

Summary of Developmental/Behavioral Screening Tools for the Primary Care Physician

DEVELOPMENTAL SCREENING TOOLS

Name	Type of Tool	Sensitivity	Specificity	Ages Tested	Format	Time to Score	Cost	Staff	Source
<i>Ages and Stages Questionnaire (ASQ) 3rd Edition</i>	Parent Questionnaire	86%	85%	1-66 months	Set of 21 questionnaires is completed by parent	5 Minutes	\$249.95	Para-Professional	Brookes Publishers PO Box 10624 Baltimore, MD 21285 800-638-3775. http://www.brookespublishing.com/tools/asq/index.htm

The ASQ contains 21 questionnaires that cover the age range of 1 to 66 months. The areas screened include communication, gross motor, fine motor, problem solving, and personal – social, as well as a set of general questions about the child’s overall health. Also contains intervention activity sheets for parents and caregivers. Available in English, Spanish. Second edition available in French. Once purchased, either as a boxed set or on a CD-ROM, material can be copied as needed.

<i>Bayley Infant Neuro-development Screener (BINS)</i>	Direct Elicitation	Excellent	Excellent	3-24 months	Kit	10-15 Minutes	\$195.00	Masters or Equivalent	Pearsons Attn: Customer Service 19500 Bulverde Road San Antonio, TX 78259-3701 800.627.7271 http://www.pearsonassessments.com/HAIWEB/Culture/en-us/Productdetail.htm?Pid=015-8028-708&Mode=summary
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The BINS quickly screens infants at risk for neurological impairment or developmental delay. It reliably assesses basic neurological functions, auditory and visual receptive functions, verbal and motor expressive functions, and cognitive processes. Item sets contain 11 –13 items selected from the *Bayley Scales of Infant Development-Second Edition (BINS-II)* and neurological assessments.

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<i>Brigance Screens</i>	Direct Elicitation and Observation	70-82%	70-82%	0-90 months	One form for each 12 month range	10-15 Minutes	Each component is priced separately	Professional	MA: Curriculum Asso, Inc. 153 Rangeway Rd PO Box 2001 North Billerica, MA 01862 800-225-0248 http://www.curriculumassoc.com/products/subjects.asp?topic=SBSPE0

The Brigance Screens has four components: Infant & Toddler Screen, Early Preschool Screen, Pre-School Screen, and Kindergarten and First Grade (K & 1) Screen. Each component of each screen is priced separately. Components include manuals (also available in Spanish), materials, and data sheets (not available in Spanish). Data sheets are not reproducible. The Brigance Screens key developmental areas include: expressive language; receptive language; fine-motor skills; gross-motor skills; self-help skills; and, social-emotional skills.

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<i>Child Development Inventories: (3 separate inventories)</i>		All tools are 75% or greater	All tools are 70%			About 10 minutes		Professional	Behavior Science Systems Box 19512 Minn., MN 55419-0008 P (612) 850-8700 http://www.childdevrev.com/index.html Email heidi@childdevrev.com
Infant Development Inventories (IDI)	Parent Questionnaire			Birth – 18 months			Manual \$30 IDI pad 25@ \$11		
Early Child Development Inventory (ECDI)	Childhood Development Inventory			15 months through 3 years	60 yes/no questions and a General Development Scale		ECDI pad 25@ \$11		
Pre-School Development Inventory (PDI)	Preschool Development Inventory			Pre-school	60 yes/no questions and a General Development Scale, but no Child Development Chart.		Manual \$11 PDI pad 25@ \$11		

The IDI questionnaire involves parents by asking them to describe their infant and report, “What’s Your Baby Doing?” using an Infant Development Chart. The chart tracks developmental skills in social, self-help, gross motor, fine motor and language. Monthly developmental milestones on the chart help parents to see how infants develop.

The ECDI is still available, but the developers recommend using the CDR Parent Questionnaire because it is briefer and easier to use and also includes a Child Development Chart.

The PDI is the precursor to the briefer, easier to use CDR Parent Questionnaire. It yields a "score," instead of identifying children as "normal," "borderline," or "delayed" in specific developmental areas. This tool is still used by many for preschool screening but the developers recommend trying the CDR Parent Questionnaire because it obtains the same information and includes a parent education component, the Child Development Chart. Requires PDI Manual.

All forms are available in English & Spanish. Manuals are available only in English.

