Setting the Stage for Success...
DEVELOPMENTAL & BEHAVIORAL SCREENING

A Quality Improvement Initiative in Primary Care Practice

Developed by:
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What We Know

• Impact of experience on brain development.
• Growth, development, and behavior are inextricably linked.
• Emotional development occurs in the context of a relationship (bonding, attachment, reading cues).
Our Nation’s Children...

- 37% of the children in the U.S live in low-income families

- The rate of children living in low income families is rising again, a trend that began in 2000 (after a decade of decline)
“The AAP Committee on Children with Disabilities recommends the use of standardized screening tests at well visits”

About **16%** of children have disabilities including speech and language delays, mental retardation, learning disabilities and emotional/behavioral problems.

(Only 30% are detected prior to school entrance.)
Prevalence and Risk

13% of preschool children have mental health problems.

This rate increases with the co-occurrence of other risk factors:
- Poverty
- Maternal depression
- Substance abuse
- Domestic Violence
- Foster care
Maternal Depression

Infant at 1 year may show:

• Decreased performance on Bayley.

• Insecure attachment, which is associated with later conduct disorders and behavior problems.
Poverty

Severe child hunger associated with:
• Increased rates of internalizing behavior problems in preschoolers and school-age children.
• Increased rates of anxiety and depression at school age.

(U Mass Med study 2002)
Foster Care

- Children of “risky families,” who have characteristics of conflict, aggression, relationships that are neglectful.
- “Risky” environment disruptive of biological stress-response regulatory systems, and to psychosocial functioning.
Foster Care

Children in foster care have increased rates over the general population of children for:

• Acute and chronic illness
• Growth and development problems
• Serious mental health problems
• Difficulty accessing health services
Disparities

• Minorities receive about \( \frac{1}{2} \) as much outpatient mental health care as whites.

• Most children who need a mental health evaluation do not receive services, and Latinos and uninsured children have especially high rates of unmet needs.
Disparities

- Children in living in poverty have twice the rate of mental health problems as the general population of children.

- Rates of use of mental health services are extremely low among preschool children.
Disparities

System Capacity

• Workforce shortage of child and adolescent psychiatrists and clinicians who can work with children.

• Even greater workforce shortage of child psychiatrists and psychologists who can work with very young children.
“Under-detection ... Eliminates the Possibility of Early Intervention...”

• No point in waiting to screen until the problem is observable.

• Don’t ignore screening results; there is no value to “wait and see.”

• Informal checklists have no validated criteria for referral.
Are we looking?

Poor rates of screening in PCP’s office for:

- Development and behavior
- Maternal depression
- Family risk factors
Limited use of screening at well visits because...

- Takes too long
- Difficult to administer
- Children may not cooperate
- Reimbursement is limited
So....

What **Should** We Do?

- Use **new**, **brief**, **accurate** tools
- Use **parents**
- Use **Family Centered** principles
Screening Overview

• **Screening** - Looks at the whole population to identify those at risk - flags those who need further assessment.

• **Assessment** - Determines existence of delay or disability - generates decision regarding intervention.

• **Surveillance** - Periodic evaluation of development in relation to the child as a whole.
The Screening Tools

Types of screening include:
- Parent Questionnaire
- History/Interview
- Direct Elicitation
- Observation

Desired Sensitivity and Specificity:
- 70-80% min.
<table>
<thead>
<tr>
<th>Type/ Ages</th>
<th>ASQ</th>
<th>BINS</th>
<th>PEDS</th>
<th>IDI</th>
<th>BRIGANCE</th>
<th>PSC</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Parent Questionnaire 2 mos–5yrs.</td>
<td>Direct Elicitation 3 mos-24 mos</td>
<td>Parent Questionnaire 0-8 yrs.</td>
<td>Parent Questionnaire 3 mos-18 mos.</td>
<td>Direct Elicitation 21 mos -7.5 yrs.</td>
<td>Parent Questionnaire 6 -18 years</td>
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<td>Staff Required</td>
<td>Para-prof</td>
<td>MA or Equiv.</td>
<td>Para-prof</td>
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<tr>
<td>Time (Score)</td>
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<td>10-15 min.</td>
<td>5 min.</td>
<td>10 min.</td>
<td>10-15 min.</td>
<td>7 min.</td>
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<td>$195</td>
<td>$30 (pad of 50)</td>
<td>$11 (pad of 25)</td>
<td>$249</td>
<td>Freely Download</td>
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<td>Needed</td>
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<td>English &amp; Spanish, Vietnamese, Hmong, Somali</td>
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<td>Reading Level</td>
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<td>NA</td>
<td>5th Grade</td>
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The Office Process

• Assess Current Protocols
• Identify Physician Champion
• Select a Screening Tool
• “Map the Workflow”
• Identify System Supports
  Networking is key
• Conduct Staff Orientations
The ASQ Questionnaire
Each questionnaire - Reviews 5 areas*

- communication
- gross motor
- fine motor
- problem-solving
- personal/social.

