

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, age specific questionnaires is completed by parent	10-15 Minutes	\$275.00	Para-Professional	Brookes Publishers PO Box 10624 Baltimore, MD 21285 800-638-3775. www.agesandstages.com

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	\$220.00	Masters or Equivalent	Pearsons Attn: Customer Service 19500 Bulverde Road San Antonio, TX 78259-3701 800.627.7271 http://www.pearsonclinical.com/psychology/products/100000163/bayley-infant-neurodevelopmental-screener-bins-bins.html?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%	0-6 years	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.curriculumassociates.com/products/detail.asp?title=BrigEC-Screens

The Brigance Screens has three components: **Early Childhood Screens III**

- **0–35 months** includes Screens for Infants, Toddlers, and 2-Year-Olds
- **3–5 years** includes Screens for 3-, 4-, and 5-Year-Olds
- **K & 1** includes Screens for 5- and 6-Year-Olds

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
Infant Development Inventories (IDI)	Parent Questionnaire			Birth – 18 months			\$45.00 for pack of 75		Email heidi@childdevrev.com
Early Child Development Inventory (ECDI)	Childhood Development Inventory			15 months through 3 years	60 yes/no questions and a General Development Scale		\$45.00 for pack of 75		
Pre-School Development Inventory (PDI)	Preschool Development Inventory			Pre-school	60 yes/no questions and a General Development Scale, but no Child Development Chart.		\$45.00 for pack of 75		

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 \$15 Parent Questionnaire and Child Development Chart 75 @ \$45.00	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	56-83%	43-80%	0-72 months	Kit	20-30 Minutes	Test Kit: \$90.00 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	\$36.00	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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<i>Parents' Evaluation of Developmental Status- Developmental Milestones (PEDS-DM)</i>	Parent Questionnaire	70-97%	70-97%	Birth to 7 years	6-8 item screener/used in conjunction with PEDS	5 minutes	Starter kit \$275.00	Professional/ training offered on website	E & V Press, Ltd. PO Box 68164 Nashville, TN 37206 P(615) 226.4460 F(615)227.0411 http://www.pedstest.com

PEDS-DM is a 6- to 8- item screener that tracks a child's development in several domains. The PEDS-DM screener can be administered by parent report, parent/child interview, or direct administration with the child. It tracks progress over time on a recording form with multiple time periods, through which strengths and weakness in various domains become apparent. The PEDS-DM can be used with the PEDS developmental screener (to capture parents' concerns) or separately, but the developers recommend using them together to get a full picture of a child's development/ There is a separate profile of PEDS in this document. It is available in English, Vietnamese and Spanish. Scoring forms are longitudinal, so only one recording form is needed per child over 7 years.

<i>The Survey of Well-being of Young Children (SWYC)</i>	Parent Questionnaire	Not published	Not published	2-60 months	Combination of several screeners (see descriptors below)	10-15 Minutes	No cost	Professional	Dr. Ellen Perrin at Tufts Medical Center's Floating Hospital for Children. Dr. Perrin can be reached at theswyc@gmail.com . www.theswyc.org
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The SWYC is made up of several different scales: the Baby Pediatric Symptom Checklist (BPSC), the Preschool Pediatric Symptom Checklist (PPSC), the Parent's Observations of Social Interactions (POSI), *The Developmental Milestones* checklist and *Family Risk Factors* questions. The BPSC (18 items) measures social-emotional development for children up to 18 months, and the PPSC (25 items) measures social -emotional development for children 18-60 months. *The Developmental Milestones* checklist (10 items) contains questions for parents about their child's motor, language, social and cognitive development, and parents of children between 16 and 30 months of age also complete the Parent's Observations of Social Interactions (POSI), which is an autism -specific screener. The screens are available in English , Spanish, Burmese, and Nepali

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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>Global Appraisal of Individual Needs-Short Screener (GAIN-SS)</i>	Adolescent Questionnaire	90%	90%	12-18 years	Four sub screeners with 5-7 items each/ 23 total items	5-10 minutes	Licensing cost \$100 per agency and covers 5 years of unlimited usage	Para-Professional	GAIN Project Coordination Team Chestnut Health Systems 448 Wylie Drive Normal, IL 61761 309.451.7900 gaininfo@chestnut.org http://gaincc.org/GAINSS
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The GAIN-SS screens for identification of mental, emotional, and behavioral problems in adolescents. The GAIN-SS is comprised of four sub screeners: Internalizing Disorder Screener (IDScr), Externalizing Disorder Screener (EDScr), Substance Disorder Screener (SDScr) and Crime and Violence Screener (CVScr) for a combined 23 item Total Disorder Screener (TDSr). It is available in English and Spanish.

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Name	Type of Tool	Sensitivity	Specificity	Ages Tested	Format	Time to Score	Cost	Staff	Source
<i>Patient Health Questionnaire 9 (PHQ-9)</i>	Youth Questionnaire	88%	88%	12-18 years	9 items scored 0-3	2-5 minutes	Free	Para-Professional	http://www.phqscreeners.com/ or TNAAP Website www.tnaap.org
<p>The PHQ-9 screens for symptoms in domains of depression and suicidality. The 9-item screening tool is adapted from the adult screen and scores each of the 9 DSM-IV criteria based on the mood module from the original PRIME-MD (Primary Care Evaluation of Mental Disorders). The PHQ-9 is available online for free and in a variety of languages. The PHQ-9 should be administered in alignment with the GLAD-PC.</p>									
<i>Patient Health Questionnaire – 2 (PHQ-2)</i>	Youth Questionnaire	*Varies based upon prevalence of depression	*Varies based upon prevalence of depression	13-17 years	2 items scored 0-3	2-5 minutes	Free	Para-Professional	http://www.phqscreeners.com/ or TNAAP Website www.tnaap.org
<p>The PHQ-2 includes the first two items of the PHQ-9 and inquires about the frequency of depressed mood and anhedonia over the past two weeks. The PHQ-2 should not be used to establish a diagnosis but to screen for depression as a “first step” approach. Patients who screen positive, should be further evaluated with the PHQ-9. The PHQ-2 is available online for free in a variety of languages. The PHQ-2 should be administered in alignment with the GLAD-PC.</p>									

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<i>Pediatric Symptom Checklist (PSC)</i> <i>Pediatric Symptom Checklist -Youth (PSC-Y)</i>	Parent Questionnaire Youth 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

- 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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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 Revised/ Follow up (M-CHAT R/F)</i>	Parent Questionnaire	Awaiting final outcomes	Awaiting final outcomes	16 -30 months	20 questions	5 minutes	Available free on web	Para-Professional	For copy of test: https://m-chat.org/print.php or TNAAP Website www.tnaap.org For copy of M-CHAT Follow-Up Interview: https://m-chat.org/print.php or TNAAP Website www.tnaap.org

The M-CHAT- R/F is a simple screen that can be given to children, starting at 16 months, during pediatric visits. **The revised tool has a reduced false positive rate (which means fewer children are given a "high risk" result when they truly do not have autism). It also has a higher sensitivity (which means more children who truly have autism spectrum disorder are given a "high risk" result).** It relies on parents' report of current skills and behaviors. The M-CHAT-R/F 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.