Standardized Developmental Screening: Using the Ages and Stages Questionnaire - 3 Screening Tool

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Faculty

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Part 3:
Features of the ASQ-3 and ASQ-3 Administration and Scoring

Case Study: Andrew

Features of the ASQ-3

- 21 questionnaire intervals:
  - 2, 4, 6, 8, 9, 10, 12, 14, 16, 18, 20, 22, and 24 months (spaced 2 months apart)
  - 27, 30, 33, and 36 months (spaced 3 months apart)
  - 42, 48, 54, and 60 months (spaced 6 months apart)

Selecting the Correct Questionnaire

- Through the age of 24 months
  - Administer within two month "window"
  - For example, 16 month ASQ-3 is valid from 15 months through the end of the 16th month

Selecting the Correct Questionnaire

- Over the age of 24 months
  - Windows have been "stretched" so that there are no gaps
  - Each interval has an age range clearly marked on the first two pages of each questionnaire

Correcting for Pre-maturity

- If child is under 24 months and pre-mature by at least three weeks then correct for pre-maturity

Correcting for Pre-maturity

- Confirm child's exact age at time of screen
- If child is under 24 months and pre-mature by *at least three weeks* then correct for pre-maturity
- Subtract weeks of pre-maturity from child's age and use that corrected age ASQ-3

Calculate Age

- Confirm child's exact age at time of screen

Year	Month	Day	*Administration of ASQ-3*
-Year	Month	Day	*Date of Birth*
=	Child's Age		

Exact Age

- Example

 2009   10   14   (Oct. 14, 2009 date of ASQ-3)
 -2008   4   30 (DOB)
 1yr.   6 mo.   -16 days

- Equals 1yr. 5 months 2 weeks 2 days = 17 ½ months

Correcting for Prematurity: Adjusted Age

- Andrew's age is 17 1/2 months
- Andrew was 6 weeks premature
- Next adjust Andrew's actual age by <u>subtracting</u> 6 weeks
- Andrews Adjusted Age is 16 months (2 days)

Three Main Parts of ASQ-3

1. Family Information Sheet
   – Date of completion- be sure correct interval (at top left of sheet) is used
   – Allows a program/school to personalize the ASQ-3 questionnaires

Three Main Parts of ASQ-3

1. **Family Information Sheet**
   - Corrected date of birth if child is under 24 months and three or more weeks pre-mature
2. **Developmental items - questions written at 4th to 6th grade reading level**
3. **ASQ-3 Summary Sheet**

Features: ASQ-3 Developmental Items

- Each interval of ASQ-3 has 30 questions about child's five areas of development
- Each developmental area has six questions
  - Communication
  - Problem Solving
  - Gross Motor
  - Personal Social
  - Fine Motor

Features

- Questions are in *hierarchical* order
  - That is, the most difficult questions (numbers 5 and 6) are *average* skills for children of that age
  - For example, a 48-month skill for a 48-month old child

Features

- Questions are answered "yes," "sometimes," and "not yet"
- Yes = 10
- Sometimes = 5
- Not yet = 0

Features: The Overall Section

- Unscored section used to indicate parents' concerns
- Very predictive
- Looks at *quality* of skills
  (e.g., speech, movement)

Features: The Overall Section

- 4, 6, 8, 10, and 12 month questionnaires ask questions to detect cerebral palsy:
  - "Does your baby use both hands equally well?"
  - "When you help your baby stand, are his feet flat on the surface most of the time?"

Features:
The Overall Section

- Any questionable response requires follow-up

Features: Information
Summary Sheet

- Each summary sheet is specific to an interval
- Summary sheets have five sections:
  - Bar graph of the five domain scores
  - Overall responses section

Features: Information
Summary Sheet

- Score interpretation and recommendations
- Follow-up action taken
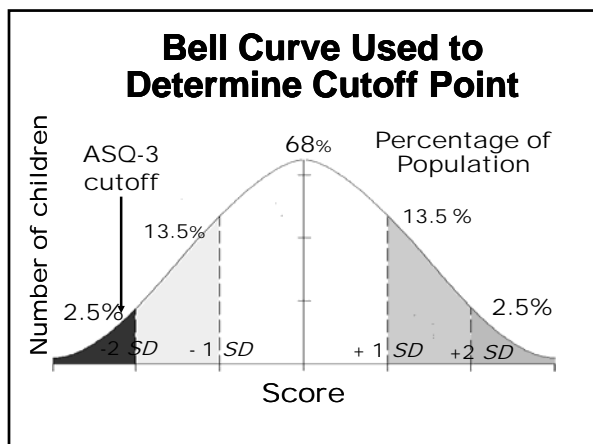- Optional: item responses summary for each question

Follow-up/Referral Criteria

- Well above cutoff points:
  - Provide follow-up activities and rescreen at next well child visit

Follow-up/Referral Criteria

- Close to cutoffs:
  - Provide follow-up activities to practice specific skills
  - Make community referrals as appropriate
  - Rescreen in 4-6 months or sooner if necessary

- The highest score the child can make is "Average"