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<i>Child Development Review (CDR)</i>	Parent Questionnaire	68% or greater	88%	18 months to 5 years	6 questions and a 25-item problems checklist	5 minutes (If interview is needed)	Manual \$30 Parent Questionnaire and Child Development Chart 25 @ \$11.00	Professional	Behavior Science Systems Box 19512 Minn., MN 55419-0008 P (612) 850-8700 http://www.childdevrev.com/index.html Email heidi@childdevrev.com

The CDR Parent Questionnaire asks parents of toddlers and preschool age children to briefly describe their child and report any questions or concerns they may have about their child's development, health, and behavior. The CDR helps combine information from the parents with the observations of the health care provider. It helps focus the health care provider's talk with parents to identify their concerns. A Child Development Chart, located on the back of the parent questionnaire, covers development in the first five years in the areas of social, self-help, gross motor, fine motor, and language.

<i>Denver Developmental Screening Test II (DDST)</i>	Direct Elicitation, Observation and History/ Interview	83%	43%	0-72 months	Kit	20-30 Minutes	Test Kit: \$73 Training Videos Available	Training Necessary	Denver Developmental Materials, Inc., P.O. Box 371075 Denver, CO 80206-0919 (303) 355-4729 http://www.denverii.com/DenverII.html
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The Denver II is a surveillance and monitoring tool that should be administered by someone trained in using the tool correctly. It is designed to enable the user to obtain a quick overview of the child's development and to identify relative areas of strengths and weakness. It is available in both English and Spanish.

<i>Parents Evaluation of Developmental Status (PEDS)</i>	Parent Questionnaire	74-80%	74-80%	0-8 years	10 questions	5 Minutes	\$39.00	Para-Professional	E & V Press, Ltd. PO Box 68164 Nashville, TN 37206 P(615) 226.4460 F(615)227.0411 http://www.pedstest.com
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The PEDS was designed to facilitate parent-professional communication and ensure that developmental and behavioral problems in children 0 to 8 years old are addressed. The PEDS is written at the fifth-grade level and can be used by parents with differing educational levels. It can also be administered as an interview. It requires minimal training to administer. Response forms are available in English, Spanish, and Vietnamese. Scoring forms are longitudinal, so only one recording form is needed per child over 8 years. Forms are not reproducible.

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BEHAVIORAL SCREENING TOOLS

Name	Type of Tool	Sensitivity	Specificity	Ages Tested	Format	Time to Score	Cost	Staff	Source
<i>Eyeberg Child Behavior Inventory (ECBI)</i>	Parent Questionnaire	80%	86%	2-16 years	36 short statements	5 minutes	Manual \$51 Test Sheets 25@ \$40	Professional	Psychological Assessment Resources, Inc. 16130 N. Florida Ave. Lutz, FL 33549 800-331-8378 http://www4.parinc.com/Products/Product.aspx?ProductID=ECBI

The ECBI is a behavioral rating scale of externalizing or conduct-disorders. Each behavior on the 36 item list is rated on two scales: a 7-point Intensity Scale that indicates how often the behaviors currently occur, and a Yes-No Problem Scale that identifies whether the child's behavior is problematic or not for the parent. Test sheets are not reproducible.

<i>Pediatric Symptom Checklist (PSC)</i>	Parent Questionnaire	80-95%	68-100%	4-18 years	35 short statements	7 Minutes	Available free on web	Para-Professional	http://psc.partners.org/psc_order.htm or TNAAP Website www.tnaap.org
<i>Pediatric Symptom Checklist - Youth (PSC-Y)</i>	Youth Questionnaire								

- The PSC is used to screen for emotional or behavioral disorders among children and adolescents. The questions address internalizing, externalizing, and attention issues. The child's parent or guardian completes the PSC. The PSC is available in English, Spanish, and Japanese.
- The PCP-Y consists of the same 35 statements, but is worded so that the child or adolescent may complete the tool. The PSC-Y is available in English and Spanish.

<i>Pediatric Symptom Checklist-17 (PSC-17)</i>	Parent Questionnaire	.77 - .87	.68 -.80	4 to 18	17 questions	Less than 7 minutes	Free	Para-Professional	To obtain a reproducible copy of the PSC-17, email Dr. Michael Murphy at mmurphy6@partners.org or TNAAP Website www.tnaap.org
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The PSC-17 is a shorter version of the PSC. It is used to screen for emotional or behavioral disorders among children and adolescents. The questions address internalizing, externalizing, and attention issues.

