FULFILLING THE PROMISE: INTERVENTIONS TO PROMOTE CHILDREN’S HEALTHY DEVELOPMENT

Pathways to Child Flourishing Symposia
Contexts for Development and Child Flourishing
University of Notre Dame
September 30, 2014

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INTRODUCTION

American Academy of Pediatrics

Committed to the attainment of optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults

Help Me Grow
National Center
“Whether one views promoting children’s optimal healthy development through the lens of child health, early life experiences, or parenting practices, the importance of cross-sector collaboration in early childhood comprehensive system building quickly emerges as a necessity.”
GOALS

- Identify implications from the science of brain/early child development for interventions to promote children’s healthy development (i.e., applied science)
- Share the story of an intervention to promote vulnerable children’s healthy development
- Explore implications for system building, public policy, and research

Help Me Grow
National Center
TRADITIONAL CONTENT
Guidelines for Health Supervision

- History
- Physical examination
- Measurements
- Sensory screening
- Immunizations and procedures
- Anticipatory guidance
- Developmental and behavioral monitoring

Prospective, controlled study to evaluate the value of discussing developmental stages with mothers during health maintenance visits

<table>
<thead>
<tr>
<th>Age of Infant</th>
<th>General Issues</th>
<th>Developmental Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 wk</td>
<td>Feeding, skin care, navel care, elimination patterns, safety, use of thermometer</td>
<td>State organization (predictability of change), synchrony (mutual awareness, expectations), attachment, temperament</td>
</tr>
<tr>
<td>2 mo</td>
<td>Feeding, injury prevention, immunizations, proprietary drugs, toy safety, babysitting</td>
<td>State organization (regularity of demands), synchrony (“fussing”), attachment, temperament</td>
</tr>
<tr>
<td>4 mo</td>
<td>Feeding, injury prevention, immunizations, toy safety, bedroom (night awakening)</td>
<td>Attachment, temperament, motor skills</td>
</tr>
<tr>
<td>6 mo</td>
<td>Feeding, injury prevention, immunizations, bedroom (nursing bottle caries), teething</td>
<td>Attachment (stranger, separation anxiety), autonomy and independence, temperament, motor skills</td>
</tr>
</tbody>
</table>

* Developmental issues were routinely discussed only with intervention group mothers.

- **Dependent measures:**
  - Maternal-infant interaction
  - Maternal perceptions of infant temperament, family adaptation and adjustment, satisfaction with the infant’s behavior and development
  - Maternal satisfaction with pediatric services

- **No significant effect of treatment group on any of the outcome measures**
• Anticipatory guidance should continue to be emphasized as a means to promote children’s development

• Need to individualize the content; discuss matters at level of parents’ cognitive, cultural, psychological readiness
  ○ *Open-ended, parent-led agenda* may be preferable

- **Criteria for judging conditions appropriate for the screening process**
  - Must have significant morbidity or mortality and be sufficiently prevalent
  - Screening program must include entire population
  - Diagnostic tests must distinguish affected from non-affected persons
  - Condition must treatable or controllable
  - Detection and treatment during asymptomatic stage much improve prognosis
  - Adequate resources must be available for definitive diagnosis and treatment
  - Cost of screening must be outweighed by savings in suffering and alternative expenditures
• Criteria by which specific tests are judged appropriate for use in screening programs
  ○ Simple, convenient, acceptable
  ○ Reliable, valid (sensitive and specific)
  ○ Economical
  ○ Lend themselves to easy interpretation
VALIDITY OF PARENTS’ APPRAISALS AND DESCRIPTIONS


Developmental Monitoring

Developmental Surveillance and Screening

- Flexible, longitudinal, continuous process
- Knowledgeable practitioners perform skilled observations during child health encounters

Components:
  - eliciting/attending to parents’ concerns
  - obtaining a relevant developmental history
  - making accurate observations of children
  - identifying risk and resiliency factors
  - maintaining record of process and findings
  - sharing opinions with other professionals

