From Neurons to King County Neighborhoods: Partnering to Promote Policies Based on the Science of Early Childhood Development

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THE EARLY YEARS OF LIFE ARE an important time of active development and foundation building for later-life successes and good health. A recent Institute of Medicine report, From Neurons to Neighborhoods, identified 2 essential conditions that shape the well-being of young children and their developmental trajectory into adolescence and adulthood: “First is the need for stable and loving relationships with a limited number of adults who provide responsive and reciprocal interaction, protection from harm, encouragement for exploration and learning, and transmission of cultural values. Second is the need for a safe and predictable environment that provides a range of growth-promoting experiences to promote cognitive, linguistic, social, emotional, and moral development.”

Socioeconomic status is a strong predictor of children’s health and development. Children with a low socioeconomic status are usually more vulnerable to health and developmental problems than are children from families of higher socioeconomic status. However, these differences in health and development by socioeconomic status can be seen at all points on the continuum, not just in the poorest groups. Data from 3 national US studies of developmental differentials in childhood and adolescent well-being reveal that such gradients exist along the entire income spectrum.

These results suggest the need to improve all children’s neighborhood environments, not only those traditionally considered “high risk” because of high poverty levels. Several current models suggest social or ecological determinants of health—the interaction between social, economic, and physical environments and individual biological factors and behaviors. Two of these models explicitly include a lifecourse dimension, suggesting that early life experiences affect later health and social well-being. The Institute of Medicine framework calls for a multilevel approach to understand and intervene at both upstream (social and economic policies, institutions, neighborhoods and communities, living conditions, social relationships) and downstream (individual risk factors, genetic/constitutional factors, pathophysiological pathways) points of reference. Hertzman offered a useful framework for understanding the role of social forces on human development and the social determinants of health. Forces shaping human development are drawn as 3 concentric circles representing the determinants of health and well-being at 3 levels of social organization. The most immediate and interpersonal level shows social network factors associated with social support and nurturing. The next level shows community factors that can either buffer or increase the daily stresses, such as quality child care and safe, family-friendly neighborhoods. The broadest level shows social and economic environments usually determined by public policy—employment benefits, taxation, national wealth, income distribution, and so forth. Hertzman summarized the model as follows: “The picture that emerges is of a lifelong interaction between the cognitive and socioemotional capabilities of the developing individual and social, economic and psychosocial conditions as they present themselves” at these 3 levels.

From this ecological perspective, policy analysis and advocacy has the potential to influence the middle and outer levels of the social determinants of early childhood development. Figure 1, an adaptation of Hertzman’s framework, shows this influence. Public health agencies are well positioned to educate and advocate about how to change policies that promote optimal environments for young children.

Public Health–Seattle & King County (PHSKC) designed a policy-oriented intervention to focus explicitly on social and economic environmental factors to complement existing efforts focused on the family and individual. The organization’s goal is to strengthen early childhood environments across King County, Washington, by (1) developing a partnership with early childhood development stakeholders, (2) building a common knowl-
Policies

Nurturing relationships
Family resources
Childcare
Neighborhood
Access to interventions

Social networks
Community assets and services
Socioeconomic environment

Birth Early childhood Childhood/youth Adulthood Elder years Death

FIGURE 1—Framework for human development and the social determinants of health that can be influenced by public and private policies.

Source. Adapted from Figure 2.2 in Hertzman.13(p30)

FIGURE 1—Framework for human development and the social determinants of health that can be influenced by public and private policies.

BUILDING A COMMON KNOWLEDGE BASE

The early stage of this King County project included an extensive review of the literature on early childhood development that had already been compiled by The National Research Council and the Institute of Medicine in the 2000 Institute of Medicine report From Neurons to Neighborhoods: The Science of Early Childhood Development.2 This 500-page review is extensive, multidisciplinary, and complex and is a credible source for establishing a common knowledge base about early childhood environments. PHSKC produced a 75-page summary of From Neurons to Neighborhoods to provide an accessible summary of “what we know.” This product was the primary resource provided to partners to inform them about social and economic environmental factors considered crucial for normal childhood development. All 60 stakeholder partners were asked to read the summary before coming together to generate policy recommendations for each of 5 early development environments: nurturing relationships, family resources, child care, neighborhoods, and access to early interventions.

