Health Plan Survey)
- Home Health and Preventive Services

The following table is designed to help you find the strategies most likely to address the performance weaknesses you identified by analyzing your CAHPS data. It lists each of the CAHPS items (by topic) and indicates which strategies you might want to consider and whether the strategy is more appropriate for health plans or provider groups (“1” indicates primary responsibility for design and implementation; “2” indicates secondary responsibility). When you turn to a set of related strategies, you will see the full CAHPS questions.

### Table 8. An Index of Improvement Strategies

<table>
<thead>
<tr>
<th>Composite and Short Title of Item</th>
<th>Locus of Accountability</th>
<th>Relevant Strategy</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health Plan Provider Network</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A. Getting Needed Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem getting a personal doctor</td>
<td>1</td>
<td>Beyond-the-Basics Provider Directory</td>
<td>54</td>
</tr>
<tr>
<td>Problem getting referral to a specialist</td>
<td>1</td>
<td>Beyond-the-Basics Provider Directory</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Rapid Referral Programs</td>
<td>57</td>
</tr>
<tr>
<td>Problem getting needed care</td>
<td>2</td>
<td>Rapid Referral Programs</td>
<td>57</td>
</tr>
<tr>
<td>Problem with delays in care because waiting for health plan approval</td>
<td>2</td>
<td>Rapid Referral Programs</td>
<td>57</td>
</tr>
<tr>
<td><strong>B. Getting Care Quickly</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Got help or advice by phoning clinic</td>
<td>2</td>
<td>Access to Email</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Internet Access</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Standards for Customer Service</td>
<td>119</td>
</tr>
<tr>
<td>Got routine appointment as soon as wanted</td>
<td>—</td>
<td>Open Access Scheduling</td>
<td>62</td>
</tr>
<tr>
<td>Got needed care right away</td>
<td>—</td>
<td>Open Access Scheduling</td>
<td>62</td>
</tr>
<tr>
<td>Taken to exam room within 15 minutes</td>
<td>—</td>
<td>Streamlined Patient Flow</td>
<td>68</td>
</tr>
</tbody>
</table>
### C. How Well Doctors Communicate

<table>
<thead>
<tr>
<th>Composite and Short Title of Item</th>
<th>Locus of Accountability</th>
<th>Relevant Strategy</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors listen carefully</td>
<td>Health Plan 1</td>
<td>Provider Network 2</td>
<td>Training Physicians to Communicate</td>
</tr>
<tr>
<td></td>
<td>— Health Plan</td>
<td>1</td>
<td>Group Visits</td>
</tr>
<tr>
<td></td>
<td>2 Health Plan</td>
<td>1</td>
<td>Tools to Help Patients</td>
</tr>
<tr>
<td></td>
<td>2 Health Plan</td>
<td>1</td>
<td>Shared Decision Making</td>
</tr>
<tr>
<td>Doctors explain things clearly</td>
<td>Health Plan 1</td>
<td>Provider Network 2</td>
<td>Training Physicians to Communicate</td>
</tr>
<tr>
<td></td>
<td>— Health Plan</td>
<td>1</td>
<td>Group Visits</td>
</tr>
<tr>
<td></td>
<td>1 Health Plan</td>
<td>2</td>
<td>Evidence-based Information</td>
</tr>
<tr>
<td></td>
<td>1 Health Plan</td>
<td>2</td>
<td>Support Groups/Self Care</td>
</tr>
<tr>
<td></td>
<td>1 Health Plan</td>
<td>2</td>
<td>Shared Decision-Making</td>
</tr>
<tr>
<td>Doctors respected your comments</td>
<td>Health Plan 1</td>
<td>Provider Network 2</td>
<td>Training Physicians to Communicate</td>
</tr>
<tr>
<td></td>
<td>2 Health Plan</td>
<td>1</td>
<td>Tools to Help Patients</td>
</tr>
<tr>
<td></td>
<td>2 Health Plan</td>
<td>1</td>
<td>Shared Decision Making</td>
</tr>
<tr>
<td>Doctors spent enough time</td>
<td>— Health Plan</td>
<td>1</td>
<td>Group Visits</td>
</tr>
<tr>
<td></td>
<td>1 Health Plan</td>
<td>2</td>
<td>Evidence-Based Information</td>
</tr>
<tr>
<td></td>
<td>— Health Plan</td>
<td>1</td>
<td>Planned Visits</td>
</tr>
</tbody>
</table>

### D. Customer Service

#### Courteous and Helpful Office Staff

<table>
<thead>
<tr>
<th>Composite and Short Title of Item</th>
<th>Locus of Accountability</th>
<th>Relevant Strategy</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor’s staff courteous and respectful</td>
<td>— Health Plan</td>
<td>1</td>
<td>Listening Posts</td>
</tr>
<tr>
<td></td>
<td>— Health Plan</td>
<td>1</td>
<td>Service Recovery</td>
</tr>
<tr>
<td></td>
<td>— Health Plan</td>
<td>1</td>
<td>Patient/Family Councils</td>
</tr>
<tr>
<td></td>
<td>— Health Plan</td>
<td>1</td>
<td>Standards for Customer Service</td>
</tr>
<tr>
<td>Doctor’s staff helpful</td>
<td>— Health Plan</td>
<td>1</td>
<td>Listening Posts</td>
</tr>
<tr>
<td></td>
<td>— Health Plan</td>
<td>1</td>
<td>Service Recovery</td>
</tr>
<tr>
<td></td>
<td>— Health Plan</td>
<td>1</td>
<td>Patient/Family Councils</td>
</tr>
</tbody>
</table>

#### Health Plan Customer Service

<table>
<thead>
<tr>
<th>Composite and Short Title of Item</th>
<th>Locus of Accountability</th>
<th>Relevant Strategy</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem finding or understanding written information</td>
<td>1 Health Plan</td>
<td>—</td>
<td>Listening Posts</td>
</tr>
<tr>
<td></td>
<td>1 Health Plan</td>
<td>—</td>
<td>Claims Processing</td>
</tr>
<tr>
<td>Composite and Short Title of Item</td>
<td>Locus of Accountability</td>
<td>Relevant Strategy</td>
<td>Page No.</td>
</tr>
<tr>
<td>----------------------------------</td>
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</tr>
<tr>
<td><strong>Health Plan Customer Service (continued)</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Problem getting help from customer service</td>
<td>❶</td>
<td>—</td>
<td>Listening Posts 109</td>
</tr>
<tr>
<td></td>
<td>❶</td>
<td>—</td>
<td>Service Recovery 114</td>
</tr>
<tr>
<td></td>
<td>❶</td>
<td>—</td>
<td>Claims Processing 125</td>
</tr>
<tr>
<td>Problem with paperwork</td>
<td>❶</td>
<td>—</td>
<td>Claims Processing 125</td>
</tr>
<tr>
<td><strong>Additional CAHPS 3.0H Questions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claims handled in reasonable time</td>
<td>❶</td>
<td>—</td>
<td>Claims Processing 125</td>
</tr>
<tr>
<td>Claims handled correctly</td>
<td>❶</td>
<td>—</td>
<td>Claims Processing 125</td>
</tr>
<tr>
<td>Amount required made clear</td>
<td>❶</td>
<td>—</td>
<td>Claims Processing 125</td>
</tr>
<tr>
<td>How long to resolve complaint</td>
<td>❶</td>
<td>—</td>
<td>Service Recovery 114</td>
</tr>
<tr>
<td>Complaint settled satisfactorily</td>
<td>❶</td>
<td>—</td>
<td>Service Recovery 114</td>
</tr>
<tr>
<td><strong>E. Home Health and Preventive Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problems with home health services</td>
<td>❶</td>
<td>—</td>
<td>Innovative Home Health Services 130</td>
</tr>
<tr>
<td>Had mammogram</td>
<td>❶ ❷</td>
<td></td>
<td>Reminder Systems 132</td>
</tr>
<tr>
<td>Had prostate screening</td>
<td>❶ ❷</td>
<td></td>
<td>Reminder Systems 132</td>
</tr>
<tr>
<td>Exercising 20 minutes</td>
<td>❶ ❷</td>
<td></td>
<td>Reminder Systems 132</td>
</tr>
<tr>
<td>Had flu shot</td>
<td>❶ ❷</td>
<td></td>
<td>Reminder Systems 132</td>
</tr>
<tr>
<td>Had pneumonia shot</td>
<td>❶ ❷</td>
<td></td>
<td>Reminder Systems 132</td>
</tr>
</tbody>
</table>

**What’s Not Here**

Of course, there are many things beyond the scope of QI initiatives that health plans and medical groups can do to raise their CAHPS scores. Examples include increasing the size of the provider network and redesigning or enhancing the physical plant and facilities in which consumers and patients are treated. These kinds of strategies are not discussed in this Guidebook.
A Recurring Theme: Information Technology in a Supporting Role

A quick review of the list of strategies reveals information technology (IT) at the center of various efforts to improve consumers’ and patients’ experiences with care. However, this does not mean that technology is the answer to all of your problems, nor does it mean that you must rely on technology to improve the quality of care. Information technology is a valuable tool for facilitating communication, expediting care, and increasing efficiency – but it also introduces complexity and costs that you must be prepared to handle.

If you decide to harness information technology as a means of improving care, take the time to consider how the technology fits with the larger IT strategy of your organization. With the help of an IT specialist, either as part of the QI team or as a consultant, the team needs to determine what they need the technology to do, whether existing (i.e., in-house) systems can meet those needs, and if not, how a new technology would be integrated with those existing systems. Perhaps more importantly, the team needs to make sure that all stakeholders accept the strategy underlying the technology. In many cases, a new system has been deemed a failure not because of the technology but because the “users” had not bought into the intervention. If the culture is not ready for change, new technologies will invariably fail.

Recognizing that health care organizations adopt expensive new technologies for many reasons, the CAHPS QI team should pay attention to the potential benefits of these systems from the patient’s or member’s perspective, and make sure that those benefits are realized. Electronic data interchange (EDI), for example, is typically regarded as a way to reduce transaction costs by sharing information among providers and insurers electronically. Rather than sending paper back and forth, EDI allows health care organizations to exchange data with insurers in seconds rather than hours or even days or weeks, resulting in cost savings for the plans and providers. But these cost savings do not capture the benefits to patients, such as faster approvals for specialty care and more accurate information about claims.

Electronic medical records (EMRs) are another excellent example of a technology with the potential to vastly improve the experiences of members and patients with health care services. While EMRs are primarily designed for the use of medical personnel, they can be made accessible to patients via the Internet. To many people, EMRs offer the best hope of improving coordination of care among primary care doctors, specialists and the patient. They can also be linked with new systems that are providing evidence-based, customized clinical information directly to patients (for more on this topic, see Idea B.4: Internet Access for Health Information and Advice and Idea C.5: Delivery of Evidence-Based Information).

A number of health care and consumer organizations are advocating an approach to EMRs that would enable patients (rather than health care organizations) to control access to personal electronic records. For more information about this initiative, contact the Patient Safety Institute (www.ptsafety.org).

Example of EDI in Practice

In New England, a group of plans and health systems developed a network called the New England Health EDI Network (NEHEN), which facilitates rapid Internet-based approval from insurers and greatly reduces transaction costs. NEHEN has resulted in substantial cost savings to the participating health care networks. For Caregroup, the cost per authorization request went from $4.74 (for requests by phone, paper, etc.) to 15 cents; for Partners Healthcare System, the cost dropped from $2.64 to 10 cents (Pizzo 2002).
Section 4-A

Improvement Strategies for “Getting Needed Care”

This section presents two ideas intended to make it easier for consumers to choose a personal provider that meets their needs and to get prompt access to other sources of care, including specialists. These strategies include:

1. Beyond-the-Basics Provider Directories
2. Rapid Referral Programs

They focus on performance issues raised by the “Getting Needed Care” composite, which is composed of the following CAHPS questions:

<table>
<thead>
<tr>
<th>CAHPS Questions in the “Getting Needed Care” Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑️ With the choices your health plan gave you, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?</td>
</tr>
<tr>
<td>☑️ In the last...months, how much of a problem, if any, was it to get a referral to a specialist that you needed to see?</td>
</tr>
<tr>
<td>☑️ In the last...months, how much of a problem, if any, was it to get the care you or a doctor believed necessary?</td>
</tr>
<tr>
<td>☑️ In the last...months, how much of a problem, if any, were delays in health care while you waited for approval from your plan?</td>
</tr>
</tbody>
</table>
A.1 Beyond-the-Basics Provider Directories

The Problem

An analysis of responses to the 2002 Medicare Managed Care CAHPS survey found that, on average, nearly a quarter of enrollees experienced some problem finding a primary care provider (doctor or nurse) who could meet their needs (see Table 9 below.) For commercial health plan enrollees, the situation is worse. According to data from NCQA, in 2001, 35 percent of members on average reported a problem finding a provider. And for the plans in the bottom 10th percentile, 45 percent of members reported a problem (NCQA 2002).

Table 9. Problems Getting a Personal Provider: The Experiences of Medicare Managed Care Enrollees

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>10th Percentile</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>90th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>78.85</td>
<td>69.31</td>
<td>74.75</td>
<td>79.67</td>
<td>84.25</td>
<td>87.08</td>
</tr>
<tr>
<td>2001</td>
<td>75.72</td>
<td>65.03</td>
<td>71.00</td>
<td>75.80</td>
<td>81.52</td>
<td>86.41</td>
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<tr>
<td>2002</td>
<td>77.16</td>
<td>65.93</td>
<td>71.57</td>
<td>78.16</td>
<td>83.54</td>
<td>87.31</td>
</tr>
</tbody>
</table>

* Question: With the choices your Medicare plan gave you, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?
Source: Medicare Managed Care CAHPS Survey

To find a personal provider, health plan members generally rely on a provider directory that indicates which doctors, hospitals, and other health care providers are available to them. These directories typically provide the name and contact information for each provider, often organized by location and type of practice. Some also include the hospital affiliation of the doctor, office hours, and languages spoken. Members usually receive a printed provider directory upon enrollment, when they may be asked to choose a primary care provider from the published list. Plans update their directories on a regular basis, to keep current with changes in the provider network.

One problem with this standard approach to directories has been that the printed versions often could not keep up with changes in the network. Members would contact a provider only to find that she was no longer in the network, or would not know of the availability of a provider new to the network. Another issue has been that few directories offer information that can help members figure out which provider would be most appropriate for their needs. This has complicated the process of finding a provider that a member can be “happy with;” some remain unhappily loyal to their initial uninformed choice, while others try out multiple providers looking for the one that suits them.

Primary care physicians (PCPs) also need good information in order to choose the right specialist for a patient. While they may know some specialists through various channels, they frequently face the same problem that members have when trying to choose a primary caregiver, i.e., they lack the data needed to make an informed decision.
The Intervention

In the past decade, methods for organizing and publishing provider directories have evolved rapidly, incorporating new content as well as new delivery mechanisms. For example, some sophisticated directories now include expanded information on the providers in the network, such as personal profiles of providers (background and training, board certification, practice philosophies, photographs) and comparative quality and performance ratings (based on patient survey data, clinical data, or both). To see Web sites where patients can post information about a physician, go to: www.HealthGrades.com and www.TheHealthPages.org.

Some are also taking advantage of new technologies to improve members’ access to up-to-date directory information. While printed directories are still common, many health plans have launched Internet-based directories to provide members with access to information on-line. Web-based directories allow members to search for providers by benefit plan, location, and specialty. They can also include direct links to providers’ Web sites, making it easier for members and patients to obtain detailed information on physician practices, such as office hours, languages spoken, and maps showing where the office is located.

These innovations in provider directories can enhance ease of patient and enrollee access to appropriate caregivers. Improved access to information about providers can in turn improve member relations as well as provider-patient relationships. Finally, expanded provider directories can also be a helpful resource for PCPs seeking to make a good “match” between patients and specialists.

Some Examples

HealthPartners: One example of an innovative on-line provider directory tool is the HealthPartners’ Consumer Choice System (http://www.consumerchoice.com). This system allows both members and non-members to log in and search for providers and clinics in the HealthPartners network by zip code, as well as to compare the quality of clinics using measures of clinical quality as well as consumers’ reports on their experiences with

Results of a Low-Tech Intervention

Enhancements to the provider directory do not require a Web address to be successful. For example, after reviewing member survey results, a mid-sized health plan decided to address its members’ dissatisfaction with the process for choosing a primary care physician. By reviewing complaints, the plan learned that one problem was the requirement that members contact physicians themselves to make sure they were accepting new patients.

What They Did: To deal with this problem, the plan initiated a new process: Three times a year, it asked its PCPs to verify whether they would accept patients for the next four months. Based on that information, the plan updated and printed a new provider directory every four months. Because the directories were current, patients were no longer required to call the primary care provider’s office prior to selecting the provider.

What Happened: This intervention resulted in a one-year increase in the percentage rating the “ease of choosing a personal physician” as either very good or excellent from the baseline of 41 percent to 48 percent. Further interventions to facilitate the process of changing physicians (including the use of a tear-out, postage-paid card in the directory that members could use to notify the plan when selecting or changing providers) boosted the rate to 55.4 percent over two years. Subsequent interventions, including the addition of the provider directory to the plan’s Web site, resulted in further improvements in the score (NCQA 2001).
A special feature of the performance comparisons, called “People Like Me,” presents information on quality of care for specific medical conditions, such as diabetes, or types of people, such as children or adults.

**PacifiCare:** PacifiCare Health Systems’ Doctor Directory (www.pacificare.com) is an on-line directory available to members and non-members that allows them to identify contracted providers by health plan product, type of providers, and location. Special features allow users to customize their search by distance, specialty, and language preference. The PacifiCare Web site also features the Quality Index® profile, a public report on medical group performance. The index rates medical groups and IPAs that contract with PacifiCare on more than 40 measures related to clinical and service quality, affordability, and administrative accuracy.

The CAHPS Improvement Guide

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**Key Resources**


This study of 40 physician directory Web sites found that many of the sites suffered from incomplete physician listings, few search options, and missing, inaccurate, or outdated data. Few Web sites provided information on disciplinary actions, malpractice claims, or mortality rates. And few offered e-patients an opportunity to review or rate their doctors.

**National Committee for Quality Assurance (NCQA).** With funding from the Commonwealth Fund, NCQA has developed recommendations for elements that health plans should include in their provider directories. A report entitled “Recommendations for Improving the Quality of Physician Directory Information” is available. Please contact Linda Shelton (shelton@ncqa.org; 202 955-5165) for more information.

**WebMD** (www.webMD.com). In addition to general health information, WebMD includes a “Find a Doctor” section. The format of this information offers health plans and care systems a model for providing an on-line physician directory.
A.2 Rapid Referral Programs

The Problem

Both the ease and the speed of the specialist referral process are major concerns for patients and their primary care providers. For patients, problems getting a referral are reason enough for dissatisfaction. Patients having trouble getting referrals reported the greatest level of distrust, lack of confidence, and dissatisfaction with their PCP (Grumbach, Selby et al. 1999).

Compounding their frustration is the possibility of delays in care, which generates greater anxiety and contributes to a greater risk of adverse clinical outcomes (Murray 2002). This problem is especially salient for members with chronic illnesses, who typically require regular visits with one or more specialists.

In addition, patients unclear on the process or disconcerted by the wait often have little choice but to call their clinician’s office to seek clarification and assistance, which can add to their frustration (and increases the workload for the office). Some patients end up seeking care elsewhere (e.g., emergency departments and urgent care clinics), and become “no-shows” for the eventual referral appointment.

Specialist referrals are a serious problem for some health plan members. Among Medicare managed care enrollees surveyed in 2002, about 20 percent reported a problem seeing a specialist when needed (see Table 10 below.) Similarly, nearly one quarter of commercial health plan enrollees reported a problem getting a referral to see a specialist. Among the plans in the lowest percentile of performance, roughly a third of the members reported either a small or big problem (NCQA 2002).

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>10th Percentile</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>90th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000*</td>
<td>83.71</td>
<td>75.32</td>
<td>80.00</td>
<td>84.55</td>
<td>88.69</td>
<td>91.51</td>
</tr>
<tr>
<td>2001**</td>
<td>80.48</td>
<td>72.07</td>
<td>76.14</td>
<td>81.90</td>
<td>85.53</td>
<td>88.31</td>
</tr>
<tr>
<td>2002**</td>
<td>79.95</td>
<td>69.94</td>
<td>75.78</td>
<td>81.15</td>
<td>85.29</td>
<td>87.82</td>
</tr>
</tbody>
</table>

* Question in 2000: In the last 6 months, how much of a problem, if any, was it to get a referral to a specialist that you needed to see?
** Question in 2001 and 2002: In the last 6 months, how much of a problem, if any, was it to see a specialist that you needed to see?

Source: Medicare Managed Care (MMC) CAHPS Survey
While several factors contribute to complaints about specialist referrals, one common problem is that physicians’ offices are not set up to handle the referral process efficiently. In particular, they are not communicating well with the specialists, the health plans, or their patients.

**Intervention#1: The Referral Agreement**

Rapid referral programs include a host of strategies intended to reduce the delays associated with specialty referrals and increase satisfaction among patients and doctors. One useful approach is to improve communication between the PCP and the specialist through a referral agreement.

The goals of a referral agreement include the following:

- Speeding the process by which a PCP makes a referral to a specialist
- Reducing the amount of time between the initiation of a referral and the date of the patient’s appointment with the specialist
- Providing the PCP with decision support for the referral decision (typically in the form of guidelines)
- Improving the flow of information among the PCP, the specialist, and the patient

When implemented effectively, this program should result in earlier diagnoses, reduced “no-show” rates at specialists, better patient outcomes, and greater patient satisfaction.

The referral agreements are meant to make the process more systematic and more responsive by helping PCPs make appropriate referral decisions and clarifying the expectations for information on both ends. In general, referral agreements require the following elements (Murray 2002):

“Patients are often informed that they will be ‘referred’ but have little or no influence on the process or knowledge about who they will be referred to or how long the expected wait will be.”

(Murray 2002)

**Delays Due to Preauthorization: A Decreasing Problem**

In the 1990’s, referral problems were primarily regarded as the responsibility of health plans, many of which had policies and practices in place that caused delays in referral authorizations. However, it appears that various changes in these policies and practices – including direct access to OB/GYNs and other “repeat” specialists and more efficient systems for processing referral request — have succeeded in minimizing delays. The NCQA reports that even in the lowest performing plans, nearly three-quarters of members report no problems with delays due to health plan approvals (NCQA 2002).

For more information on some of the strategies that health plans have adopted, see the following case studies in the NCQA’s Quality Profiles (www.qualityprofiles.org):

- Decreasing Complaints and Appeals Regarding Referrals: Addressing Opportunities for Improvement
- Improving the Referral Process: Changing the System to Boost Satisfaction
- The Referral Process: Reengineering Referrals to Improve Satisfaction
- Referral Redesign: Partnering with Vendors
1. Joint development of guidelines by a small group of PCPs and specialists who are willing to think of themselves as creating a cohesive system of care. The purpose of the guidelines is to identify which clinical conditions the PCPs should manage themselves and which should be referred to the specialists.

2. An explanation of the benefits to PCPs (e.g., shorter waiting times for patients, more timely and complete information from the specialist). While specialists may get fewer referrals, the benefits to them are more obvious: more effective care for patients, higher relative value units (RVUs), and more referred patients who have had a complete work-up.

3. A referral process that involves the patient in decision making. This process should be designed to keep the patient informed, identify the work-up required before the specialist appointment, inspect the completeness of the work-up, and make sure that both the specialist and the PCP receive timely information. An electronic referral system can facilitate this process.

4. An evaluation of the new referral process based on specific measures, such as waiting time for an appointment, physician compliance with the guidelines, and patient satisfaction with involvement in the referral process.

An Example

An example of an electronic referral system can be found at The University Hospitals of Leicester, England, which have embarked on a pilot of a Web-based electronic referral system for cancer. While this project applies to the UK’s National Health System, which clearly differs in many ways from the system of care in the U.S., it is still illustrative of the improvements that technology can make, in this instance by linking decision support with an electronic referral process.

When the clinician opens the Early Referrals Application (ERA), he or she chooses from among 12 different cancers, and then selects the electronic referral option. Once there, the physician is guided through a series of three screens:

- **Data entry**: This page collects the information needed for the decision support module (e.g., for breast cancer, it has a series of check boxes to describe lumps, skin changes, pain, etc.).

- **Recommendations**: Using the data entered in the first screen, this page indicates whether a referral is recommended and, if appropriate, the degree of urgency. If the physician chooses the “referral” button, the final screen appears.

