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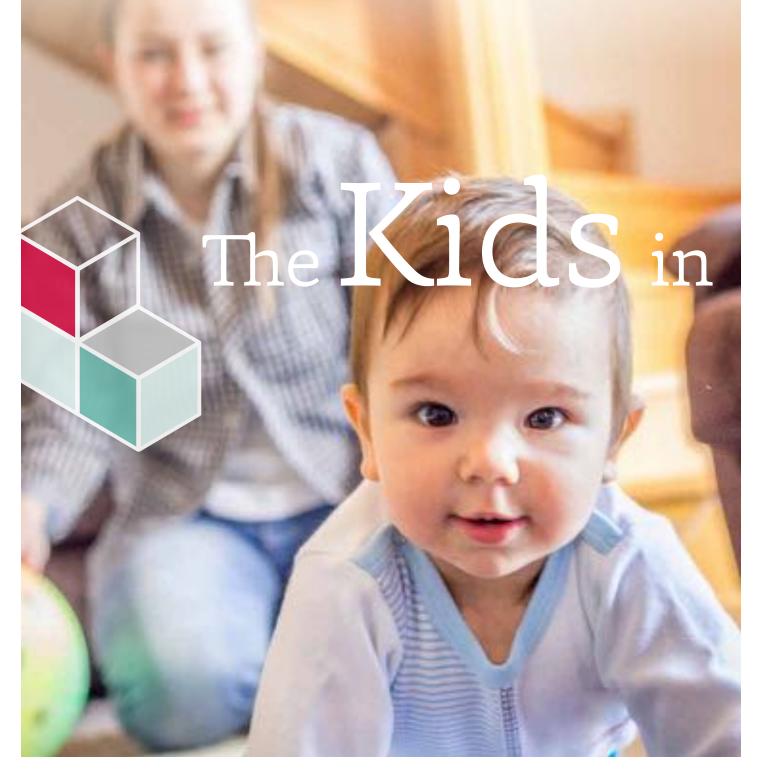
#### **EXECUTIVE SUMMARY**



About 29,000 children in Columbus live in extreme poverty (Annie E. Casey Foundation, 2013a). Each year, the City of Columbus invests almost \$18 million (Rakovsy, 2015) in resources aimed at improving the health and well-being of low-income children and their families. However, the impact of this investment on child outcomes is not clear. Yet, to date, there have been no long-term studies of how low-income families with young children access and use community resources in Franklin County, Ohio. The goal of the Kids in Columbus Study (KICS) is to learn more about low-income families with young children over a five-year period to better understand how these families access and use community resources in Franklin County, Ohio.



In this white paper, we explain the rationale for this project, list the goals of the project, describe the Women, Infants and Children (WIC) clinics, provide a profile of families enrolled in KICS, and summarize the activities we plan to conduct over the course of the project.



### **Expected Outcomes**

This project will provide new information about how families with young children access and use various programs or services designed to support their children's health and well-being.

#### These include:

- How families get access to community-based resources.
- Which types of services they access (e.g., health, housing, parenting) and when they access these services (e.g., first year of a child's life, preschool years).
- Which combination of services are accessed and used together.
- · Profiles of families who are successful in accessing and using the services available to them.
- Where services are located and how the location of services impacts their use.
- The impact of service use on children's health and well-being over the first five years of life.

# Columbus Study (KICS)

# Project Rationale

As the fifteenth largest city in the U.S., Columbus has a racially and ethnically diverse population, a varied economy, and a growing population of young children. In the past decade, the number of children under six years of age in Franklin County has increased by 6.7%, which represents almost 6,200 children, and almost half of these children are part of a racial or ethnic minority group (Community Research Partners, 2012).

Economically, Columbus is a very diverse city with a large and educated workforce, strong research capabilities and corporate foundations. At the same time, it is estimated that 32% of children under the age of 18 in Columbus are officially "poor" and 16% of them live in households with incomes less than 50% of the federal poverty level. That means that 29,000 children in Columbus live in extreme poverty (Annie E. Casey Foundation, 2013a).

The City of Columbus invests almost \$18 million (Rakovsy, 2015) in resources to improve the health and well-being of low-income families with young children. Yet, it's unclear whether these resources are being accessed and used by the families who need them the most and whether they are actually improving children's health and well-being.

The Kids in Columbus Study is examining resource access and use from the families' perspectives, rather than the point of view of a single agency or program. In doing so, KICS will make a vital contribution to understanding how these community resources are being accessed and used, the potential barriers to accessing them, and their impact on children's health and well-being. Understanding the barriers that prevent families from accessing and using these services can help us to ensure a return on community investments, and ultimately, improve children's health and well-being in Columbus, Ohio.