DEVELOPING THE POLICY AGENDA

This collaborative work, initiated and convened by PHSKC, resulted in a policy agenda comprising 15 recommendations (Table 1). Over a period of 18 months, 50 to 60 community stakeholders took part in 3 half-day meetings and 10 small task force working meetings. At the second stakeholder meeting, PHSKC summarized the main findings.

edge base, (3) developing a local policy agenda informed by science, and widely disseminating the policy agenda, (4) organizing support at the community level, and (5) monitoring the policy environment. Through a coordinated policy agenda and strengthened advocacy, stakeholders who work with parents and young children or who are concerned with optimal early childhood development are focusing on building public will to address social and economic environmental factors shaping young children. The ultimate goal is “universal access” to environments that support healthy development, school-readiness, and success in school.13

PARTNERSHIP DEVELOPMENT

Early childhood policies and practices are deeply imbedded in the fabric of communities and thus require wide and diverse community participation to change them. PHSKC’s initial challenge was to engage scientists, advocacy organizations, elected officials, educators, and service providers to build a partnership. The organization brought together a multisector, multidisciplinary group of stakeholders who work with parents and young children or are concerned with optimal early childhood development and asked them to participate in all aspects of project planning and execution, especially in working toward consensus on the policy agenda.

Among the academic partners was a public policy expert at the Evans School of Public Policy, University of Washington, Seattle, who worked with partnership leaders to formulate policy prioritization criteria and later facilitated prioritizing exercises to finalize the policy agenda. Other partners included local and state government representatives from departments of parks and recreation, human services, “neighborhoods,” mental health, public health, and child care and a citizen commission appointed by the King County Executive. Education sector partners included school districts, the Puget Sound Educational Service District, Head Start/Early Childhood Education and Assistance Program, and child care organizations. Family and child advocates contributed expertise particularly useful in developing policy recommendations concerning moving families out of poverty and ensuring family-friendly work environments. The overall goal of strengthening social and economic environments depended initially on increasing the partnership’s collective capacity to develop policies affecting such environments. The partnership first built a common knowledge base (see next section) and then applied individual knowledge and experience to local circumstances to identify needed policy changes.
from *From Neurons to Neighborhoods* and presented a model policy framework to promote optimal early childhood development. Policy experts were invited to compare existing policies at the city, county, and state levels with model policies for each of the 5 environments. Partners used the following criteria to develop and prioritize policy recommendations: robustness (reaches many children), equity (lifts poor children up), feasibility (has public support), and effectiveness (it works). The partnership held additional small group work meetings with the stakeholders to develop 4 to 5 specific policy recommendations for each early childhood environment. At a third large stakeholder meeting, the stakeholder group finalized the policy agenda, selected priority policies (7 of the 15 recommendations), and made commitments to promote these policies. The product resulting from this work was a brief 5-panel leaflet that summarized “what we know” (science) and “what we propose” (policies) for each environment, the latter shown in Table 1.

**ORGANIZING SUPPORT AT THE COMMUNITY LEVEL**

PHSKC reached out to communities within King County through face-to-face presentations of the policy agenda to 2 types of local groups: (1) Families and Children Early Support, a consortium of community members and early childhood educators, providers, agencies, funders, school staff, and advocates who supported early childhood education and school-readiness efforts in each of 4 regions of the county and (2) United Way Human Services Councils in the same 4 regions. The organization had additional presentations and discussions with child care task forces representing diverse ethnic communities.

PHSKC also provided regional-level data on early childhood indicators relevant to the 5 environments, so that community members and leaders would have baseline data to help them set local goals and choose strategies to improve these environments. The King County Early Childhood and School Readiness Action Agenda used the policy agenda as a framework for creating more detailed action strategies for each of 4 regions. Regional Families and Children Early Support groups committed themselves to work on the policy recommendations, specifically improving the quality of child care through teacher credentialing and compensation and helping parents through training and support. Collaboration and alignment issues will be a key focus for annual policy updates with stakeholders.