Bell Curve Used to Determine Cutoff Point

Number of children

ASQ-3 cutoff

68%

Percentage of Population

13.5%

13.5 %

2.5%

2.5%

-2 *SD*   - 1 *SD*   + 1 *SD*   +2 *SD*

Score

Information Needed to Guide Decisions: Risk and Protective Factors

- **Biological/health factors**
- **Environmental factors**
  - **Stressful life events**
  - **Social supports**
  - **Family/caregiving environment**

Information Needed to Guide Decisions: Risk and Protective Factors

- **Developmental history**
- **Family and cultural context**
- **Parent concerns**

Prescreening Activities

- **Obtain consent from the parent or caregiver**
- **Explain the purpose of screening to parents, and review the questionnaire content**
- **Schedule the screening**

Prescreening Activities

- **Mail the ASQ-3 2 weeks before the visit, or leave the ASQ-3 with a parent on a previous visit to review**
- **Assemble materials (if necessary)**

Correcting for Prematurity

- **Either of the following methods can be used to determine the appropriate interval for a child**
  - **Use if child is three or more weeks premature, up to age two years**
  - **CDOB: Add weeks of prematurity to date of birth to obtain a corrected date of birth**

Correcting for Prematurity

- Adjusted age: Subtract weeks of prematurity from present age to determine corrected age

Scoring the ASQ-3

- 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 form
  - Fill in the matching circle in the space provided

Scoring the ASQ-3

- Step 3: Read the answers to the "overall" section questions carefully and respond appropriately
- Step 4: Recommend further attention or assessment for any score falling near or into the shaded area

ASQ-3 Omitted Item(s)

- Try to obtain answers from the family
- It is okay to omit up to two items per area
- See the ASQ-3 User's Guide for additional guidance

ASQ-3 Omitted Item(s)

- Calculation:
  - Step 1: Divide the total area score by the number of questions answered in that area
    - For example, 45 (points in personal social area) /5 (questions) = 9 points

ASQ-3 Omitted Item(s)

- Step 2: Add this number, which is the average score for items in this area, to the total area score to get a new total score
  - For example, 45 + 9 points = new personal social area total of 54 points
- (Refer to p.4 of Quick Start Guide for Adjusted Area Score)
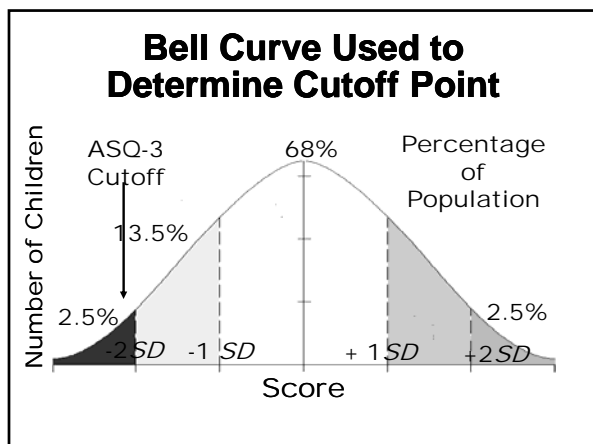
Bell Curve Used to Determine Cutoff Point

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Follow-up/Referral Criteria

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Follow-up/Referral Criteria

- Below cutoff in one or more areas:
  - Refer for diagnostic assessment
  - Send ASQ-3 Summary Sheet
    - Age Birth to 36 months

Follow-up/Referral Criteria

- Age Birth to 36 months
  - Early Intervention Child Find number, 1-800-543-3098 (or TTY 800-499-1816), or by calling the Alabama Department of Rehabilitation Services at 334-281-8780

Follow-up/Referral Criteria

- Public Health Department Patient First Care Coordinator
  - Medicaid eligible children
- Local school system- age 3 years and up

Parental Concerns

- **Respond to all concerns**

- **Screen even if between recommended age for screening**

- **Refer if necessary**

Information Needed to Guide Decisions: Risk and Protective Factors

- **Biological/health factors**
- **Environmental factors**
  - **Stressful life events**
  - **Social supports**
  - **Family/caregiving**

Information Needed to Guide Decisions: Risk and Protective Factors

- **Developmental history**
- **Family and cultural context**
- **Parent concerns**

Communicating Screening Results

- **Assure the family that the discussion is confidential**

- **Review the purpose of screening**

- **Avoid terms such as** *test, pass,* **or** *fail*
  - **Instead, use** *below cutoff* **or** *near cutoff*

Communicating Screening Results

- **Review the ASQ-3, and explain area scores**

- **Emphasize child and family strengths**

- **Provide specific examples of concerns**

- **Invite parents to share their observations and/or concerns**

Communicating Screening Results*

- **Prepare for the meeting carefully:**
  - **Make notes about behaviors**
  - **Note information you need to gather (e.g., health history) from the family**
  - **Select a private, comfortable place to meet**

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Communicating Screening Results*

- **Prepare for the meeting carefully:**
  - –**Consider cultural or language issues**
  - –**Know your community resources**
  - –**Be calm!**

* **From the Hilton/Early Head Start Training Program, Sonoma State University)**

In Summary

- **Screening tools can help bridge communication with families**
- **Screening tools can assist in making referrals to community agencies**
- **Referrals should be based on a variety of considerations in addition to scores**

In Summary

- **Developmental issues are very complicated**
- **Use available resources to make decisions about what steps to take after screening**