An Introduction to the Ages and Stages Questionnaire (ASQ-3)
A parent-completed child monitoring system
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Training Objectives

• Define and discuss the benefits of developmental screening

• Describe features of ASQ-3

• Score ASQ-3

• Describe ASQ-3 cutoff scores

• Interpret ASQ-3 information in relation to other referral considerations
Types of Assessment

• Screening assessment
• Diagnostic assessment
• Curriculum-based (programmatic, ongoing) assessment
# ASQ-3 vs. DRDP-R

<table>
<thead>
<tr>
<th></th>
<th>DRDP-R</th>
<th>ASQ-3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TYPE of TOOL</strong></td>
<td>Child assessment</td>
<td>Developmental Screening</td>
</tr>
<tr>
<td><strong>WHO is it for?</strong></td>
<td>Children birth - 12 years enrolled in early care and education or before/after school programs and their families.</td>
<td>All children: 1 month - 66 months</td>
</tr>
<tr>
<td><strong>WHO administers or completes tool?</strong></td>
<td>Teacher or Caregiver</td>
<td>Parent; may be assisted by a screener.</td>
</tr>
<tr>
<td><strong>WHEN?</strong></td>
<td>Twice each year</td>
<td>Twice each year for children 1-24 months;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Once each year for children 24-66 months.</td>
</tr>
<tr>
<td><strong>PURPOSE</strong></td>
<td>Teachers use it to look at a child’s growth and development, progress and plan learning activities.</td>
<td>To determine which children would benefit from further assessment.</td>
</tr>
</tbody>
</table>
### Detection Rates of Children with Existing Delays

<table>
<thead>
<tr>
<th></th>
<th>Without Screening Tools</th>
<th>With Screening Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developmental Disabilities</strong></td>
<td>30% identified</td>
<td>70-80% identified</td>
</tr>
<tr>
<td></td>
<td>Palfrey et al, 1994</td>
<td>Squires et al, 1996</td>
</tr>
<tr>
<td><strong>Mental Health Problems</strong></td>
<td>20% identified</td>
<td>80-90% identified</td>
</tr>
</tbody>
</table>
What is ASQ-3?

• Parent- or caregiver-completed screening tool that encourage parental/caregiver involvement

• Series of questionnaires for children ages 1 month to 5 ½ years

• Tool to accurately identify children at risk for developmental delay
Features of the Ages & Stages Questionnaires® (ASQ-3™)
• Administration window indicated on ASQ-3 cover page
• 16 month “window” is 15 months, 0 days to 16 months, 30 days
• Programs can personalize by replacing the logo of the mother and child (on the top right)
• 5 developmental areas (e.g., Communication)
• 6 questions in each area
• Questions are in hierarchical order
• Questions #5 and #6 are average skills for children of that age interval
  – (i.e., a 12 month skill for a 12 month child).
• Response options: Yes, Sometimes, Not Yet
• Written at 4th- to 5th-grade reading level
Features: ASQ-3 Overall Section

- Un-Scored Section
- Looks at quality of skills (e.g., speech)
  - Example: “Does your baby use both hands equally well?”
  - “No” response indicates possible cerebral palsy.
    Important to follow up
- Parent concerns very predictive
- Any concerns or questionable responses require follow-up
Features: Cultural Adaptability

- Alternative administration methods for individuals from different cultural backgrounds
- Alternative materials for individuals from different cultural backgrounds
- Normative sample includes diverse populations
- Scoring permits omission of inappropriate items
Video Clip
ASQ-3 Administration:
Andrew Scoring Exercise
Andrew: ASQ-3 Cover Page

- Date ASQ-3 Completed: August 3, 2014
- Child’s Name: Andrew
- Child’s Date of Birth: February 24, 2013
- Vicky (mother) filling out questionnaire

What is Andrew’s actual Age at ASQ-3 Administration in months and days?
Age at Administration: Andrew

Date ASQ-3 Completed: August 3, 2014
Child’s Date of Birth: February 24, 2013

\[
\begin{align*}
2014 & \quad 08(-1) \text{ mo} \quad 03 \quad (+30)\text{days} \\
- 2013 & \quad 02 \quad \text{mo} \quad 24 \quad \text{days} \\
= & \quad 1 \quad \text{year} \quad 5 \quad \text{mo} \quad 9 \quad \text{days}
\end{align*}
\]

Andrew’s Age at administration is 17 months, 9 days
Choosing the Correct ASQ-3 when the Child is Premature

- Adjusted age
  - Subtract weeks of prematurity from child’s age at administration to create an adjusted age
  - Use adjusted age to choose appropriate ASQ-3 interval

- Corrected date of birth (CDOB)
  - CDOB commonly used to determine a monitoring schedule for a child (e.g., 6, 12, 18…)
  - Add number of weeks child was premature to child’s birth date.
Andrew was born 6 weeks premature. What is Andrew’s Adjusted Age?