Why does KICS focus on the first five years of life? Over the past two decades, researchers have revealed that health is a lifelong process that changes as a child develops and grows into adulthood. As shown in Figure 1, health is more than a constant state of being well or unwell. Health is a trajectory that changes over time, and is affected by a variety of biological, behavioral, family, social, environmental, and policy factors (Halfon & Hochstein, 2002; Halfon, Larson, Lu, Tullis, & Russ, 2014; Hanson & Gluckman, 2011).

The life course health development (LCHD) trajectory in Figure 1 shows how multiple factors either improve (upward arrows) or negatively affect (downward arrows) a child's health and well-being. By the time a child reaches preschool, he or she has been exposed to factors that either put him or her on the pathway to healthy development, or place him or her at risk (Halfon & Hochstein, 2002).

# Life Course Health Development

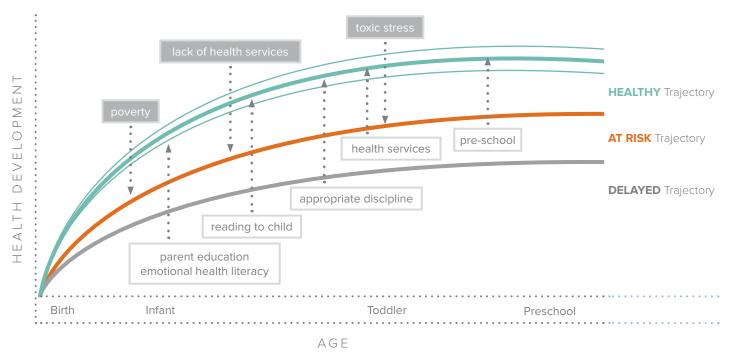


Figure 1. Life Course Health Development. Adapted from "Life course health development: an integrated framework for developing health, policy, and research," by N. Halfron & M. Hochstein, 2002, *Milbank Quarterly, 80*(3), 433-479.

#### A child's developmental trajectory is determined by:

- The amount of risk or protective factors he or she experiences.
- · Whether he or she experience these factors during a critical or sensitive time period in his or her development.
- Whether he or she experiences multiple factors together, or one right after the other, producing a change in his or her genetic or biological makeup (Hanson & Gluckman; 2011; 2014; Shonkoff, Garner, et al., 2012).

Conception to age five is recognized as a critical or sensitive period for children's health and well-being. While genes provide the blueprint for healthy development, a child's environment influences the manner in which these genes are expressed over time. During these first years, a child experiences conditions that will affect his or her physical, socio-emotional, and cognitive development as he or she grows into adulthood (Gluckman & Hanson, 2004; Shonkoff, Richter, van der Gaag, & Bhutta, 2012). Challenges in early life can set these trajectories in ways that undermine lifelong learning, behaviors and, physical and mental health (Shonkoff, Garner, et al., 2012). Community resources may be able to compensate for some of these effects and improve outcomes.

The underlying hypothesis of the Kids in Columbus Study (KICS) is that children's health and well-being improve when families access community resources that support their young children and their families. However, health may be negatively affected when families do not access or use community resources. This is especially true for families in need of these resources, but with little- or no- access to or use of community resources. It is also especially true during a child's critical or sensitive period in his or her development.

# Program Participation Designed to Improve Family Resources

The programs designed to provide support for low-resource families cover a diverse set of needs, including food insecurity (Supplemental Nutrition Assistance Program for Women, Infants and Children (SNAP/WIC)), health insurance (Medicaid, Exchange), and child care/child enrichment (Head Start). Enrollment and retention in programs have been difficult for families. Over the last three decades, researchers have tried to understand why enrollment and retention has been low in some programs. This research has been conducted mostly by evaluating specific programs and from the program's perspective. The KICS project improves on prior research by studying access and use of community resources from the family's perspective and in the context of other services and needs during early childhood.



# Aims of KICS

The goal of this project is to generate new knowledge about how community resources are accessed and used by low-income families over time and how these resources affect children's health and well-being during the first five years of life.

#### Specifically, the aims of this study are:

- 1. To identify the type and range of child and family community resources available to families and;
- 2. To understand how the mix, duration, extent, timing, and type of resources used during early life, (birth to age five), impacts the social-emotional, cognitive, behavioral, and health development outcomes of children living within low-income families.

# Profile of Women, Infants and Children (WIC) Participants and Clinic in Franklin County

KICS involves families from Franklin County who could potentially need community-based resources during the first five years of their child's life. To recruit participants for the project, researchers from The Ohio State University (OSU) partnered with the Columbus Public Health Department (CPH) and Women, Infant and Children Clinics (WIC) in Franklin County, Ohio.

