Defining Populations of Children with High Needs

Top-line findings

- **There is no one measure that captures "need" among children; rather a cluster of characteristics that contribute to good or bad outcomes.** On average, the prevalence of poor early-childhood outcomes is highest among children of less-educated, unmarried or adolescent parents, parents who are depressed, parents with limited incomes who have difficulty meeting basic needs, and among children with special needs themselves.

- **A significant share of Iowa families face economic stress; many are headed by young and less-educated parents.** More than 40 percent of Iowa's young children live in households below 200 percent of poverty, a realistic measure of what it takes to support a family. Nearly one in five (19 percent of the total) live in households below 100 percent of poverty ($22,314 for a family of four in 2010). In 2010, 17 percent of Iowa first-time births, and 8 percent of total births, were to adolescent mothers, almost all of whom were unmarried with less than a high school diploma.

- **Another significant share of Iowa children have special health needs**. In fact, 21 percent of Iowa children four months to five years of age are at moderate or high risk of developmental, behavioral or social delays. Based on national research, we know over 50 percent of young children begin kindergarten behind in at least one area of special need and over 20 percent have multiple needs that require even greater levels of support.

The majority of Iowa children begin school in reasonable health and with adequate cognitive, language and social-emotional development to engage in learning when they enter school. They exhibit what is often called "school readiness."

At the same time, from national and state analyses, we know a very significant share of Iowa children start school substantially behind their peers and in need of special attention to catch up. The national ECLS-K study shows that approximately 56 percent of children start school behind in at least one area (cognitive, social-emotional or physi-

cal) and 21 percent start school behind in two or more areas and require significant remediation.[1] When examining basic and proficient reading and mathematics levels at fourth grade on National Assessment of Educational Progress (NAEP) scores, one sees similarly levels of some concern (below proficient) and significant concern (below basic).[2]

Clearly, young children develop at different rates and in different areas, and there is no one measure to declare a child either "ready" or requiring additional help. The question posed to the early childhood field is whether, prior to school entry, it is possible (and at what age) to identify the children most likely to experience these concerns and intervene in ways that reduce their risk.

There are few sources of information that measure healthy development in all children from birth to school entry (as there are once children start school), particularly at the community level, but there is substantial information from national survey data and other research about children and their communities to begin to outline the need.

These indicate that a substantial portion of the young-child population has conditions—special health-care needs, developmental disabilities, or behavioral and mental-health issues—that place them at high need. Twelve percent of infants and toddlers experience developmental delays or disabilities which would qualify them for early intervention services (Part C of the Individuals with Disabilities Education Act, known in Iowa as Early ACCESS),[3] and 18 percent of 2- to 5-year-olds have a diagnosable mental-health condition under the DSM-IV classification system.[4] Research further shows profound differences by socio-economic background in children's language and vocabulary development by age three.[5] While these data are not Iowa-specific, based on them, it is reasonable to estimate that 20 to 25 percent of young Iowa children are at highest need before they enter school, and a larger proportion exhibit a lower level of need. Further, it is clear that identification of children with high needs can be made on the basis of their own characteristics, and very early in life.

While Iowa specific data is sparse, the 2007 National Survey of Children's Health found 21.2 percent of Iowa's children 4 months to 5 years of age were at moderate or high risk of developmental, behavioral or social delays. Nationally the rate was 26.4 percent.[6] Iowa's rate is somewhat below the national average, but still indicates that a significant share of Iowa's young-child population has significant health and social needs and that national studies measuring child needs are generally applicable to Iowa.

The continually evolving body of research on brain and early-childhood development not only has identified the early years as critically important for growth and development, but also identified key "protective" factors that contribute to healthy development and "risk" factors that jeopardize that development. While children's own constitution (innate capabilities and congenital make-up) plays a role in development, the largest impacts on children's development are in fact ecological; that is, relating to family and community supports and opportunities. In the health world, it is estimated that children's own constitution may contribute 20 percent to their health and medical care may contribute 10 percent, but the remaining 70 percent is related to social, environmental and behavioral factors.[7]

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In other words, healthy young-child development is related to the home and community environment and the consistency and quality of nurturing young children receive. The research on toxic stress, adverse childhood experiences and social determinants of health all confirm the impact of stressed and inconsistent home environments on child development across all domains of school readiness: physical health and motor development, social and emotional development, language and literacy, approaches to learning and general cognition.