- View child within context of overall well-being
DEVELOPMENTAL MONITORING

Developmental Surveillance and Screening

- Use of *screening tools* at periodic intervals to strengthen surveillance
  - Types
    - parent-completed questionnaires
    - professionally-administered “tests”
  - Frequency
    - 9, 18, 24-30 months
    - when concerns arise ("second-stage")
Caveat: Detection without referral/intervention is ineffective and may be judged unethical*

1990’s-“Decade of the Brain”
Critical Concepts in Early Brain Development

- Proportional brain growth
- Neural plasticity
- Critical periods
- Sequential development
- Role of experience
ROLE OF EXPERIENCE

The human brain has the ability to be shaped by experience.

Experience, in turn, leads to neural changes in the brain:

- birth: 50 trillion synapses
- 1 year: 1,000 trillion
- 20 years: 500 trillion

The remolded brain facilitates the embrace of new experiences— and so the process goes on.
SERVICE IMPLICATIONS
Early Brain Development

- For optimal effectiveness, services must begin as early as possible.
- Stimulation during the first three years is particularly critical to ensure optimal development:
  - Aspects of “use it or lose it”
- Services must be comprehensive and aligned with children’s developmental stages and needs.
CRITICAL CONCEPTS IN CHILD DEVELOPMENT

IMPLICATIONS FOR SERVICES
<table>
<thead>
<tr>
<th>Developmental Phases</th>
<th>Years</th>
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<tbody>
<tr>
<td>Prenatal</td>
<td>0-6 months</td>
</tr>
<tr>
<td>Early Infancy</td>
<td>6-12 months</td>
</tr>
<tr>
<td>Late Infancy</td>
<td>12-18 months</td>
</tr>
<tr>
<td>Early Toddler</td>
<td>18-24 months</td>
</tr>
<tr>
<td>Late Toddler</td>
<td>24-36 months</td>
</tr>
<tr>
<td>Early Preschool</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Late Preschool</td>
<td>5-7 years</td>
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**Developmental Trajectories**

- "Ready to Learn" Trajectory
- "At Risk" Trajectory
- "Healthy" Trajectory
- "Delayed/Disordered" Trajectory

**Factors Influencing Development**

- Parent education
- Emotional health
- Protective Home Environment
- Quality ECE
- Medical Home
- Neighborhood Safety and Support
- Inaccessible health services
- Domestic violence
- Socioeconomic disparities
- Inaccessible health services
- Domestic violence

**Socioeconomic Disparities**

- Inaccessible health services
- Domestic violence
- Socioeconomic disparities

**Neighborhood Safety and Support**

- Medical Home
- Quality ECE
- Neighborhood Safety and Support

**Quality ECE**

- Parent education
- Emotional health

**Graphic Concept Adapated from Neal Halfon, UCLA Center for Healthier Children, Families, and Communities**
“The most effective long-term strategy appears to be the development of a comprehensive, coordinated, community-wide approach focused on preventing low- and medium-risk families from becoming high-risk, as well as providing intensive services to those who already have reached a high-risk status.”
Targeted Interventions

Clinical/Individual Interventions

Universal Curve Shift

NUMBER OF CHILDREN

FUNCTION

DISABLED  VULNERABLE

Low income

Median

High income

[From Halfon N, UCLA Center for Healthier Children, Families, and Communities]
The True Nature of Preventive Medicine

Mechanisms By Which Adverse Childhood Experiences Influence Adult Health Status
TREATMENT PROGRAMS AND SERVICES MUST BE **COMPREHENSIVE**, **MULTIDISCIPLINARY**, AND ADDRESS THE **MULTIPLE FACTORS** THAT FACILITATE AND HINDER CHILDREN’S OPTIMAL DEVELOPMENT