CPH is the local public health grantee for the WIC agency for Franklin County, Ohio. Since its establishment in 1903, CPH's focus has been on helping all people live healthier and safer lives, promoting social justice, and assisting the underserved. Congress established the WIC program in the early 1970s in response to a growing concern over malnutrition among low-income pregnant women and mothers with young infants (National WIC Association, n.d.).

The overarching goal of the WIC program is to improve health status and prevent health problems among at-risk women, infants, and children. More specifically, WIC seeks to (1) improve pregnancy outcomes by providing or referring women to support services necessary for full-term pregnancies, (2) reduce infant mortality by decreasing the incidence of low birth weight, (3) increase breastfeeding rates among newborns, and (4) provide nutritious foods to infants and children so they can get a healthy start in life.





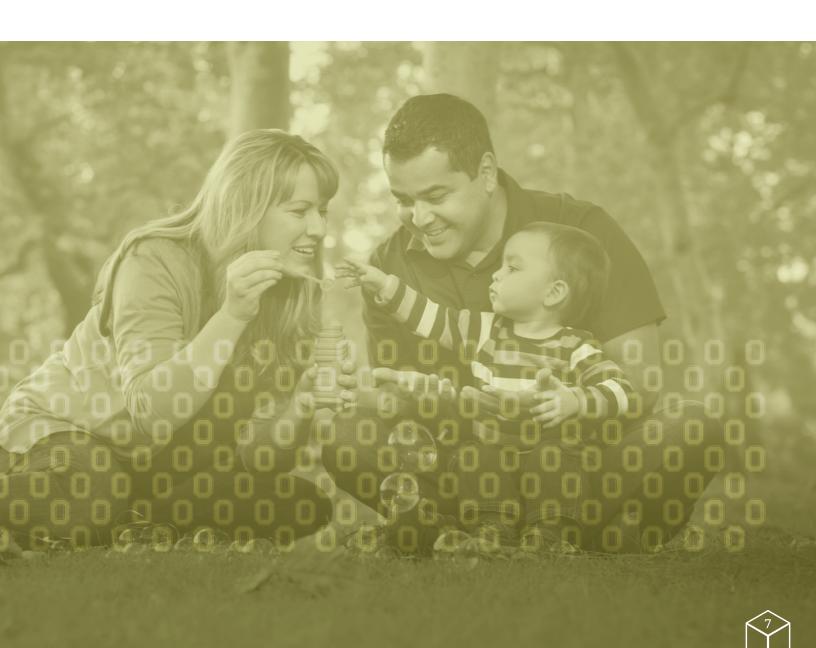


# According to The Ohio Poverty Report (Larrick, 2016), 210,472 Franklin County residents live in poverty. This means that nearly 18% of all Franklin County residents live below the Federal Poverty

Level. Of those living in poverty, a high number are women of childbearing age. Using data from the American Community Survey conducted between 2007 and 2011, it is estimated that 21.5% or 55,499 women between the ages of 15 and 44 in Franklin County live below the poverty level. This number is even higher among African-American women (34%).

Franklin County WIC provides comprehensive services to all income-eligible participants. To be eligible for WIC, an individual must have a household income at or below 185% of the Federal Poverty Level. Currently, Franklin County WIC serves slightly more than 35,000 women and their young children, which represents about 85% of the total number of individuals who may qualify for WIC services. Notably, a growing number of WIC clients are of Hispanic or Somali descent which presents several challenges to service provision due to the language barrier and the need for interpreters. Additionally, the provision of services must be done in a culturally sensitive manner.

Franklin County WIC services include: (1) nutritional risk assessment, (2) provision of supplemental and nutritious foods through benefits provided on a WIC Nutrition Card, (3) nutrition education, (4) breastfeeding education and support services (e.g., breast pumps for women returning to work/school), (5) breastfeeding peer helper support and assistance from breastfeeding counselors, (6) referral to prenatal and pediatric health care and to other health and human service programs, and (7) an annual Farmer's Market held on the grounds of CPH (WIC, 2016).



The CPH provides WIC services at nine locations throughout Franklin County. Nationwide Children's Hospital, as a subcontractor of CPH, provides WIC services at six of the 13 Primary Care Centers that are affiliated with Nationwide Children's Hospital. Six of the WIC centers are designated to serve individuals with infants or young children diagnosed with cognitive or physical disabilities. The remaining nine WIC centers serve mothers with typically developing infants and young children. Figure 2 maps the location of the nine WIC centers and the Administration Office.