- **Referral form**: This form captures the patient information needed by the specialist being given the referral. Because of the link to an electronic medical record system, much of the demographic information will already be inserted. When the physician adds additional comments or notes and clicks on “Email Referral,” the form is sent to the referral hospital.

More information about this project is available at http://www.infermed.com/era.
Intervention #2: The Referral Expert

Doctors and group practices that care for patients covered by multiple plans and insurers often expend a great deal of time and energy getting approvals from the plan/insurer for referrals to specialists, hospital admissions, tests, and procedures (Preston 1999). This task has become increasingly complex as the number of insurance products has grown, since each one has its own rules and requirements.

One way to address this problem is for a group practice to develop a “referral expert” – in the form of a person, a computer system, or a combination of the two – that is responsible for tracking and managing each plans’ requirements. This basic strategy helps to increase the speed of approvals, which has multiple benefits. For the patient, it can mean reduced or eliminated delays for referrals, tests, and procedures, which increases satisfaction with care (Chan, Hayden et al. 1997). For providers, health plans, and payers, quicker approvals save costs associated with the phone and paper-based approval processes (NEHEN 2002), as well as costs resulting from grievances and complaints.

A referral expert would expedite insurance authorization by doing the following (Preston 1999):

- Knowing which plans require authorizations
- Staying abreast of changes in plan regulations
- Knowing what actions to take when referrals are denied

However, this intervention can be as simple as developing matrices (or ideally, a database) of referral requirements, copays, etc., for each insurance product and designating a person to keep the matrix or database up-to-date.

Other Interventions to Consider

In addition to becoming familiar with each plan’s requirements, medical groups may want to explore other ideas for managing referrals more effectively, such as:

- Standardizing referral forms across multiple plans;
- Developing forms that specialists’ offices can fill out so that the PCP has all the information needed to get preauthorization.
- Hiring a referral coordinator who can keep track of all referral requests and follow-up items, and facilitate communication with patients, specialists, and plans.


Key Resources


For information on the Early Referrals Application, see:

For information on related projects sponsored by the National Health Service in the UK, see the following documents on www.nhsia.nhs.uk.

- Electronic referrals aim to reduce waiting time for patients with suspected cancer
- Pilot objectives
Section 4-B

Improvement Strategies for “Getting Care Quickly”

This section presents four ideas for expediting the delivery of care to patients and consumers:

1. Open Access Scheduling for Routine and Urgent Appointments
2. Streamlined Patient Flow
3. Access to Email for Administrative Help and Clinical Advice
4. Internet Access for Health Information and Advice

These ideas focus on performance issues raised by the “Getting Care Quickly” composite, which includes the following CAHPS questions:

<table>
<thead>
<tr>
<th>CAHPS Questions in the “Getting Care Quickly” Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>☀ In the last...months, when you called during regular office hours, how often did you get the help or advice you needed?</td>
</tr>
<tr>
<td>☀ In the last...months, how often did you get an appointment for regular or routine health care as soon as you wanted?</td>
</tr>
<tr>
<td>☀ In the last...months, when you needed care right away for an illness or injury, how often did you get care as soon as you wanted?</td>
</tr>
<tr>
<td>☀ In the last...months, how often did you wait in the doctor’s office or clinic more than 15 minutes past your appointment time to see the person you went to see?</td>
</tr>
</tbody>
</table>
B.1 Open Access Scheduling for Routine and Urgent Appointments

The Problem
While most Medicare managed care enrollees (about 90 percent) report that they always or usually receive care as soon as they wanted it (see Table 11 below), studies have shown that inadequate access to a primary care provider remains a major source of patient dissatisfaction (Forjuoh, Averitt et al. 2001). Among commercial health plan enrollees surveyed in 2001, only three-quarters reported that they received non-routine care as soon as they wanted. Also, on average, only two-thirds of those who needed non-routine care were seen the same day or the next day (NCQA 2002).

Table 11. Getting Care As Soon as It’s Wanted: The Experiences of Medicare Managed Care Enrollees

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>10th Percentile</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>90th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>90.89</td>
<td>84.92</td>
<td>88.33</td>
<td>91.76</td>
<td>94.26</td>
<td>95.96</td>
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<tr>
<td>2001</td>
<td>91.48</td>
<td>85.71</td>
<td>89.04</td>
<td>92.49</td>
<td>94.86</td>
<td>96.48</td>
</tr>
<tr>
<td>2002</td>
<td>90.80</td>
<td>82.95</td>
<td>87.84</td>
<td>92.31</td>
<td>94.87</td>
<td>96.40</td>
</tr>
</tbody>
</table>

* Question: In the last 6 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?
Source: Medicare Managed Care (MMC) CAHPS Survey

Several studies cited in a recent JAMA article confirm that patients are not getting the care they need when they need it (Murray and Berwick 2003):

- In a survey of insured adults under 65, 27 percent of those with health problems reported difficulty gaining timely access to a clinician.
- From 1997 to 2001 the percentage of people reporting an inability to obtain a timely appointment rose for 23 percent to 33 percent.
- In 2001, 43 percent of adults with an urgent condition reported that they were sometimes unable to receive care as soon as they wanted.
- 28 percent of women in fair or poor health reported delaying care or failing to receive care because of an inability to obtain a timely physician appointment.

The Intervention
Open access—also known as advanced access and same-day scheduling— is a method of scheduling in which all patients can receive an appointment slot on the day they call, almost always with their personal physician. Rather than booking each physician’s time weeks or even months in advance, this model leaves about half of the day open; the other third is booked only with clinically necessary follow-up visits and appointments for patients who chose not to come on the day they called (typically no more than 25 percent of patients).

3 “Open access” sometimes refers to the elimination of gatekeepers in HMOs so that patients have direct access to specialists. In this context, it refers only to same-day appointments.
This model breaks away from the traditional approach of differentiating between urgent and routine appointments, which results in the routine visits being put off until a later date. Instead of triaging callers by clinical urgency, front-desk staff simply sort the demand for appointments by clinician. According to experts in the design and implementation of the model, it is effective in both managed care and fee-for-service environments (Murray and Tantau 2000).

In essence, the open access model applies the principles of queuing theory and industrial engineering in an effort to match the demand for appointment visits with the supply (i.e., the time of clinicians). It is based on the supposition that the problem is not lack of capacity but an imbalance between supply and demand.

While the open access model has not yet been formally evaluated with systematic controlled studies (Murray, Bodenheimer et al. 2003), anecdotal evidence points to several benefits of this approach:

- It enables practices to reduce or eliminate delays in patient care without adding resources. Better access to care typically results in higher levels of patient satisfaction; physician satisfaction also improves as long backlogs and angry patients are no longer a daily source of frustration (Murray and Tantau 1998).
- In contrast to what many physicians anticipate, patient demand for appointments decreases, mostly because patients are more often able to see their own clinician (Murray and Berwick 2003).
- The ability of patients to see their personal physician enhances continuity of care, which is associated with both better health care and higher patient satisfaction.
- Finally, medical practices often realize cost and efficiency savings. Because patients no longer have to deal with long waits, the number of “no-shows” is likely to decrease, so clinical time is used more efficiently. Also, less staff time is required to manage the no-shows and the backlog of patients.

The literature on open access suggests that medical practices can implement this model in a few months by working through the following steps:

1. Measure supply and demand as precisely as possible. (See below for more on the challenges of predicting demand.)
2. Establish a test team of providers who are willing to try the system out.
3. Reduce the backlog of appointments. This may take six to eight weeks of extra work. To facilitate this difficult task, practices may want to set a target date and agree that visits will not be pre-scheduled beyond that date. Another useful recommendation is to apply the
concept of “max packing.” The idea is to reduce the demand for future visits by taking care of any upcoming preventive or screening needs whenever the patient comes in for a necessary visit – regardless of the reason for that visit.

4. Simplify the appointment types and make them all roughly the same length. One recommended tactic is to minimize complexity by limiting the practice to three appointment types:
   - Personal, where the patient is seeing his or her physician;
   - Team, where the patient is seeing someone else on the clinical team; and
   - Unestablished, where the patients does not yet have a specific physician.
Appointment times can also be specified as either short or long, where a long appointment is roughly equivalent to two short ones (Murray and Tantau 2000).

Develop a contingency plan for days (or parts of the day) when demand far outstrips the availability of physicians. This plan should identify who can supplement or substitute for each physician, if and when needed. Also, the group should be proactive about planning for those times when they can predict increases in demand, such as visits for school physicals or flu shots.

5. Reduce demand for one-on-one visits with patients. One helpful tactic is to identify and address sources of unnecessary visits based on outdated clinical protocols, such as routine follow-up visits for urinary tract infections or annual Pap smears. Another approach is to implement group visits to better manage care for patients with the same chronic condition. (See the description of C3: Group Visits.) Finally, clinicians can use the phone and email effectively to address concerns that do not require a visit.

6. Once the practice is able to offer same-day appointments, it should assess its effectiveness by measuring appointment availability on a daily basis (e.g., third next available appointment). (For more information on the specific measures that you can use to evaluate and monitor the model, see the February 2003 JAMA article by Mark Murray and Donald Berwick cited in the box listing Key Resources.)

While the implementation of open access scheduling may seem daunting, the primary barriers are psychological rather than logistical. For both clinicians and their staff, this approach seems unintuitive; it defies both their beliefs and their experiences with scheduling systems. Because routine and urgent requests are treated similarly, the model also forces them to abandon the solidly ingrained notion that routine care can wait. Finally, clinical and administrative staff are typically skeptical that existing resources can meet demand (Murray and Berwick 2003).

That said, the logistical challenges should not be discounted. First, the model requires accurate data on the size of the patient population (for each doctor), the level of demand for visits, and the number of appointment slots available each day. In particular, it relies on the ability to accurately predict demand for same-day appointments (Forjuoh, Averitt et al. 2001). But demand is hard to measure retrospectively because the number of past appointments is more a factor of the supply of clinical time than of the demand for services. Medical groups need to obtain this data prospectively, usually by tracking patients’ calls for appointments as well as requests by clinicians for follow-up appointments. Some practices rely on mathematical models for predicting demand, with mixed success (see box below). Computer-based information systems that integrate billing and scheduling can be useful for providing the initial data input for such models (Forjuoh, Averitt et al. 2001).
Section 4–B: Improvement Strategies for “Getting Care Quickly”

An Example of the Challenge of Predicting Demand

One of the biggest challenges in open access scheduling is predicting daily, weekly, monthly, and seasonal demand for same-day appointments. Forjuoh et al. compared the accuracy of two demand prediction grids (estimates of demand for future same-day appointments) for the Scott and White Killeen Clinic. One grid was created by the Scott and White Killeen Clinic itself; the other was an “off-the-shelf” grid developed by Kaiser Permanente for the Clinic. In a six-month period, the Scott and White Killeen Clinic had 6 percent more appointments, on average, than its own demand grid had predicted. While Kaiser Permanente’s grid was relatively accurate in its predictions of the Scott and White clinic’s demand, it was less accurate at predicting seasonal fluctuation in demand (Forjuoh, Averitt et al. 2001).

The second major challenge is reducing the backlog of appointments. To do this, the group may need to see more patients each day for six to eight weeks (Murray 2000). A recent study of practices that have implemented open access scheduling found that all of them had trouble working down the backlog. Moreover, the task was especially difficult for larger organizations, especially when the model was introduced by management rather than by the physicians themselves. One contributing factor was that management recognized benefits in the form of reduced delays in appointment before the physicians saw benefits in the form of a less stressful workday (Murray and Berwick 2003).

Finally, there are some practices where the demand for appointments vastly exceeds the supply of clinical services. While the open access model can handle excess demand on a given day, no scheduling system works effectively if demand is greater than capacity on a permanent basis.

To overcome both the psychological and logistical barriers, medical groups may want to join a collaborative, where they can learn from others dealing with the same issues, or hire a consultant who can guide them through the more challenging terrain. For example, PracticePartners – a practice management company in Portland, Maine – started out by having one of its primary care clinics participate in the Institute for HealthCare Improvement (IHI) collaborative on improving efficiency and access. Once that clinic had some success with the strategy, PracticePartners developed an internal collaborative so that other practices could learn from the experiences of the first clinic.

Some Examples

In the late 1990’s, HealthPartners of Bloomington, Minnesota, identified members’ dissatisfaction with access to care as a major concern. CAHPS data indicated that access to appointments remained a source of frustration for patients; this finding was corroborated by complaints data (specifically, complaints related to access had been increasing over the past year and now represented 51 percent of quality of care complaints) as well as a survey of satisfaction with behavioral health. In addition, an analysis of internal data found that appointment wait times had steadily increased over the course of the last several years.

In 1999, several HealthPartners’ medical groups participated in “Action Groups” supported by the Institute for Clinical Systems Improvement (ICSI) in collaboration with IHI. Through the action groups, the teams learned about the Advanced Access model and received support in implementing it at some of the clinics within their medical groups.

Initial assessments revealed little progress in improving patients’ experiences with appointment access, primarily because the clinics were struggling to overcome some of the
challenges of this model – including the backlog reduction and the skepticism of clinical and other staff. However, over time, the clinics have made measurable progress, including a statistically significant increase in the percentage of respondents that were very satisfied with their ability to get an appointment at their clinic at a convenient time (HealthPartners 2003).

Other examples of successful implementation of open access scheduling include the following (Murray and Tantau 2000):

**Kaiser Permanente in Roseville, Northern California**: This clinic – which was the site at which the open access strategy originated – succeeded in lowering the wait time for routine appointments from 55 days to one day in less than a year. It also increased the changes that a patient would see his or her own physician from 47 percent to 80 percent.

**The Mayo Clinic’s Primary Care Pediatric/Adolescent Medicine Team**: Implementation of an open access model resulted in a reduction of the wait time for routine appointments from 45 days to within two days. The strategy also succeeded in lowering the number of daily visits on average.

**The Alaska Native Medical Center**: At this medical center, open access led to a drop in the wait time for routine appointments in family medicine and pediatrics from 30 days to one day. They were also able to increase the percentage of patients seeing their own physician from 28 percent to 75 percent.

**Fairview Red Wing Clinic, Red Wing, Minnesota**: In addition to reducing the wait time for routine appointments, this clinic succeeded in reducing the time required to cycle patients through the office from 75 minutes to 40 minutes. At the same time, it increased their time with physicians.

**Advice from the UK**

While the United Kingdom’s health care system differs from ours in many ways, clinical practices in both nations struggle with many of the same issues with regards to improving access and patients’ experiences with care. To assist practices in better meeting patients’ needs, the UK’s National Health Service (NHS) offers various resources through its Demand Management Group, including guidance related to reducing waits for routine and urgent appointments and clinical services.

To learn more about the NHS Modernisation Agency Demand Management Group, see its Web site at http://www.demandmanagement.nhs.uk/home.php.

For specific advice on these issues, see The Little Wizard and The Big Wizard at http://www.demandmanagement.nhs.uk/wizards/index.php
Key Resources


For information on how a health plan implemented this strategy, see:

For information on collaboratives available to support the implementation of this strategy, contact:

- The Institute for HealthCare Improvement (IHI)
  375 Longwood Avenue, 4th Floor
  Boston, MA 02215
  Phone: (617) 754-4800
  www.ihi.org

- The Institute for Clinical Systems Improvement (ICSI)
  8009 34th Avenue South
  Suite 1200
  Bloomington, MN 55425
  Phone: (952) 814-7060
  Fax: (952) 858-9675
  www.icsi.org

For information on resources for VA Clinics, contact the Veteran’s Health Administration.

For information on resources for federally qualified community health centers and other primary care practices, contact:
- The Bureau of Primary Care, which is part of the federal Department of Health and Human Services
- The Primary Care Development Corporation of New York City
**B.2 Streamlined Patient Flow**

**The Problem**

In addition to the frustrations associated with waiting for routine appointments (as discussed in the previous profile of *Open Access Scheduling*), dissatisfaction with timely access to care also reflects unhappiness with the all-too-common waits for diagnostic tests, test results, treatments, hospital admission, and specialty services. While the waits seem unavoidable, they are often the result of redundancies, inefficiencies, rework, and other variations on waste in administrative and clinical processes.

**The Intervention**

There are many ways to address the problems that result in unnecessary and inappropriate delays in care, including the following:

- **System changes, such as eliminating redundancies, understanding and adjusting demand, and doing things in parallel** (e.g., by using standardized x-ray and lab protocols that are ordered as a part of the registration process)
- **Operational analyses of flows** (see example in box below) and applications of queuing theory

**Example of Patient Flow Analysis**

An analysis of patient flow involves tracking the experience of the patient during the visit, whether to a primary care practice, a specialist’s office, or a site for clinical services (such as a lab or radiology facility). It can be as basic as a “flow mapping” – where you take detailed notes on your observations and impressions – or a more involved look at the time required to complete various parts of the visit. (Flow mapping is similar to a walkthrough or patient shadowing, which are discussed in greater detail in *Idea D.1: Listening Posts*.)

When conducting this kind of “cycle-time” measurement, be sure to separate out the time spent waiting in the waiting room and/or exam room and the time spent with the doctor. See the box below for an example.

This level of analysis can help a medical group identify problem areas and ways to reduce waits by eliminating unnecessary steps or being better prepared for visits. For example, a medical practice may decide to start previewing charts prior to visits or reviewing schedules each morning in order to better anticipate what may be needed (Backer 2002).

**For a tool that enables patients to track cycle time in the office**, see the following resource on IHI’s QualityHealthCare Web site (www.QualityHealthCare.org): http://www.qualityhealthcare.org/QHC/Topics/OfficePractices/Access/Tools/Patient+Cycle+Tool+IHI+Tool.htm

<table>
<thead>
<tr>
<th>Step</th>
<th>Time in minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait at check-in</td>
<td>2</td>
</tr>
<tr>
<td>Complete check-in</td>
<td>6</td>
</tr>
<tr>
<td>Wait in waiting room</td>
<td>14</td>
</tr>
<tr>
<td>Move to exam room</td>
<td>4</td>
</tr>
<tr>
<td>Wait for physician</td>
<td>10</td>
</tr>
<tr>
<td>Interaction with physician</td>
<td>19</td>
</tr>
<tr>
<td>Move to checkout</td>
<td>3</td>
</tr>
<tr>
<td>Check out</td>
<td>4</td>
</tr>
<tr>
<td>Total cycle time</td>
<td>65 minutes</td>
</tr>
<tr>
<td>Percent of time spent with a physician</td>
<td>29 percent</td>
</tr>
</tbody>
</table>
Collaborative improvement programs that pool the ideas from multiple clinics, hospitals, or health systems — Organizations in both the U.K. and the U.S. have developed collaborative programs that bring groups of health care organizations together to make system changes aimed at achieving substantial improvements in waits and delays. IHI and the Veterans Health Administration have offered many collaborative learning programs to improve access to care, flow through the ambulatory care setting, and patients’ experiences of care.

Strategies that reduce delays in care have multiple benefits, particularly with regards to patient and clinician satisfaction. Other benefits include better outcomes, increased capacity to care for patients, and cost and efficiency savings (Simunovic, Gagliardi et al. 2001).

Because there are a number of ways to proceed, depending on the setting and the type of flow problem, it is difficult to describe concrete implementation steps in this guidebook. However, while some tactics require significant changes to well-established systems, others are fairly basic and easy to implement. For example:

Identifying and eliminating logjams. For instance, an ophthalmology clinic found that patients who needed their pupils dilated were slowing down the flow because their appointment slot did not take this into consideration. The solution was to identify such patients and have them come 30 minutes prior to their consultation with the physician (NHS Modernisation Agency 2002).

Shifting tasks previously handled by specialists to other health professionals such as physician’s assistants and nurse practitioners. These tasks may include performing histories and physical exams, basic prescribing, and ordering x-rays.

Developing and using standardized order sheets for common conditions or procedures. By making it easier and faster for clinicians to communicate orders, this intervention enables them to spend more time with the patient. It also makes it more feasible for clinical staff to take on some of the clinician’s responsibilities.

Developing standardized patient information and instruction sheets, possibly in conjunction with standardized order sheets and related protocols. These materials help staff streamline the patient education process while still ensuring that they meet the patient’s need for appropriate education and information.

Key Resources

For ideas for reducing waits associated with appointments for primary and specialty care, see:

- Idea A.2: Rapid Referral Programs
- Idea B.1: Open Access Scheduling for Routine and Urgent Appointments


B.3 Access to Email for Clinical Advice and Administrative Help

The Problem
One issue that affects patients, clinicians, and staff is the health system’s reliance on conventional office visits and phone calls to relay information. In particular, patients are often frustrated in their attempts to get non-urgent advice and information from their clinician or from administrative staff without visiting the practice. First, calling hours are often inconvenient, especially for working patients. Second, when patients do call, they are typically put on hold, only to leave a message and hope they can avoid a game of “phone tag” with the clinician. Finally, unless the patient takes excellent notes, some of the information delivered over the phone may be lost or misunderstood.

The Intervention
One way to facilitate communication is to offer some or all patients the ability to exchange email with their clinicians’ offices. Patients, clinicians, and office staff can use email for multiple purposes:

- To request and provide information or advice related to non-urgent concerns.
- To request administrative help (e.g., with forms) and schedule appointments.
- To request referrals.
- To communicate results of lab and diagnostic tests.
- To request and refill prescriptions.
- To transmit patient-monitored clinical measures, such as blood pressure, glucose levels, or temperature.
- To provide patient education and other materials, including links to appropriate Web sites.
- To send reminders.
- To clarify billing issues.

Recent surveys indicate that a significant number of patients – 90 percent of the 66 percent of all adults who have access to the Internet – are interested in communicating with their doctors online. Online patients say they would like to e-mail their physicians to do the following:

- Ask questions
- Schedule appointments
- Refill prescriptions
- Receive test results

More than half said that they might choose a doctor or health plan that offered online patient services over one that did not (Harris Interactive 2002).

What do Patients (or their Parents) Want?

- A survey of 325 parents and 37 physicians found that 74 percent of parents were interested in using email with their doctor or doctor’s office, although not all wanted to communicate with the physician, i.e., they regarded email as a way to see lab results, schedule appointments, and get camp forms. In contrast, 79 percent of physicians did not want to communicate with patients via email, citing concerns about patient confidentiality and additional demands on their time (Kleiner, Akers et al. 2002).

- In a survey of patients in central Texas, respondents most often expressed interest in using email for prescription refills, non-urgent consultations, and lab results (Couchman, Forjuoh et al. 2001). Most patients (74 percent) would expect a response within 24 hours.
“When so many people want something—in this case the ability to communicate online with their physicians—the system (or the marketplace) will eventually provide it. It seems safe to predict that within a fairly short space of time many doctors will be communicating with their patients on the Internet. This will happen because some doctors and health plans will use this as a way to differentiate themselves from their competitors. Some doctors will embrace this as an opportunity to grow their practices. Some health plans will require, or incent, physicians to be accessible online. It is only a question of how quickly this will happen.”

(Harris Interactive 2002)

However, access to clinicians through email is currently limited. One study found that only six percent of respondents with Internet access used email to contact a clinician in the previous year (Baker, Wagner et al. 2003). And only 23 percent of those physicians who go online have reported that they use email to interact with their patients (Fulcrum Analytics and Deloitte Research 2002).

Email communication offers several benefits. It is convenient, fast, asynchronous (i.e., both people do not have to be available at the same time), unintrusive (i.e., it does not interrupt the recipient on either end), and easy to track and manage, unlike telephone messages. Because it facilitates communications between patients and their doctors, email has the potential to improve patient-centered care and increase self-management, while increasing timeliness and efficiency. Another possible benefit is improved adherence to treatment and medication, and a general increase in patient involvement in their own care (Mandl, Kohane et al. 1998). A recent study has also found cost savings associated with the use of online communications (RelayHealthCorporation 2003).

Another advantage of email is that it provides a written record of what transpired and what information was conveyed to the clinician and patient; copies of this documentation can be incorporated into the patient’s medical record (Kane and Sands 1998). However, the ability to integrate email into the medical record raises issues of informed consent and the adequacy of safeguards to protect privacy and confidentiality (Bauchner, Adams et al. 2002). (See more on this topic below.)