*(Same focus as Early Intervention Program)*
The Ages and Stages (ASQ)

“First level screening tool for accurate identification of developmental delays or disorders”

- **Original sample** - 2008
- **Validation** - Gesell, Bayley, Stanford-Binet, McCarthy, Batelle. Overall= 83%.
- **Sensitivity** - 72%
- **Specificity** - 86%

Ages Tested - 4-60 months
Elicits parent input/concerns
Parents Evaluation of Developmental Status (PEDs)

- **Validation** - 771 children
- **Standardized** - 2823 children across the U.S.
- **Sensitivity**: 74 – 80%
- **Specificity**: 70 – 80%
- **Format** - Each questionnaire reviews 10 items
  - No, yes, and a little are responses.
  - Decision pathways A – E, based on score, to refer or do a second stage screen with ASQ, BINS, Batelle or CDI

**Ages Tested: 0-8 years**

**Elicits parent input/concerns**
Ages and Stages – SE (ASQ-SE)

- Areas screened: self regulation, compliance, communication, adaptive functioning, autonomy, affect, interaction. 30 items.
- Sensitivity: 71 – 85%
- Specificity: 90 – 98%
- Ages: 6 – 60 months
- 10 minutes
- English and Spanish
Eyberg Child Behavior Inventory

- 36 short statements of common acting out behaviors. Rating scale with single cutoff.
- Sensitivity: 80%
- Specificity: 86%
- Ages: 2 – 16 years
- 5 minutes
- English only
Pediatric Symptom Checklist (PSC)

- 35 short statements of problem behaviors. One cutoff for preschool and one for school-age.
- Sensitivity: 80 – 95%
- Specificity: 68 – 100%
- Ages: 4 – 18 years
- 5 minutes
- English, Spanish, Chinese
Temperament & Atypical Behavior Scales (TABS)

- 15 items. To identify temperament and self-regulation problems that indicate risk for developmental delay.
- Sensitivity: 72%
- Specificity: 83%
- 11 – 71 months
- 5 minutes
- English and Spanish
Brief-Infant-Toddler Social-Emotional Assessment

- 42 items to identify social-emotional problems. Cutoff based on age and sex.
- Sensitivity: 80 – 85%
- Specificity: 75 – 80%
- Ages: 12 – 36 months
- 5 – 7 minutes
- English, Spanish, French, Dutch, Hebrew
Family Psychosocial Screens

• Variety of tools ranging from very brief to multi-item.
• Most screen for maternal depression, domestic violence, substance abuse: individual area or several.
• Considered best practice, but limited validation data, etc.
• Examples are Kemper&Kelleher, Edinburgh
Talking with Families

- Identify child’s strengths
- Discuss developmental issues
- Discuss transition stages
- Discuss sharing information
- Discuss community resources
MH Needs in 0-5 Population
Level 1

SERVICES

• Preventive strategies
• Screening & Surveillance
• Health promotion and education

WHO CAN PROVIDE

• Primary care physician/medical home
• Child care consultants
• Home visitors
MH Needs in 0-5 Population
Level 2

Children with elevated risk (e.g. parental depression, SA, Domestic Violence, Foster Care)

SERVICES

• Consultation
• Support
• Short term counseling
• Early Intervention

WHO CAN PROVIDE

• PCP
• Social Worker
• Counselor
• Early Intervention Specialist
PCP Using the DSM-PC

• VARIATION – Reassurance

• PROBLEM – Short-term Counseling and Follow-up, Early Intervention

• DISORDER - Referral
MH Needs in 0-5 Population
Level 3

SERVICES
• Referral after screening indicates serious emotional disorder
• Intensive Mental Health treatment
• Multidisciplinary essential

WHO CAN PROVIDE
• PCP
• Psychiatrist
• Psychologist
• Community MH Program
Conclusions

- Mental Health is a consideration for 0-5 year olds.
- Screening and surveillance needs to be a regular part of periodic well care.
- It is essential to elicit and listen to family concerns.
- Collaborative relationships among providers in the community constitute best practice.