

## SUPPORTING FAMILIES WITH YOUNG CHILDREN

**FAMILIES WITH YOUNG CHILDREN FACE A NUMBER OF CHALLENGES THAT CAN INFLUENCE A CHILD'S OPPORTUNITIES FOR HEALTH AND SUCCESS, RANGING FROM FINANCIAL INSECURITY TO CAREGIVER DEPRESSION.**

The support that families receive during early childhood can lay the foundation for a child's future health outcomes, educational attainment and success in adulthood. This brief describes three key areas in which PolicyLab researchers are developing and sustaining programs and policies aimed at supporting young children and their families: 1) Promoting early childhood language and literacy, 2) Supporting social-emotional and healthy development, and 3) Supporting caregivers' health and parenting skills.



### PROMOTING EARLY CHILDHOOD LANGUAGE AND LITERACY

From the moment they are born until they are three years old, children's brains grow rapidly, producing more than one million new neural connections every second.<sup>1</sup> A wealth of research has demonstrated that children who are exposed to large amount of words and conversation, both in variety and quantity, during this critical period are more likely to enter kindergarten with vital early literacy and language skills needed to thrive.<sup>2</sup> Unfortunately, insufficient parent-child verbal interaction and access to quality, age-appropriate books can lead to language delays, which occur in approximately 13% of children under the age of three.<sup>3</sup> Children from low-income communities face higher rates of language and literacy delays, so addressing this disparity is essential to closing gaps in educational attainment.<sup>4</sup>

#### Increasing parent-child verbal interaction with Reach Out and Read

Parents play a key role in their children's language and literacy skills. To promote healthy development and decrease delays in these domains, researchers at PolicyLab are conducting studies examining 1) the effects of initiating a literacy program called Reach Out and Read (ROR) in the newborn period, six months sooner than it typically begins, and 2) whether digital e-books are as effective as standard books for child development. Since its inception in 1989, ROR has been shown to improve children's language development over time.

#### Building high-quality home language environment through LENA Start parent groups

Researchers have used digital language processors as a tool to understand how parents interact with their children at home. PolicyLab researchers are using one of these devices, the Language Environmental Analysis (LENA) digital language processor, which captures and analyzes the quality and quantity of words parents use at home as an educational means for parents to see how they are using language during the day. Through this intervention, parents learn how to increase the quantity and quality of their interactions with their young children.

## SUPPORTING SOCIAL-EMOTIONAL AND HEALTHY DEVELOPMENT

It's estimated that 10 to 20% of young children experience delays in development, manifest behavioral challenges or are at risk for autism.<sup>5</sup> However, less than 3% of children in the United States under the age of five are actively participating in Early Intervention (EI) services that could address these disorders.<sup>6</sup> All children need support both at home and in child care settings to develop strong social-emotional skills. PolicyLab is researching and developing interventions to prevent delay and build these skills in young children and address barriers that prevent vulnerable children—including Spanish-speakers, children of color and children from low-income households—from receiving crucial services.

### Reducing pre-k suspension and expulsion from child care

More than 5,000 preschool students are expelled each year in the United States, with a disproportionate impact on minority children; while African American students make up only 18% of pre-school enrollment, they account for 42% of preschool suspensions.<sup>7</sup> To address this concern, PolicyLab and our community partners are studying a program that provides more social-emotional supports to Philadelphia child care providers to reduce disciplinary actions that result in removal from the classroom.

The program uses Positive Behavior Intervention Support (PBIS), a three-tiered model that aims to create a universal system of building social-emotional skills in all young children, incorporate supports such as EI for some children and connect children with greater needs to helpful mental health supports. Teachers work together with parents to support children's social and emotional development through classroom and individual positive supports with a goal of reducing behavioral challenges. Since the program's inception, there have been many positive strides in implementation of PBIS at child care centers in Philadelphia. This work will also encompass a targeted effort to help child care providers recognize their implicit racial biases and mitigate the effects of their biases on decision making.

### Understanding the role of maternal beliefs on investment in early childhood activities

Knowledge about the benefits of investing in the first few years of a child's life may determine how much time and resources a mother devotes to raising her child, however there has been little research on how maternal beliefs influence these decisions. Therefore, PolicyLab

researchers and collaborators at Rice University developed the Philadelphia Human Development Project (PHD), a prospective longitudinal study that seeks to fill this gap in knowledge regarding the determinants of early childhood development. Following the large cohort of women from pregnancy until their child is about two years old, researchers will conduct multiple interviews with families to determine how maternal beliefs and investments in physical and mental tasks change over the two-year period.

### Increasing access to EI services for poor, urban children of color

To promote healthy child development, the Individuals with Disabilities Education Act (IDEA) mandated EI services be made available to young children with delays. However, only half of at-risk children initiate and complete EI services.

To improve the rate at which children start and complete EI services, PolicyLab researchers developed the Opening Doors to Early Intervention (ODEI) program, a patient navigation intervention targeted to at-risk urban minority children. This community-based participatory research application will test the effectiveness of this program in Philadelphia using a randomized trial design. Participants will either be in the control group and receive basic information about EI services, or they will be in the intervention arm and receive a designated family navigator who will engage, inform and assist the participating parents to follow through with the process of EI referrals and services.