**MONITORING POLICY CHANGES AND CHILD OUTCOMES**

As the convening partner, PHSKC committed to annual monitoring and reporting to all partners the progress, or lack of progress, on the 15 policies in the agenda. The current evaluation question is “How have the 7 prioritized policies of the From Neurons to King County Neighborhoods early childhood development policy agenda fared in King County from fall 2002 through spring 2004?” Specifically, what changes have occurred and what are the current opportunities for advancing the goals of the policy agenda? PHSKC administered key interviews with persons knowledgeable in each of the policy areas. Key data will help us identify opportunities for action as well as policies needing more coordinated partner and community support. PHSKC will use feedback from individuals, organizations, and interest groups, combined with an update on the status of local, state, and federal policies to determine future directions of the partnership work and to refine the original policy agenda.

In addition to monitoring the progress made with the policy agenda, PHSKC also initiated a public health–public school collaboration in partnership with United Way of King County to assess community-level school-readiness. Both the policy and action agendas identified school-readiness as a significant and relatively concrete outcome. School-readiness refers to a child’s ability both to cope with the challenges of starting kindergarten and to benefit from the academic and social opportunities at school. Readiness encompasses social, emotional, linguistic, and cognitive competencies. School-readiness has been linked to children’s later academic performance, adolescent dropout patterns, and behavior and coping skills. Children who are “not ready to learn” when they start school are more likely to repeat a grade, need special education services, and leave school before graduation.

The objective of the assessment is to identify gaps in readiness and to engage communities in deciding how to narrow the gaps through program and policy changes. The Early Development Instrument, a psychometrically validated instrument focused at the population level, is being used to monitor changes over time. A population-based assessment of school-readiness in King County kindergarten children will be piloted in 2 school districts and eventually administered in all 19 districts in the county. Resulting data will support 2 important functions: serving as a springboard for mobilizing community action and, over time, providing quantitative feedback on whether the policy agenda and advocacy are changing social environments to benefit the youngest children.

The Early Development Instrument is a relatively short, easy-to-administer checklist completed by kindergarten teachers to evaluate age-appropriate performance in 5 major developmental domains: physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills and general knowledge. Results can be aggregated for schools, neighborhood clusters, and school district levels. This makes it possible and desirable to link school-readiness results with other population and community data shown in maps based on the same geographical boundaries.

**CONCLUSIONS**

In recognition of the crucial role of social and economic environments in shaping early childhood development and determining the health of young children, PHSKC partnered with early childhood development stakeholders to design a From Neurons to King County Neighborhoods policy initiative based on science and community knowledge. A number of factors shaped the direction of this project. The community understands the importance of the early years, not only for health outcomes but also for overall well-being, success in school, and adult achievements. The veritable explosion of scientific knowledge about human development, from early brain de-
<table>
<thead>
<tr>
<th>Nurturing Relationships</th>
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<th>Child Care</th>
<th>Neighborhood/Community</th>
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<tbody>
<tr>
<td><strong>Goal:</strong></td>
<td>Every parent/caregiver has the mental health and knowledge to build and sustain nurturing relationships with the children in his/her care.</td>
<td>Policy Recommendations:</td>
<td>1. Increase provider knowledge about early childhood development and reduce provider turnover through^7^</td>
<td>Goal: Every neighborhood is safe and cohesive and supports families and children.</td>
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<tr>
<td><strong>Goal:</strong></td>
<td>Every parent/caregiver has the time and financial resources to provide safe, nurturing, and stimulating environments for her/his children.</td>
<td>Policy Recommendations:</td>
<td>• Increased salaries and benefits</td>
<td><strong>Goal:</strong> Regardless of income and cultural background, every parent has access to the support, information, and effective services needed to identify and respond to the developmental needs of the child.</td>
</tr>
<tr>
<td><strong>Goal:</strong></td>
<td>Every child has quality child care.</td>
<td>Policy Recommendations:</td>
<td>• Career path incentives and opportunities (TEACH, Career and Wage Support Study)</td>
<td><strong>Goal:</strong> Ensure a comprehensive system of assessment and care that provides:</td>
</tr>
<tr>
<td><strong>Goal:</strong></td>
<td>Every child has quality child care.</td>
<td>Policy Recommendations:</td>
<td>2. Ensure comprehensive system of identifying and treating emotional, behavioral, and substance abuse problems in children and their parents and caregivers;</td>
<td>• Universal, early developmental screening beginning at age 3 in all school districts</td>
</tr>
<tr>
<td><strong>Goal:</strong></td>
<td>Every child has quality child care.</td>
<td>Policy Recommendations:</td>
<td>3. Build neighborhood connections and strengthen social fabric and informal supports:</td>
<td>• Interventions with timing, intensity, and duration that are based on intervention-specific best practices</td>
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**Note.** TANF = Temporary Assistance for Needy Families; ESL = English as a second language; GED = general equivalency diploma; ABE = adult basic education; TEACH = Teacher Education and Compensation Helps; DSHS = Department of Social and Health Services; ECEAP = Early Childhood Education and Assistance Programs.