A number of organizations offer guidelines regarding the use of email in health care settings. Key sources include:


The guidelines cover email content, informed consent, turnaround time, acknowledgements of receipt, documentation and record keeping, appropriateness of tone, and limitations (e.g., concerns about discussing sensitive subjects). Perhaps the biggest consideration in these guidelines is the security of personal health information and the liability risks associated with email communications, particularly in light of the new HIPAA regulations. (HIPAA refers to the Health Insurance Portability and Accountability Act of 1996.) HIPAA requires that health care organizations take steps to safeguard patient confidentiality by:

- ensuring that messages cannot be tampered with (by authenticating the contents),
- implementing the security standards for Protected Health Information (possibly through encryption), and
- maintaining records that can be audited.

The box at right offers a sample of the guideline recommendations. A list of useful resources, including sources of guidance on the HIPAA rules, is provided at the end of the description of this strategy.

Because of the security issues, there are basically two approaches you can consider if you decide to implement email communications. One option is to use existing email capabilities. This requires that the medical practice or clinic become familiar with the implications of HIPAA and implement various systems and measures to manage the flow of information (e.g., systems to forward the emails when a clinician is out of the office for a few days) and to minimize risk. However, while it is possible to comply with many aspects of the current guidelines for physician-patient electronic communications, you would not be able to offer a secure network through a standard email system.

A second, albeit more costly, option is to use the services of a secure messaging vendor; current examples include RelayHealth.com, MyDocOnline.com, HealthyEmail.org, and WellMed.com. These vendors offer off-the-shelf products that medical groups can use to send and receive information in a secure Internet-based environment. Typically, these products enable communications that are more structured and presumably more efficient than regular email would be, in that patients are submitting forms and templates rather than free-flow text.

Example of Communication Guidelines

Published guidelines combine common sense advice on how to make email communications effective and efficient as well specific recommendations for maintaining security and protecting personal information. For example:

- The medical practice should advise patients not to use email for urgent issues since the doctor may not see it right away.
- Clinicians, staff, and patients should avoid disclosing any highly sensitive and confidential information in an email because of the risk of interception or inadvertent transmission to the wrong party.
- Clinicians should respond to all emails from patients with whom they have established relationships, ideally by the next business day.
- Patients should include identifying information (e.g., a name and patient identification number) in the body of the message.
- Both clinicians and patients should send automatic replies to indicate that a message was received.
- Patients should be asked for their informed consent prior to using email communications.
- Clinicians and staff should develop and implement specific steps to decrease the risk of unauthorized access to patients’ emails.

(Kane and Sands 1998; Sittig, King et al. 2001; eRisk Working Group on Healthcare 2002)
Because electronic communication – whether through standard email or secure networks – is fairly familiar to most patients and clinicians, this intervention does not face some of the technical and logistical obstacles typical of information system strategies. Some clinicians resist due to concerns about the privacy of electronic communications (particularly through standard email systems), while others worry about the potential volume of messages they could be asked to handle.

However, the lack of compensation to clinicians for their time poses the most substantial barrier. In a survey of doctors, over half of those who were not using email and who indicated a preference for “face-to-face” pointed to insurance reimbursement as the most important factor that would compel them to use email (Fulcrum Analytics and Deloitte Research 2002). (For an interesting perspective on these common concerns, see Using E-mail in Clinical Care: A Practical Approach Combining the Best of High-tech and High Touch, by Daniel Z. Sands, MD, MPH, of CareGroup HealthCare System and Harvard Medical School, at http://www.informatics-review.com/thoughts/pat-email.html.)

A small number of health plans are paying doctors to do online consultations. For example, after a pilot program demonstrated improvements in patient satisfaction and health care savings of $3.69 per member per month, several health plans — including Blue Shield of California, ConnectiCare, and Blue Cross Blue Shield of Massachusetts — agreed to reimburse physicians for online consults. (See Press Releases at www.RelayHealth.com.) However, it is not common for physicians to be reimbursed for the time they spend responding to emails (nor are they compensated for time on the phone).

Some of the secure messaging vendors are working with providers on this issue; in addition, some products incorporate ways to obtain payments directly from patients, especially for online consultations. In the Harris Interactive survey of patients with Internet access, over a third indicated a willingness to pay for online access to their clinicians (Harris Interactive 2002). Some health care organizations charge patients for access to email services; Portland-based GreenField Health, for instance, charges an annual fee of $350 to each patient who wants to participate in the service (iHealthBeat 2003).

**Example**

Several health plans and medical groups have begun to use email to facilitate communications between patients and clinicians. At Washington-based Group Health Cooperative (GHC), for example, about 20,000 of 300,000 eligible patients have signed up for an online service called MyGroupHealth (www.ghc.org). Using the plan’s Internet portal, patients can communicate over a secure network with their personal health care teams, refill medications, and schedule appointments. The site also gives them access to searchable health information as well as discussion groups (see Idea B.4: Internet Access for Health Information and Advice and Idea C.4: Support Groups and Self-Care.). In a survey of these online users, GHC found that 92 percent would recommend the service to others, and that 58% say they stay at GHC because of the online services (Eytan 2003).

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**Other Examples of Email Systems**

- **Beth Israel Deaconess Medical Center and Caregroup HealthCare System** in Boston, Massachusetts: https://patientsite.bidmc.harvard.edu./whatis.asp
- **Palo Alto Medical Foundation**: www.PAMF.org Look for information on PAMFOnline. Patients are asked to pay a $60 annual subscription fee for access to PAMFOnline Messaging, which allows them to communicate through a secure network to their doctors and advice nurses.
- **Geisinger Health System** in Danville, PA: www.geisinger.org/mychart/index.shtml
- **University of Michigan Health System**: www.talktomydoc.org
Key Resources

Web Sites Offering Useful Information and Links

Electronic Patient Centered Communication Resource Center: www.e-pcc.org  This site offers a great deal of information on using email effectively in clinical practice.

Ferguson Report: www.fergusonreport.com

HealthyEmail (a nonprofit organization that offers educational materials, a secure communications tool, and related information on the use of secure email): www.healthyemail.org

iHealthBeat: www.ihealthbeat.com


Massachusetts Health Data Consortium: Guidelines and related information on email use are available at http://www.mahealthdata.org/. See “Guidelines for the Use of Patient-Centered E-mail” by Daniel Z. Sands, M.D., M.P.H., Beth Israel Deaconess Medical Center and Harvard Medical School.


Articles


Moyer CA, Stert DT, et al. Bridging the Electronic Divide: Patient and Provider Perspectives on E-mail Communication in Primary Care. The American Journal of Managed Care, May 2002. 8(5). Also see: First large doctor-patient e-mail study finds positive attitudes on both sides, but an increased communications burden to the clinic. Press Release from the University of Michigan Health System, May 4, 2002. Available at http://www.med.umich.edu/opm/newspage/2002/emailstudy.htm.


For more information on HIPAA compliance for electronic communications, see:

HIPAA Advisory: http://www.hipaadvisory.com/action/ecomm.htm

**B.4 Internet Access for Health Information and Advice**

**The Problem**

Many health care consumers seek information about specific complaints, conditions or diseases, drugs, nutrition, and fitness (Kassirer 2000). For these people, getting information quickly is a large component of “getting care quickly.”

In the past, patients and their families had to depend primarily on their physicians for this kind of information. In the last decade, of course, the Internet has evolved into an amazing resource for those seeking health-related information. Studies disagree on the number of Americans using the Internet for this purpose. For example:

- A survey conducted in early 2002 by the Pew Internet and American Life Project found that 62 percent of Internet users (about 73 million people) were looking for health-related information (Fox and Rainie 2002).
- Another survey found that the number was lower, with about 40 percent of people with Internet access using it for that purpose (Baker, Wagner et al. 2003).

But there is little question that a large number of people are looking for information and advice on the Internet, and that the number is growing rapidly. Data from the 1999 American Internet User Survey suggest that health use is growing at a rate of 43 percent per year (Reents 1999). It also appears that the effect has been positive: In the Pew survey, 61 percent of “health seekers,” or 45 million Americans, reported that the Internet has improved the way they take care of their health either “a lot” or “some.”

However, the sheer volume often makes information on the Internet overwhelming, hard to navigate, and hard to validate. For example, the Robert Wood Johnson Foundation reported finding 19,000 health Web sites in a 2001 Yahoo! Search (Eng 2001). It is also hard for people to know whether a source of information is trustworthy. The Pew survey found that many seekers of health information on the Internet do not follow recommended guidelines for checking the reliability and timeliness of information: half reported that they check the date and source of information only occasionally, hardly ever, or never (Fox and Rainie 2002).

**The Intervention**

A number of health plans and medical groups have been exploring ways to channel consumers and patients to useful and reliable sources of information on the Internet. This strategy is meant to help address the demand for immediate information and to build on and reinforce the relationship of trust that health care organizations have with patients and members. While information on the Internet should not be a substitute for direct communication with personal care providers, it is a useful way to augment information sources for patients, especially when direct access to clinicians is not available.

One way to do this is to expand your own Web site to include health information and relevant tools as well as links to related information. Another simpler approach is to tell patients or members about external sites that could be helpful; this information could be provided during office visits, in printed materials, or in emails (which allow you to provide the address [URL] for the site). In a variation on this intervention, some clinicians are directing their patients to specific information on their diagnoses and treatment options; this approach is discussed in Idea C.5: *Delivery of Evidence-Based Information.*
PAY FOR PERFORMANCE: AN INTRODUCTION

Concerns over quality in the US health care system have long been the subject of debate at the national policy level and personal anecdotes at the local level. The landmark report published in 2001 by the Institute of Medicine, “Crossing the Quality Chasm”, highlighted a number of these issues and also cited the need to transform physician payment methodologies in order to truly transform the quality of our nation’s health care. Current physician payment systems are simply not designed to promote quality or better outcomes. Both theory and history support this claim. New methods for paying physicians are needed so that providers are appropriately rewarded for providing high-quality care and promoting better outcomes for their patients. The growing trend toward systems of Pay for Performance reflects the industry’s attempt to start rewarding providers for quality care.

Pay for Performance initiatives across the US take a variety of forms, but it is clear that the number of such initiatives is growing. More than 100 programs are now operational. Those national programs of particular note include the Bridges to Excellence program, the Rewarding Results program, and Medicare’s demonstration project, although there are many successful local and regional initiatives as well.

- The Bridges to Excellence program is an initiative of large employers (including GE, UPS, Humana, Ford), health plans (including Aetna, Tufts Health Plan), and physician groups in the three large urban markets of Boston, Cincinnati and Louisville. Payment is made for quality in three areas:
  - Diabetes care—up to $80 per patient
  - Cardiovascular care—up to $160 per patient
  - Patient care management systems—up to $50 per patient for systems to reduce errors and improve quality

◊ The Rewarding Results program is an initiative begun by the Robert Wood Johnson Foundation and the California HealthCare Foundation. It is coordinated through and organization called IHA and includes several of the large payor groups: Cigna, PacifiCare, HealthNet, BCCA. Bonuses are paid to providers based on quality indicators. These include measures of patient satisfaction, investment in information technology, and seven clinical indicators: childhood immunization status, cervical cancer screening, breast cancer screening, asthma medication, LDL < 130, A1c testing and control in diabetes, URI treatment in children.

◊ Medicare has recently initiated a pilot program to reward physicians for providing quality care and investing in new technology to better track patients. The pilot is geared toward large groups, 10 of which were selected for the initial phase, and is based on 32 measures included among those endorsed by the joint working group of CMS and the AMA.

The Pay for Performance programs that are in place take a variety of forms and differ in:
  - The set of performance measures being used
  - How the health plan collects the performance data
  - How the health plan determines its performance targets or benchmarks
  - How the health plan will reward providers for meeting or exceeding performance targets.
insurance, the situation is even more drastic. Most people now agree that the poor quality of care in this country is a result of healthcare that is misaligned, unplanned, and fragmented.

The Chronic Care Model as a Guide for Change

With funding from The Robert Wood Johnson Foundation, the MacColl Institute developed and tested a quality improvement approach based both on evidence and experience of how to effectively care for chronically ill people. This work led to the development of the Chronic Care Model, a visual guide to the comprehensive, integrated reorganization of care delivery needed to improve important patient outcomes. The diagram below illustrates the Chronic Care Model:

![Chronic Care Model Diagram]

Redesigning health systems to align with the Chronic Care Model emphasizes the central role of patients and their relationship with an organized practice team to achieve optimal health outcomes. It changes the healthcare system’s focus from reacting to the acute care needs of individuals to taking a proactive approach to engaging a population of patients. The Chronic Care Model puts the patient’s long-term health goals, needs, and competencies at the center of the healthcare system. It challenges the notion of specialized knowledge resting solely with the physician in favor of a broader approach where every member of the care team, including the patient, brings expertise to the table.

The Chronic Care Model includes six essential elements of a health care system that when integrated encourage high-quality chronic disease care:

- Community resources
- Health system
- Self-management support
Example of an Online Information System for Patients: CHESS

In addition to the Web sites listed in the box above, there are a number of Web-based resources that offer information and support for people with various conditions. One example of an online service that providers can refer patients to is the Comprehensive Health Enhancement Support System (CHESS). CHESS offers 11 online services to people with specific diseases (Breast Cancer and HIV have been developed so far). The services include disease information, decision-making tools, and support services (Gustafson, Hawkins et al. 2001).

The full list of services includes:

\(\text{Information Services}\)
- Questions and answers
- Instant library (articles from popular press and health/medical literature)
- Consumer guide (being a better consumer of health services)
- Referral directory (contacting local and national agencies)

\(\text{Support Services}\)
- Discussion groups (facilitated bulletin boards)
- Ask an expert (confidential responses to specific health questions)
- Personal stories of others with the same condition

\(\text{Decision Services}\)
- Self-assessment of emotional status
- Health charts for personal tracking
- Decision support
- Action plan (individual goals and resources to achieve them)

An evaluation of CHESS (specifically, the breast cancer resources) found that, compared to a control group, users had better access to relevant information and improved their social support. The benefits were greatest for women from underserved populations, i.e., those from the inner city and with lower socioeconomic status (Gustafson, Hawkins et al. 2001). An earlier study had found that the HIV application of CHESS resulted in patients needing 15 percent less time for office visits, having 47 percent more phone consultations, and experiencing fewer and shorter hospitalizations than patients in a control group (Gustafson, Hawkins et al. 1999).

For more information, visit http://chess.chsra.wisc.edu/Chess/.
Key Resources

Health Commons Institute: www.healthcommons.org. HCI’s Library and Bibliography offer extensive lists of articles and public and private resources related to using information technologies to improve medical decision making. HCI has also recently published “Seniors on the Internet: A Health Information Guide,” which is available on the Web site.

Internet Healthcare Coalition: www.ihealthcoalition.org

Pew Internet and American Life Project: www.pewinternet.org

Ferguson Report: www.fergusonreport.com

Consumer and Patient Health Information Section (CAPHIS) of the Medical Library Association: www.caphis.mlanet.org/consumer/.

Publications


For some guidance on assessing health-related Web sites, see:


Section 4–C

Improvement Strategies for “How Well Doctors Communicate”

This section presents seven ideas for improving the level of communication between clinicians and their patients. These strategies include interventions at the level of both providers and patients. But they all share a common purpose, which is to help health plans and medical groups do a better job of listening to members and patients, explaining things clearly, and supporting members and patients in their efforts to participate in and manage their care.

These ideas are as follows:
1. Training to Advance Physicians’ Communication Skills
2. Tools to Help Patients Communicate Their Needs
3. Shared Decision-Making
4. Support Groups and Self-Care
5. Delivery of Evidence-Based Information
6. Planned Visits
7. Group Visits

The last two ideas in this list are important elements of a more comprehensive strategy known as the Chronic Care Model, which is explained briefly on page 99.

These seven strategies are meant to address performance issues raised by the “How Well Doctors Communicate” composite, which is composed of the CAHPS questions in the box below.

By taking steps to improve communication between clinicians and patients, health care organizations help to create better relationships and better-informed patients who have a good understanding of both their conditions and appropriate treatment options. Empiric evidence suggests that these interventions are associated with many desirable outcomes, including reduced postoperative pain and hospital stays, improved functional and physiologic outcomes, improved patient satisfaction, and better adherence to medical care (Maly, Bourque et al. 1999). Additionally, agreement between patient and physician about the nature of a health problem and the course of treatment appears to increase the likelihood of a successful health outcome (Stewart 1995).
C.1 Training to Advance Physicians’ Communication Skills

The Problem
People rarely complain about the technical aspects of the health care they receive because – in the absence of an obvious error – patients are generally unable to judge technical competence. However, they and only they are well-equipped to judge the ability of clinicians to communicate with them effectively. Even though a clinician explains a diagnosis, test result, or treatment option to a patient, if the person walks away and does not understand the explanation, it has not been an effective communication.

Poor communication can have a serious impact on health outcomes. Patients may not provide the clinician with adequate information on their health or related concerns; they may not comply with the physician’s orders – and in some cases, they may not even understand what they have been told. According to a study at the University of Kansas School of Medicine in Kansas City, patients’ reports of their understanding of the post-discharge information and instructions they had received was significantly less than what their doctors perceived. For example, while the physicians thought that 89 percent of the patients understood the potential side effects of their medications, only 57 percent of patients said that they understood (Rogers 1999).

In addition to affecting the patient’s experience with health care, poor patient-physician communication has important consequences for medical practices. One study found that, in a three-year period, 20 percent of Massachusetts state employees voluntarily left their primary care physician because of the poor quality of their relationship, which was a function of trust, the patients’ sense that the physician knew them, the level of communication, and personal interaction (Safran, Montgomery et al. 2001). Poor communication is also a contributing factor in a majority of malpractice suits (Flaherty 2002).

While the curriculums of most medical schools now include some form of training in communications skills (Rogers 1999), this is a fairly recent phenomenon. Traditionally, medical education has paid little attention to the skills that promote effective interactions with patients. Most practicing physicians have not been taught to appreciate the patient’s experience of illness; nor do they learn how to partner with patients and serve as a coach or guide. As a result, they typically do not know how to communicate with patients in a way that maximizes understanding, lets the patient know that his or her concerns have been heard, and ensures that the care plan meets the needs of the patient.

The Intervention
To compensate for this deficiency in medical education, numerous health plans and medical groups are training practitioners in the communication skills they need – either through in-house programs or through communications programs offered by outside organizations (see “With patient characteristics and structural features of care taken into account, those with the poorest-quality physician-patient relationships in 1996 were 3 times more likely to leave the physician’s practice over the ensuing 3 years than those with the highest-quality relationships.” (Safran, Montgomery et al. 2001)
Section 4–C: Improvement Strategies for “How Well Doctors Communicate”

box on page 84). Most of these programs are optional, but a few organizations require the participation of all doctors. In some organizations, the program is mandatory only for those doctors who consistently receive low scores in this area.

The purpose of these programs is to improve providers’ effectiveness as both managers of care and educators of patients. It is also believed that trained physicians may allocate a greater percent of clinic-visit time to patient education, leading to increased patient knowledge, better compliance with treatment, and improved health outcomes.

The most effective and efficient way of offering training in physician-patient communication is in the form of seminars or workshops where you can cover many strategies for improved communication in a relatively short period of time. Workshops may also use case studies to illustrate the importance of communication and suggest approaches to improving the physician-patient relationship.

For clinicians, workshops may serve multiple purposes, including increasing their understanding of the physician’s roles; offering insight into the importance of connecting with patients; and increasing confidence in their interviewing skills. In addition to basic communication skills, the training can cover:

- history-taking skills,
- issues related to communicating across cultures,
- communicating with “problem” patients,
- interviewing techniques (including skills to help promote behavioral change), and
- empathic responses.

### Timing Is Everything

Training in behavioral change concepts can help physicians identify patients who are likely to be receptive to their advice and guidance. The Transtheoretical Model, for example, lays out five unique “Stages of Change:”

1. **Precontemplation** is the stage in which there is no intention to change behavior in the foreseeable future. Many individuals in this stage are unaware or under-aware that a problem exists.

2. **Contemplation** is the stage in which people are aware that a problem exists and are seriously thinking about overcoming it but have not yet made a commitment to take action.

3. **Preparation** is a stage that combines intention and behavioral criteria. Individuals in this stage are intending to take action in the next month and have unsuccessfully taken action in the past year.

4. **Action** is the stage in which individuals modify their behavior, experiences, or environment in order to overcome their problems. Action involves the most overt behavioral changes and requires considerable commitment of time and energy.

5. **Maintenance** is the stage in which people work to prevent relapse and consolidate the gains attained during action. For addictive behaviors, this stage extends from six months to an indeterminate period past the initial action.

A full explanation of this model can be found at: [http://www.uri.edu/research/cprc/TTM/detailedoverview.htm](http://www.uri.edu/research/cprc/TTM/detailedoverview.htm) (Cancer Prevention Research Center 2003).

Some medical groups and health plans are teaching physicians about this model and encouraging them to identify where patients are in these stages and to focus their educational efforts on patients who are ready to change. If patients are precontemplative, physicians do not need to be spending much time convincing them to stop or start a new behavior. But if they are contemplative, then the time required to coach them about things they can do to adopt the desired behavior is well-spent.
Organizations that Offer Communication Training

Two organizations that offer courses and other resources to improve physician-patient communications are the Bayer Institute for HealthCare Communication and the American Academy on Physician and Patient.

The Bayer Institute for HealthCare Communication

The Bayer Institute offers a variety of workshops to help clinicians develop and hone their communication skills. It also offers books, videos, and practical guides on how to improve communication.

Three models of training options are currently available to health care organizations:

- **Train-the-trainer**: The sponsoring organization may choose to have the Institute train one or more of its staff members to present the Institute’s workshops back at the organization. Once they have completed the course, these trainers are considered a member of the Institute faculty and are eligible to receive training in all of the Institute’s workshops.

- **In-house consulting**: The sponsoring organization may hire a member of the Institute’s faculty to conduct workshops on a consulting basis.

- **Individual training**: The Institute also offers training for individual clinicians to improve their performance.

For more information about the Bayer Institute, visit the Web site at www.bayerinstitute.com or call (800) 800-5907.

The American Academy on Physician and Patient

The American Academy on Physician and Patient (AAPP) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-physician communication and relationships, and psychosocial aspects of health care. The organization conducts and publishes research on the patient-physician relationship and offers courses for practitioners to improve and refine their communication style and techniques. AAPP also maintains an extensive bibliography of articles on doctor-patient communication and a library of educational videos.

For more information, visit the Web site at www.physicianpatient.org or call (703) 556-9222.

Some programs also address weaknesses in written communications, which can be a serious problem for clinicians who use email to communicate with some patients. Group Health Cooperative in Seattle, for example, offers a training curriculum on how to write emails to patients.

An Example

One of the best known examples of an in-house program to inculcate strong communication skills in clinicians is the **Thriving in a Busy Practice** program developed by Kaiser Permanente. This comprehensive communications curriculum strives to develop the ability of physicians to relate to patients effectively in both routine and difficult setting. In particular, it is intended to help physicians learn and practice techniques for dealing with difficult patient encounters. Over the past decade, the workshops have been expanded beyond the issues that typically confront primary care physicians to include guidance pertinent for different specialists (such as emergency physicians).

Evaluations of this program have found a positive impact on the clinicians. One study found that clinicians reported improved confidence in their ability to conduct effective medical
interviews and handle difficult situations. It also found that, after taking the course, fewer clinicians reported frustration with patient visits (specifically, the percent reporting frustration with 11 percent or more of patient visits fell from about half before the course to about one-third afterwards) (Stein and Kwan 1999). However, the impact on patient satisfaction is not yet clear: One study found that the program had no impact, but noted that other factors may have influenced that finding (Brown, Boles et al. 1999).

**Key Resources**

Bayer Institute for Health Care Communication
West Haven, Connecticut
http://bayerinstitute.org/
(800) 800-5907

The American Academy on Physician and Patient
McLean, Virginia
http://www.physicianpatient.org/
(703) 556-9222

Healthcare Communication Project, Inc.
http://healthcarecommunication.org/

Northwest Center for Physician-Patient Communication
Portland, Oregon
http://www.tfme.org/nwppc.htm
(503) 636-2234

Motivational Interviewing Web Site.
http://motivationalinterview.org/clinical/whatismi.html: Resources for clinicians, researchers, and trainers.

**Publications**


The CAHPS Improvement Guide

C.2 Tools to Help Patients Communicate Their Needs

The Problem
Communication is a two-way street. While the communication skills of physicians and other providers certainly play a large role in shaping the patient’s experience, that patient’s ability to express herself clearly, process and interpret the information she receives, and act upon it (e.g., by changing behavior) also contributes to the experience of care.