17 months 9 days – 6 weeks = 16 months

(Andrew’s Age at administration)

Andrew’s adjusted age is 16 months.
Andrew should receive the 16-month ASQ-3.
Here is an online resource to help calculate age:

Step 1: Review responses. If any missing items, try to obtain answers. If items inappropriate, omit item

Step 2: Calculate area totals: “yes”= 10; “sometimes”= 5; “not yet”= 0

Step 3: If any items omitted, calculate new area total (see next slide for example)

Step 4: Review overall section responses. Ask for further clarification and make notes if needed

Step 5: Transfer information to ASQ-3 Summary Page
Create a new total area score so child is not penalized

1) Divide total area score by the number of items answered in that area

\[
45 \text{ (area score)} \div 5 \text{ (items)} = 9 \text{ points}
\]

2) Add this average item score to the total area score to get a new total score

\[
45 + 9 \text{ points} = \text{new total of 54 points}
\]
Child's name: Andrew  
Date ASQ completed: Oct 14, 2007
Date of birth: April 30, 2006

1. SCORE AND TRANSFER TOTALS TO CHART BELOW: See ASQ-3 User’s Guide for details, including how to adjust scores if item responses are missing. Score each item as YES = 10, SOMETIMES = 5, NOT YET = 0. Add item scores, and record each area total.

In the chart below, transfer the total scores, and fill in the circles corresponding with the total scores.

<table>
<thead>
<tr>
<th>Area</th>
<th>Total Item</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>16.81</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Gross Motor</td>
<td>37.91</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>30.51</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Personal Social</td>
<td>26.63</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>


1. Hears well?  
   Comments:  
   Yes  
   No  
2. Talks like other toddlers his age?  
   Comments:  
   Yes  
   No  
3. Understand most of what your child says?  
   Comments:  
   Yes  
   No  
4. Walks, runs, and climbs like other toddlers?  
   Comments:  
   Yes  
   No  
5. Family history of hearing impairment?  
   Comments:  
   Yes  
   No  

3. ASQ SCORE INTERPRETATION AND RECOMMENDATION FOR FOLLOW-UP: You must consider total area scores, overall responses, and other considerations, such as opportunity to practice skills, to determine appropriate follow-up.

If the child's total score is in the 10 area, it is above the cutoff, and the child's development appears to be on schedule.
If the child's total score is in the 10 area, it is below the cutoff. Provide learning activities and monitor.
If the child's total score is in the 10 area, it is below the cutoff. Further assessment with a professional may be needed.

4. FOLLOW UP ACTION TAKEN: Check all that apply.
   **K** Provide activities and re screen in 6 months.
   **K** Share results with primary health care provider.
   **K** Refer for circle all that apply: Mental, Vision, and/or behavioral screening.
   **K** Refer to primary health care provider or other community agency (specify reason).
   **K** Refer to early intervention/early childhood special education.
   **K** No further action taken at this time.
   **K** Other (specify).  

5. OPTIONAL: Transfer item responses (Y = YES, S = SOMETIMES, N = NOT YET, X = response missing).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Y</td>
<td>S</td>
<td>Y</td>
<td>S</td>
<td>N</td>
</tr>
<tr>
<td>Gross Motor</td>
<td>T</td>
<td>S</td>
<td>T</td>
<td>S</td>
<td>Y</td>
</tr>
<tr>
<td>Fine Motor</td>
<td>T</td>
<td>S</td>
<td>T</td>
<td>S</td>
<td>Y</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>T</td>
<td>Y</td>
<td>T</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Personal Social</td>
<td>Y</td>
<td>Y</td>
<td>X</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

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*ASQ 3: 16 Month ASQ-3 Information Summary*
Consider the following to determine appropriate follow-up

- Total ASQ Area Scores
- Overall Responses (Parent Concerns)
- Additional Considerations
  - What other factors may have impacted the child’s screening results?
Additional Considerations

– Biological / Health factors
– Family and cultural context
  – stressful life events
  – caregiving environment
– Environmental factors
  – opportunity to practice skills
– Developmental history
– Extent and frequency of contact
– Availability of resource
How Might Culture or Values Influence these Activities?

