Assuring Better Child Development: Improving Services in Communities

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The Commonwealth Fund

Thanksgiving Point
Lehi, Utah
May 20, 2005
Pediatrics is a developmental specialty
How to Alter Children’s Outcomes

Children’s Development

Age

Risk Factors

Protective Factors

Consequences of Early Childhood Developmental Problems

- Low self-esteem, poor self-image
- Poor relationship formation
- Poor academic success
- Conduct problems
- Truancy and school drop-out
- Uneducated workforce
- Unemployment
- Poor quality parenting skills
Preventable or Mutable Conditions

- Attachment disorders
- Developmental delays
- Behavior problems
- Conduct disorders
- Affective Disorders
- ADHD
Public Education Expenditures: Primary & Secondary in the U.S.

- Average Annual Per Pupil: $8,482
- Special Education Per Pupil: $12,500
  - Emotional Disorder: $14,200
  - Mental Retardation: $15,000
  - Autism: $18,800
Children Who Are at Greatest Risk

- Families who are poor
- Parents with mental illness
- Parents who use or abuse substances
- Incarcerated parents
- Abused, neglected or abandoned
- Homeless
- Severe emotional trauma
- Aversive, unpredictable or unresponsive parenting
- Undiagnosed learning problem
Kindergartners With Behavioral Self-Control Most of the Time

- Two biological or adoptive parents: 72%
- One biological parent/one stepparent: 59%
- One biological parent: 58%
- No biological parents: 46%

Child Trends Chartbook, 2004
Socioemotional Adjustment to Kindergarten

- The more time spent in non-maternal child care through age 4 1/2, the more behavior problems were manifest in kindergarten.

- The best predictor of child development outcomes is maternal sensitivity and supportive parent-child relationships.

Trends in Children’s Psychosocial Problems

Clinician-identified psychosocial problems increased from 6.8% to 18.7% for all pediatric visits between 1979 and 1996.

Kelleher et al, 2000
Parents’ Misconceptions

Of parents with young children…

• 62% believe babies do not take in or react to the world around them until 2 months

• 55% say a baby must be at least 3 months to sense their parent’s mood

• Almost 40% believe a 12-month-old’s behavior can be based on revenge

• 51% expect a 15-month-old to share
Childcare Workers Prepared to Meet Social-Emotional Needs of Children and Families

Unmet Needs Project, Illinois 2002
Preschool Teachers Expelling or Suspending At Least One Child in Past Year (N=119)

- Expelled: 39.3%
- Suspended: 14.7%

Gilliam and Shahar, *Infants and Young Children*, 2004
Children Expelled or Suspended from Preschool and K-12 in Past Year

<table>
<thead>
<tr>
<th></th>
<th>Expelled</th>
<th>Suspended</th>
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</thead>
<tbody>
<tr>
<td>Mass. Preschool</td>
<td>1.3 %</td>
<td>2.7 %</td>
</tr>
<tr>
<td>Mass. K-12</td>
<td>0.08 %</td>
<td>5.7 %</td>
</tr>
<tr>
<td>National K-12</td>
<td>2 %</td>
<td>6.7 %</td>
</tr>
</tbody>
</table>

Gilliam and Shahar, *Infants and Young Children*, 2004
Percent Of Children Who Saw A Pediatric Clinician In Past Year

- Total with at least 1 visit: 99%
- 1-3 visits: 30%
- 4-6 visits: 41%
- 7 or more visits: 29%
Developmental Services in Primary Care

• Educate parents
• Assess families and children for risks and problems
• Intervene with children and parents
• Coordinate care, refer and follow-up
Outcomes of Well Child Care - Age 5

Emotional, social and cognitive development

• No unrecognized or untreated developmental delays: (emotional, social, cognitive, communication)

• No unrecognized maternal depression, family violence, or family substance use

• Parents read regularly to the child

• Parents knowledgeable and skilled to anticipate and meet child’s developmental needs
Outcomes of Well Child Care - Age 5

Emotional, social and cognitive development

- Child has good self-esteem
- Parents linked to all appropriate community services
- No undetected early warning signs of child abuse or neglect
- Parents feel valued and supported as their child’s primary caregiver
Age at Identification of Handicapping Conditions
(25th-75th Percentile)

