

Community Health Workers: Key Partners in Improving Children’s Health and Eliminating Inequities

As policymakers, health care providers, and other stakeholders work to transform our health care system into one that rewards value and not volume, it is imperative that achieving health equity be a central focus of these efforts. Health system transformation is a critical opportunity to implement delivery system reforms and interventions designed to narrow racial, ethnic, and other health and health care inequities, and to align payment and other incentives to resource these necessary improvements.

Nowhere is this more urgent than in the area of children’s health and well-being, particularly as evidence mounts indicating the long-term effects of adverse childhood experiences (ACEs)—trauma related to a child’s exposure to abuse, neglect, parental substance abuse, domestic violence, and other forms of early adversity—on one’s physical and mental health and productivity as an adult.¹ Earlier this year, the U.S. Census Bureau reported that for the first time in our nation’s history, the non-Hispanic White population declined.ⁱ At the same time, the majority of children under 10 are children of color² Yet children of color suffer worse health than White children, fueled by multiple intersecting factors, many of which are socially influenced. These factors range from a higher burden of ACEs, an increased risk of violence, poorer quality

schools, greater exposure to environmental threats, and food insecurity, to the cumulative effects of structural, institutional, and interpersonal racism.

Efforts to transform our nation’s health systems provide an excellent opportunity to address the multiple challenges that undermine the health of our nation’s most important asset: our children. One highly effective strategy to improve health outcomes for children is the effective deployment and sustainable financing of community health workers (CHWs).ⁱⁱ CHWs are frontline public health workers who are trusted members of, and deeply rooted in, the communities they serve.³ Increasingly, CHWs are recognized as playing a unique and invaluable role as part of health care teams, helping families enroll their children in coverage,

ⁱ In this report we use “Latino” and “Hispanic,” and “Black” and “African American,” interchangeably to reflect these communities’ diverse preferences.

ⁱⁱ For the purpose of this issue brief, we are using the term “community health workers” as an umbrella term that encompasses many job titles, including *promotores de salud*, community health representatives, community-based doulas, and other titles that are used to describe those providing peer-to-peer health promotion and support.

increasing access to screening and preventive services, facilitating system navigation, and providing care coordination and disease management for children with chronic conditions and those with complex health and social needs. By serving as liaisons between the health care system, social services, and the broader community, CHWs can play a significant role in helping families obtain care for their children while improving the quality and cultural competence of service delivery.

This brief highlights the value of integrating CHWs into maternal and child health care delivery to effectively address a range of health care concerns and conditions for children and families, offering examples of specific initiatives that are promising or have demonstrated impact in improving health care and health outcomes for children of color.

CHWs Can Drive Health Equity for Children

Underserved communities of color often struggle with multiple barriers to good health and health care—regardless of whether they have health insurance—such as living in concentrated poverty, low-quality housing, sub-par education, low literacy, limited English proficiency, racism and discrimination, increased exposure to and risk of violence, and lack of reliable transportation. These and other barriers create and perpetuate existing health inequities.⁴

Due to the compounding effects of disadvantage, discrimination, and racism, children of color face greater threats to their health than White children and suffer disproportionately from a number of health conditions, including higher rates of elevated blood lead concentrations, asthma, obesity, and dental disease.⁵ CHWs are ideally positioned to reduce health disparities and advance health equity for children on several fronts. They improve access to care,

including critically necessary preventive services; bridge cultural, linguistic, and trust gaps between people and providers; advocate for improving conditions in their communities; and address the many non-clinical factors—often driven by structural inequities—that influence a person’s health. Beyond connecting underserved communities to needed health and social services, because they are part of the communities they serve, CHWs are especially adept at helping families to minimize the negative impact of social factors on their children’s health.