• Food and Feeding Practices
• Books and Writing Tools
• Toys
  – Blocks, stuffed animals, shopping carts
  – Socializing vs. solitary play
• Sports (e.g., balls)
# 16-Month ASQ-3 Scoring Chart

Andrew, Case Study

<table>
<thead>
<tr>
<th>Area</th>
<th>Cutoff</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>16.81</td>
<td>30</td>
</tr>
<tr>
<td>Gross Motor</td>
<td>37.91</td>
<td>50</td>
</tr>
<tr>
<td>Fine Motor</td>
<td>31.98</td>
<td>35</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>30.51</td>
<td>40</td>
</tr>
<tr>
<td>Personal-Social</td>
<td>26.43</td>
<td>54</td>
</tr>
</tbody>
</table>
68% of population scores in this “average” range.
ASQ-3 “Bell Curve”

(Not to Scale)

Number of children

Scores (in points) on ASQ

Monitor Zone

ASQ-3 Cutoff

-2SD

15.8%

32%

52.2%

-1SD

60

ASQ-3™ and ASQ:SE Training Materials by Jane Squires, Jane Farrell, Jantina Clifford, Suzanne Yockelson, and Elizabeth Twombly
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Role of the Screener

- Establish a relationship with family
- Explain the purpose of screening and questionnaire content
- Acquire consent
- Gather information from the family
- Administer and score the questionnaire
- Set the tone for follow-up with the family

“Parent involvement is at the heart of the ASQ.”
Practice Administering and Scoring the ASQ
Form Pairs:
- Line up by birthday: Month and Day
- Partner with the person with the next birthday.
- Find a place to sit with your partner.

Role Play:
- Parent: Think of a 2 or 4 year old child you know well and answer as completely as possible.
- Screener: Explain the screening process, administer the screening, score and discuss the results with parent.
Small Group Debrief

- Form a small group with 4-5 people
- Discuss what was easy for you and what was hard for you in your role as the parent or as the screener in the role play
Parents

+ What worked?

Δ What could be changed?
Screeners

+ What worked?

Δ What could be changed?
Follow-up / Referral Criteria

- **Above monitor zone**
  - Provide follow up activities & rescreen in 6-12 months

- **Monitor zone**
  - Score is between 1-2 standard deviations below average
  - Provide follow up activities to practice specific skills
  - Rescreen in 2 months to 6 months in areas of concern
  - Make community referrals as appropriate
Follow-up / Referral Criteria (con’t)

• **Below cutoff in one or more areas**
  - Score is below 2 standard deviations below average
  - Refer for further assessment
  - Rescreen in 6-12 months

• **Parent concern**
  - Respond to all concerns
  - Refer if necessary
Example of Follow-Up Actions
Andrew, Case Study

4. FOLLOW-UP ACTION TAKEN: Check all that apply.

✓ Provide activities and rescreen in 2 months.
✓ Share results with primary health care provider.
✓ Refer for (circle all that apply) hearing, vision, and/or behavioral screening.
✓ Refer to primary health care provider or other community agency (specify reason): ________________________________________________________________________.

✓ Refer to early intervention/early childhood special education.

✓ No further action taken at this time

✓ Other (specify): ________________________________________________________________________
Communicating Screening Results

• Assure the family that the discussion is confidential
• Review the purpose of screening
• Avoid terms such as “test”, “pass” or “fail” ("below/above cutoff, in monitoring zone")
• Review ASQ-3 and explain area scores
• Emphasize child and family strengths
• Provide specific examples of concerns
• Invite parents to share observations, concerns
Parent Report: Research

• Dinnebeil and Rule (1994) reviewed 23 studies and reported high reliability in parents’ report

• Area specific studies supporting parent report:
  – Cognitive (Glascoe, 1999)
  – Communication (Ring & Fenson, 2000)
  – ADHD and school related problems (Mulhern, 1994)
  – Gross Motor (Bodnarchuk & Eaton, 2004)
Accessing the ASQ-3

• Through a generous grant from the Mimi and Peter Haas foundation the ASQ-3 questionnaires can be printed for free here:

  www.ECEresourcesCA.org
New Strategy I want to try

- new method of implementing the ASQ with families
- Communicating results with families

When I’m going to do this

- Ideally, within the next two weeks

What I need to do this

- From Inclusion Networks, from administrative staff, from other consultants, etc.
Complete action plan form, either by yourself or with a partner.
Record at least ONE idea that you’re committed to putting into practice.
Fill Out These Parts

Your Address

Three Boxes

WHAT I WANT TO HAPPEN:

WHEN I'M GOING TO DO THIS:

NEW STRATEGY I WANT TO TRY:
• The ASQ-3 can help bridge communication with families
• ASQ-3 can assist in making referrals to community agencies
• Referrals should be based on a variety of considerations—including the culture of the family, in addition to scores
• Developmental issues are very complicated
• Use available resources to make decisions about what steps to take after screening
If you have any questions that we didn’t answer about the ASQ and how to use it, feel free to contact:

Zulema Rubalcava Barron
415-282-7494 ext. 131
zulema@supportforfamilies.org
THANK YOU
(and please fill out your evaluations)