- Benefits of strengthening *protective factors*

SERVICES SHOULD ADDRESS THE NEEDS OF *ALL CHILDREN* (E.G., THE ENTIRE POPULATION), RECOGNIZING THAT THOSE IN GREATEST NEED WILL LIKELY DERIVE THE GREATEST BENEFITS

- Expand target to *at-risk* children and families
- Perils of *exclusive* focus on children with complex medical conditions
“Humans are not ideally set up to understand logic; they are ideally set up to understand stories.“
Roger Schank Professor Emeritus, Northwestern University
THE CONNECTICUT STORY

- Describe a community-based approach to enhancing intervention for developmental problems
  - Help Me Grow
- Derive implications for replication and dissemination of effective interventions
PLANNING PARTNERS

- Hartford Foundation for Public Giving (HFPG) *Brighter Futures* initiative
- Hartford City Health Department
  - *Child Development Program (CDP)*
- Region’s child health providers
  - Community health centers
- Children’s Health Council
  - *Children’s Health Infoline*
- *Hartford Parents Network*
- CT Birth to Three System (Part C)
COMMON ASSUMPTIONS

- Children with developmental/behavioral problems are *eluding early detection*
- Many *initiatives* exist to provide services to young children, their families
- A *gap* exists between child health and child development/early childhood education programs
- Children and their families would benefit from a *coordinated, region-wide system* of early detection, intervention for children at developmental risk
Help Me Grow System

Core Components

1. Child health care provider outreach to support early detection and intervention.
2. Community outreach to promote use of Help Me Grow and to provide networking opportunities among families and service providers.
3. Centralized telephone access point for connecting children and their families to services and care coordination.
4. Data collection to understand all aspects of the Help Me Grow system, including the identification of gaps and barriers.

Structural Requirements

- Organizing Entity
- Statewide Expansion
- Continuous Quality Improvement
Help Me Grow

1-800-505-7000

1. Well-Child Visit
2. Solicit Parent Opinions
3. Contact Help Me Grow
4. Care Coordinator provides resources
5. Parent Connected to Resource
6. Provider Gets Feedback
Child Development Infoline, a specialized call center of United Way 2-1-1, helps families with children who are at risk for or experiencing developmental delays or behavioral health issues find appropriate services.

Care Coordinators provide:

• Assessment of needs & referrals to services
• Education on development, behavior management and programs
• Ongoing developmental monitoring
• Advocacy and follow up
Connecticut's Child Development Infoline

Connecticut Birth to Three System
Help Me Grow
Early Childhood Special Education
Children and Youth with Special Health Care Needs

Participating Agencies
Department of Social Services | Children's Trust Fund | Department of Developmental Services
Department of Public Health | Department of Education | United Way of Connecticut
Lessons Learned

- **Importance of Language**
  - *Enhancement*-not expansion-of entitlement programs
  - Focus on *vulnerable* children
  - *Central point of entry* for programs/services

- **Value of Strategic Reframing**
  - Primary and secondary *prevention* of emotional problems
  - Frequency of behavioral concerns
  - *Connecticut Community KidCare* initiative

- **Need for Data Collection**
  - Strengthening of outreach and care coordination activities
EVALUATION
Results Based Accountability (Friedman, 2005)

- Trend data: All *performance indicators* can fit into any of the following categories...
  - “How much did *Help Me Grow* do?”
  - “How well is *Help Me Grow* doing?”
  - “Is anyone better off as a result of utilizing *Help Me Grow*?”

- Increased identification of developmental and behavioral concerns (18% vs 9%, p=.001)
- Increased referral rate to CDI
  - older children (>3 years)(14% vs 6.4%, p<.0001)
  - behavioral concerns (4.2% vs 1.4%, p=.005)
- Promotion of CPT codes for developmental screening

*Supported by a grant from The Commonwealth Fund
EVALUATION
EFFICACY AND COST EFFECTIVENESS

• Promoting Optimal Child Development

• Cost Benefits

Help Me Grow Promotes Optimal Child Development by Enhancing Protective Factors

Help Me Grow promotes optimal child development by enhancing protective factors. Enhanced protective factors can lead to healthy child development. Study findings indicate that children who participate in the Help Me Grow program have a reduced risk of experiencing poor health outcomes, such as academic achievement, social skills, and emotional well-being. Program participants demonstrated improved behaviors, decreased rates of suspensions, and increased attendance in school. The program also helped families to access needed resources and services, leading to better overall outcomes for children and families.