One issue is that many, if not most, patients are just beginning to become comfortable with relationships with clinicians that are based on a partnership model rather than the traditional paternalistic model. This shift is especially difficult for older patients and people who do not speak English or who come from cultures where this kind of a relationship with a doctor is unheard of.

But even those who embrace the idea of working collaboratively with physicians may lack important communication skills, which can inadvertently undermine their interactions with the health care system. Beginning in childhood, people are socialized to restrain themselves with doctors, answering only what they have been asked. While this attitude is changing, it is still a big step for people to accept that their agenda is as important as the doctor’s, and an even bigger one for them to learn how to satisfy that agenda while still respecting the clinician’s constraints.

The Intervention
Health plans and medical groups can help patients improve their ability to share information with providers by suggesting or even giving them one or more simple and inexpensive communication tools. Patients who can communicate effectively with their clinicians tend to be more satisfied with their care and less likely to sue in case of an error. Their clinicians are likely to be more satisfied with their caregiving experience as well.

There are several ways to implement this strategy, including the four tactics discussed below:
- Record Sharing
- Patient Question Lists (a.k.a. Doc Talk Cards)
- Feed Forward
- Coached Care

Record Sharing
Record sharing involves using the patient’s medical record as a way to facilitate information sharing and generate discussion in the context of primary care. It typically consists of giving patients a copy of their physicians’ progress notes (on paper or electronically) together with a glossary of terms. Access to this information enables patients to better understand their condition and treatment plan, to feel more in control of their health, and to identify and correct inaccurate information. Two factors may drive record sharing to become more commonplace: the HIPAA regulation that requires health care organizations to allow patients to review and amend their medical records, and the emergence of electronic medical records, which will make it easier to share legible (and therefore less confusing) information. Some health plans are already taking advantage of this capability: Geisinger Health Plan in Danville, PA, for example, offers members access to portions of their electronic medical record through the Internet. (See http://www.geisinger.org/mychart/index.shtml.)
Proponents believe that this intervention has the potential to increase compliance, improve patient safety, and enhance quality of care. Controlled studies indicate that the sharing of medical records has a consistently positive impact on doctor-patient communications, as well as modest benefits in other areas; with the exception of psychiatric patients, it appears to have little downside (Ross and Lin 2003). It has been found especially effective for patients with repeated visits, such as those with chronic conditions (Maly, Bourque et al. 1999) and pregnant women.

**Patient Question Lists (a.k.a. Doc Talk Cards)**

Another tactic is to encourage patients to write down questions they wish to ask their doctor and bring the list to their visit; these lists are sometimes referred to as “Doc Talk” cards. Typically, patients are asked to generate two to five questions about their medical problems or their reason for the visit that they would like their physician to answer during the office visit. The cards are often designed to prompt patients for questions by listing topic areas such as symptoms and medications. These questions can be attached to the patient’s chart for the physician’s review. This intervention is simple, requires few resources, and is effective at generating communication and increasing patient satisfaction with their care.

One tactic is to provide a form on the Web that patients can print out prior to their visit. PacifiCare’s Web site (www.pacificare.com), for example, offers members a form that suggests they write out answers to the following two questions and bring their response to the visit:

- What do I want to tell my doctor today?
- What do I want to ask my doctor today?

The plan also recommends that patients use the form during the visit to write down what they and the doctor agreed the patient would do after the visit.

Another approach is to maintain an ongoing record of health issues and concerns that the patient could share with his or her caregivers. Peace Health’s “Shared Care Plan” in Appendix D is one example of how this could be done.

**Feed Forward**

The Feed Forward concept is part of a model developed by Eugene Nelson and John Wasson that aims to use information to improve the ability of the microsystem to deliver effective care that addresses the patient’s needs. (See Section 1 of this guidebook for an overview of the microsystem concept.) The basic idea is that, prior to a visit, each patient completes a questionnaire that asks about perceptions of the care received to date, functional health status, clinical health status, and health risk status. The clinical team can then use that information to design and deliver a treatment plan that is appropriate for that individual. After the visit, the team collects similar information that can be used to redesign care for future patients (i.e., information for feedback). The model encompasses other steps as well, including a “prescription” that includes self-care assignments and tailored instructions.

For more information, see


Coached Care

“Coached Care” programs are designed to prepare patients to be more effective participants in their care by teaching them how to ask the right questions, how to interrupt, and how to get their needs met in the encounter. Coaching sessions may also address common misconceptions regarding a condition. Its goals include helping people become more assertive health care consumers, improving the quality of interpersonal care, and increasing patient involvement in treatment decisions.

The design of Coached Care programs varies from the inexpensive, where patients receive brochures prior to their visits that contain a list of common questions and other prompts, to more expensive programs involving individual coaching sessions between patients and designated clinic staff. For example, just prior to a doctor visit, a nurse may interview the patient, review the chart together, and generate a list of questions the patient has for the doctor. These more involved coaching programs require larger resources for staff training in Coached Care techniques in addition to financial coverage of staff time. While coaching sessions are usually performed in an office setting, they may also take place through email or over the phone.

Coached care programs have been shown to improve both physiologic and functional outcomes [Rost, 1991; Oliver, 2001; Greenfield, 1985; Greenfield, 1988]. A 1995 literature review of 21 studies found a definite correlation between effective

Books to Recommend to Patients

Clinicians may also support their patients by suggesting books that may help them communicate more effectively. Examples include:


Coached Care Enhances Breast Cancer Decision Making

To learn about the effects of a coached care program on breast cancer care, see:


physician-patient communication and improved patient health outcomes (Stewart 1995). In addition, anecdotal evidence suggests that Coached Care programs enhance physician-patient communication without requiring an increase in visit length (Kaplan 1995).

Some Examples

The PREPARE Program: The Bayer Institute for HealthCare Communication offers a communication improvement model for patients called the PREPARE Program. The PREPARE to be Partners in Your Health Care: Six Steps to Help You Get More Out of Your Doctor’s Visit program consists of a self-administered audio tape and a guidebook that can be used to prepare patients for medical visits. It is designed to be used in a brief time period such as while waiting to see the doctor. The program takes approximately 20 minutes to complete and is most effective when used immediately before the doctor’s visit and when the guidebook is taken into the visit as a reminder and place to write.

<table>
<thead>
<tr>
<th>The Six Steps of Prepare</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step One: Plan</strong></td>
</tr>
<tr>
<td>Think about what you want to tell your doctor or learn from your doctor today. Once you have a list, number the most important things.</td>
</tr>
<tr>
<td><strong>Step Two: Report</strong></td>
</tr>
<tr>
<td>When you see the doctor, tell your doctor what you want to talk about during your visit today.</td>
</tr>
<tr>
<td><strong>Step Three: Exchange Information</strong></td>
</tr>
<tr>
<td>Make sure you tell the doctor and ask the doctor what is wrong with you.</td>
</tr>
<tr>
<td><strong>Step Four: Participate</strong></td>
</tr>
<tr>
<td>Discuss with your doctor the different ways of handling your health problems. Make sure you understand the good things and bad things about each choice.</td>
</tr>
<tr>
<td><strong>Step Five: Agree</strong></td>
</tr>
<tr>
<td>Be sure you and your doctor agree on a treatment plan you can live with.</td>
</tr>
<tr>
<td><strong>Step Six: Repeat</strong></td>
</tr>
<tr>
<td>Tell your doctor what you think you will need to do to take care the problem.</td>
</tr>
</tbody>
</table>

For more information on the PREPARE kits, contact the Bayer Institute for HealthCare Communication Web site at www.bayerinstitute.com. For more information about how to implement this program in a clinic, hospital, or managed care organization, please contact the program designer and manager, Maysel Kemp White, Ph.D. at 1-800-800-5907 or by email at maysel.white.b@bayer.com.

Consumer Tips on Patient Safety: Health plans and medical practices can help patients understand what they can do to get safer care by taking advantage of a communications program recently launched by several Federal agencies, including the Agency for Healthcare Research and Quality, the Centers for Medicare & Medicaid Services, the Office of Personnel Management, and the Department of Labor. Conducted in partnership with the American Hospital Association (AHA) and the American Medical Association (AMA), this campaign aims to distribute information about improving patient safety to health care providers and patients across the country.
Posters and fact sheets describe “5 Steps to Safer Health Care,” which are evidence-based, practical tips on the role that patients can play to help improve the safety of the care that they receive. These materials, which are available in English and Spanish, emphasize that good communication between health care providers and patients can often reduce a potential source of problems in today’s increasingly complex health care system. The tips are also included in CMS’s Medicare & You handbook, which is mailed to about 39 million Medicare households each year.

The AHA and AMA are encouraging hospital leaders and physicians to hang the posters in their waiting rooms and exam rooms to help encourage dialogue between patients and providers about health care safety. The groups also are distributing the posters through mailings and meetings.


Other Government Materials You Can Share

The Federal government offers several free documents that can be used to educate members and patients and prompt them to ask questions and take other steps to communicate more effectively. These materials can be ordered or downloaded from the Internet. Examples include the following:


Key Resources


The Bayer Institute for Healthcare Improvement: http://www.bayerinstitute.com
The American Academy on Physician and Patients: http://www.physicianpatient.org
HowsYourHealth: www.howsyourhealth.org – On this Web site, users can fill out a 10-minute survey on their health and health-related behavior. Based on the responses, the site generates a confidential form that summarizes that person’s health concerns. Users can share this form with their clinicians.
C.3 Shared Decision-Making

The Problem

Although they are far more informed than patients were even 20 or 30 years ago, some people express frustration and dissatisfaction with their care because they do not feel like they have adequate (if any) input into the decisions that clinicians are making about their health and their lives. One element of this problem is that patients often do not know enough about their treatment options to make informed decisions. In particular, they may not understand the evidence base underlying the decisions they are being offered.

Another contributing factor is that providers are not always supportive of patient involvement in the decision-making process. In some cases, clinicians are supportive of the concept but do not know how to make it happen.

Complicating the decision-making process is the fact that decisions related to preventive testing, diagnostic work-ups, and treatment options are often driven by physicians’ preferences (which may be shaped by medical training, local norms, or personal experience) rather than scientific evidence. The resulting variations in care across the country are tremendous and well-documented. (For evidence of geographic variations, see the Dartmouth Atlas at www.DartmouthAtlas.org.) However, the only preference driving variations should be that of the patient. This is a core principle behind shared decision-making.

The Intervention

Shared decision-making is a model of patient-centered care that enables and encourages people to play a role in the management of their own health. It operates under the premise that, armed with good information, consumers can and will participate in the medical decision-making process by asking informed questions and expressing personal values and opinions about their conditions and treatment options. This intervention can be implemented by medical groups, but it is typically put in place and financed by health plans.

While some critics of shared decision-making maintain that patients are not able or willing to make their own health care decisions, there is considerable evidence that patients want more information and greater involvement in decision making in partnership with their doctors (Deber, Kraetschmer et al. 1996; Guadagnoli and Ward 1998). (Also see: Coulter A. The Autonomous Patient: Ending Paternalism in Medical Care. London: Nuffield Trust, 2002.)

Improved quality of medical consultations has been found to have a positive effect on the quality of treatment decisions, the quality of patient-physician communication, and the satisfaction of both patients and physicians. Specifically, research on the impact of this intervention has found:

- Consumer participation can increase patient satisfaction and lead to better health outcomes (Greenfield, Kaplan et al. 1985; Greenfield, Kaplan et al. 1988; Kaplan, Greenfield et al. 1989).
- Patients who are empowered to make decisions about their health that better reflect their personal preferences often experience more favorable health outcomes such as decreased anxiety, quicker recovery and increased compliance with treatment regimens (Guadagnoli and Ward 1998).
- Greater consumer involvement in decision making leads to lower demand for health care resources (Devine and Cook 1983).
Research also suggests that the use of interactive presentations can increase the complexity of discussions between physician and patient. In one study, both patients and physicians benefited from an increased level of understanding that allowed discussions to focus on the critical risk/benefit tradeoffs rather than simply describing treatment alternatives (Onel, Hamond et al. 1998).

The first step in shared decision-making is that patients become informed about their medical condition. Consumers have access to a variety of sources for such information, including physicians, friends and family, printed materials such as pamphlets and journal articles, community centers, and the Internet. But the innovation of shared decision-making is the use of interactive technology to inform patients. This method of informing patients may be applied to a variety of medical conditions as well as general preventive medicine.

Since this approach was first developed in the early 1980’s, the use of video and computer technology has been increasingly seen as an effective means of helping patients make informed choices about their care. Interactive presentations can inform patients of treatment options, promote health, and teach self-management skills. Good interactive CD-ROMs and videos do not encourage any one treatment approach over the others; rather, they explain the issues fairly and clearly, highlighting the pros and cons of each option (Foundation for Informed Medical Decision Making 2003). Instructional applications may also be used to prepare patients for various procedures or explain what they need to know after surgery (Mechanic 1999).

The challenge to the technology is to keep pace with rapidly changing developments including new treatment alternatives and new information concerning treatment efficacy and complications (Onel, Hamond et al. 1998). Keeping them up-to-date is a major enterprise (Mechanic 1999).

Once the patient is informed, the second step is for the clinician to involve the patient in the decision-making process. However, while the right of patients to be informed decision makers is well accepted, it is not always well implemented (Institute of Medicine 2001). Shared decision-making requires a “modification of the relationship between patient and provider and recognition of the ability of the patients to participate in making choices that affect their lives.” (Deber, Kraetschmer et al. 1996) Thus, one key to success lies in training physicians to help them understand how to facilitate the shared decision-making process and to ensure that they appreciate the importance of respecting patient’s values, preferences, and expressed needs (Towle and Godolphin 1999). It is also helpful to use a team approach to shared decision-making so that the physician’s time is used appropriately.

At the same time, patients must also take some responsibility for identifying and availing themselves of alternative sources of information, such as shared decision-making tools, the Internet, interactive CD-ROMs, and support groups or educational programs offered in the community.
Sources of Interactive Decision Aids

Foundation for Informed Medical Decision Making

One good resource for video-based decision aids is Health Dialog, which distributes decision-support tools created by the Foundation for Informed Medical Decision Making (FIMDM) in Boston, Massachusetts. FIMDM has developed portfolios of decision aids related to some of the most common and important medical conditions, including coronary artery disease, prostate cancer, breast cancer, back pain, osteoarthritis, benign uterine conditions, and benign prostatic hyperplasia.

According to FIMDM, their video tools present the latest clinical evidence about the risks and benefits of treatment options in ways patients can understand. In addition, they explain why there is sometimes a lack of evidence to support one option over another. Also included are interviews with patients who have undergone treatments and experienced good and bad outcomes, which helps to illustrate the variety of patients’ perspectives and concerns. These videos focus on helping patients engage in high-quality decision making with their doctors and supporting patients in carrying out their choices with confidence and competence (Foundation for Informed Medical Decision Making 2003).

A full list of the videos currently available through the Foundation for Informed Medical Decision Making and Health Dialog is available at http://www.fimdm.org/programs.html.

Blue Cross Blue Shield Technology Evaluation Center

Blue Cross Blue Shield has created a Technology Evaluation Center (TEC) on its Web site at www.bcbs.com/consumertec/whatis_tec.html. This Internet-based resource provides credible health care information to consumers to help them understand the scientific evidence on the effectiveness of treatments and tests. This service is designed to help consumers make more informed health care choices and communicate more effectively with their physicians in a decision-making partnership.

Health Dialog

Health Dialog (http://www.healthdialog.com) works with health plans and employers to improve the quality of care and reduce the costs of healthcare by enhancing the quality of patient-physician dialogs. Individuals participating in Collaborative Care better manage their chronic conditions, are more active participants in key treatment decisions, and are more confident about managing their health. The result is improved quality of care, improved satisfaction, reduced absenteeism, and reduced healthcare costs.

Health Dialog’s Collaborative Care Program includes ongoing processes for the following:

- Regularly assessing how scarce care management resources should be deployed (using ever changing morbidity profiles and treatment pattern variation statistics)
- Identifying individuals with “coachable high needs” (using proprietary predictive risk models that include both clinical factors and treatment pattern variation factors)
- Reaching and engaging individuals with “coachable high needs” using an extensive library of direct mail materials and telephonic outreach protocols
- Providing tailored nurse Health Coach telephonic support (which includes the dissemination of world-class evidence-based video, Web, and printed material produced by or reviewed by the Foundation for Informed Medical Decision Making)
- Measuring and reporting outcomes

The Cochrane Collaborative

The Cochrane Collaborative is an international nonprofit organization that aims to support clinicians and consumers in making informed decisions based on the best available evidence. The Collaborative produces a Web site (www.cochraneconsumer.com) that is specifically designed to inform consumers by offering access to evidence reviews, which are summaries of research on health care therapies and advice. The site also helps consumers understand how to interpret the research that is conducted.
# Key Resources


Cochrane Collaborative: [www.cochrane.org](http://www.cochrane.org) or [www.cochraneconsumer.com](http://www.cochraneconsumer.com)

## Resources for Decision-Making Tools on Video and CD-ROM

The Foundation for Informed Medical Decision Making: [http://www.fimdm.org/programs.html](http://www.fimdm.org/programs.html) (For a comprehensive bibliography on this topic, see: [http://www.fimdm.org/bibliography.php](http://www.fimdm.org/bibliography.php)).

Health Dialog: [http://www.healthdialog.com](http://www.healthdialog.com)

CollaborativeCare.net: [www.collaborativecare.net](http://www.collaborativecare.net). CollaborativeCare.net is an online service of the Foundation for Informed Medical Decision Making and Health Dialog. Its purpose is to increase the availability of decision support to persons making choices about healthcare. Collaborative Care is based on the Foundation’s concept of shared decision-making. It helps individuals become informed about their medical options, communicate effectively with their doctors, and achieve better overall health outcomes.

The Ottawa Health Research Institute: [http://www.ohri.ca/home.asp](http://www.ohri.ca/home.asp). This site offers an inventory of international Patient Decision Aids including many of the shared decision-making programs in existence, evaluations of those programs, and the information about how to obtain them.
C.4 Support Groups and Self Care

The Problem
Patients often express dissatisfaction because they are not getting everything they need from the clinicians – but in many cases, what they need is not something that the clinicians can provide. While many physicians believe that they can (or should be able to) satisfy all of their patients’ needs, including the need for self-care, this presumption is not realistic or helpful for them or their patients – particularly for those with chronic conditions.

Many communities offer multiple resources that serve patients looking for support, advice, better self-care knowledge and skills, and comfort. Rather than setting expectations they cannot meet, clinicians need to accept that this is a role better filled by others and help their patients connect with the outside resources they need.

The Intervention
Health plans and medical groups can play two important roles to counter this problem. First, they can manage the expectations of members and patients by helping them regard their doctors as coaches rather than all-knowing sages. Second, they can offer access to the kinds of educational, behavioral, and emotional resources and support they need. Tactics for providing this support include self-care programs and support groups.

- **Self-Care Programs**: Self-care programs are usually highly structured educational forums where patients with a chronic condition may learn about a variety of topics, including symptom management, nutrition, community resources, medications, managing emotions, and communication skills (Lorig, Sobel et al. 1999; Lorig, Sobel et al. 2001). Self-care programs often teach skills that make people better able to manage their medical problems on their own, e.g., taking a blood pressure, giving injections, taking medications, and even performing diagnostic tests such as urine tests and blood glucose. Such programs are based on self-efficacy theory and emphasize problem solving, decision making, and confidence building (Lorig, Sobel et al. 2001).

- **Support Groups**: Support groups may take the form of face-to-face meetings or on-line chat groups operating under the principle that patients can learn to take responsibility for the day-to-day management of their disease. They help people who have chronic health problems by teaching them how to do a better job of self-care, providing emotional support, or offering other kinds of concrete support, like getting groceries or providing transportation to and from medical appointments. Other similar group interventions include survivor groups, 12-step programs, and psychoeducational groups for families of patients with chronic diseases (Mechanic 1999).

The use of support groups and self-care programs can increase patients’ knowledge about their disease and, in some cases, improve compliance with prescribed treatment. Additionally, these programs are beneficial to both patients and health facilities in that confident, knowledgeable patients practicing self-management have been shown to experience improved health status while utilizing fewer health care resources (Lorig, Sobel et al. 1999; Bodenheimer, Lorig et al. 2002). Additional anecdotal evidence suggests that such programs can have a positive influence on long-term health outcomes (Lorig, Mazonson et al. 1993).

Studies of support groups formed for chronic arthritis, heart disease, stroke, and lung disease have shown that such groups have beneficial effects on mental and physical health as well as social functioning. Specifically, support groups were found to (Lorig, Mazonson et al. 1993; Lorig, Sobel et al. 1999):
increase communication with physicians,
improve self-reported health,
make enhancements in social/role activities, and
reduce the need for hospitalizations.

These studies did not detect short-term improvement in other factors such as pain and psychological well-being, but there is evidence of significant improvements of these factors over the long-term.

Inexpensive self-care programs and support groups appear to be responsible for significant cost savings. Evaluations of some of these programs have shown fewer hospitalizations and days spent in the hospital as patients become more confident in caring for themselves. Additionally, one study found a total health savings of ten times the cost of the self-care program (Lorig, Mazonson et al. 1993; Lorig, Sobel et al. 1999).

Trained lay persons can effectively moderate support groups and educate patients in self-care techniques; this person need not have the same condition as the patients. Such instructors have been found to be acceptable to both patients and health professionals and are an inexpensive staffing option for these programs (Lorig, Sobel et al. 1999). Additionally, many guidebooks are available that can serve as a text for self-care programs or as a topical guide for support group meetings. The book “Living a Healthy Life with Chronic Conditions: Self-Management of Heart Disease, Arthritis, Diabetes, Asthma, Bronchitis, Emphysema & Others,” edited by Kate Lorig, has served these purposes for a variety of self-care programs.

Participants typically learn about self-care programs and support groups through referrals, fliers left in physicians’ offices, and/or program announcements posted at senior citizen centers and in patient or member newsletters. Additional cost savings could come from holding these meetings at the health care facility (if sufficient room is available) or at low-cost sites in the community, such as churches, senior centers, or public libraries.

### Key Resources


**New Jersey Self-Help Clearinghouse**
100 E. Hanover Ave., Suite 202
Cedar Knolls, New Jersey 07297

The New Jersey Self-Help Clearinghouse is a non-profit, statewide organization that helps people find and form self-help support groups. It is funded through the Division of Mental Health Services and sponsored by Saint Clare’s Health Systems in Denville, NJ.
C.5 Delivery of Evidence-Based Information

The Problem

Consumers and patients may consider their experience with care to be less than ideal because they did not receive sufficient information from the clinician during an office visit. They may want a better understanding of what a diagnosis means, what their treatment options are, what is going to happen to them, how they could better manage their health, what impact their behaviors have on their health, and/or what they can do to prevent or minimize the risk of other problems or further complications.

Unfortunately, a number of factors conspire to limit the ability of clinicians to educate their patients sufficiently:

- Clinicians often do not have enough time with any given patient to convey the information and answer questions.
- Comprehending complex medical information in the face of a stressful diagnosis or chronic condition is an iterative process for most people. One piece of information can easily generate a round of questions long after the office visit is over.
- Patients do not retain much of what doctors tell them. One study found that the average patient forgets half of what the doctor said within five minutes of leaving the room (Kitching 1990).
- Most people also want their families to understand what they have heard, but family members are usually not present at the visit. This problem alone can generate an enormous number of time-consuming follow-up phone calls.
- Clinicians are rarely compensated for spending time on this critical aspect of health care.
- Finally, while clinicians can take steps to be prepared for visits, they do not currently have at hand all the information that their various patients might need when they need it.

The Intervention

One way to facilitate patient education and behavioral change is to give patients access to pertinent and specific evidence-based information that they can use to educate themselves and make better decisions about their behaviors, their health, and their health care. Ideally, this strategy takes advantage of the electronic infrastructure emerging in many health care settings, but computer access is not necessary.

While there are several information products available to clinicians, one of the most prominent examples of this strategy is Information Therapy (Ix™). Launched in January 2002, Information Therapy aims to overcome many of the barriers that prevent health care consumers from feeling sufficiently informed and empowered to manage their health.

Information Therapy may be “prescribed” by a physician or by a health system or health plan (e.g., patients scheduled for a specific kind of appointment or procedure would automatically receive relevant information). It may also be “consumer-prescribed” in that consumers can independently research information about their health on their own. The information is designed to be accessible over the Web, but it may also be delivered in print.

Information Therapy is “the prescription of the right information to the right person at the right time in order to help patients make wise health decisions.”

