Implementing Developmental Screening in Primary Care Practice

Arianna Keil, MD

Learning Objectives
- Recognize the purpose of developmental screening and early intervention for children with developmental delays
- Be familiar with screening tools for developmental delay, and understand the need for use of a valid and reliable screening tool
- Know how to incorporate developmental screening into well-child care
- Be familiar with resources and referral options, in the community

Rationale for Screening and Early Identification

What is Developmental Screening?

Developmental screening is the administration of a brief standardized tool that aids the identification of children at risk of a developmental disorder.

Surveillance Versus Screening

- Developmental Surveillance: recognizing children who may be at risk of developmental delays
- Developmental Screening: using standardized tools to identify and refine risk of developmental delays

Developmental screening does not result in either a diagnosis or treatment plan but rather identifies areas in which a child’s development differs from same-age norms.
Implementing Developmental Screening in Primary Care Practice
Arianna Keil, MD

Why Screen?

• Improves patient / family satisfaction
  - Parents are interested in knowing more about their child’s development
• AAP recommendation
  - July 2006 policy statement recommends standardized routine screening
• Screening is more effective than surveillance alone at early identification of children with developmental delays

Improved Patient Satisfaction

• Most parents desire developmental screening
  - According to parent report, only 57% of children age 4 to 35 months ever received developmental screening
  - Parents rated health care providers higher when screening did occur

Developmental Surveillance and Screening Algorithm Within a Pediatric Preventive Care Visit

Detection Rates: With and Without Use of Screening Tools

<table>
<thead>
<tr>
<th></th>
<th>Mental Health Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without tools: 20%</td>
<td>Without tools: 20%</td>
</tr>
<tr>
<td>With tools: 80-90%</td>
<td>With tools: 80-90%</td>
</tr>
</tbody>
</table>

The Prevalence of Children with Disabilities

• Approximately 12-16% of children have disabilities
  - Only 30% of children with disabilities are detected before school entrance

Wisconsin Medical Home Webcast Series
Benefits of Early Intervention (EI)

- EI is critical to the development and well-being of children and their families
- EI improves outcomes for participants
- EI is socially and economically effective

Early Identification of Developmental Delays Makes a Difference!

Screening Methods Used by Pediatricians

- 7 out of 10 pediatricians always identified potential problems via clinical assessment (e.g., surveillance) without the use of a screening instrument
- Only 23% use a standardized tool
- Of those tools used, Denver II was used most frequently

Screening Methods Used by Pediatricians & Family Physicians

- Nearly all…
  - Used list of developmental milestones
  - Prompted parents for concerns
- About one-third…
  - Used a provider administered instrument
- Less than 15%…
  - Used a validated parent questionnaire

Physician’s Reported Barriers to Developmental Assessment of Children 0-3

- Insufficient time: 82%
- Lack of non-MD staff: 48%
- Inadequate reimbursement: 44%
- Other barriers:
  - Unable to unbundle from WCC
  - Unfamiliar with codes
  - Lack of Dx and Rx services
  - Lack of training
  - Unfamiliar with instruments
  - Referral resources
Screening Tool Features

- Sensitivity
- Specificity
- Positive predictive value
- Validity
- Reliability

Comparing Validity Across Three Screening Tools

<table>
<thead>
<tr>
<th>Screening Tool</th>
<th>Sensitivity</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASQ</td>
<td>72% (51-90%)</td>
<td>86% (81-92%)</td>
</tr>
<tr>
<td>Denver II</td>
<td>56%-83%</td>
<td>43-80%</td>
</tr>
<tr>
<td>PEDS</td>
<td>75% (74-79%)</td>
<td>74% (70-80%)</td>
</tr>
</tbody>
</table>

ASQ: Ages & Stages™ Questionnaire

- Parent report tool with 30-35 items / level
- 2 - 60 months of age
- Covers 5 developmental areas in children
- Choice of responses (yes, sometimes, not yet)
- Requires 15-20 minutes to complete if completed in the waiting room by parents, 5 minutes to score
- Written at a 6th grade level
- Spanish, French, other language versions available

Sample Words to Describe the ASQ to Parents

- “The ASQ is a tool that you can use to check your child’s development.”
- “Your child will be able to do some of the items, but not all of the items.”
- “You can help your child practice the skills we do on the ASQ.”
- “Your answers help show your child’s strengths and any areas where your child may need support or more practice.”