^Policies were prioritized for local action.
Development to the influence of social determinants of health and development, has added excitement to the policy arena. This new knowledge is increasingly acknowledged by educators, social service providers, and child advocates—the professionals who are PHSKC’s partners.

The process of developing the policy agenda spanned 1.5 years, and it was a challenge to keep partners engaged long enough to reach a “common knowledge base” in order to be fully informed participants in building the policy agenda. Partners found it challenging to focus on the level of social and economic environments instead of the level of providing services to individual parents, children, or families. The tendency to focus on immediately needed services rather than the social and economic contextual factors that led to the need for services, required reorienting the group to prioritizing policy recommendations. Partners struggled with how to take incremental steps toward making structural changes in the environment to address such things as access to affordable housing, adequate food, health care, child care, and other financial resources needed to support young children. “Moving people out of poverty” is a goal that all can agree on, but the changes required to truly increase family resources seem daunting and distant, especially to partners who typically plan specific service delivery programs.

Although the momentum and high level of activity directed toward healthy early development was evident during this project, enhanced collaboration of organizations to address prioritized policies remains a challenge. Identified impediments to coordinated efforts fell into several key areas:

The need for better collaboration among groups to align their respective policy agendas to address specific policy priorities of the partnerships, the need for stronger leadership and commitment to prioritized policies, and the need for protection of existing funding for early childhood services and programs.

The Institute of Medicine’s report *The Future of Public Health in the 21st Century* recommends that “every public health agency exercise its responsibility to serve the public interest in the development of comprehensive public health policies by promoting use of the scientific knowledge base in decision making about public health and by leading in developing public health policy.”

Professionals and communities need both time and concerted effort to use evidence and best practice to advance a policy agenda addressing optimal early childhood development. The public and public officials may recognize the importance of the early years without acknowledging the underlying structural forces in the social, economic, built, and political environments that shape development in those early years. Achieving universal access to conditions for all children to be healthy and ready to learn will require ongoing commitment of many sectors and multidisciplinary partners over time to move political will and mobilize for change.

**Contributors**

The authors jointly originated and planned the policy development process. K. Horsley reviewed the literature and wrote the summary of the science that formed the basis for common knowledge among stakeholders. She also organized the large and small meetings of community stakeholders devoted to generating and prioritizing policy recommendations. S. Ciske offered leadership in strategizing steps to develop and maintain the partnership over time. Both authors wrote the article.

**Acknowledgments**

This project was supported in part by King County Children and Family Commission, United Way of King County, Department of Health, Healthy Child Care Washington, Foundation for Early Learning and Kids Get Care.

The authors acknowledge the work of the Committee on Integrating the Science of Early Childhood Development of the National Research Council and Institute of Medicine. The committee’s work culminated in the book *From Neurons to Neighborhoods: The Science of Early Childhood Development*, which was the inspiration for policy partnership work. The National Academies Press granted permission to adapt parts of the book in a summary. The research and writing of Clyde Hertzman has been formative in our conception of early childhood development as a social determinant of health.

**References**


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This article was accepted November 27, 2004.


23. Project Lift-Off and United Way of King County Children’s Initiative (now SOAR, helping kids reach for the sky).