- Learning Disabilities
- Emotional Problems
- Speech
- Mental Retardation
- Hearing
- General Medical
- Cerebral Palsy
- Down Syndrome

Modified from Palfrey J. et al, J.Peds. 1987; 111:651-9
Pediatrician Recognition of Developmental and Behavioral Problems

Identified 8.7%

Prevalence 13%

## Developmental Surveillance/Assessment

<table>
<thead>
<tr>
<th>Parent Concerns</th>
<th>Parent Concerns Assessment</th>
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<tbody>
<tr>
<td>Developmental Screening</td>
<td>Developmental history Developmental screening test</td>
</tr>
<tr>
<td>Psychosocial Risk Screening</td>
<td>Psychosocial history Psychosocial risk assessment Stress management interview Home environment screening</td>
</tr>
<tr>
<td>Behavior Concerns</td>
<td>Child behavioral assessment Temperament assessment</td>
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</tbody>
</table>

Regalado & Halfon, The Commonwealth Fund, 2002
Children 0-5 Whose Parents Reported One or More Concerns About Learning, Development or Behavior

National Survey of Child Health, 2005
Children 0-5 Whose Parents Were Asked About Concerns About Learning, Development or Behavior

- MA: 56%
- UT: 46%
- Mean: 41%
- MS: 29%

National Survey of Child Health, 2005
Options for Early Detection
Developmental Surveillance

“...a flexible, continuous process in which knowledgeable professionals perform skilled observations of children during child healthcare.”

• Components
  – Eliciting/attending to parents’ concerns
  – Obtaining a relevant developmental history
  – Skillfully observing children’s development
    • Professionally administered tool as aid to monitoring
  – Sharing opinions with other professionals
Developmental Screening of Young Children by Pediatricians

- Any Screening: 96%
- Always Only Clinical Assessment: 71%
- Sometimes Only Clinical Assessment: 15%
- Standardized Instrument: 23%

AAP Periodic Survey #53, 2002
“Tis Better to Screen than Not”

<table>
<thead>
<tr>
<th></th>
<th>Correctly Identified With Screening</th>
<th>Not Identified Without Screening</th>
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<tbody>
<tr>
<td>Children with Developmental Disabilities</td>
<td>70-80%</td>
<td>70%</td>
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<tr>
<td>Children with Mental Health Problems</td>
<td>80-90%</td>
<td>80%</td>
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## Structured Screening Protocol
(Mock-up)

<table>
<thead>
<tr>
<th></th>
<th>2 wk</th>
<th>2 mo</th>
<th>4 mo</th>
<th>6 mo</th>
<th>9 mo</th>
<th>12 mo</th>
<th>15 mo</th>
<th>18 mo</th>
<th>2 yr</th>
<th>3 yr</th>
<th>4 yr</th>
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<tr>
<td><strong>Family Psycho-Social</strong></td>
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<tr>
<td><strong>Maternal Depression Screen</strong></td>
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<tr>
<td><strong>Parent's Concerns</strong></td>
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<td><strong>Develop'l Screen</strong></td>
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<td><strong>Milestones</strong></td>
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</tbody>
</table>
## Developmental Surveillance
*(Marian Earls, MD)*

<table>
<thead>
<tr>
<th>Age</th>
<th>Standard</th>
<th>As Indicated</th>
<th>Age</th>
<th>Standard</th>
<th>As Indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 wks</td>
<td>Psychosocial</td>
<td>15 mo</td>
<td>15 mo</td>
<td>Psychosocial</td>
<td>MCHAT</td>
</tr>
<tr>
<td>2 mo</td>
<td>Maternal Depression</td>
<td>18 mo</td>
<td>18 mo</td>
<td>ASQ/PEDS</td>
<td>ASQ SE, TABS or BITSEA</td>
</tr>
<tr>
<td>4 mo</td>
<td>Psychosocial</td>
<td>24 mo</td>
<td>24 mo</td>
<td>ASQ/PEDS</td>
<td>ASQ SE, TABS, BITSEA, Eyberg, MCHAT</td>
</tr>
<tr>
<td>6 mo</td>
<td>ASQ/PEDS</td>
<td>ASQ SE</td>
<td>36 mo</td>
<td>ASQ/PEDS</td>
<td></td>
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<tr>
<td>9 mo</td>
<td>Psychosocial</td>
<td>48 mo</td>
<td>48 mo</td>
<td>ASQ/PEDS</td>
<td>ASQ SE, PSC</td>
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<tr>
<td>12 mo</td>
<td>ASQ/PEDS</td>
<td>ASQ SE,</td>
<td>60 mo</td>
<td>ASQ/PEDS</td>
<td>ASQ SE, PSC</td>
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</table>
Success Increasing Developmental Screening at Guilford Child Health