PolicyLab researchers are also investigating other factors that influence healthy development, including:



How teaching parents cooking skills increases their confidence in preparing nutritious meals at home and, in turn, their children's nutrition-related health outcomes



Effective strategies for promoting healthy sleep among children such as establishing regular bedtime patterns



How cultural backgrounds and beliefs shape parenting practices and behaviors



## SUPPORTING CAREGIVERS' HEALTH AND PARENTING SKILLS

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**Increasing evidence suggests that the health and well-being of a caregiver has a dramatic effect on the health and well-being of their children.**<sup>8</sup> Providing support for caregivers that both addresses their own health needs and develops positive parenting skills can make a significant impact on their children. Specifically, research suggests that intergenerational family services result in improved safety, increased parenting capacity and a higher likelihood that a family will use preventive services.

### Integrating home visiting, pediatric primary care and child care services

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Home visiting programs are voluntary, in-home services provided to under-resourced, pregnant moms and families of young children. In recent years, these programs have scaled up to become a key structural component of communities across the country, however the need for additional supports in health care and child care services for families has become clear.

To improve the delivery of home visiting services to underserved and vulnerable families with young children in Philadelphia, PolicyLab researchers are creating an integrated cross-sector early childhood support system that includes evidence-based home visiting services, pediatric primary care and quality child care. The model will strengthen the systems of service delivery available to families within their communities through 1) embedding public health home visiting nurses within a primary care system, 2) facilitating use of high-quality child care for home-visited families, and 3) building a sustainable model of early childhood family supports through effective engagement with key decision-makers in early childhood systems.

### Improving screening and referral for caregiver services in pediatric primary care

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Pediatric primary care offices provide a unique setting to offer intergenerational family services, or family-based services, as many caregivers will forego their own medical care when they have young children. Using pediatrics to direct caregivers to services that can help them quit smoking, address a mental health condition or prevent unwanted pregnancies could help fill this gap in care.

PolicyLab researchers are evaluating the feasibility and acceptability of a number of interventions that screen for and refer at-risk families to services. These interventions address families' social risk to ensure parents are connected to services that meet their needs. Developing sustainable financial models to support the long-term delivery of intergenerational family services in pediatrics is also a key tenant of this work.

### Developing positive parenting skills

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Approximately 11 to 20% of children in the United States meet diagnostic criteria for a behavioral health disorder at any given time.<sup>9,10</sup> Problematic behaviors from young children can provoke negative and reactive parenting responses, which, in turn, increases the child's behavior problems. Parenting interventions that promote positive, authoritative parenting can reduce the severity and frequency of behavioral problems, decrease parental stress and reduce the risk of child maltreatment, however these interventions are rarely offered in pediatric primary care settings.

Recognizing the untapped potential of this setting for addressing children's behavioral problems, PolicyLab, Children's Hospital of Philadelphia (CHOP) and University of Cincinnati researchers developed PriCARE, a primary-care based trauma-informed program to teach caregivers techniques that support the social-emotional growth of children. As a group-training program for parents, PriCARE is designed to improve child behavior, strengthen parent-child relationships and decrease stress for parents.

## COMPLETED POLICYLAB PROJECTS

In addition to the ongoing research in early childhood, PolicyLab has several projects that have been completed but exemplify other interests and areas of expertise with this population.

### → Improving developmental and behavioral screening for Spanish-speaking children

Children with developmental challenges often do not receive necessary developmental services before the age of three. Primary care providers frequently refer families whose children face developmental and behavioral challenges to services following screenings, however these screening tools may not work as well for Spanish-speaking families if they are not culturally and linguistically appropriate. To address this issue, PolicyLab researchers compared the effectiveness of two sets of developmental and behavioral screening instruments: 1) the Survey of Well Being of Young Children (SWYC), a publicly available comprehensive screener created by Tufts University that screens for risk of developmental delay, behavior problems and autism, and 2) established Spanish-translated screening instruments such as the Ages and Stages Questionnaire (ASQ) and Modified Checklist for Autism in Toddlers (MCHAT). Our results showed both of these tools were promising in identifying Hispanic children with developmental delays.<sup>11</sup>

### → Examining the impact of poverty on infant development

An estimated 16 million children in the United States live below the poverty line, and these children are more likely to experience food insecurity, live in impoverished communities and have poorer access to high-quality health care.<sup>12</sup> Since many studies focus on children older than two years of age, PolicyLab researchers wanted to understand how early the effects of poverty can be seen in infants. They studied low- and higher-income infants under the age of one, evaluating their risk of developmental disadvantage in domains such as their home and neighborhood environments. This research found that infants in low-income households are at higher risk for developmental disadvantage that their higher-income counterparts in more than a dozen risk factors, which suggests that support for low-income children cannot come soon enough.<sup>13</sup>

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The mission of PolicyLab at Children's Hospital of Philadelphia (CHOP) is to achieve optimal child health and well-being by informing program and policy changes through interdisciplinary research. PolicyLab is a Center of Emphasis within the Children's Hospital of Philadelphia Research Institute, one of the largest pediatric research institutes in the country.

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