Developmental Surveillance and Screening In Primary Care

**Developmental surveillance**:
- is a longitudinal, cumulative process to identify children at risk for developmental delays
- notes risk factors, including medical history and home risk factors, as well as protective factors
- provides the context for interpretation of screening results

**Developmental screening**:
- uses standardized tests to refine the identification of children who may need intervention
- does not result in a diagnosis or treatment plan but rather identifies areas in which a child's development differs from same-age norms
- AAP guidelines recommend routine screening at 9, 18, (24) and 30 months or whenever concerns are identified (Identifying Infants and Young Children With Developmental Disorders in the Medical Home, Pediatrics 2006; 118: 405-420)

There are other screening protocols available. For example, the North Carolina ABCD Project recommends screening at 4, 6, 12, 24, 36, 48 months (http://www.nashp.org)

**WHY IS SCREENING IMPORTANT?**

- **Early intervention is effective.** Children who participate in early intervention programs prior to kindergarten are more likely to achieve goals of independence, functional productivity, community integration, and improved school performance. Families are more likely to cope effectively.
- Without the use of standardized tools, only 30% of children with developmental disabilities are identified before school entrance. However, when standardized tools are used, 70-80% of children with developmental disabilities are identified. (Palfrey et al. J Pediatr. 1987;111:651-655; Squires et al. JDBP. 1996; 17(6):420-427.)
- Studies have shown that incorporating a screening test before a well-child care visit does not increase the length of the visit. (Schonwald et al. Clinical Pediatr 2009; 48:648-655; Slcues et al. 2009; Pediatrics; 122: 1095)
- Incorporating regular screening for all children in your practice facilitates discussions with parents when concerns arise. *It is easier to broach the subject of new developmental concerns in the context of an ongoing discussion with parents.*
- Even if children referred for evaluation do not qualify for early intervention/special education or therapy assistance, there are resources - from parent websites and handouts, to Head Start programs and more - that can assist parents and their children with borderline range skills.

**WHAT SCREENING TESTS ARE AVAILABLE?**

- **Parent report questionnaires** can be given to parent to complete before a visit, so that administration time does not add to visit length. Ages and Stages or PEDS can be mailed home or given in the waiting room. They can also be administered in an interview, either in-person or by phone. The results can then be discussed at the visit.
- A good screening test should have good sensitivity (few false negatives) and good specificity (few false positives.) **Values for both sensitivity and specificity should be at least 70 – 80 %**. There are several parent report tools available that are easy to incorporate into practice and that meet these criteria, including the ASQ-3 and the PEDS.
THREE EXAMPLES ARE LISTED BELOW:

- **Ages and Stages Questionnaire (ASQ-3)**  --  Also available online for parents to complete.  
  AGES: 1 month through 5 ½ years  
  ITEMS: 30 items in 5 domains for each questionnaire  
  TIME: Administered at home, waiting room or by phone – takes parents 10-15 minutes  
  Scoring takes 1 - 3 minutes  

- **PEDS (Parent Evaluation of Developmental Status)**  
  [http://www.pedstest.com](http://www.pedstest.com)  --  (electronic version:  [www.forepath.org](http://www.forepath.org)  --  for a charge)  
  AGES: Birth to 8 years  
  ITEMS: 10 item questionnaire  
  TIME: takes parents 2 minutes, can be administered as interview at home or by phone  
  Scoring takes 5 minutes  

- **Child Development Inventories (CDI)**  -  [www.childdeverev.com](http://www.childdeverev.com)  
  Infant Development Inventory – 0-21 months  
  Child Development Review – Parent Questionnaire – 18-60 months  
  ITEMS: 6 open-ended questions; 25-item problems checklist, developmental milestones in five areas  
  TIME: 5-20 minutes for parent to complete  
  SCORING: 5 minutes  

For a more detailed discussion, visit the Washington State Medical Home website:  [www.medicalhome.org/health/dev_mon.cfm](http://www.medicalhome.org/health/dev_mon.cfm)  
For autism screening guidelines, see: Johnson et al. *Pediatrics* 2007; 120 (5): 1183-1215

**Nicole Castonguay, MD, (ncastonguay@wcaap.org 360-397-3537), WA Chapter of WCAAP, and Vancouver Clinic Pediatrician, is available to present to pediatric and family practice clinics on medical homes including developmental screening in routine well child care, following the AAP guidelines.**

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<thead>
<tr>
<th>COUNTY RESOURCES FOR DEVELOPMENTAL SCREENING AND ASSESSMENT</th>
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<tr>
<td>➢ For children under age three: Contact: Early Support for Infant and Toddlers (ESIT) ........................................... 360-567-2741</td>
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| ➢ For children age three and older: Contact:  
  ESD112 .......................................................................................... 360-750-7500 x342  
  Vancouver School District ................................................................. 360-313-4858  
  Evergreen School District ................................................................. 360-604-3925  
  Or school district where child resides, if different from above. |

**SPECIAL NEEDS INFORMATION AND RESOURCES:**

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<th>Local:</th>
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<tr>
<td>Children with Special Health Care Needs Program, Clark County</td>
<td>360-397-8472 referrals</td>
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<td>Public Health</td>
<td>360-397-8000 ex 7400 Connie Callahan, PHN</td>
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<td>EOCC: Early Head Start (0 to 3 year olds); Head Start: 4 – 5 y/o’s</td>
<td>360- 567-2720</td>
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<td>Regional:</td>
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<td>WithinReach Family Health Hotline</td>
<td>1-800-322-2588, 1-800-833-6388 TTD</td>
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<td><a href="http://www.withinreachwa.org">www.withinreachwa.org</a></td>
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<td>Seattle Children’s Hospital: Health Professional Hotline Parent Resource Line</td>
<td>(800) 293-2462 (866) 987-2500</td>
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<tr>
<td>Sacred Heart Children’s Hospital Health Professional Consultation &amp; Referral Line</td>
<td>(877) 474-7640</td>
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<td>Early Support for Infant and Toddlers (ESIT)</td>
<td><a href="http://del.wa.gov/development/esit/Default.aspx">http://del.wa.gov/development/esit/Default.aspx</a></td>
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<td>Parent to Parent Support Programs of Washington</td>
<td>(800) 821-5927</td>
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<td><a href="http://www.arcwpa.org/getsupport/parent_to_parent_c2p_programs">http://www.arcwpa.org/getsupport/parent_to_parent_c2p_programs</a></td>
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<td>National/Internet:</td>
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<td>American Academy of Pediatrics</td>
<td><a href="http://www.aap.org">www.aap.org</a></td>
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<td>AAP Developmental and Behavioral Pediatrics</td>
<td><a href="http://www.dbpeds.org">www.dbpeds.org</a></td>
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<td>American Academy of Family Physicians</td>
<td><a href="http://www.aafp.org">www.aafp.org</a></td>
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**PUBLIC HEALTH**  
Always working for a safer and healthier Washington  

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