(Center for Information Therapy 2002)
One drawback to instituting an Information Therapy program is the amount of technological infrastructure required. If this infrastructure is not already in place, this intervention may be costly for some sites or health plans.

The anticipated benefits of delivering pertinent, evidence-based information to patients include better management of chronic disease, prevention of medical mistakes, improved efficiencies within the delivery system, and overall improved quality and experience of care.

However, this strategy has not yet been extensively evaluated. A review of outpatient health behavior interventions utilizing computers as extensions of face-to-face encounters found that 13 out of 14 studies of targeted interventions reported improved patient outcomes (Revere and Dunbar 2001).
Special Section: An Overview of the Chronic Care Model

Introduction

Over the past few decades, chronic conditions (such as heart disease, hypertension, diabetes, asthma, and depression) have been rapidly replacing acute and infectious diseases as the major cause of death, disease, and disability in the U.S. (Glasgow, Orleans et al. 2001). However, because the prevailing health care system is based on the diagnosis and treatment of acute illness, it is not well suited for the effective care of chronic illness.

Development of the Chronic Care Model

Clinicians and researchers have devoted significant resources to addressing this problem through chronic disease management, which has evolved into a comprehensive strategy for improving care for people with chronic illness. While disease management programs vary in design and implementation, almost all promote one or more of the six core elements of the Chronic Care Model (CCM) developed by Ed Wagner and colleagues as a framework for guiding specific quality improvement strategies (Wagner 2001).

1) **Health care organization and leadership**: An organizational environment that systematically supports and encourages chronic illness care through leadership and incentives results in more successful quality improvement activities (Wagner 2001).

2) **Linkage to community resources**: Community linkages can provide cost-effective access to services not available inside the organization, such as nutrition counseling, peer-support groups, and data for patient registries (Wagner 2001).

3) **Support of patient self-management**: Individual and group interventions that emphasize patient empowerment and self-management skills have been shown to be effective in the management of diabetes (Norris et al. 2001) as well as asthma and other chronic conditions.

4) **Coordinated delivery system design**: Innovations in delivery system design to coordinate actions of multiple caregivers of diabetics, for example, have led to significant improvements in glycemic control, patient satisfaction, and health care utilization (Sadur, Moline et al. 1999).

5) **Clinical decision support**: Incorporating evidence-based practice guidelines into registries, flow sheets, and patient assessment tools can be an effective method for changing provider behavior (Wagner 2001).

6) **Clinical information systems**: For example, with access to adequate database software, health care teams can use disease registries to contact patients to deliver proactive care, implement reminder systems, and generate treatment plans and messages to facilitate patient self-care (Glasgow, Orleans et al. 2001). (See box on disease registries on next page.)

The model is built on the premise that these six elements work together to create productive interactions between an informed, activated patient and a prepared, proactive practice team – which is what leads to improvements in outcomes.
What We Know About the Chronic Care Model

According to a recent literature review and survey of reputable programs, there is substantial evidence that chronic disease management strategies “achieve better disease control, higher patient satisfaction, and better adherence to guidelines by redesigning delivery systems to meet the needs of chronically ill patients.” (Wagner 2001) For example:

\[ \text{Acute Depression: } \text{A simple but systematic program of feedback to doctors on treatment recommendations, supplemented with follow up and care management by telephone, was shown to significantly improve primary care treatment of patients with acute depression (Simon, VonKorff et al. 2000).} \]

The Uses of Disease Registries

Registries are an important tool for monitoring and improving care for patients with chronic conditions. In essence, a registry is a list of patients with specific conditions. At a minimum, this list contains each patient’s:

- Name
- Diagnosis
- Contact information
- Date of last visit

While a registry may be maintained on paper or in a computer system, a computer offers the ability to search, analyze, and manipulate the data. Ideally, a registry is linked with clinical data and guidelines so that providers can easily track their patients’ progress and proactively address their needs for referrals, tests, consults, etc. (For some organizations, “tickler files” offer a low-tech alternative to registries.)

Registries can be very helpful in serving multiple purposes. Some examples of how you might want to use them include the following:

- To track clinical measures for patients
- To identify patients who need increased care management
- To identify patients that are missing important services or treatments across multiple chronic conditions
- To aid in preplanning of visits to ensure that patients’ needs are met (e.g., by pre-scheduling blood work)
- To improve communication with patients with specific needs (e.g., diabetic patients with elevated levels of HbA1c)
- To identify patients needing education (based on pharmacy data)
- To provide feedback to providers on their performance
- To promote compliance with evidence-based guidelines
- To link to community-wide electronic medical records


For tools to help identify and evaluate registry products, see the Improving Chronic Illness Care (ICIC) Web site: http://www.improvingchroniccare.org/tools/criticaltools.html#registryevaluat.
Diabetes: In a randomized trial to assess the impact of primary care group visits on the process and outcome of care for diabetic patients, the intervention group receiving self-management support through “mini-clinics” involving teams of providers exhibited better outcomes (including higher patient satisfaction and HbA1c levels) than the control group (Wagner, Grothaus et al. 2001).

Interventions Based on Model

Several of the specific interventions described in this Guide are drawn from the Chronic Care Model. In particular, the next two strategies – Planned Visits and Group Visits – are key elements of this model.

For that reason, it is difficult to assess them as stand-alone strategies. Also, while you can implement each of these strategies on their own, it is important to see them as components of a comprehensive and coordinated approach to care. Research studies suggest that the more aspects of the Chronic Care Model you use, the likelier you are to achieve better process and patient outcomes. (See: Renders, Valk et al. 2003.)

Key Resources

Improving Chronic Illness Care (ICIC) Program: www.improvingchroniccare.org

An important national resource for supporting implementation of the Chronic Care Model is the Improving Chronic Illness Care (ICIC) program. This program is funded by the Robert Wood Johnson Foundation and based at the MacColl Institute for Healthcare Innovation at Group Health Cooperative in Seattle.

Now in its third year, the ICIC program seeks to improve the care of the chronically ill through:

- Improvement collaboratives,
- A targeted research grants program, and
- A dissemination program providing technical assistance and support to organizations interested in improving chronic illness care.

Working in collaboration with the Institute for Healthcare Improvement (IHI), ICIC has completed three national chronic condition collaboratives involving over 100 health care organizations participating in 12 to 13-month quality improvement programs. Each organization used the CCM to design and test system changes to improve care for a single condition such as diabetes.

To learn about an evaluation of the three Chronic Illness Care Collaboratives, see: http://www.rand.org/health/ICICE/about.html.

Partnership for Solutions: www.partnershipforsolutions.org

The Partnership is an initiative of Johns Hopkins University and The Robert Wood Johnson Foundation to improve the care and quality of life for people with chronic conditions. The Partnership focuses on identifying and communicating promising solutions based on existing research and its own original research on the problems faced by this population.

C.6 Planned Visits

The Problem

When patients with chronic illness report that their clinicians do not explain things well, they are often referring to inadequate support for, or training in, self-management of their illness. In many cases, clinical teams are not prepared to provide this kind of information during the patient’s visit. Sometimes, the problem is that they are trying to fit it into an acute care visit, whether or not the reason for the visit is related to the chronic illness (Kern and Mainous 2001). A recent study by RAND found that patients received adequate counseling and teaching (i.e., interventions known to be a “best practice” for certain conditions) only 18 percent of the time (McGlynn, Asch et al. 2003).

The Intervention

One antidote to this problem is the planned visit, which is a component of the Chronic Care Model developed by Ed Wagner and colleagues at the MacColl Institute for Healthcare Innovation at Group Health Cooperative in Seattle. The purpose of the visit is to ensure that the clinical team reviews the care for each patient with a chronic illness and is proactive in providing the patient with all the elements of evidence-based care for his or her condition, including training in self-management.

These visits are pre-scheduled one-on-one visits, 20 to 40 minutes in length. During the visit, the clinical team and the patient review the patient’s progress and work on clinical and self-management topics. A typical visit might cover some challenging aspect of self-management, such as medication adherence. Other health professionals, such as pharmacists, nurses, nutritionists, etc., may also play a role by identifying appropriate patients, preparing for the visit, or participating with the primary care physician in the visit. (For more details, see www.improvingchroniccare.org.)

Planned visits can be used for:

- specialty services,
- one-on-one visits with the primary care provider,
- reviews of medications and adherence, and
- psychosocial support (Wagner 2001).

Because this approach gives clinicians and patients the opportunity to review and strengthen the patient’s self-management of his or her chronic illness (Bodenheimer, Wagner et al. 2002), planned visits can fill the gap left by acute care visits which, because of their focus on immediate symptoms, frequently allow little time for this kind of interaction.

Effective planned visits can lead to better clinical control of the illness (e.g., improvements in indicators such as blood pressure, cholesterol, HbA1c), reduce symptoms, improve overall health, and increase patients’ sense of control over their health by providing them with ways to manage their own illness (Bodenheimer, Wagner et al. 2002). They may also lead to fewer acute care visits, reduced costs, and greater patient satisfaction.
Based on their experience with planned visits that focus on better medication management among patients 75 and older, the ICIC program recommends the following steps to conducting planned visits (Wagner 2001):

1. Choose a patient population to focus on (e.g., diabetics, asthmatics, heart disease patients).
2. Generate a list of patients at particular risk within the group. Patients at risk could include:
   - Those who are not adhering to their medications
   - Those with clinical evidence of poor disease control
   - Those who have not received important medications or other services indicated for their condition
3. Call patients and explain the need for a visit.
4. Schedule the visit and instruct the patient to bring all medications.
5. Prepare for the visit (e.g., attach patient summaries to the front of the chart, prepare “Doc Talk” cards as described in C.2. Tools to Help Patients Communicate Clearly to identify the patient’s concerns).
6. Reviews medications prior to the visit.
   (Physician consults with the pharmacy, if necessary.)
7. At the visit:
   - Review the patient’s concerns and questions.
   - Review the patient’s clinical status and treatment.
   - Review medications; eliminate any unnecessary drugs and adjust remaining medications as necessary.
   - Identify facilitators to help patient with behavioral changes.
   - Discuss and resolve adherence issues with patient.
   - Collaboratively develop an action plan that the patient can and will follow.
   - Schedule a follow-up visit.

What We Know About the Value of Follow-Up Care

There is little literature on the effectiveness of planned visits because they are only one component of the Chronic Care Model described earlier. However, more general studies of the effects of follow-up visits for chronic illness found that they improve the management of disease. For example, one study found that children and adolescents with regular follow-up visits for diabetes had better glycemic control, fewer episodes of diabetic ketoacidosis, and reduced likelihood of developing retinopathy compared to children and adolescents with irregular follow-up (Jacobson, Hauser et al. 1997).

For More Information

These steps and a case example are reviewed in a video available from the ICIC Website at www.improvingchroniccare.org.
### C.7 Group Visits

#### The Problem

Dissatisfaction with how providers communicate can arise when people need more attention, support, and information from the health system than they are getting. But in a typically brief office visit, clinicians do not have the time to cover everything the patient may need to know or to discuss all of their concerns (including problems with self-management.) As a result, the patient may feel that no one is listening or making the effort to explain things clearly. While the patient may be receiving various services, many of his or her needs are being missed.

This problem is particularly common for patients with chronic conditions, who are often struggling to understand how to control and live with their disease. A frequent consequence is that these patients become “high utilizers” of the health care system, particularly of emergency departments and urgent care centers – which tends to make them even less satisfied with their health care experience and more likely to have poor outcomes. These visits occur in part because the system of care does not provide patients with the tools, support, and information they need to manage their health problems adequately.

#### The Intervention

Group visits are an important component of the Chronic Care Model. In essence, they are a form of outpatient care that combines medical care, patient education, and patient empowerment in a group setting. In a group visit, patients with a common condition (such as diabetes) meet as a group under the guidance of one or more clinicians; participation in this group becomes part of their regular clinical treatment. This model dates back to at least 1990 when John Scott, M.D., of Kaiser Permanente Denver created the Cooperative Health Care Clinic (CHCC) for groups of 25 chronic care patients, 65 and older, who were high users of health care (Lippman 2000).

The benefits associated with group visits include reduced health care costs, greater patient and clinician satisfaction, greater patient compliance, reduced repeat hospital admissions, and fewer emergency room and sub-specialist visits (Improving Chronic Illness Care 2002).

As a response to increased pressure for clinician productivity, this format can be an efficient way for patients to have face-to-face contact with their provider, get educational content, and learn from the experiences of fellow patients, without overly taxing the clinician’s time. These groups provide social and psychological support for the participants and help motivate them to follow their treatment plan and to take more responsibility for their own health (Improving Chronic Illness Care 2002). The clinician is spared the repetition of delivering the same educational message to multiple patients in traditional one-on-one encounters (Masley, Sokoloff et al. 2000), while patients get to share valuable information and insights with one another about self-management and quality of life issues.

There are several variations of the group visit concept. For example, in the model known as the drop-in group medical appointment (DIGMA), patients need not make prior appointments (Lippman 2000). Appendix D provides details on the various ways in which medical practices conduct group visits.

The implementation of group visits is not complex, but it does require advance planning and preparation. There are several good resources that describe how to establish and run group visits (see the box on Key Resources). A few considerations are worth mentioning:
First, choose an appropriate condition. Group visits are best suited for chronic illnesses, such as asthma, diabetes, arthritis, and obesity (Masley, Sokoloff et al. 2000).

Think carefully about which patients to invite. The goal is to identify patients who seem in need of better care, better advice on self-management, and more support. One way to do this is to focus on high-utilization patients, who can often be identified through pharmacy and billing records.

Keep the group a manageable size, perhaps 10 to 16 patients.

Pay attention to who is leading the group visit. Physician-led groups can be more effective at reducing no-shows than groups led by nurses or other mid-level clinicians. Also, it is important to avoid the impression that group visits are a way for physicians to avoid time with the patients.

Be sure to get the permission of participants to share information about them in the meeting. Also discuss the confidentiality of personal health information during the meeting itself.

Barriers to conducting group visits include privacy concerns, resistance from patients who do not want to participate in a group, and practical issues like adequate meeting space and available personnel. For many practices, the only space large enough to hold a group of people is the waiting room. Some medical groups get around this problem by conducting the group visits in the evenings; other organizations sometimes seek out space in the community that may be more accessible and familiar to their patients.

What We Know About the Impact of Group Visits

Evaluations of group visits have found promising results:

Randomized trials have shown that diabetic patients involved in group visits achieved better HbA1c levels than patients in a control group (Trento, Passera et al. 2001). Other studies of group education in diabetes have also found that HbA1c levels in the intervention groups were better than those of control groups; they also found evidence of improvements in patient self-care and satisfaction (Sadur, Moline et al. 1999), self-efficacy (Anderson, Funnell et al. 1995), and body weight and non-fasting triglyceride levels (Kronsbein, Jorgens et al. 1988).

In a study that compared a control group to a group of high users of HMO medical care who participated in group visits (all aged 65 and older with chronic conditions), the findings indicated that those in the intervention group were more satisfied with their care; had lower care costs; and had fewer ER visits, sub-specialist visits, and calls to physicians.

Nurse contact (phone and in person) was higher among the group visit patients. Also, participating physicians were more satisfied with caring for older patients than comparison physicians who relied on standard one-to-one interactions with their patients (Beck, Scott et al. 1997).
Key Resources

Improving Chronic Illness Care program:  www.improvingchroniccare.org

Also see:


Section 4-D

Improvement Strategies for “Customer Service”

In the CAHPS 3.0 Health Plan Survey, some questions focus on customer service in the doctor’s office while others focus on service at the level of the health plan. In addition, the version of the survey submitted to NCQA (CAHPS 3.0H) includes questions about the health plan’s ability to handle complaints. These questions are listed in the table below:

For Medicare managed care enrollees, customer service is often a concern, with over a quarter of survey respondents reporting a problem of some kind getting help from customer service. (See Table 12 at top of next page.) For commercial enrollees, customer service and complaint resolution are the areas in which they rate their plans the lowest. Even in the best-performing plans, nearly 35 percent of members experienced a problem of some kind getting help from customer service (NCQA 2002).

This section reviews four tactics for improving customer service at the level of physicians, groups, and health plans:
- Listening Posts
- Patient and Family Advisory Councils
- Service Recovery Programs
- Standards for Customer Service

CAHPS Questions in the “Courteous and Helpful Office Staff” Composite

- In the last...months, how often did office staff at a doctor’s office or clinic treat you with courtesy and respect?
- In the last...months, how often were office staff at a doctor’s office or clinic as helpful as you thought they should be?

CAHPS Questions in the “Health Plan Customer Service” Composite

Questions from CAHPS 3.0 (Core Survey)

- In the last...months, how much of a problem, if any, was it to find or understand information in the written materials?
- In the last...months, how much of a problem, if any, was it to get the help you needed when you called your health plan’s customer service?

Additional Questions from CAHPS 3.0H

- Of those who called or wrote their health plan with a complaint or problem: How long did it take for your health plan to resolve your complaint?
- Of those whose complaint or problem was resolved: Was your complaint or problem settled to your satisfaction?
Table 12. Problems with Customer Service: The Experiences of Medicare Managed Care Enrollees
Percent of Respondents Who Reported No Problem Getting Help When They Called Customer Service *

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>10th Percentile</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>90th Percentile</th>
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<td>2000</td>
<td>69.59</td>
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<td>63.23</td>
<td>69.70</td>
<td>76.99</td>
<td>82.95</td>
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<td>2001</td>
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<td>64.29</td>
<td>72.45</td>
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<td>2002</td>
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<td>59.90</td>
<td>66.33</td>
<td>74.47</td>
<td>80.95</td>
<td>85.99</td>
</tr>
</tbody>
</table>

* Question: In the last 6 months, how much of a problem, if any, was it to get the help you needed when you called your Medicare health plan's customer service? 
Source: Medicare Managed Care (MMC) CAHPS Survey

General Resources

Sage Consulting: www.sageteam.com

Also see this report from the NCQA’s Quality Profiles (www.qualityprofiles.org):
D.1 Listening Posts

The Problem

Quality improvement activities that focus on the needs and experiences of customers – i.e., members and patients – can only succeed in an environment that emphasizes the concepts and responsibilities of “customer service.” One critical element of effective customer service is the capacity to elicit detailed, constructive feedback in a way that assures people that someone is really listening to them. When this is done well, members and patients are more likely to report a positive experience. At the very least, the organization should not be surprised by any negative reports.

However, this hands-on approach can be a major challenge for health care organizations that are not accustomed to communicating with their members or patients in this way. Many assume they understand how to fix the problem and do not probe beneath the surface of complaints and survey responses. For example, complaints that the office staff of a plan or a group are not helpful could stem from many sources:

- Not being given clear instructions about how to get to the practice
- Not being able to get an appointment when they needed it
- Being put on hold in the middle of a medical emergency
- Real rudeness and disrespect during a visit or on the phone

The solutions to these problems vary tremendously. Without digging deeper with patients or members to understand the true problem, a plan or group could waste a great deal of money on the wrong fixes.

The Intervention

The term “listening posts” refers to a variety of ways to learn about the experiences of patients and staff and involve them in the improvement process. Most already exist in some form in most health plans or clinical practices. The most difficult issue related to listening posts is building a system to routinely synthesize all of the feedback you receive from these different sources into a coherent picture of what they are telling you about the way you deliver care.

Once this system is in place, you can perform root cause analyses to identify problems such as a particular staff member or medical group that accounts for many of your problems versus problems that are systemic to your delivery of care such as an antiquated manual appointment system.

“Listening posts” strategies include:

- Surveys
- Focus Groups
- Walkthroughs
- Complaint/Compliment Letters
- Patient and Family Advisory Councils (This last strategy is described separately in Idea D.2 immediately following this discussion.)

Surveys

You can benefit from analyzing data from the annual CAHPS survey as well as from more frequent, small-scale use of CAHPS composites or individual questions to monitor a specific intervention. Analytical approaches are discussed in detail in Section 2 of this Guidebook.
**Focus Groups**

You can bring staff and/or patients together in a moderator-led discussion group to collect more precise information about a specific problem and new ideas for improvement strategies. A focus group allows for more in-depth exploration of the drivers of dissatisfaction and can provide excellent ideas for reengineering services. In addition, videotapes of focus groups can be very effective at changing the attitudes and beliefs of staff members because the stories that participants tell often bring to life the emotional impact of excellent service as well as service failures. To learn more about focus groups, see:


**Walkthroughs**

A walkthrough may be the easiest way to give your staff the patient’s perspective and the fastest way to identify system, flow, and attitude problems, many of which can be fixed almost overnight. Performing a walkthrough is an effective way of recreating for staff the emotional and physical experiences of being a patient or family member. Walkthroughs provide a different perspective and bring to light rules and procedures that may have outlived their usefulness. This method of observation was developed by David Gustafson, Ph.D. at the University of Wisconsin in Madison and adapted by Susan Edgman-Levitan to incorporate the staff perspective.

During a walkthrough, one staff member plays the role of the patient and another accompanies them as the family member. They go through a clinic, service, or procedure exactly as a patient and family does. They do everything patients and families are asked to do and they abide by the same rules. They do this openly, not as a mystery patient, and throughout the process ask staff members a series of questions to encourage reflection on the processes or systems of care and to identify improvement opportunities.

The staff conducting the walkthrough take notes to document what they see and how they feel during the process. They then share these notes with the leadership of the organization and quality improvement teams to help develop improvement plans. For many who do this, it is the first time they have ever entered their clinics, procedure rooms, or labs as the patient and family do. Clinicians are routinely surprised about how easy it is to hear staff comments about patients from public areas and waiting rooms. Walkthroughs usually turn up many problems with flow, signage, and wasteful procedures and policies that can be fixed almost immediately. (See recommendations for conducting a walkthrough in Appendix E.)

As an alternative to a walkthrough, you could use a similar technique called “patient shadowing,” where a staff member asks permission to accompany a patient through the visit and take notes on the patient’s experience. Since this approach does not require taking a slot away from a real patient, it can be useful in settings where visits are at a premium.

**Complaint/Compliment Letters**

By reviewing these letters systematically, you can often get a better picture of where you need to do more “background research” with staff and patient focus groups or a walkthrough versus when you need to get a manager involved to address a personnel problem. (For more on managing complaints, see *Idea D.3: Service Recovery Programs* as well as the discussion of customer service in Section 1.)
**Key Resources**


D.2 Patient and Family Advisory Councils

The Problem

For some patients and health plan members, the issue is not a concern about being heard. Rather, their dissatisfaction with their health care experience reflects frustration with a system that does not involve them in decisions that will affect the design and delivery of care. From their perspective, the system is superficially responsive: It acknowledges that a problem with service or care exists, but does not bother to investigate whether a proposed solution will really address the problem from the patients’ or members’ point of view.

Although patient satisfaction surveys provide extremely useful data, they are not the best source of information for innovative ideas about improving the delivery of care. Also, even plans and practices with high satisfaction scores often have many opportunities to improve services, which may not be revealed by survey data.

The Intervention

A Patient and Family Advisory Council is one of the most effective strategies for involving families and patients in the design of care (Webster and Johnson 2000). First designed and advanced by the Institute for Family-Centered Care, these councils are composed of patients and families who represent the constituencies served by the plan or medical group. It is important to involve both families and patients because they see different things and they each have an important perspective to consider.

The goal of the councils is to integrate the patients and families into the plan or practice evaluation and redesign processes in order to improve the experience of care and customer service. In addition to meeting regularly with senior leadership, they serve as “listening posts” for the staff and provide a structure and process for ongoing dialogue and creative problem-solving between the organization and its patients and families. (To learn more about this approach, see Idea D.1 Listening Posts.) The councils can play many roles but they do not function as boards, nor do they have fiduciary responsibility for the organization.

Council responsibilities may include input into or involvement in:

- program development, implementation, and evaluation;
- planning for major renovation or the design of a new building or services;
- staff selection and training;
- marketing plan or practice services;
- participation in staff orientation and in-service training programs; and
- design of new materials or tools that support the doctor-patient relationship. (For an example, see the Shared Care Plan in Appendix C.)

These councils help overcome a common problem that most organizations face when they begin to develop patient-and family-centered processes: They do not have the direct experience of illness or the health care system. Consequently, health care professionals often approach the design process from their own perspective, not the patients’ or families’. Improvement committees with the best of intentions may disagree about who understands the needs of the family and patient best. But family members and patients rarely understand professional turf boundaries. Their suggestions are usually inexpensive, straightforward, and easy to implement because they are not bound by the usual rules and sensitivities.
In general, when starting a Patient and Family Advisory Council, it is best to start with members that are recommended by staff. Depending on the size of the organization, most councils have between 12 and 30 patient or family members and 3 or 4 members from the staff of the organization. The council members are usually asked to commit to one 2- to 3-hour meeting a month, usually over dinner, and participation on one committee. Most councils start off with one-year terms for all members to allow for graceful departures in case a member is not well suited for the council.