As resources continue to be significantly redirected toward time-consuming, unnecessary, and expensive medical and behavioral health care costs, including Medicaid and Medicare, grow at an unacceptable rate. As a result, our country’s most at-risk children suffer. Help Me Grow must become part of the national strategy to combat these costs and get our children the treatment they need and deserve.

Help Me Grow National Center

www.helpmegrownational.org
FIVE PROTECTIVE FACTORS

• PARENTAL RESILIENCE

• SOCIAL CONNECTIONS

• KNOWLEDGE of PARENTING and CHILD DEVELOPMENT

• CONCRETE SUPPORT in TIMES of NEED

• SOCIAL and EMOTIONAL COMPETENCE of CHILDREN
<table>
<thead>
<tr>
<th>Response to Survey Questions</th>
<th>Parent Responses (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>As a result of my call to Child Development Infoline and the information and services I received:</td>
<td></td>
</tr>
<tr>
<td>I have a better understanding of my child's development.</td>
<td>80%</td>
</tr>
<tr>
<td>I am able to better understand and meet my child’s needs.</td>
<td>79%</td>
</tr>
<tr>
<td>I have a better understanding of services for me and/or my child.</td>
<td>81%</td>
</tr>
<tr>
<td>I am able to access services if I need it.</td>
<td>84%</td>
</tr>
<tr>
<td>There are people who can provide me with assistance when I need it.</td>
<td>87%</td>
</tr>
<tr>
<td>I have people I can talk to for advice and emotional support.</td>
<td>79%</td>
</tr>
<tr>
<td>There is improvement in my family’s day-to-day circumstances.</td>
<td>66%</td>
</tr>
<tr>
<td>My relationship with my child has improved.</td>
<td>71%</td>
</tr>
<tr>
<td>My child’s behavior has improved (e.g., mood, attitude, play, relationships with other children).</td>
<td>45%</td>
</tr>
</tbody>
</table>
The “de-medicalization” of early childhood developmental/behavioral concerns reduces costs and wait-times, improving outcomes.
• Promoting development and expansion of a national network of states that are building *HMG* systems

• Providing technical assistance to help states implement *HMG*’s core components and structural requirements

• Informing the public discourse on the crucial importance of optimal child development

• Providing tools for implementation

• Supporting the dissemination of innovations
LESSONS LEARNED
Sustainability

- **Embedding Strategy**
  - Home Visiting Initiative-MCHB, HRSA
  - Project LAUNCH-SAMHSA
  - Race to the Top Early Learning Challenge-US Department of Education & Human Services
  - Strengthening Families Initiative-CSSP
  - “Learn the Signs, Act Early” Campaign-CDC
  - Early Childhood Comprehensive Systems-MCHB
IMPLICATIONS FOR INTERVENTIONS

- *Systems change* strategy vs. programs/services
- *Cross-sector integration* of child health, early care and education, and family support
  - From medical home to *health neighborhood*
- Focus on *all* children, including those *vulnerable, at risk*
- Benefits of a *common portal of entry* to programs and services
- Efficiency of *blending* administrative and financial resources
- Benefits of *linking* to community-based programs/services
- Critical importance of *data collection*
- Central importance of *care coordination*
Our ‘new’ knowledge of early brain/child development demands that we redefine the content and process of interventions to promote children’s healthy development.
Interventions such as *Help Me Grow* are best viewed in the context of comprehensive systems supporting young children’s healthy development.
REFERENCES