Research has shown parental, and particularly maternal, depression has strong negative impacts on child development, and we know a significant share of parents have, at least at times, struggled with depression. Case in point: recent estimates indicate that nearly 15 million U.S. children

currently live with an adult who has suffered major depression in the last year,[8] and a national study concludes that more than two-thirds of adults with mental illness are parents.[9] A 2008-2009 estimate says that 18 percent of adults in Iowa have some mental illness.[10]

Disruptive or high-stress events such as periods of family homelessness can also harm the developmental environment for young children. According to Iowa's Homeless Management Information System, 2,530 children age five and under were homeless and received shelter emergency or transitional housing or rapid rehousing services in Iowa in 2011. An additional 3,353 children received services to prevent immediate homelessness.[11]

Therefore, a key way to identify and respond to children with high needs, particularly from a preventive perspective, is through the family.

Family economic circumstances play a role in families being able to provide essential services and supports. Because it is readily available, the most common criterion used to identify young children at high need is family income level. Common benchmarks for risk are falling below the federal poverty level ($22,314 for a family of four in 2010) or below 200 percent of the poverty level. This translates to 21 percent and 44 percent of all children 0-17 nationally, and 16 percent and 38 percent of all children in Iowa, respectively. While this report will use income and poverty measures at times, it must be recognized that this measure alone is not the best "predictor" of high needs.

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For example, imagine two families, each with three family members, and with similarly low incomes. One is a married couple with a child. The two parents in this household may be starting their careers living in poverty, but in this case, one is in graduate school and the other works. They have extensive support from their own parents. Then imagine a single mother of two preschool children working as a nurses' aide, who has little support from her own parents or other family members. This single mother may either be particularly resilient, or be stressed and depressed, with difficulty getting up to face the day. Either way, the complexities of her life are significant. These families have the same income level, but the prospects for their children's development are very different.

Income level is most important in assessing the ability of families to meet their children's economic needs, including quality child care arrangements. At precisely the time when costs for arranging such care are likely to be greatest, families are likely to have the least income, and there clearly is a mismatch between what most families with young children can afford to pay (particularly in the youngest years) and what is available to them, particularly assuming a level of quality.

Research indicates that maternal education is actually a stronger indicator than income in "predicting" future child development and success.[12] Single parenting also is a strong predictor, and one of the "adverse childhood experiences" that can hinder healthy development.

Data from Iowa birth records are valuable source information on maternal education, family status and age and help suggest which children are most likely to be at high need. Time of birth also is when many home-visiting programs in Iowa seek to engage families, particularly those with their first child, so it is important to assess how the families they serve match up to those most likely to be at high need.

Examining the 14,867 first-order births in Iowa in 2010, over 17 percent were to adolescent mothers, almost all of whom were unmarried and with less than a high school diploma. This is clearly a high-need group. The largest proportion of births (30 percent) was actually to married couples where the mother had a college diploma or higher. Members of this group are most likely not to be in a high-need category. The rest of the births fall between these two extremes, with less-educated mothers much less likely to be married. Simply looking at adolescent mothers and unmarried mothers with a high school diploma or less (12 percent), we can identify a group of children—together 29 percent of first-order

births—at risk of growing into struggling students.

Identifying such a large share of births where children are at risk of development challenges suggests that this is not an isolated concern, but one of significant stature. Moreover, it suggests that a long-term approach involves raising overall educational achievement and ensuring that students have and make use of opportunities to excel educationally.

Prevention programs, in general, face the challenge of identifying the children most likely to benefit from those programs' services. The takeaway message regarding defining "high needs" among young children is this: Any one marker for "need," such as income level, likely will both include children who do not require the service and miss others who do. Such an exercise always will be imperfect, but often can be made more precise by examining more than one marker.

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