Look for people who can listen and respect different opinions. They should be supportive of the institution’s mission as well as constructive with their input. Staff members will frequently describe good council members as people who know how to provide “constructive critiques.” They also need to be comfortable speaking to groups and in front of professionals.

**Key Resources**


This manual is an excellent resource for organizations who are ready to establish these councils. The Institute’s Web site (www.familycenteredcare.org) is also a good source of information about related topics such as creating patient and family faculty programs.


D.3 Service Recovery Programs

The Problem

No matter how well you manage the customer service at your organization, problems are inevitable. Some may be serious, some may be minor, but they all play a role in shaping the member’s or patient’s perceptions of the organization and its responsiveness to their needs. Marketing researchers have found that the most satisfied customers are ones that have never experienced a serious problem or product defect. The next most satisfied customers are those who have experienced service difficulties, sometimes significant ones, that have been redressed by the organization. The least satisfied customers are those whose problems remain unsolved.

In surveys of Medicare managed care enrollees, only 56 percent reported that their complaint or problem was settled to their satisfaction (see Table 13 below). In contrast, nearly 80 percent of respondents enrolled in commercial plans said that their complaints were adequately addressed (NCQA 2002).

Table 13. Satisfaction With the Resolution of Member Complaints: The Experiences of Medicare Managed Care Enrollees

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>10th Percentile</th>
<th>25th Percentile</th>
<th>Median Percentile</th>
<th>75th Percentile</th>
<th>90th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>55.74</td>
<td>42.94</td>
<td>48.28</td>
<td>55.10</td>
<td>61.54</td>
<td>71.05</td>
</tr>
<tr>
<td>2001</td>
<td>56.53</td>
<td>44.00</td>
<td>47.83</td>
<td>56.48</td>
<td>64.62</td>
<td>71.74</td>
</tr>
<tr>
<td>2002</td>
<td>55.66</td>
<td>41.88</td>
<td>49.37</td>
<td>54.66</td>
<td>62.30</td>
<td>70.00</td>
</tr>
</tbody>
</table>

* Question: Was your complaint or problem settled to your satisfaction?

Source: Medicare Managed Care (MMC) CAHPS Survey

Most health plans and physician practices have some sense of the cost of replacing a lost member or patient. But many are not aware of how powerfully the “grapevine effect” can affect their reputations. Several marketing studies have confirmed that only 50 percent of unhappy customers will complain to the service organization, but 96 percent will tell at least nine or ten of their friends about their bad experience.

The “grapevine effect” can become an even more powerful force when your members and patients take advantage of the Internet to voice their complaints. Many Internet sites already allow patients to evaluate their experiences with a doctor, group, or plan on-line and some have the capacity to include written comments. Doctorquality.com, Healthgrades.com, and Healthcareprice.com are examples of proprietary sites that sell this kind of information to consumers. Several health plans, such as HealthPartners in Minnesota, also publish their

“When it comes to service recovery, there are three rules to keep in mind:
1. Do it right the first time.
2. Fix it properly if it ever fails.
3. Remember: There are no third chances.”

— Leonard Berry, Marketing Professor, Texas A & M University
patient satisfaction data as part of their on-line provider directories. Consider the influence that consumer ratings have on restaurants (through Zagat’s surveys at www.zagat.com) and books and other products (through Web sites like www.Amazon.com).

In the same way that it can be helpful to remember that some problems or difficulties will always be with us, it is important to acknowledge that complaints are inevitable. Health care organizations are caring for people who are almost always anxious and afraid, so the stakes are higher. What differentiates member- or patient-focused organizations from others is whether and how they handle these incidents to ensure that unhappy members or patients feel like their concerns have been addressed and that the organization values them.

**The Intervention**

Service recovery is the process used to “recover” dissatisfied or lost members or patients by identifying and fixing the problem or making amends for the failure in customer or clinical service. Excellent service recovery programs are an effective tool for retaining members or patients and improving their level of satisfaction. Good service recovery programs can turn frustrated, disgruntled, or even furious patients or members into loyal ones.

Service recovery is about restoring trust and confidence in your ability as an organization to “get it right.” When members or patients repeatedly experience breakdowns in service, they begin to lose confidence in the care they receive. If you cannot get the small things right, how can they trust that you will do well with the complicated processes required to deliver high-quality care?

National experts in service recovery recommend a well-tested process for service recovery. This six-step process details how to handle a range of problems from the mildly irritated to the malpractice case in the making.

1. Apologize/acknowledge
2. Listen, empathize, and ask open questions
3. Fix the problem quickly and fairly
4. Offer atonement
5. Follow up
6. Remember your promises

Service recovery can range from listening to an upset patient to giving free parking to patients who have to wait more than a specified time for their doctor visit. It can also mean providing solutions or making amends for problems that the patient created. Making sure that someone gets to see a doctor when they show up on the wrong day is an example of the kind of customer service patients never forget. Service recovery programs ensure that patients never hear, “I can’t help you with this. It’s against our policy.”

According to Dr. Wendy Lebov, a national expert on service recovery in health care, service recovery is everybody’s job. When people complain, they usually address those complaints to front-line staff – but these staff do not necessarily have the skills or the resources to fix “system issues” that are often the source of the problem. Managers and the executive leaders have responsibility for redesigning dysfunctional work processes, systems, or even staff who may need to be moved to a different job.

Dr. Lebov has developed a very effective model for service recovery. Her model is described in detail in *Service Savvy Healthcare: One Goal at a Time* (see the list of resources at the end of this
description). Based on her experience with hundreds of health care organizations, the following five components must be in place to handle customer complaints and consistently impress your members and patients:

1. Effective systems for inviting/encouraging customers to complain.
2. Guidelines for staff and latitude to act and atone. (See box at right.)
3. Documentation and a feedback loop that channels problems revealed through service recovery into an improvement or problem elimination process.
4. Clear protocols for handling customer complaints effectively.
5. Staff skilled in service recovery – aware of protocols, and able to listen nondefensively, empathize, handle emotion, solve problems, and follow through to closure. (For an overview of what employees need to understand about complaints and service recovery, see Appendix F.)

GUIDELINES FOR STAFF AND LATITUDE TO ACT AND ATONE

Staff need to have the authority to make decisions about handling complaints autonomously so they can act quickly. Specifically, they need:

- Clarity about the extent of their authority to act on complaints without getting approval from managers
- Defined courses of actions for most frequent complaints
- Minimal red tape
- A clear system of resource people, clear authority lines, and backup systems for dealing with difficult situations or those with financial, legal or ethical implications

Good service recovery programs go beyond the “quick fix.” They include a process for tracking problems and complaints to help identify the source of the problem so the right improvement can be put into place. Some complaints arise from experiences with a specific person in the service process, which reflects a training problem, while others are the result of system problems that require a totally different process to resolve. The tactic of assigning complaint letters received by the CEO to middle managers for resolution as if they all reflect a one-time event or an employee that needs disciplinary action is outdated, and will never result in permanent solutions to long-term problems. Many staff know immediately which situations or patients will end up in the CEO’s office. Organizations with good customer service and service recovery programs are proactive and let the CEO, clinic manager, or chief medical officer know about these situations right away so that the person can be contacted before they have the time to file a formal complaint.

“Eighty percent of customers’ problems are caused by bad systems, not by bad people.”

– John Goodman, Technical Assistance Research Programs (TARP), a market research firm based in Arlington, VA

WHAT WE KNOW ABOUT THE IMPACT OF SERVICE RECOVERY PROGRAMS

Studies indicate that when customers’ problems have been satisfactorily handled and resolved, their loyalty and plans to use the services again were within a few percentage points of those who had not experienced a problem (Goodman 1988).

In other service industries, service recovery has proven to be cost-effective. Also, retention benefits the bottom line: Because of their word-of-mouth referrals and willingness to purchase ongoing services and premium products, customers retained over five years can be up to 377 more profitable than a “revolving door” customer who uses your services once (Reichheld and Sasser 1990).
Encourage Complaints

Health care organizations that are truly committed to improving the member’s or patient’s experience of care can make this commitment obvious to their staff and their members by encouraging complaints. Moreover, improvements in customer service depend on the organization’s ability to elicit and monitor customer complaints. In particular, service recovery cannot take place if the provider does not know that the member or patient is unhappy.

Many people would rather “switch than fight,” especially in a health care environment, where people fear that complaining could jeopardize the quality of the clinical care they receive. Also, minorities and people from under-served communities tend to avoid complaining, even though they may have significant problems with the delivery of care (Schneider, Zaslavsky et al. 2001; Zaslavsky, Zaborski et al. 2002).

If you make it harder for members or patients to complain, you will continue to miss important service failures that shape your reputation in the community and the quality of care. It is helpful to offer your members and patients multiple ways to give you feedback and help you improve your service. Several tactics for getting feedback are reviewed in Idea D.1: Listening Posts.

Also, there are many tools for cataloguing patient or member complaints that allow you to track the problems by CAHPS composite or other typologies that support linking the qualitative complaints to improvement activities (For one example, see the Feedback Monitor Pro at http://www.radicalogic.com/. This product integrates quick-response and productivity innovations to transform complaints, compliments and suggestions into valuable improvement opportunities. By simplifying documentation, enabling collaboration, and automating resource-intensive processes, Feedback Monitor Pro streamlines feedback management to ensure a high level of satisfaction and loyalty.)

The following table summarizes the most common steps in the process for managing complaints.

<table>
<thead>
<tr>
<th>Complaint Management Process Step</th>
<th>Actions to Take</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encourage use of complaints as a QI tool</td>
<td>Let your staff know that complaints are valued and essential for QI. Display complaints in public areas to reinforce the value you place on them. Make it easy for customers and staff to complain.</td>
</tr>
<tr>
<td>2. Establish a team of people to respond to complaints</td>
<td>The team should include people from the front lines as well as senior management. Use this team to develop planned protocols for service recovery for your most common service failures.</td>
</tr>
<tr>
<td>3. Resolve customer problems quickly and effectively</td>
<td>Commit the organization to resolving complaints quickly to avoid the waste of repeated contacts. Train and empower frontline employees to resolve problems and give them the authority to fix problems on the spot.</td>
</tr>
<tr>
<td>4. Develop a complaint database</td>
<td>Develop a computerized database that catalogs complaints by CAHPS composite or question to identify trends and generate regular reports to staff and management.</td>
</tr>
<tr>
<td>5. Commit to identifying failure points in the system</td>
<td>Using complaint data, identify failure points that are root causes of low satisfaction. Be proactive, not reactive; try to anticipate negative situations from occurring in the first place.</td>
</tr>
<tr>
<td>6. Track trends and use information to improve service processes</td>
<td>Stop handling problems one at a time as if they have never occurred before.</td>
</tr>
</tbody>
</table>

Adapted from Bendall-Lyon D. Powers TL. The Role of Complaint management in the service recovery process. Joint Commission Journal on Quality Improvement. 2001 May. 27(5):278-86.
Key Resources


D.4 Standards for Customer Service

The Problem
Achieving high levels of member satisfaction requires two ingredients:

- A deep knowledge of what constitutes high quality service from the perspective of your members and patients
- Service standards that clearly tell your staff what is expected of them in their interactions with members and patients

However, while most of the accrediting organizations require such standards in their regulations, most health care organizations do not have a well-defined process for developing effective standards. One barrier is that setting standards takes time. However, Dr. Wendy Leebov and other national experts in this area argue that the absence of standards necessitates spending time on far more unpleasant activities, such as responding to complaints and managing unsatisfactory staff behavior.

Another problem with developing standards is that some of the behaviors are hard to describe. It can be challenging to describe what good and excellent service feel like. Setting standards is also fundamentally about being accountable to high standards of service on a daily basis. That is a challenge in health care systems that are often deeply grounded in a culture of professional autonomy.

The Intervention
Customer service standards are already embedded in many of the CAHPS survey questions. These questions were selected because they measure processes of care that patients and members use to define a “quality experience.” However, that does not mean it will be easy to translate the questions into standards that your staff can measure and evaluate.

In some respects, standards are similar to “service guarantees” – a concept that frightens many health care employees because they do not trust that the systems they need to meet “guarantees” are in place. Organizations that maintain their focus on service often find that the standards evolve over time. As the organization gets better and better at meeting the needs of its patients, the staff are willing to raise the standards they commit to and trust that they will be able to deliver.

Examples of standards that some plans or groups have implemented include the following:

- 90 percent of patients who call for an appointment will receive one for the same day.
- Patients will wait 10 minutes or less in the reception area before being placed in an exam room.
- All telephone calls will be answered within three rings.
- All test results will be communicated in writing to the patient after an ambulatory care visit.

Leebov et al. describe a step-by-step process to help set standards that everyone can abide by (Leebov, Scott et al. 1998). The steps are as follows:

1. Work with staff and managers to resolve any mixed feelings or uncertainty about setting high standards and holding staff accountable.
2. Help your team to commit to aiming high and setting ambitious goals.
3. Engage your customers and staff in identifying basic service behaviors that reflect impressive customer service.
4. Use these guidelines to identify job-specific behaviors.

5. Crystallize these behaviors into scripts and protocols (see box on “Talking Points”).

6. Design and institute measurable service standards that you expect your people to meet regularly. (See example below.)

7. Set service targets – stretch goals – that will have a significant impact on customer satisfaction and that can become standards.


9. Hold yourself and your team accountable.

Although this process may require a big change in an organization’s culture, it is very valuable. Without these kinds of standards in place, most organizations cannot sustain a meaningful focus on patient-centered improvements.

**Example of Service Standards for a Pharmacy Department:**

**Kaiser Permanente, Washington DC**

Our department will abide by the following standards to guarantee caring and quality service is provided to our members and in-house customers.

**Service Standards to our Members**

- We will greet our members in a courteous and professional manner.
- We will listen effectively to our members’ requests and promptly take the necessary actions to assist them.
- We will keep our members informed of unexpected delays in service.
- We will not engage in personal conversations while providing service to our members.
- We will call our members by name and will verify identity by means of address and/or ID card.
- We will inform our members of specific departmental procedures (e.g., refill line, last refill, mail order) to help them maximize pharmacy services.
- We will finish our encounters with our members in a courteous and professional way.
- We will respect our members privacy and will not discuss member-related information in public.

**Service Standards to our In-House Customers**

- We will interact with our co-workers and company staff in a courteous and professional way.
- We will not discuss staff, organizational policies, problems, or medical care in public areas.
- We will be considerate, and we will cooperate and assist co-workers, staff, and other departments to guarantee quality service.
- **Telephone etiquette:**
  - We will answer the phone within four rings.
  - We will provide our center location, our name, and our department and politely ask: “How may I help you?”
  - We will listen to the caller’s request and assist accordingly.
  - We will direct the call to the person, department, or service needed to assist the caller.
  - We will obtain the caller’s permission before placing the caller on hold.
  - We will end the call in a courteous and professional way.
  - We will omit personal phone calls while on duty.
“Talking Points”

Talking points or scripts ensure that everyone in the organization is delivering a positive message in a consistent way to your members and patients. These messages make sure that you are meeting your service standards and build these behaviors into predictable, daily routines. Work with your staff to develop the talking points and to help them understand that scripts are not intended to turn your staff into robots. Rather, they are reminders of the minimum that staff can do to create a positive experience for members and patients.

Once people become familiar with the design and intent of talking points, they often realize how helpful they are when dealing with frightened or upset patients. Simply put, scripting:

- Conveys the message of your culture, “this is how we do business around here.”
- Puts words to your behaviors.
- Sets clear expectations for what is supposed to happen in encounters.

Here are some examples of how scripts can help to change communications:

**Instead of...** | **Say...**
---|---
“No, I don’t have the time.” | “Yes! I can help you in five minutes.”
“We’re short staffed.” | “We may be busy, but we’re never too busy to help you!”
“I don’t know.” | “I think I can help you find the answer.”
“It’s the doctor’s fault and I can’t believe that happened.” | “I’m sorry that happened. What can I do to help?”

(Adapted from *Scripting*, Baptist Healthcare Leadership Institute, Pensacola FL, 2003)

Other examples of the most common and powerful talking points are:

- “How can I help you? I have the time.”
- “How can I make this better for you?”
- “I’d like you to meet, XXXX, your doctor, nurse, etc. She will take excellent care of you.”

When staff are resistant to using scripting, remind them that their personalities will always come through yet they will be delivering a consistent message that reflects your organization’s high standards. Reward employees who use scripting effectively and make it easy for people to remember the most common and important message by putting them on the back of name badges or other convenient places.

For further guidance, see: *Scripting*. Pensacola, FL: Baptist Healthcare Leadership Institute, 2003.
Case Example:  
Customer Service Interventions at Harvard Pilgrim Health Care

Based on its analyses of CAHPS data as well as other data, Harvard Pilgrim decided to design a set of interventions aimed at improving telephone access as measured by Average Speed to Answer (ASA) and Call Abandonment Rates. Some of the interventions also improved the consistency, clarity, and timeliness of responses to member inquiries and the availability of written member materials.

The plan implemented two types of interventions:

**Interventions aimed at increasing self-service options for members**

The purpose of these interventions was to improve access and reduce call volume to Customer Service Representatives.

- Installed an Interactive Voice Response (IVR) system to enable members to get quick answers to the most frequently asked questions and to place the most common requests (e.g., new identification (ID) card, change of address, change of primary care provider (PCP)) without the intervention of a service rep. This system operates all day, everyday. Through focus groups, members helped to design the IVR, which has been evaluated and fine-tuned over time.

- Installed an after hours voice-mailbox so that members could leave an inquiry in the evening or over a weekend and receive a call back from a Customer Service Representative in the morning of the following business day.

- Developed and implemented Web-based FAQ (frequently asked questions) materials, downloadable member materials (e.g., benefit plan descriptions), online service requests (new ID cards, address and PCP changes), and email inquiries. The materials and requests are available around the clock, with service and inquiry responses within 24 hours.

- Currently developing a much broader range of self-service options (e.g., change own address or PCP, see claims status, view prescription history, etc.).

- Implemented financial incentive program for Customer Service Representatives to promote the self-service options to members

**Interventions aimed at increasing efficiency and responsiveness of Customer Service representatives**

- Simplified and standardized product offerings and benefit policies.

- Installed an intranet-based reference system for service representatives to assure quick and consistent responses to member inquiries: fine-tuned it over time to provide quick links to frequently viewed pages.

- Increased manager and staff training and improved and streamlined staff resource materials.

- Improved internal communication and workflow between Customer Service and Claims departments to resolve members’ inquiries about claims.

- Expanded hours of operation to 7:30 PM on Mondays and Wednesdays (peak volume days).

- Implemented a series of performance incentive programs for Customer Service Representatives that were tied to the goals of reducing ASA and Call Abandonment Rates.
Case Example (continued)

Results of Interventions at Harvard Pilgrim

Performance on Internal Metrics

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Current Goal</th>
<th>Q4 2000</th>
<th>Q4 2001</th>
<th>Q4 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed to Answer</td>
<td>30 seconds or less</td>
<td>67 sec.</td>
<td>47 sec.</td>
<td>28 sec.</td>
</tr>
<tr>
<td>Call Abandonment Rate</td>
<td>3% or less</td>
<td>5.6%</td>
<td>2.8%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Performance on CAHPS Measures

Member Services Telephone Access Improvement 1999-2003

CAHPS Item: In the last 12 months, how much of a problem was it to get the help you needed when you called your health plan’s customer service?
Section 4–E

Improvement Strategies for “Claims Processing”

The HEDIS version of CAHPS (known as CAHPS 3.0H) includes a few items related to claims processing that build on the question about paperwork in the core survey. These questions are listed in the table at right.

These few items can have a major impact on a health plan’s CAHPS scores. In fact, many plans have found that claims processing is the single most important driver of the overall health plan rating.*

The Problem

Several related factors contribute to members’ experiences with claims and paperwork:

- When bills are not paid accurately or in a timely fashion, providers may pass their dissatisfaction along to their patients, and sometimes pass their bills along as well. In some cases, providers resubmit the claim, which can clog the system and add to further delays.
- Members who receive a bill for a covered service often see that as a failure on the part of the health plan, even when the problem may have originated with the provider.
- Finally, when members call their provider about a bill that they believe was received in error, they are frequently referred to their health plan. This reinforces the perception that the health plan is at fault, whether or not that is true.

In addition, members sometimes experience problems with claims they have submitted directly, as well as those submitted by providers on their behalf.

To address the scenario described above, health plans must start by identifying the most likely causes of two common problems: inaccurate claims payments and delays in claims payments. Inaccurate payments can occur when providers submit incorrect or incomplete information, which may result in inappropriate denials of payment. They may also be the result of complex benefit designs and/or multiple fee schedules that complicate the plan’s claims processing algorithms and produce errors. Finally, members may perceive that a claim was handled incorrectly because they misunderstood their benefits and/or coverage limitations. (One way to probe this possibility is to check the results for the CAHPS item on understanding information in the health plan’s written materials.)

* Personal communication with Kathryn L. Coltin, MPH, Director of External Quality and Data Initiatives, Harvard Pilgrim Health Care, October 2003; based on unpublished reports analyzing the CAHPS performance of health plan members of the New England HEDIS Coalition.
Delays in claim payments may be due to:
- Pended claims due to incomplete information submitted by providers
- Health plan protocols and/or dollar thresholds for pending claims for manual review
- Backlogs due to pended claims and resubmissions of claims already in the system
- Submission and processing lags associated with paper claims and manual processing
- Cash flow policies at health plans that can delay payment even when processing has been completed

**The Intervention**

While different interventions need to be designed to address each type of problem, some interventions will help to address all or most of the problems. These include changes in policies and processes as well as applications of information technology. The examples of strategies and specific tactics provided below are drawn from the experiences of Harvard Pilgrim Health Care.

**Changes in Policies and Processes**

1. **Simplification of benefits and payment policies.** For example, the plan:
   - Implemented contracting guardrails, which limit the customization of provider contracts to be configured in the claims system.
   - Reduced reasons why a claim would pend to increase the percent of claims that can be auto-adjudicated.
   - Implemented new processes that align Customer Service and Claims to allow claims submitted for reimbursement directly by the member to go through Claims correctly the first time, and for checks to be issued immediately after adjudication is complete.
   - Implemented an in-line quality control program to identify and fix claim processing errors before processing is complete. Processors are held fully accountable for claim accuracy.

2. **Provider education around the most common types of problems.** For example, Harvard Pilgrim created a highly integrated Payment Policy Team to create, implement, and communicate the plan’s payment policies. Prior to that, providers that submitted claims incorrectly had few tools to educate them on the plan’s payment and billing policies. As a result of the Payment Policy Team’s efforts, the plan released both a hospital provider manual as well as a major revision of a physician manual to aid providers with billing.

3. **Restructuring, training, and support tools for staff.** For example, the plan:
   - Created a dedicated Provider Claims Focus Team to address specific provider issues and root cause analysis. This team increased analysis of second submissions and appeals to address the root cause of the top issues for re-submission.
   - Standardized all Claims policies, procedures, and processing guidelines and placed them on an internal Web site. Processors were required to use the Web site as the “truth” copy of guidelines.
   - Improved performance of the claims processing staff by:
     - Introducing training and cross-training initiatives to address quality control issues.
     - Restructuring teams to specialize in claim types, which helps with accuracy and other aspects of performance.
Section 4–E: Improvement Strategies for “Claims Processing”

- Implemented a quality incentive program enabling staff to earn bonus dollars for meeting criteria for quality and productivity.
- Implemented a formal quality control program including re-training and progressive disciplinary action for staff unable to maintain quality and productivity standards.

4. Payment arrangements that do not depend on claims processing (such as capitation).

Applications of Information Technology

5. Electronic data interchange for claims processing. Harvard Pilgrim increased claims submission through EDI by participating in the New England Health EDI Network (NEHEN) and developing online Web-based claims submissions.

6. Imaging system for paper claims. This system manages inventory and assists the Provider Call Center in answering provider phone calls regarding submitted claims. This helped to reduce the number of claims that were re-submitted by providers and improved the efficiency of the Provider Call Center, enabling a quicker response to provider inquiries.

7. Automated Phone/Online eligibility checking to prevent denial of services. Harvard Pilgrim implemented automated tools for providers to check a member’s eligibility for services prior to delivery. This helped reduce the likelihood that members would receive services that were not covered without being informed of this in advance.