Although CHWs are more frequently deployed to work with adults, available data suggest that they have played a valuable role in improving child health in a variety of areas, including: managing chronic conditions,⁶ reducing child morbidity and mortality,⁷ maternal and newborn health,⁸ breastfeeding,⁹ immunization uptake,¹⁰ as well as helping families enroll in health insurance.¹¹

Addressing Childhood Asthma Disparities

In the U.S., more than 6 million children, or one out of every 12, have asthma,¹² making it the most common childhood chronic condition in the country.¹³ The consequences are far-reaching, and sometimes even fatal. In 2016, asthma caused the death of 209 children.¹⁴ Asthma limits daily activities, and affects school attendance and performance, family life, and finances.¹⁵ Childhood asthma drives a considerable number of hospital admissions, doctor's visits, and school absences. Asthma in children under 15 years of age produced roughly 640,000 emergency department visits in 2010, and was the third-leading cause of hospitalization for that age group.¹⁶ It is also one of the leading reasons children are absent from school.¹⁷ In 2013, asthma caused an estimated 13.8 million lost school days.¹⁸

The burden of asthma falls disproportionately on low-income children and children of color. The lower the family income, the more likely the child will have asthma.¹⁹ Black and Puerto Rican children have the highest rates of asthma in the country. Black children's rate of asthma is more than double (2.2 times) that of White children, while the Puerto Rican rate is 80 percent higher.²⁰ In 2015, the asthma death rate for Puerto Rican children was quadruple that of non-Hispanic Whites,²¹ while the death rate for Black children was tenfold.²² Unfortunately, recent research indicates that the usual asthma "rescue" medication, albuterol, is less effective for Black and Puerto Rican children,²³ yet Black and Hispanic children are 35 percent and 27 percent less likely, respectively, to receive appropriate "controller" medication to help them prevent asthma attacks in the first place.²⁴

How CHWs Help Families Manage Asthma

Families with asthmatic children have to learn to address multiple factors to get and keep their symptoms under control and avoid potentially dangerous, and costly, flare-ups. CHWs are well-suited to help parents and children better manage their condition. As a culturally centered bridge between clinical care and the community, they can educate families about the condition, help to review prevention and treatment, and make sure the families understand how to use their asthma management medications. Because they are welcomed in families' homes, CHWs can assess the child's environment, identify potential environmental triggers, and work with families in respectful, culturally centered ways to mitigate those triggers.

Home-based interventions that utilize CHWs can be enormously valuable for these children and their families, improving their asthma, long-term health outcomes, and the family’s overall quality of life and productivity.

Given high prevalence rates, worse outcomes, and the fact that rescue treatment is less effective, preventing asthma attacks in these children is crucial. Many factors play a role in exacerbating asthma, from cold temperatures, to exercise, to viral infections, to being exposed to second-hand smoke.²⁵ Some experts have estimated that up to 40 percent of the total risk of developing asthma for children of color is attributable to residential exposures to allergens (dust mites, fungi, cockroaches, etc.).²⁶ Researchers have also found a link between exposure to toxic stress (such as racism or violence) and a higher risk of asthma.²⁷ All these factors underscore the importance of ramping up clinical and home-based preventive efforts with these vulnerable children. This is why home-based interventions that utilize CHWs can be enormously valuable for these children and their families, improving their asthma, long-term health outcomes, and the family’s overall quality of life and productivity.^{28, 29}

Following are some examples of how CHW interventions are demonstrating success in helping families with asthmatic children get the care they need to stay healthy.