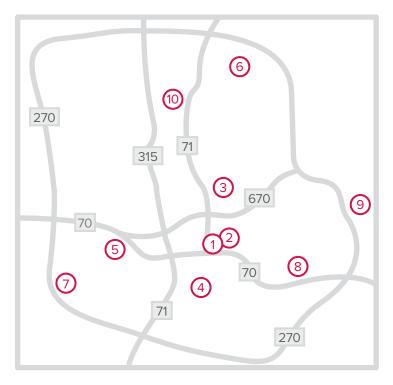


Figure 2. Franklin County WIC locations.

- 1. WIC Administration Office
- 2. East Central
- 3. St. Stephens
- Southside John R. Maloney
   Family Health & Wellness Center
- 5. Westside Health Center
- 6. Northeast
- 7. Georgesville
- 8. Eastland
- 9. Outerbelt East
- 10. Clintonville

#### A Profile of the KICS Families

A total of 323 women and children are enrolled in the KICS project. At enrollment, there were 180 pregnant women and 143 mothers with infants 0-3 months old. KICS participants represent the racial and ethnic make-up of Franklin County. Approximately 36% of them identified as White/Caucasian, 41% as Black/African American, 7% Hispanic/Latino, 10% Bi/Multiracial. The remaining 7% belong to other races or chose to not disclose their race or ethnicity. The average age of the participating mothers is about 26 years and almost 92% of them report English as the main language they speak at home.

Although there is some variability in the annual household income reported by the participants in our project, about 80% of them reported an annual household income less than \$30,000, with the largest percentage (45.8%) reporting an income of \$10,000 or less. Almost half of the participants in the study reported being single, whereas the other half were almost equally divided between those living with a partner, or married.



The participants in the KICS study have diverse backgrounds with respect to their level of education and employment. Nearly 40% report having a high school diploma or GED as their highest level of education, 29% report some college education and nearly 39% report being employed full-time or part-time. The remaining 61% are unemployed. Table 1 summarizes the characteristics of KICS participants.

# Characteristics of KICS Adult Participants

(n = 323)

Age of mother		Mother's education (%)	
Mean age (SD)	26.17 (5.38)	Less than high school diploma	19.3
Age range	18–43	High school diploma or GED	39.2
		Some college but no degree	29.3
Mother's marital status (%)		AA/AS 2 year degree	3.1
		Bachelor or Master's degree	7.1
Married	23.4	Unreported	1.9
Single	41.7		
Single, living with partner	25.9	NA 11 2 1 1/0/	
Unreported	9.0	Mother's employment (%)	
·		Employed full or part time	38.6
Main language spoken at	home (%)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	·		
English	91.6	Mother's annual household income	
Spanish	0.9		
Somali	1.2	\$10,000 or less	45.8
Other	5.3	\$10,001 to \$30,000	34.5
	0.9	\$30,001 to \$60,000	11.9
Unreported	0.5		
Unreported	0.3	\$60,001 or more	1.2

Table 1. Characteristics of KICS adult participants.

# Planned Activities over the Five Years

To collect information about community resources, their use (or not), and their impact on children's health and well-being, each year the KICS team conducts two face-to-face meetings with the mother and child. These meetings are equally spaced out over the year, with one meeting focusing on the mother and the second one focusing on the child. The parent (first annual) meeting collects information on medical history and community resource use, including types of resources accessed, timing of accessing resources, and barriers to accessing them. The child (second annual) meeting focuses on child development, including physical health and, cognitive, social-emotional, and behavioral development.

As new data are being collected and analyzed, the Ohio State research team will provide the Columbus community and researchers with relevant findings regarding community-based resources, their use (or not), barriers to accessing them, and their relationship with children's health and well-being for low-income families.

These findings will be very important for helping us better understand how the investments made by the Columbus community affect children's health and well-being. KICS findings will provide practitioners and policymakers with highly salient information regarding the types of services families with young children access, the combination of services they use, and the period in a child's life when families access each type of resource.

Additionally, the study will identify the main characteristics of families who are successful in accessing and using the resources available to them, as well as map how the location of existing services may influence their use. These findings will greatly contribute to the community's understanding of the investments made in assisting its most vulnerable population—young children—and the impact these investments have on their lives.



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#### The Crane Center for Early Childhood Research and Policy (CCEC)

The Crane Center for Early Childhood Research and Policy (CCEC), in the College of Education and Human Ecology, is a college-level research center dedicated to conducting high quality, empirical research on how to improve children's learning and development in the home, the school, and the community. Our Vision is to be a driving force in the intersection of research, policy, and practice, as they relate to children's well-being. Our Mission is to stimulate research and influence practices and policies that enhance the well-being of children, with respect to their cognitive, social-emotional, and physical development.

The CCEC white paper series provides original research and thinking to practitioners and policymakers on matters of pressing concern. The recommended citation for this paper is:

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