8. Automated Phone/Online tools for providers and members to check on claim status. At Harvard Pilgrim, these automated tools helped them quickly determine whether or not a claims had been paid and why a claim was either pended or denied.

As a result of these interventions, Harvard Pilgrim saw improvements in both its internal metrics (percent of claims resolved in 30 days -- see below) as well as the pertinent CAHPS items (see box on the next page).
Case Example: Impact of Harvard Pilgrim’s Interventions to Improve Claims Processing

CAHPS Health Plan Claims Items
Percent responding Always/Usually

<table>
<thead>
<tr>
<th>Year</th>
<th>Timeliness</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAHPS 2.0H 2000</td>
<td>72.0%</td>
<td>83.6%</td>
</tr>
<tr>
<td>CAHPS 2.0H 2001</td>
<td>87.0%</td>
<td>87.9%</td>
</tr>
<tr>
<td>CAHPS 2.0H 2002</td>
<td>83.0%</td>
<td>87.6%</td>
</tr>
<tr>
<td>CAHPS 3.0H 2003</td>
<td>92.0%</td>
<td>91.5%</td>
</tr>
</tbody>
</table>
Section 4-F

Improvement Strategies for “Home Health and Preventive Services”

In addition to the CAHPS composites, QI teams can also use responses to supplemental items in the CAHPS surveys to uncover specific problem areas that lend themselves to targeted quality improvement strategies. The Medicare CAHPS instrument, for example, asks respondents questions about their experiences with home health care services and preventive services and advice. These are listed in the table below.

### Supplemental CAHPS Questions from the Medicare CAHPS Survey

#### Question about Home Health Care

- In the last 6 months, how much of a problem, if any, was it to get the (home health) care or assistance you needed through your Medicare health plan?

#### Questions about Preventive Services and Advice

- In the last 12 months, have you had a mammogram (a test to detect breast cancer in women)?
- In the last 12 months, have you had a pap smear (a test to detect cervical cancer in women)?
- In the last 12 months, have you had a prostate screening or PSA test (a test to detect prostate cancer in men)?
- In the past 4 weeks, how often have you walked and/or exercised for more than 20 minutes at a time?
- In the last...months, how often did your health plan handle your claims in a reasonable time?
- Did you get a flu shot last year, at any time from September to December 2000?
- Did you get that flu shot either through your Medicare health plan or from your personal doctor?
- Have you ever had a pneumonia shot? This shot is usually given only once or twice in a person’s lifetime and is different from the flu shot. It is also called the pneumococcal vaccine.

This section offers two strategies for improving performance in these areas:

1. Innovative Home Health Services
2. Reminder Systems for Preventive Services and Immunizations
F.1 Innovative Home Health Services

The Problem
CAHPS data can reveal to a health plan or provider network whether patients are experiencing problems with home health care services. In some cases, these problems occur because the current models for delivering home health care services do not meet the needs of those members.

Growing out of what originated as community health nursing in the early 1900’s, home health traditionally takes place under three models:

- **Skilled nurse visits** may take place via Private Duty Nursing Services, Home Health Agency Services who also provide home health aid services, or Personal Care Assistant Services. These visits are conducted in the patients home by a Medicare-certified agency nurse. Nurses visit intermittently to assess their patient’s health status and to provide health care education as well as hands-on nursing care. The service provided ranges from regular care where nurses provide daily assessments of health to more complex care where nurses provide long-term care to patients requiring interventions for life-threatening episodes of instability.

- **Home health aide visits** are conducted by certified staff employed by a Medicare-certified agency. Health aides provide personal hands-on care and are able to perform simple procedures, administer medications, and assist with patients’ physical therapy exercises.

- **Personal care attendant services** provide assistance with activities of daily living. These include such tasks as helping with meals, personal finances, shopping, and household chores.

The main problem with these models is that caregivers are not necessarily available when the member needs attention, information, or assistance.

The Intervention
A recent innovation that helps to address this problem is tele-home health care, which was started by Kaiser Permanente in California in response to increasing demand for home health services in the mid-1990’s. Tele-home health uses remote video technology in the home health care setting, which permits nurses and patients to interact in real time while also allowing home health care staff to assess a patient’s physical status. Using telemedicine, staff can monitor patients’ vital signs, provide follow-up care, track the patients’ progress, and provide educational services.

Models of Telemedicine
Tele-home health is one of several applications of telemedicine. Others include the following (University of Virginia Health Systems 2003):

- **Telemedicine-Facilitated Clinical Consultations** facilitates patient consultation, remote diagnosis, and patient care in all clinical specialties.

- **Teleradiology** supports the transmission of diagnostic quality (DICOM) radiographic images with rapid interpretation.

- **Interactive distance learning programs** such as grand rounds, and other special conferences, are offered through videoconferencing technologies.

- **Patient education seminars** can be designed to meet the needs of patients in remote locations.

Consultations, educational programming and administrative conferences offered through a telemedicine program provide cost-effective and confidential medical services to virtually any location.
Tele-home health care offers the potential to improve patient satisfaction with care while improving clinical outcomes. Remote home health care can also reduce hospitalizations because patients can be cared for in the home. Home health care is most significant in improving access to health care staff for patients and family caregivers as the technology provides them with access to a home health care provider 24 hours a day (Johnston, Wheeler et al. 2000). From the plan’s perspective, it also offers the potential for cost savings when home-based care can substitute for in-person visits.

The costs of implementing a tele-home health care program include direct costs for payroll, benefits, travel, and cell phone usage as well as additional costs for capital equipment (computers, etc.) and telecommunication charges (Johnston, Wheeler et al. 2000).

**What We Know About the Impact of Home Health Care**

Interventions that rely on communications and information technology have been shown to enhance social support and cognitive functioning; enhance learning efficiency; improve clinical decision-making and practice; reduce health services utilization; and lower health care costs among certain study groups (Eng 2001). Evaluations of tele-home health as a model of care found it to be effective and well-received by patients (Johnston, Wheeler et al. 2000). Additionally, studies have found it capable of maintaining quality of care and to have a great potential for cost savings (Johnston, Wheeler et al. 2000).

However, most assessments of general tele-health interventions have been limited to small groups, have not involved the randomized selection necessary for a controlled trial, have had limited follow-up periods, or have investigated proprietary interventions that may or may not be replicable (Eng 2001).

### Key Resources


IHealthbeat.com – Offers up-to-date news on efforts around the country to use technology to improve home health care.


**F.2 Reminder Systems for Immunizations and Preventive Services**

**The Problem**

Many patients do not receive important immunizations and other preventive services and advice because they do not know to see their clinical team for these services, they forget to make appointments, or they miss scheduled appointments. Studies have shown that the rate of missed appointments ranges from 19 percent to 52 percent (Macharia et al. 1992). Missed appointments result in discontinuity of care, reduce care opportunities for other patients, disrupt the patient-provider relationship, and add to health care costs.

The fact that immunization rates for adults (and children) are below optimal levels supports this finding. In 1997, 65% of adults over 65 had had the influenza vaccine and only 45% had been vaccinated against pneumonia (Szilagyi, Bordley et al. 2000). Two common reasons for missed vaccinations are forgetting appointments and in the case of children, parents not knowing their child’s immunization schedule (Alemi, Alemagno et al. 1996).

**The Intervention**

Two useful strategies for tackling this problem are:

- Reminder Systems for Patients
- Reminder Systems for Clinicians

**Reminder Systems for Patients**

One way to tackle the inadequate delivery of preventive services is to institute reminder and recall systems for patients. Reminder systems notify patients a few days before their scheduled appointment, while recall systems contact patients who have missed appointments and encourage them to reschedule.

The benefits of reminder and recall systems include improved immunization rates, fewer missed appointments (no-shows), and more preventive care visits. The higher levels of preventive services are likely to reduce morbidity and mortality from preventable diseases. Also, as more patients come for their allotted appointments, the practice can increase its visit capacity and reduce its costs, particularly those associated with the inefficient use of clinician and staff time when slots are wasted.

Reminder systems have been in use for several decades, and except for the more sophisticated computerized phone reminder systems, are not complex either to initiate or to operate. Reminder and recall systems can work through a variety of mechanisms meant to prompt the patient, including phone calls (by clinic staff or by computer), letters, postcards, and email. While all types of reminder systems are effective, telephone reminders have been found to be most effective, but also the most expensive compared to postcard and letter reminders (Szilagyi, Bordley et al. 2000).

Systems to reduce no-shows employ some additional techniques, including:

- Reducing perceived barriers (e.g., providing transportation)
- Providing information (such as pamphlets or videos) on the importance of regular preventive and health maintenance visits (Macharia, Leon et al. 1992)

Reminder, Recall, and Outreach (RRO) programs are a more resource-intensive version of these systems and have been used effectively to improve immunization rates for hard to reach populations, such as inner-city minority children (Szilagyi, Bordley et al. 2000).
Barriers to implementation include cost and lack of information about the variety of systems (Szilagyi, Bordley et al. 2000). Costs for immunization reminder programs vary widely; for example, the cost per additional child vaccinated ranges from $7 to $62. Studies have found that a letter reminder system can cost $10.50 per fully vaccinated child, whereas a comprehensive program of reminders and community outreach can cost $63 per child per year, with an estimated cost effectiveness of $316 per year per fully vaccinated child (Szilagyi, Bordley et al. 2000).

**What We Know About the Impact of Patient Reminder Systems**

Reminder and recall systems are effective at improving immunization rates in adults and children (Szilagyi, Bordley et al. 2000). They also reduce the no-show rate for preventive services. Increases to immunization rates ranged from 5 to 20 percent in intervention groups compared to control groups. Effectiveness was shown for adult pneumococcus, tetanus, and influenza vaccines and for childhood vaccines, including the influenza vaccine (Szilagyi, Bordley et al. 2000). While all types of reminder systems were effective, telephone reminders were the most effective.

A review of studies of appointment reminder systems also found that they resulted in improvements. The rates of kept appointments increased an average of:

- 40 percent for patient contracts,
- 120 percent for letters,
- 190 percent for phone calls and for orientation/information programs (e.g., videos and pamphlets), and
- 660 percent for phone reminders for psychosocial appointments (Macharia, Leon et al. 1992).

In a study comparing the effectiveness of different approaches to improve immunization and screening, patient reminder systems were the fifth most effective method with an average improvement of 150 percent compared to control groups (Stone, Morton et al. 2002). More effective were organizational change, provider reminders (see discussion below), patient financial incentives, and provider education. Less effective (but still more effective than no intervention) were patient education, provider financial incentives, and provider feedback.

**Reminder Systems for Physicians**

While physicians generally agree with preventive measures and guidelines, there is substantial evidence that physician compliance with such preventive measures is well below optimal (Shea, DuMouchel et al. 1996). Since most patient encounters revolve around treating acute illnesses and alleviating symptoms, preventive measures are often overlooked (Litzelman, Dittus et al. 1993). One way to improve compliance with such secondary tasks is to provide physicians with organized and processed data at key times (Litzelman, Dittus et al. 1993).
Among physician reminders, the most prominent is the concurrent report, which offers the benefit of timeliness – i.e., it provides information to a physician at a time when she can act on it (Murrey, Gottlieb et al. 1992). Such reports are commonly in the form of a computer-generated printout of suggested preventive procedures that is attached to the front of a patient’s chart. A common computer reminder system reviews the records of patients coming for scheduled appointments and prints out the necessary procedures and tests in the “orders” section of the encounter form (Litzelman, Dittus et al. 1993).

Other concurrent formats include tagged notes, stickers in patient charts, and cards given to patients to help them prompt physicians (Balas, Weingarten et al. 2000). The type or location of the prompt does not seem to matter; that is, reminders at a variety of places in the medical chart (e.g., tagged progress note, computer monitor display) are equally as effective as a printout at the front of the patient medical record. All achieve 12 to 14 percent improvement (Balas, Weingarten et al. 2000).

Other categories of reminders include:

- Intervisit reminders (i.e., a reminder sent to the physician after a visit when something is overdue)
- Registry reminders (e.g., an intervisit reminder for a specific patient group, such as those with chronic condition) (Murrey, Gottlieb et al. 1992)

Prior to implementing physician reminder systems, the health care organization should address the following questions (Murrey, Gottlieb et al. 1992):

- Do the affected physicians believe that the services they are being reminded about are important?
- Do the physicians agree on the best approach to these issues?
- Do they agree on which steps of the process need the most support?
- Does the reminder system meet physicians’ needs while also incorporating safeguards against process failures?

Failure to consider these questions is likely to undermine the success of the reminder system.

It is important to note that significant rates of non-compliance with preventive procedures may indicate that there are fundamental problems with the underlying systems, which should be addressed before reminder systems are attempted (Murrey, Gottlieb et al. 1992).

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**What We Know About the Impact of Physician Reminder Systems**

There is strong evidence from meta-analytic studies that physician reminder systems for preventive care are effective at increasing preventive procedures (Shea, DuMouchel et al. 1996; Balas, Weingarten et al. 2000). Balas et al. reviewed 33 controlled studies and found that reminder systems led to an average improvement in six preventive procedures of 13 percent, ranging from 5.8 percent for Pap smear to 17.2 percent for pneumococcal vaccination. (The other four procedures were fecal occult blood test, mammogram, influenza vaccination, and tetanus vaccination.) Extrapolating these results nationwide, the researchers estimated that reminder systems could save 8,333 lives per year (Balas, Weingarten et al. 2000).

Shea et al. reviewed 16 randomized controlled trials and found, for six preventive practices, an overall 77 percent increase in procedures when computerized reminder systems were used (Shea, DuMouchel et al. 1996). Litzelman et al. found a 19 percent relative difference in physician compliance with reminders on three procedures when physicians were required to actively respond to a prompt by indicating the action taken, compared to a reminder that required no active response (Litzelman, Dittus et al. 1993).
Appendix A: Items in the CAHPS Reporting Composites and Ratings

These are the question items and responses for each of the five CAHPS consumer reporting questions composites. Although Claims Processing is not a composite, it is included in this list as part of Plan Administrative Services. The exact wording of the ratings questions is on the next page.

<table>
<thead>
<tr>
<th>CAHPS Health Plan Survey Composites and Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domain: Access</strong></td>
</tr>
<tr>
<td><strong>Getting Needed Care</strong></td>
</tr>
<tr>
<td>(Responses: A big problem, A small problem, Not a problem)</td>
</tr>
<tr>
<td>With the choices your (child’s) health plan gave you, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?</td>
</tr>
<tr>
<td>In the last…months, how much of a problem, if any, was it to get a referral to a specialist that you (your child) needed to see?</td>
</tr>
<tr>
<td>In the last…months, how much of a problem, if any, was it to get the care (for your child) you or a doctor believed necessary?</td>
</tr>
<tr>
<td>In the last…months, how much of a problem, if any, were delays in (your child’s) health care while you waited for approval from your (child’s) plan?</td>
</tr>
<tr>
<td><strong>Getting Care Quickly</strong></td>
</tr>
<tr>
<td>(Responses: Never, Sometimes, Usually, Always)</td>
</tr>
<tr>
<td>In the last…months, when you called during regular office hours, how often did you get the help or advice you needed (for your child)?</td>
</tr>
<tr>
<td>In the last…months, how often did you (your child) get an appointment for regular or routine health care as soon as you wanted?</td>
</tr>
<tr>
<td>In the last…months, when you (your child) needed care right away for an illness or injury, how often did you (your child) get care as soon as you wanted?</td>
</tr>
<tr>
<td>In the last…months, how often did you (your child) wait in the doctor’s office or clinic more than 15 minutes past your appointment time to see the person you (your child) went to see?</td>
</tr>
<tr>
<td><strong>Domain: Interpersonal Care</strong></td>
</tr>
<tr>
<td><strong>How Well Doctors Communicate</strong></td>
</tr>
<tr>
<td>(Responses: Never, Sometimes, Usually, Always)</td>
</tr>
<tr>
<td>In the last…months, how often did your (child’s) doctors or other health providers listen carefully to you?</td>
</tr>
<tr>
<td>In the last…months, how often did your (child’s) doctors or other health providers explain things in a way you could understand?</td>
</tr>
<tr>
<td>In the last…months, how often did your (child’s) doctors or other health providers show respect for what you had to say?</td>
</tr>
<tr>
<td>In the last…months, how often did doctors or other health providers spend enough time with you (your child)?</td>
</tr>
</tbody>
</table>
### Courteous and Helpful Office Staff
In the last...months, how often did office staff at your (child’s) doctor’s office or clinic treat you (and your child) with courtesy and respect?
In the last...months, how often were office staff at your (child’s) doctor’s office or clinic as helpful as you thought they should be?

### Domain: Plan Administrative Services

#### Customer Service
(Responses: A big problem, A small problem, Not a problem)
In the last...months, how much of a problem, if any, was it to find or understand information in the written materials?
In the last...months, how much of a problem, if any, was it to get the help you needed when you called your (child’s) health plan’s customer service?
In the last...months, how much of a problem, if any, did you have with paperwork for your (child’s) health plan?

#### Complaints (from CAHPS 3.0H – HEDIS Supplemental Items)
Of those who called or wrote their health plan with a complaint or problem: How long did it take for your health plan to resolve your complaint? (Responses: Same day, 2-21 or more days, Still waiting)
Of those whose complaint or problem was resolved: Was your complaint or problem settled to your satisfaction? (Responses: Yes, No)

#### Claims Processing (from CAHPS 3.0H – HEDIS Supplemental Items)
(Responses: Never, Sometimes, Usually, Always)
In the last...months, how often did your health plan handle your claims in a reasonable time?
In the last...months, how often did your health plan handle your claims correctly?
In the last...months, before you went for care, how often did your health plan make it clear how much you would have to pay?

### Consumer Rating Items

#### Rating of Personal Doctors
Use any number on a scale from 0 to 10 where 0 is the worst personal doctor or nurse possible, and 10 is the best personal doctor or nurse possible. How would you rate your (child’s) personal doctor or nurse now?

#### Rating of Specialists
Use any number on a scale from 0 to 10 where 0 is the worst specialist possible, and 10 is the best specialist possible. How would you rate your (child’s) specialist?

#### Rating of Health Care
Use any number on a scale from 0 to 10 where 0 is the worst health care possible, and 10 is the best health care possible. How would you rate all your (child’s) health care?

#### Rating of Health Plan
Use any number on a scale from 0 to 10 where 0 is the worst health plan possible, and 10 is the best health plan possible. How would you rate your (child’s) health plan now?
Appendix B: Correlations Between Responses to CAHPS Items and Overall Ratings for Medicare Managed Care Respondents

Like Table 4 in Section 2, this table is based on data from the 1999 Medicare managed care CAHPS Health Plan Survey. It shows how individual CAHPS items correlate with ratings of care, doctors, and plans. The shaded boxes have correlation coefficients of 0.45 or higher.

<table>
<thead>
<tr>
<th>Composites</th>
<th>Items</th>
<th>Doctor Rating</th>
<th>Care Rating</th>
<th>Plan Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Needed Care</td>
<td>Happy with choice of doctor</td>
<td>0.37</td>
<td>0.42</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>Problem seeing needed, appropriate specialist</td>
<td>0.19</td>
<td>0.31</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>Problem getting necessary care</td>
<td>0.24</td>
<td>0.37</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td>Delays in health care while awaiting approval from health plan</td>
<td>0.17</td>
<td>0.30</td>
<td>0.33</td>
</tr>
<tr>
<td>Getting Care Quickly</td>
<td>Getting needed advice in a timely manner by telephone</td>
<td>0.39</td>
<td>0.49</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>Routine appointments as soon as wanted</td>
<td>0.28</td>
<td>0.39</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>Care for illness as soon as wanted</td>
<td>0.32</td>
<td>0.47</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>Waited more than 15 minutes past appointment time</td>
<td>0.19</td>
<td>0.28</td>
<td>0.21</td>
</tr>
<tr>
<td>Getting Care</td>
<td>Difficulty getting care when needed</td>
<td>0.15</td>
<td>0.24</td>
<td>0.30</td>
</tr>
<tr>
<td>Health Plan Information and Customer Service</td>
<td>Problems understanding written health plan materials</td>
<td>0.14</td>
<td>0.25</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>Problems getting customer service by telephone</td>
<td>0.15</td>
<td>0.26</td>
<td>0.54</td>
</tr>
<tr>
<td></td>
<td>Problems with health plan paperwork</td>
<td>0.14</td>
<td>0.25</td>
<td>0.56</td>
</tr>
<tr>
<td>Composites</td>
<td>Items</td>
<td>Doctor Rating</td>
<td>Care Rating</td>
<td>Plan Rating</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Customer Service Helpful</td>
<td>How often has customer service of health plan been helpful?</td>
<td>0.19</td>
<td>0.32</td>
<td>0.59</td>
</tr>
<tr>
<td>Courtesy and Respect of Doctor’s Office Staff</td>
<td>Frequency treated with respect by medical staff</td>
<td>0.27</td>
<td>0.39</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>Frequency of helpfulness from medical staff</td>
<td>0.34</td>
<td>0.48</td>
<td>0.32</td>
</tr>
<tr>
<td>Communication with Providers</td>
<td>Frequency with which health care providers listen carefully to patients</td>
<td>0.46</td>
<td>0.58</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>Frequency with which health care providers explain things in an understandable way</td>
<td>0.41</td>
<td>0.54</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>Frequency with which health care providers show respect to what patient has to say</td>
<td>0.43</td>
<td>0.57</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>Frequency with which health care providers spend enough time with patient</td>
<td>0.44</td>
<td>0.59</td>
<td>0.34</td>
</tr>
<tr>
<td>Getting Special Services through the Health Plan</td>
<td>Difficulty getting special medical equipment through health plan</td>
<td>0.18</td>
<td>0.29</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Difficulty getting special therapy needed through health plan</td>
<td>0.22</td>
<td>0.36</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>Difficulty getting care or home health care through health plan</td>
<td>0.23</td>
<td>0.34</td>
<td>0.45</td>
</tr>
</tbody>
</table>

* The plan-level composites listed here (and in Table 4) are different than the reporting composites for the CAHPS Health Plan Survey because the analyses are based on associations between plan scores, in contrast to analyses that examine relationships among responses by the same individual.

Source: 1999 Medicare Managed Care CAHPS survey data
Appendix C:

Peace Health’s Shared Care Plan

Whatcom County/Peace Health, For more information, please contact HWilson@peacehealth.org.

Below is important information for all members of the care team. Please complete with a member of your care team.

<table>
<thead>
<tr>
<th>My name:</th>
<th>My phone:</th>
<th>Today’s date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth date:</td>
<td>My email address:</td>
<td></td>
</tr>
<tr>
<td>Family contact and phone:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person providing information for care and care plan (parent, guardian, or other patient representative):</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**I want the person working with me to know...**

- I have challenges with:  
  - Vision ☐  
  - Hearing ☐  
  - Mobility ☐  
  - English as a second language (ESL) ☐  
  - Other ☐

- Comments:

- I have issues with Diet:  
  - YES ☐  
  - NO ☐  
  - Comments:

- My Religion/Spirituality impacts my health care:  
  - YES ☐  
  - NO ☐  
  - Comments:

- I have:  
  - Advanced Directives ☐  
  - Physician Orders for Life Sustaining Treatment (POLST) ☐  
  - Power of Attorney ☐

- Comments:

- I live:  
  - alone ☐  
  - partner/spouse ☐  
  - extended family ☐  
  - Other:

- I learn best by:  
  - reading ☐  
  - being talked to ☐  
  - having someone show me how ☐  
  - listening to tapes ☐  
  - seeing pictures or video ☐

- I have access to the Internet:  
  - YES ☐  
  - NO ☐
## My Care Team

<table>
<thead>
<tr>
<th>Next appointment</th>
<th>Name</th>
<th>Initial</th>
<th>Phone / Fax</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Caregiver/Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Clinical Care Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Primary Care Doctor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cardiologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Endocrinologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pharmacist</td>
</tr>
</tbody>
</table>

I authorize my shared care plan to be shared with my Care Team listed above:  □ YES  □ NO

Others with whom I agree to view my plan include:

## Diagnoses

(add rows as needed)

## My Medication Profile

<table>
<thead>
<tr>
<th>Drug Allergies / Intolerances</th>
<th>Reaction</th>
<th>Date Occurred</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Other Allergies:

### Over-the-counter Meds

<table>
<thead>
<tr>
<th>Name</th>
<th>Directions</th>
<th>Times Taken</th>
<th>Why Taken</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Prescription Meds

<table>
<thead>
<tr>
<th>Date</th>
<th>Rx</th>
<th>Drug Name</th>
<th>Directions</th>
<th>Use</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACE Inhibitor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Beta Blocker</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(add rows as needed)</td>
</tr>
</tbody>
</table>

(Add rows as needed)
### Discontinued Meds

<table>
<thead>
<tr>
<th>Date</th>
<th>Rx by</th>
<th>Drug Name</th>
<th>Directions</th>
<th>Use</th>
<th>B 8-9</th>
<th>L 12-1</th>
<th>D 6-8</th>
<th>Bed 9-11</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(add rows as needed)

I am worried about: □ my ability to manage my chronic condition □ financial issues □ access to healthcare
□ emotional issues □ family issues □ spiritual support □ thinking or memory problems □ end of life issues
□ Other:

My long term goal:

HgA1c goal:   Most Recent HbA1C:

Current EF:  %

### Next steps to wellness:

(Completed by patient and other members of Care Team. Each step can be initiated by patient or other member of Care Team. Steps may include concerns about medical condition, problems, barriers, or goals and are followed by actions, solutions, observations, the current status of the step, etc. Group entries about each topic together.)