- » The **Seattle & King County Health Homes II Asthma Project**³⁰ focused on low-income children with asthma between the ages of 4 and 12, and measured the impact of adding a CHW to their existing model through a randomized control trial (RCT). The baseline model included a “Community Asthma Nurse” who provided patient education, training in self-management, the development of a patient-specific asthma action plan, and case management/review. The new intervention added CHWs to in-home outreach, education, and resources to address environmental triggers. CHWs provided in-home environmental assessments, education, support for behavior change, and resources. The study found that adding the CHW increased a child’s symptom-free days by more than 24 days per year and also improved caregivers’ quality of life.³¹
- » The **Washington Heights Inwood Network (WIN) for Asthma** in northern Manhattan combines a community-based screening and education program with targeted individual home-based family supports and resources for asthma management—all provided by, or in coordination with, local CHWs. Bilingual CHWs offer family-focused asthma education, address household environmental triggers, and link families to the clinical and social resources needed to facilitate effective and sustainable asthma management. In addition, WIN works with local providers to ensure they follow the latest asthma guidelines, based on the Physician Asthma Care Education initiative. As a result of this intervention, over a three-year period, the number of asthma-related emergency department visits and hospitalizations for children decreased by more than 50 percent, and asthma-related school absenteeism decreased by more than 40 percent. Also, caregivers’ confidence in managing their children’s asthma increased by nearly 60 percent.³²

Tackling the Maternal and Child Health Crisis

Communities of color are generally at greater risk of poor birth outcomes. African American, Puerto Rican, and American Indian and Alaska Native (AI/AN) infants are more likely to be born preterm than White infants, and Black babies are more likely to weigh less at birth than White babies.³³ In addition, there are significant inequities in maternal mortality for some communities of color. Compared to White women, AI/AN women's risk of death due to complications related to childbirth is more than double, and for Black women it is more than two-and-a-half times higher.³⁴ Even Black mothers who are college-educated are more likely to suffer severe complications of pregnancy or childbirth than White women with less than a high school education.^{35, 36} When comparing women with the same condition, Black women were found to be two-to-three times more likely to die than White women.³⁷

Promotoras, community-based doulas, and other CHWs have been shown to be very effective in improving these trends. Home visiting programs generally, whether by CHWs or other providers, can address ACEs by providing parents and caregivers with the resources, support, and knowledge needed to create a healthy, nurturing home environment and establish a secure parent-child bond. Supportive early relationships protect against biological hazards to healthy brain growth beginning prenatally, mitigate the impact of stressors, and help build resilience for children. Evidence demonstrates that home visiting yields positive impacts for children and families across a range of outcome areas, resulting in improvements in maternal and children's health, including reductions in child abuse and neglect.⁴⁷

The Effect of Racism and Discrimination on Maternal and Infant Health

In addition to the persistence of discrimination and bias against women of color by the health care system,^{38, 39, 40} a growing body of research suggests that stress induced by racism and discrimination plays a significant role in persisting disparities in maternal and infant mortality as well.⁴¹ Trauma stemming from historic persecution and ongoing disenfranchisement and discrimination has been shown to have measurable negative physiological effects on women of color and their birth outcomes, especially for Black and AI/AN mothers and their infants.^{42, 43, 44, 45} One stark example was the aftermath of the 2008 Postville, Iowa federal immigration raid, the biggest in U.S. history. Latinas living in Iowa who were pregnant at the time of the raid were 24 percent more likely to have an infant with low birth weight compared to the year before, while there was no such difference for White women.⁴⁶

How Doulas Improve Outcomes for Women and Infants of Color

Community-based doulas are a particular type of CHW who have been trained to support women during pregnancy, childbirth, and often in the postpartum period. This peer-to-peer support from women with similar lived experience, shared culture and language, and dedication to improving their clients' pregnancy and childbirth experience can make an enormous difference in the lives of women who are underserved, socioeconomically marginalized, and dealing with toxic stress, and as a result, improve their infants' health.