ASQ Screens 5 Domains

- Communication
- Gross Motor
- Fine Motor
- Problem solving
- Personal-social

Selecting Appropriate Age Interval Questionnaire

- Each age interval questionnaire valid for +/- 1 month window
- Correct for prematurity up to 2 yrs of age
  - Birth < 37 weeks gestation
Implementing Developmental Screening in Primary Care Practice
Arianna Keil, MD

ASQ Administration and Scoring

Overall Section
- Go over any question that might be a concern
- A “concern” in the overall section may be enough to make a referral

Using the ASQ

Scoring the ASQ
Step 1: Total the points in each area. “yes”= 10, “sometimes”= 5, “not yet”= 0
Step 2: Transfer the area totals to the information summary page. Fill in the matching circle in the space provided
Step 3: Read the answers to “Overall” section questions carefully and note your suggestions
Step 4: Any score falling near or into the shaded area requires further attention or assessment

Follow-up/Referral Criteria: Reassuring Screen
- Well above cut-off points:
  - Provide anticipatory guidance to parents
  - Re-screen at next scheduled interval

Wisconsin Medical Home Webcast Series
Follow-up/Referral Criteria: Borderline Screen

- **Close to cut-off points:**
  - Provide follow up activities to practice skills in specific domain(s)
  - Talk to parents about opportunities to practice skills
  - Make community referrals as appropriate
  - Re-screen in 4-6 months or sooner if necessary

Follow-up/Referral Criteria: Concerning Screen

- **Below cut-off point in one or more areas:**
  - Refer to early intervention (Birth to 3) or early childhood special education agencies
  - Refer for medical and developmental evaluations
  - Parent concern:
    - Respond to all concerns
    - Refer if necessary

Delivering Difficult News to Parents

- Validate parent concerns
- Present news in thoughtful and caring manner
- Provide hope and emphasize strengths
- Use descriptive terms
- Provide information on community resources and services
- Help establish an action plan
- Offer ongoing support

Planning Considerations in Your Practice

Planning Considerations

- Determine need/interest
- Consider financial implications
- Review and select tool(s)
- Develop implementation plan and schedule
- Determine staff roles
- Provide professional development for staff

Team Considerations

- Which ages will you screen?
- Who will determine which children being seen for well-child care in upcoming 2-4 weeks?
- Who will select the appropriate age interval questionnaire and mail to parents?
  - Each ASQ interval is valid for +/- 1 month
  - Correct for prematurity up to 2 years of age
Implementing Developmental Screening in Primary Care Practice
Arianna Keil, MD

Team Considerations
- What if parents come without a completed form?
- Who will score the questionnaire?
- If a child has a concerning score, who is responsible for making appropriate referrals?
- How will you follow-up with children with concerning or borderline screens?

GHC Developmental Screening Flowchart

Resource and Referral Process
What do I do with a concerning screen?

A Sampling of Resource Options
- Medical Specialists
- WI Title V Program’s CYSHCN Centers
- IDEA Programs
  - Part C/Early Intervention: Birth to 3 Program (0-3 years)
  - Part B/Early Childhood Special Education (3-5 years)
- Community Resources

Other Community Resources
- County Public Health Department
  [http://dhs.wisconsin.gov/programs/publichealth.htm](http://dhs.wisconsin.gov/programs/publichealth.htm)
- Child Care Resource and Referral Agencies
  [www.supportingfamiliestogether.org](http://www.supportingfamiliestogether.org)
  608-271-8191
- ABC for Health
  [www.safetyweb.org](http://www.safetyweb.org)
  608-261-6939
- Family Voices of Wisconsin
  [www.wfv.org/fv](http://www.wfv.org/fv)
- Parent to Parent of Wisconsin
  [www.familyresourceconnection.org/ptpow.htm](http://www.familyresourceconnection.org/ptpow.htm)
  888-266-0028
- Wisconsin FACETS
  [www.wifacets.org](http://www.wifacets.org)
  1-877-374-4677
You make a difference…

through
early identification
of developmental delays

Ask a Question

Viewing online?
- Click on the chat icon above
- Question emailed to Training Team
- Questions answered by expert on topic
  - Response within 2-3 weeks

Acknowledgements

- CDC-Research Topics of Interest
- WI Medical Home Webcast Series
- Waisman Center
- WI CYSHCN Program