North Carolina ABCD: Referrals for Additional Developmental Services

Percent of children referred for additional services during screening

- 2002: 2.9%
- March 2003: 7%

Percentage of Infants and Toddlers Receiving Early Intervention Services in States

[Bar chart showing the percentage of infants and toddlers receiving early intervention services in different states. The chart compares 'All Children' and 'Excluding Children At Risk'.]

US DE/OSEP, 12/1/2003
Services for Children <31 Months with or at Risk for Developmental Disabilities (N=3338)

Bailey et al, Pediatrics 2004;113:887-896
Noting a child’s development is different than promoting a child’s development
Meeting the Needs of Our Families

• 4 out 5 parents desire for more information on child rearing
  

• 50% of parents have difficulty coping with their child’s behavior
  
  (Ibid)

• 50% of parents report their concerns about child development are not adequately addressed during WCC
  
  (Bethell, Peck and Schor Pediatrics 2001)
Changing Parenting Behaviors

• **Healthy Steps outcomes**
  – Less maternal depression, continued breastfeeding, more reading, more knowledge of infant development and recognition of appropriate discipline (PrePare)
  
  – Interact with toddlers in a more positive manner, showing higher level of awareness and understanding of the child’s needs and level of maturity
  
  – Avoided harsh disciplinary tactics, such as yelling, threatening, slapping, or spanking
Several of the risk factors for early school problems appear to be related to a child’s difficulties in establishing and maintaining early, important relationships with parents, peers and teachers.
Parent Health Asked About by Child’s Health Care Providers

- Domestic Violence: 8.5%
- Depression: 50%
- Alcohol or Drug Use: 70%
- Social Support: 58%

Bethell et al. Commonwealth Fund, Sept. 2002
Ericson et al, Pediatrics 2001
Parental Risk Factors and Children’s Aggressive Behavior

Proportion of Parents

Authoritarian  Insensitive  Maternal Depression

Very Low  Low  Moderate  High

Early Childhood Patterns of Aggressive Behavior

Monographs of SRCD, 69(4), 2004
Partnerships to Improve Quality of Preventive Care

Good quality care depends on the existence of effective systems of care that integrate the efforts of a variety of professionals.
Primary care and local child public health:

- Formal relationship: 4%
- Information relationship: 58%
- No relationship: 38%

90% of practices rarely or never made referrals to public health

Iowa Department of Public Health
Waiting for the phone to ring...
Use community based resources as partners.

Early Intervention
Early Head Start
Maternal & Child Health/ Children with Special Health Needs
Community Mental Health Centers
Improving the Quality of Preventive Care

1. Form relationships **locally** with child and family service providers

2. Agree upon desired child health outcomes that people really care about

3. Identify complementary or shared roles

4. Be patient but persistent in building networks
To Improve Developmental Services

1. Clarify agencies’ responsibilities
2. Identify potential policy changes including benefits and eligible providers
3. Assess and improve service coordination and referrals across agencies and systems
4. Clarify standards of care expected through provider manuals and MCO contracts
5. Develop care guidelines and clinical standards for developmental services
To Improve Developmental Services

6. Recommend screening instruments
7. Implement program monitoring and QI activities
8. Provide education to health care providers
9. Expand services to include assessment of family
Websites for Reference

- www.dbpeds.org
- www.nashp.org
- www.cmwf.org