Community-based doulas have an especially promising record of improving childbirth experiences and outcomes for their clients. Mothers supported by a doula have been found to be in labor for shorter periods, to be less likely to report negative feelings about childbirth, are less likely to experience pre-term birth,⁴⁸ four times less likely to have low birth weight babies,⁴⁹ and initiate breastfeeding at higher rates than those who do not work with doulas.⁵⁰ In addition, doulas have been found to contribute to improvements in a range of perinatal outcomes, including increased likelihood of a spontaneous vaginal birth and lower risk for caesarean or instrumental vaginal birth.⁵¹

For example, the **Healthy Start Programa Madrina**,⁵² a home visiting promotora outreach and education program for Latina pregnant women in Chester County, Pennsylvania, has been successful in linking pregnant Latinas to perinatal health care, health education, and support services, as well as reducing barriers to prenatal care.⁵³ A 10-year evaluation of the program found reduced rates of preterm births and low birth weight rates below 7.6 percent and 5 percent, respectively.⁵⁴

Given the birth outcomes crisis in this country, efforts to provide access to culturally centered and language accessible doulas in underserved communities across the nation are on the rise.

- » In 2010, **Healthy Start Brooklyn** introduced the By My Side Birth program with the goal of complementing other maternal home-visiting programs by providing doula support during labor and birth, along with prenatal and postpartum visits. Between 2010 and 2015, 489 infants were born to women enrolled in the program. Data indicate that By My Side is a promising model of support for Healthy Start projects nationwide. Specifically, program participants had lower rates of preterm birth and low birth weight compared to other women in the community.⁵⁵

- » **Health Connect One’s Community Based Doula Model**⁵⁶ combines culturally appropriate peer-to-peer support with a life course approach,ⁱⁱⁱ focusing on the perinatal year and the early months of parenting, considered “sensitive periods” when parents are open to learning and growth. Based on a pilot in Chicago, the program provides extended, intensive support to families in communities that face high risks of negative birth and developmental outcomes during pregnancy, labor and birth, and in the early months of parenting. Mothers in the program reported higher breastfeeding rates and lower C-section rates.⁵⁷
- » **The Georgia Campaign for Adolescent Pregnancy Prevention** is a state-level adolescent pregnancy prevention organization that includes a community-based doula program. The program provides community-based and culturally centered doula support to educate, counsel, and advocate for adolescent mothers and their babies during pregnancy, birth, and the weeks after birth. Doulas conduct weekly home visits with expectant adolescent mothers, provide support during labor and birthing, and assist with postpartum needs. A recent evaluation of the program indicates that doulas provide valuable assistance to pregnant and parenting adolescents by addressing socio-psychological needs and socio-economic disparities.⁵⁸
- » **Strong Beginnings** is a federal Healthy Start program in Michigan that employs CHWs to help educate and support women throughout pregnancy and during the first two years of infants’ lives.⁵⁹ CHWs partner with nurses and social workers on case management teams and connect families to a range of resources including job placement, transportation, and housing. The program has been successful in reducing Black infant mortality by improving prenatal care and increasing postpartum exams and well-child visits.⁶⁰

Given the strong evidence base and programmatic successes, CHWs have an important role to play in efforts aimed at improving maternal and infant health and preventing and mitigating ACEs. Beginning early—with prenatal health—CHWs can be embedded in communities most affected by toxic stress to help promote maternal and child health.

ⁱⁱⁱ A life course approach looks back across a person’s life or across generations for clues to current patterns of health and disease, recognizing that both past and present experiences are shaped by a broader social, economic and cultural context. In epidemiology, a life course approach is applied in the study of physical and social conditions during the lifespan—from pregnancy to childhood, adolescence, young adulthood and midlife—that impact risk for chronic disease and health later in life.

CHWs Can Increase Children’s Health Insurance Enrollment

In addition to improving the access to and quality of care, CHWs have also been involved in improving families’ access to health insurance. In some communities, CHWs have been a key component of successful campaigns to enroll families and children in the Children’s Health Insurance Program, as well as in Medicaid and ACA Marketplace coverage.⁶¹

CHWs can help children and families overcome many common obstacles to health insurance enrollment—such as language barriers, lack of familiarity with how insurance and financial assistance work, fear and mistrust of government officials, or the time required to complete the enrollment process—particularly for families who are low-income, are from communities of color, or are immigrants. Sharing a common language, lived experience,

or cultural background enables CHWs to overcome these barriers, build trust, and help families successfully navigate the enrollment process.