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BEHAVIORAL SCREENING TOOLS

Name	Type of Tool	Sensitivity	Specificity	Ages Tested	Format	Time to Score	Cost	Staff	Source
Vanderbilt/NICHQ Caring for Children With ADHD Toolkit	Parent Questionnaire Teacher Questionnaire	>94%	>94%	5-11	Separate rating scales with 55 questions for parents & 43 questions for teachers	10 minutes	Free	Professional	To download this tool for free, log on to www.nichq.org . You have to register and get a password , but once in, go to the tab at the top of the page called "Toolkits and Publications". Click on "ADHD" and it will take you to the toolkit with all the forms in PDF format. Or go to r TNAAP Website www.tnaap.org

The Vanderbilt/NICHQ *Caring for Children With ADHD Toolkit* is divided into 4 sections:

- **Diagnosis**, which includes:
 - The **Primary Care Initial Evaluation Form** which contains patient information, medical history, sections to evaluate the scores from the informant questionnaires, as well as diagnostic assessment and planning sections.
 - **Assessment Scales** for both the parent and teacher informants containing:
 - ^ a **symptom assessment** which screens for symptoms that meet criteria for both inattentive and hyperactive or impulsive ADHD
 - ^ a **performance assessment** which screens for performance in school and with relationships.
 - The **Assessment Follow-Up** for parent and teacher informant which helps assess the treatment's effectiveness.
 - **Scoring Instructions** for the Assessment Scales
- **Treatment** - Guidelines for selecting and implementing appropriate therapy plans, setting and evaluating treatment goals, plus medication dosing and side effect information.
- **Parent Information and Support** - Features the AAP booklet, Understanding ADHD, plus an ADHD evaluation timeline, information about school issues, and other parenting resources.
- **Resources** - Includes information and sample forms on coding, billing, and reimbursement for the clinician, plus Internet resources of interest to parents, teachers, and clinicians.

The toolkit is available in English & Spanish.

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SUBSTANCE ABUSE SCREENING TOOLS

Name	Type of Tool	Sensitivity	Specificity	Ages Tested	Format	Time to Score	Cost	Staff	Source
<i>CRAFFT</i>	Youth Questionnaire/ Interview for Substance Abuse Screening	80%	86%	14-18	6 short questions in interview format or as a questionnaire completed by teenager	1 minute	Free	Professional	http://www.ceasar-boston.org/CRAFFT/index.php or call: The Center for Adolescent Substance Abuse (CeASAR) Children's Hospital or TNAAP Website www.tnaap.org

The CRAFFT was developed to screen for substance abuse in teenagers. It consists of 6 questions which can be administered as an interview or completed either as an interview or as a tool to be completed on paper by the teenager.

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AUTISM/AUTISM SPECTRUM DISORDERS (ASD) SCREENING TOOLS

Name	Type of Tool	Sensitivity	Specificity	Ages Tested	Format	Time to Score	Cost	Staff	Source
<i>Modified Checklist for Autism in Toddlers (M-CHAT)</i>	Parent Questionnaire	Awaiting final outcomes	Awaiting final outcomes	18 -30 months	23 questions	5 minutes	Available free on web	Para-Professional	For copy of test: http://www2.gsu.edu/~psydlr/Site/Official_M-CHAT_Website.html or TNAAP Website www.tnaap.org For copy of M-CHAT Follow-Up Interview: http://www2.gsu.edu/~psydlr/Diana_L_Robins_Ph.D_files/M-CHATInterview.pdf or TNAAP Website www.tnaap.org

The M-CHAT is a simple screen that can be given to children, starting at 18 months, during pediatric visits. It relies on parents' report of current skills and behaviors. The M-CHAT is a reliable tool to use to screen for the possibility of autism or other pervasive developmental disorders. While there are still no percentages out, the sensitivity and specificity are adequate but the positive predictive value is limited unless you incorporate the follow-up interview tool. The follow-up interview tool can be downloaded. See site under "Source" above.

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POST-NATAL DEPRESSION SCREENING TOOLS

<i>Edinburgh Post-Natal Depression Scale (EPDS)</i>	Questionnaire For Mother	86%	78%	6 to 8 weeks post-natal	10 questions	Less than 5 minutes	Available free on web	Para-Professional	http://www.fresno.ucsf.edu/pediatrics/downloads/edinburghscale.pdf or TNAAP Website www.tnaap.org
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The EPDS was developed to assist primary care health professionals in detecting mothers suffering from postnatal depression that might otherwise go undetected.