<table>
<thead>
<tr>
<th>Date</th>
<th>Concerns / Problems / Actions / Comments / Status</th>
<th>By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Next steps to wellness:**

(Add rows as needed)

<table>
<thead>
<tr>
<th>Date</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/26/02</td>
<td>6.7</td>
</tr>
<tr>
<td>3/4/02</td>
<td>8.6</td>
</tr>
<tr>
<td>6/26/01</td>
<td>6.6</td>
</tr>
</tbody>
</table>

**Health Logs**

(i.e., exercise, blood sugar testing, low-salt eating plan, daily weight, lab results, stress reduction, medication management)

Example:

**HgA1c (Normal range = 4.0-6.0)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/26/02</td>
<td>6.7</td>
</tr>
<tr>
<td>3/4/02</td>
<td>8.6 Recovering from broken leg</td>
</tr>
<tr>
<td>6/26/01</td>
<td>6.6</td>
</tr>
</tbody>
</table>

(Add rows as needed)

(Other concerns)
### Cooperative Health Care Clinic

<p>| Patients | Elderly with one or more outpatient visits/month | Either mixed group or single diagnosis | Elderly with chronic condition OR diabetes on medication | Age 16-75 with HbA1c &gt;8.5% or none for 1 year | Ages 40 and up with heart disease, lung disease, stroke, or arthritis. | Widely used in all ages and many conditions for patients and/or caregivers. |
| Setting | HMO (Kaiser Colorado) | HMO (Kaiser Southern California) | HMO (Group Health Cooperative of Puget Sound) | HMO (Kaiser Northern California) | Community-based, (Churches, senior centers) or clinic | Community or Clinic based |
| Interval | Monthly group meetings of 25 patients | Set by provider team, depending on format. Weekly or monthly. | 3 or 4 times/yr., 8 patients | monthly visits for 6 months with 10-18 patients | Seven weekly class sessions, 10-16 participants (revised version is six sessions) | Varies. Monthly is a typical interval. Most groups function well with between 8 and 20 members. |
| Staffing | Primary Care Provider RN Occas. Ancillary staff (pharmacy, PT, dietician) | Primary Care Provider, Medical assistant, Psychologist (some sites using SW or RN) | Primary Care Provider RN Pharmacist SW or RN for group | Diabetes nurse educator In consultation or by referral: podiatrist, pharmacist, psychologist, nutritionist, pharmacist, primary care provider | Two volunteer lay leaders per course | Varies from peer led to professionally led. MSG=Mutual Support Group. |
| Schedule | 15 min. warm-up 30 min presentation 15 min &quot;break&quot; (providers circulate and triage) 15 min. Q&amp;A 30 min allotted for brief 1:1 with MD | 90 minutes total. MA does vitals, chart retrieval, Psychologist warm-up until provider arrives Interview patients in room sequentially, provider does some &quot;huddle&quot; conversations with | ½ day clinic with 45 minute group session in the middle. Patients spend 15 minutes each with pharmacist, MD, and RN either before or after the group. | Two hour visit based on evidence-based protocol Between-visit proactive phone calling Individual visits as needed (30% of patients used). Regular case review by primary care provider. | Each session is 2 ½ hours long, which includes a lengthy break. Sessions are interactive using return demonstration, modeling, brainstorming and problem solving. Telephone calls to | Varies. Groups are typically considered either social support or educational with support. Some include cognitive behavioral techniques (CBT). |</p>
<table>
<thead>
<tr>
<th>Topics</th>
<th>Cooperative Health Care Clinic</th>
<th>Drop-In Group Medical Appointment (DIGMA)</th>
<th>Continuing Care Clinic</th>
<th>Cluster Visits for Diabetes Care</th>
<th>Chronic Disease Self-Management Program (CDSMP)</th>
<th>Support Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six topics determined by provider (evidence-based clinical priorities, such as immunizations, advanced directives), six topics determined by group.</td>
<td>individuals while psychologist discusses topics with group.</td>
<td>Planned visit following evidence-based clinical priorities for geriatrics or diabetes. Group focused on self-management support.</td>
<td>Risk factor reduction, Self-management, Skills teaching (monitoring, insulin use) By patient request: exercise, sexual dysfunction, stress management, emotional concerns</td>
<td>Topics include exercise, cognitive sx mgmt techniques, nutrition, fatigue and sleep mgmt, use of comm. resources, use of meds, dealing with emotions, communicating with others, problem-solving, decision-making</td>
<td>Some offer no structure, some are highly structured.</td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results</th>
<th>Cooperative Health Care Clinic</th>
<th>Drop-In Group Medical Appointment (DIGMA)</th>
<th>Continuing Care Clinic</th>
<th>Cluster Visits for Diabetes Care</th>
<th>Chronic Disease Self-Management Program (CDSMP)</th>
<th>Support Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCT and implementation data:</td>
<td>Anecdotal and non-comparison:</td>
<td>RCT: Elderly:</td>
<td>RCT:</td>
<td>RCT:</td>
<td>Multiple RCT’s:</td>
<td></td>
</tr>
<tr>
<td>decr. ER visits</td>
<td>impr. Patient satisfaction</td>
<td>Decr. HbA1c by 1.3%</td>
<td>Increased exercise</td>
<td>Increased cognitive symptom management</td>
<td>Decreased symptoms in depression for</td>
<td></td>
</tr>
<tr>
<td>decr. Specialist visits</td>
<td>impr. Access impr. Provider satisfaction</td>
<td>Improved self-efficacy</td>
<td>Increased cognitive symptom management</td>
<td>Improved self-reported health</td>
<td>groups with both</td>
<td></td>
</tr>
<tr>
<td>decr. Hospital admits</td>
<td></td>
<td>Incr. self-care practices</td>
<td>Longitudinal follow-up:</td>
<td>Lower hospital and outpatient utilization</td>
<td>CBT or MSG, but</td>
<td></td>
</tr>
<tr>
<td>incr. nurse visits and nurse calls</td>
<td></td>
<td>Impr. satisfaction</td>
<td>Reduced ER/outpatient visits</td>
<td></td>
<td>CBT improved more.</td>
<td></td>
</tr>
<tr>
<td>decr. Calls to MD</td>
<td></td>
<td></td>
<td>Reduced health distress</td>
<td></td>
<td>(Bright, 1999).</td>
<td></td>
</tr>
<tr>
<td>decr. Cost $14.79 PMPM</td>
<td></td>
<td></td>
<td>Improved self-efficacy</td>
<td></td>
<td>Indications that</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>telephone groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>work as well as on-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>site groups in</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>caregivers of head-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>injured pts (Brown, 1999).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Education or</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>education and peer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>support were</td>
<td></td>
</tr>
</tbody>
</table>
### Cooperative Health Care Clinic

<table>
<thead>
<tr>
<th>Drop-In Group Medical Appointment (DIGMA)</th>
<th>Continuing Care Clinic</th>
<th>Cluster Visits for Diabetes Care</th>
<th>Chronic Disease Self-Management Program (CDSMP)</th>
<th>Support Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c.</td>
<td></td>
<td></td>
<td>superior to peer support alone in breast CA (Helgeson, 1999) CBT superior to MSG in IBS (Payne, 1995)</td>
<td></td>
</tr>
</tbody>
</table>

### Citation

- Adaptation: Masley et al, FPM June 2000
- Noffsinger E. Grp Prac Jnl 1999;48(issue 1, 2, 3, 4, 6)
- Coleman et al, JAGS 47:775-783, 1999
- Lorig et al. Medical Care 37:5-14, 1999.
- See above. Search terms self-help group and support group.

### Guide available

- Yes
- On ICIC website
- Contact John Scott, MD at Kaiser Colorado 303-657-6808
- FPM: [http://www.aafp.org/fpm/20000600/33plan.html](http://www.aafp.org/fpm/20000600/33plan.html)
- Unknown
- On ICIC website
- Contact Connie Davis at GHC, 206-287-2554 or davis.cl@ghc.org
- Unknown
- Some voluntary organizations have materials, such as the American Stroke Association.

### Information on use in other settings

- Dr. Scott had HCFA review their model and HCFA has stated that this is a billable MD visit. FPM article describes coding for appropriate reimbursement, typically 99212, 3, or 4.
- Some now calling "Doctor interactive group medical appointments." Currently being studied in clinical trial.
- Widely used in Britain as a "mini clinic."
- Anecdotally, many sites using this approach.
- No reimbursement available.

Source: Connie Davis, Improving Chronic Illness Care Program.
Appendix E: How to Conduct A Walk-Through

A walk-through is your opportunity to experience what patients and family members experience when they receive care at your organization. For example, if you are examining the emergency room, choose a particular type of patient (e.g., one with asthma). You and another team member would then present to the emergency department as a patient with that disease and the patient’s family member. Here are some tips on how to conduct a successful walk-through:

1. **Let the staff know in advance that you will be doing this walk-through.**

As a result of this warning, they will probably be on their best behavior. However, experience suggests that it is far better to have them part of the process than to go behind their backs. Ask them not to give you special treatment.

2. **Go through the experience just as the patient and family member would.**

Call in advance, if the patient would have to. Drive to the emergency department, drop the patient off, find a place to park, and check in. Try to act as if you have never been there before. Follow the signs. Tell the clerk that you are simulating a patient’s experience and that you want to go through whatever a normal patient would have to do (e.g., the check-in process). Actually fill out the forms if there are ones to fill out. Find out how long a patient would typically wait and sit in the waiting room for that amount of time. Wait your turn. Do the same in the examining room. If the patient undresses, you should undress. If the patient does a peak flow meter, you should too. Ask each health care provider to treat you as if you were a real patient. If you are doing a walk-through of the cardiac cath service, hold the sandbags on your leg the required amount of time. Experience it all.

3. **As you go through the process, try to put yourself in the patient’s (or family member’s) position.**

Look around as they might. What are they thinking? How do they feel at this moment?

4. **At each step, ask the staff to tell you what changes (other than hiring new staff) would make the experience better for the patient and what would make it better for the staff.** As you do the walk-through, think about how you would answer the following questions and ask the staff you interact with to answer them when you can:

   - What made you mad today?
   - What took too long?
   - What caused complaints today?
   - What cost too much?
   - What was wasted?
   - What was too complicated?
   - What involved too many people or too many steps?
   - What did you have to do that was just plain silly?

Write down their ideas as well as your ideas. But also write down your feelings.

5. **Finally, between the two of you (patient and family member), write down a list of what needs you found and what improvements could be made.** Keep track of the things that can be fixed the next day versus problems that will take longer to remedy.
Appendix F: The Axioms of Service Recovery

When problems with service do occur – and they will – your organization has to be prepared with a service recovery program that is designed to turn a disgruntled patient or member into a happy, loyal one. (To learn more about this strategy, see Idea D.3: Service Recovery Programs.) Based on previous work in this area, researchers have developed what they term the “axioms of service recovery.” (Zemke and Bell 2000) The more your staff understand these axioms, the easier it will be for them to respond effortlessly and appropriately to service problems when they arise.

**Axiom 1. All customers have basic expectations.**

Researchers have found that these five categories of customer expectations account for 80 percent of the differences between high and low customer satisfaction (Berry, Zeithaml et al. 1990).

These factors are as follows:

- **Reliability** is the most important of the five. It signals organizational competence and promotes confidence and trust in the organization or clinician.
- **Assurance** involves reassurance that everything is going as it should or, if it isn’t, that something will be done to remedy the problem quickly.
- **Tangibles** are the visible, concrete signs that influence the other expectations. When the furnace repair person shows up with dirty hands, no one is surprised. When the doctor walks in the room with a filthy white coat and dirty hands, something else is communicated quickly and convincingly to the patient. Old magazines in the waiting room, dirty bathrooms, and chaotic registration areas all imply an organization that is not under control.
- **Empathy** conveys that you are listening and concerned about the experiences and care of your members and patients. When something happens to disrupt trust, reconnecting with the patient or member in a personal way that conveys you understand is critical to the service recovery process.
- **Responsiveness** refers to the expectation that things should happen in a timely fashion and that people should be kept informed about where they are in the process. The opposite of responsiveness is indifference and lack of communication. Solutions to problems need to be timely and responsive to the person’s need.

**Axiom 2. Successful recovery is psychological as well as physical.**

Perhaps the most important step in the recovery process is listening to the person and letting them vent their frustration and blow off steam. Letting the person tell their story and describe the impact of the failure is essential.

**Axiom 3. Work in a spirit of partnership.**

Involve the person in helping to solve the problem. However, this does not mean that the first question should be, “So what do you want me to do about it?” Work cooperatively to come up with a solution that makes the person feel like part of the problem solving and that acknowledges their needs.
Axiom 4. Customers react more strongly to “fairness mistakes” than to “honest mistakes.”

Research on service recovery indicates that the only effective solution when a person feels like they have been unfairly treated is extreme apology and atonement. When a situation like this occurs, the patient or member is a prime candidate for overt retaliation (Seiders and Berry 1990). Communication about what went wrong and compensation or atonement are essential in these situations. From the patient safety movement, we know that a critical component of resolution in these kinds of situations is letting the person know you and your organization will make sure this never happens to the patient or anyone else again.

Axiom 5. Effective recovery is a planned process.

In health care, certain problems are highly predictable. Surgeons get delayed in the operating room, flu season packs the appointment schedule, implementing a new call center system inevitably causes service glitches – but we often act like these problems are a surprise. Preparing your staff with solutions for predictable problems and teaching them how to offer and implement these solutions is essential. Even though you may have planned solutions in place, they must be offered in a very customer-sensitive way so that you do not leave people with the impression that the problem is common or your staff behave like robots.

Research on the top ten service issues for bank customers is equally applicable to patients and health plan members. These are examples of situations that call for a planned solution in the event of a service breakdown and could be used as the framework for similar events in a health care setting.

Think about how you could translate these principles into planned protocols for the common problems your patients and members experience.

---

Top Ten Service Expectations of Retail Bank Customers

1. Being called back when promised.
2. Receiving an explanation of how a problem happened.
3. Knowing who to contact with a problem.
4. Being contacted promptly when a problem is resolved.
5. Being allowed to talk to someone in authority.
6. Being told how long it will take to resolve a problem.
7. Being given useful alternatives if a problem cannot be resolved.
8. Being treated like a person, not an account number.
10. Being given progress reports if a problem cannot be solved immediately.

Bibliography


HealthPartners (2003). Quality Improvement/Preventive Health Activity Summary: Improving Satisfaction with Appointment Access - Submission of HealthPartners to NCQA.


iHealthBeat (2003). Oregon clinic streamlines office with e-mail service. Available at: www.ihealthbeat.com


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## REDESIGN AND FINANCE CHANGE PACKAGE

### DELIVERY SYSTEM DESIGN COMPONENT

<table>
<thead>
<tr>
<th>CHANGE CONCEPT</th>
<th>KEY CHANGES</th>
<th>EXAMPLES</th>
</tr>
</thead>
</table>
| Optimize the care team                  | Assign a panel of patients to each provider and manage panel size and scope of practice | Use historical records to assign patients to a panel associated with a care team  
Develop scripts for appointment scheduling to reinforce the panel concept  
Develop policies for closing panels and for assigning new patients to a provider’s panel |
| Match work to an individual’s capability and licensure |                                                                               | Use MA’s and CNA’s rather than just LPN’s  
Add a lab tech or radiology tech to the team  
Use bi-lingual MA and front desk staff  
Use protocols for UTI/immunizations and others  
Use nurse visits |
| Maximize provider productivity for each visit |                                                                               | Move unnecessary work away from the provider  
Use a huddle to share information and review patient and care team needs before a visit  
Assign a panel of patients to each provider and schedule accordingly  
Ensure all equipment, supplies, data, and manpower are available at the time of the visit  
Max pack where feasible |
<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
</table>
| Redesign the care teams                                             | Create cross-functional teams around and panel of patients  
|                                                                     | Create a matrix reporting structure where staff report functional to a care team and line to a manager  
|                                                                     | Redeploy back office staff (medical records, scheduling, billing) to a care team  
|                                                                     | Cross train front desk staff to be able to help in the back  
|                                                                     | Use promotoras                                                                                                                                 |
| Provide seamless and coordinated care to patients                    | Integrate behavioral health into primary care  
|                                                                     | Retain counselors and social workers and integrate them into your care team  
|                                                                     | Administer PHQ-9 screening for early detection and intervention  
| Create a planned visit for each encounter                           | Use CIS to predict patient needs and plan the visit  
|                                                                     | Use registry reminder systems to reach out to patients for follow up  
|                                                                     | Review registry data in huddles prior to both the morning and afternoon clinic sessions  
|                                                                     | Use visit agendas and review them with patients  
| Use a care manager to coordinate care                               | Establish a care manager for a panel of patients  
|                                                                     | Regularly review panel and patient level data  
|                                                                     | Prepare for planned and acute visits using the registry data  
|                                                                     | Coordinate logistics and care team needs prior to the visit  
|                                                                     | Serve as primary point of contact for patients  

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<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>External case managers</td>
<td>Follow-up with local referral sources to collect data on patients</td>
<td></td>
</tr>
<tr>
<td>Maximize the use of specialists</td>
<td>Schedule specialists into the center for a half or full day rather than making referrals</td>
<td>Establish a referral specialist to coordinate necessary referrals</td>
</tr>
<tr>
<td>Eliminate waste and streamline workflow</td>
<td>Reduce cycle time</td>
<td>Decrease handoffs during the encounter Move check out to the nurses’ station Check charts, encounter note printouts, lab work, etc. before patient arrives Telephonic registration Use walkie talkies to communicate Create line of sight communication to the clinical pod so all staff can see each other Bring work such as blood draws to the exam room rather than asking the patient to move Increase clinician support Start all visits on time Standardize room supplies and equipment Get all the tools you need Do today’s work today! Eliminate unnecessary work!</td>
</tr>
<tr>
<td>Recalibrate the system by working down the backlog</td>
<td>Establish a date after which time you only book future appointments for planned visits for preventive and chronic care (about 30% of your future schedule Comb the schedule and remove all unnecessary future visits from the</td>
<td></td>
</tr>
<tr>
<td>Schedule</td>
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<tr>
<td>Temporarily add patient visit slots at the beginning or end of the day, or on weekends</td>
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<tr>
<td>Understand and balance capacity and demand on a daily, weekly, and long term basis</td>
<td>Measure true demand Inventory capacity and its fluctuations Decrease number of appointment types Modify schedule to match demand fluctuations Centralize the scheduling function Use huddles to make mid-course adjustments</td>
<td></td>
</tr>
<tr>
<td>Use group visits and other alternate visit types</td>
<td>Use telephone and email visits Schedule follow up with a nurse instead of physician for certain protocols Use care managers to make home visits Establish drop-in medical group appointments (DIGMA’s) Use group visits for chronic patients, physician and school exams, flu group visits and other logical affinity groups</td>
<td></td>
</tr>
<tr>
<td>Plan for contingencies</td>
<td>Cross train staff Establish policies on vacations Anticipate flu season and staff up Use group visits for school physicals Use locum tenens to fill in for scheduled leaves</td>
<td></td>
</tr>
</tbody>
</table>
## ORGANIZATION OF HEALTH CARE COMPONENT

<table>
<thead>
<tr>
<th>CHANGE CONCEPT</th>
<th>KEY CHANGES</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use data to understand your practice and your business case</td>
<td>Complete a comprehensive diagnostic profile of your practice</td>
<td>Use Green Book assessment tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Benchmark against UDS or MGMA data</td>
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<tr>
<td>Establish system level performance aims and use them to drive your business plan</td>
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<td>Use spider diagrams to track performance against goals</td>
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<td>Post dashboards on data walls</td>
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<td>Promote transparency of data</td>
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<td>Post financial results on an intranet site</td>
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<td>Share reports on bill rejections with clinical and non-clinical staff</td>
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<tr>
<td></td>
<td></td>
<td>Use run charts to track individual staff performance</td>
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<tr>
<td></td>
<td></td>
<td>Share clinical results with administrative and financial staff</td>
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<tr>
<td>Focus leadership attention on improvement</td>
<td>Visibly support improvement by aligning strategy, resources, and priorities for improvement</td>
<td>Include improvement as part of each report to the board</td>
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<td></td>
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<td>Establish a budget for improvement activities</td>
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<td>Participate on improvement teams</td>
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<td>Leaders include reports from improvement teams at regular staff meetings</td>
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<tr>
<td>Establish an effective communications infrastructure</td>
<td></td>
<td>Use multiple media for communicating</td>
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<td></td>
<td></td>
<td>◊ Use an intranet</td>
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<td></td>
<td></td>
<td>◊ Establish a newsletter and get staff to volunteer to work on it</td>
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<td></td>
<td></td>
<td>◊ Set up a data wall for sharing reports</td>
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<td></td>
<td></td>
<td>Include all staff in communications plan</td>
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<tr>
<td></td>
<td></td>
<td>and make communications two way</td>
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<tr>
<td></td>
<td></td>
<td>◊ Give computer access to all staff</td>
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<tr>
<td></td>
<td></td>
<td>◊ Use a virtual office all staff can contribute to</td>
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<tr>
<td></td>
<td></td>
<td>Use video conferencing for meetings to</td>
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</tbody>
</table>

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| Build improvement capability | Include care model and model for improvement in orientation  
| Set up “every problem matters” meetings for staff to bring up issues that require resolution |
| Develop staff to maximize their potential and create loyalty | Institute a system of fair and equitable compensation  
| Reward and recognize achievement |
| Enhance revenue | Bill accurately and completely  
| Analyze coding patterns and train providers on coding accuracy  
| Share bill rejection information with clinical and non-clinical staff  
| Establish a cost-based charge master  
| Verify demographic information at each visit  
| Account for all encounter forms at the end of the day |
| Improve collections | Use process mapping to reduce bill cycle time  
| Establish a collection plan for each payor  
| Establish policies on up front collection of co-pays and self pay amounts  
| Files claims electronically  
| Facilitate patient application for any potential payment coverage  
| Accept credit and debit cards  
| Schedule appointments with a financial counselor prior to a new visit  
| Provide front desk staff a script for collecting money |
| **Use data to influence payors and policymakers** | **Ask your state Medicaid office to model total costs for health center patients as compared to others**  
*Approach employers and model cost reduction and productivity improvement* |
|---|---|
| **Seek new sources of revenue** | **Contract directly with self-insured employer groups**  
*Establish on-site clinics at employer worksites*  
*Contract with local hospitals to set up a chronic disease center of excellence* |
| **Eliminate waste and reduce cost** | **Renegotiate contracts**  
*Standardize supplies ordering*  
*Develop protocols for referrals to costly services*  
*Work with suppliers to improve existing contracts and materials management systems*  
*Re-visit mortgages, leases, and loan agreements and explore opportunities to renegotiate more favorable rates* |
| **Exploit technology** | **Use fax for medication refills**  
*Use hand held devices for medication prescriptions*  
*Evaluate the ROI for purchasing on onsite HbA1c analyzer*  
*Do electronic billing* |
| **Apply lean principles to core processes** | **Complete a process map of each core process**  
*Standardize forms and protocols*  
*Evaluate and improve inventory*  
*Streamline communications*  
*Minimize movement in the system*  
*Evaluate Pull vs. Push Systems* |
| Error proof your systems  
Focus on lead time reduction  
Eliminate waiting  
Eliminate rework and needless inspection  
Minimize overproduction |
|---------------------------------------------------------------|