For example, the **Northern Manhattan Community Voices Collaborative**,⁶² serving families across Harlem, Washington Heights, Inwood, and low-income communities in New York City, developed a program to train and integrate CHWs into ongoing programs at partner community organizations. A report highlighting the Collaborative’s success during a five-year period found that CHWs facilitated health insurance enrollment for nearly 30,000 children and adults, assisted 8,000 children in obtaining up-to-date immunizations, and supported 4,000 families in improving asthma management.⁶³

Improving Health Care Delivery for Children with Special Health Care Needs

More than 14 million children in the U.S. have special health care needs related to one or more ongoing health conditions that require more than routine medical services.⁶⁴ This includes children with significant conditions that range from autism spectrum disorders to vision or hearing loss, diabetes, ADD/ADHD, cancer, and cerebral palsy.⁶⁵ CHWs can be an important part of efforts to improve health and related services for children with special health care needs—especially for those in traditionally underserved communities—by reaching families and helping them effectively navigate services and the health care system.

» At New York-Presbyterian (NYP), **Special Kids Achieving Their Everything (SKATE)**⁶⁶ is a CHW-led program for children with special health care needs. The program, based in the Ambulatory Care Network of the Weill Cornell Medical Center and the Columbia University Irving Medical Center, partners with the Northern Manhattan Perinatal Partnership (NMPP) to support children with special health care needs who are considered medically complex or socially unstable. SKATE is funded by New York’s Delivery System Reform Incentive Payment Program, based in NYP’s Center for Community Health Navigation, and embeds two CHWs on

NMPP’s staff to support patients and family members of NYP’s Cornell pediatric outpatient practice. The CHWs conduct home visits to assess clients’ needs and goals, and share these with the medical team during regularly scheduled interdisciplinary team meetings. CHWs identify socially influenced barriers to good health and provide support—including navigation, education, and social service referrals—to promote improved health and well-being for participating children. The SKATE CHW program serves children up to age 21 in all five NYC boroughs.

- » In Delaware, **Westside Family Healthcare**,⁶⁷ a network of six community health centers, provides care to over 26,000 patients who have multiple medical and social needs throughout the state. Sixty percent of patients identify as Hispanic and 25 percent are children. Westside Family Healthcare engages CHWs (*promotoras*) to help coordinate services for families, including children with special health care needs. *Promotoras* help families obtain important health information, such as immunization records, through the Regional Migrant Assistance Program which tracks health information for families across sites and state to state. The program partners with a number of other community resources, including Reach Out and Read and local food banks. Westside Family Healthcare has a relationship with the Nemours Hospital in Wilmington, Delaware, and CHWs work together with providers and others on the health team in each of the community health centers to ensure that children with special health care needs can obtain subspecialty care through Nemours Hospital’s network.

Helping Families Deal with Lead Poisoning

The toxic water crisis in Flint, MI, shone a powerful media spotlight on the persistence of lead poisoning in communities across the country, particularly because it is an egregious example of how policy decisions are made without regard as to how they may place communities of color and low-income communities at risk. However, 1,300 communities in the US have blood lead levels at least four times higher than Flint’s,⁶⁸ and nearly 4,000 areas across the U.S. continue to report blood-level levels twice those documented in Flint, MI during the water crisis.⁶⁹

No level of lead is considered safe for children.⁷⁰ Studies have shown lead concentration in the blood as low as 2 micrograms per deciliter of blood ($\mu\text{g}/\text{dL}$) can lower a child’s IQ⁷¹ and that blood lead levels of 5 $\mu\text{g}/\text{dL}$ and above (considered lead poisoning), can lead to severe neurological damage, slowed growth and development, and learning, behavior, hearing, and speech problems in children.⁷² The two main sources of high-dose lead poisoning—consumer uses of lead-containing paint and leaded gasoline—were banned or

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phased out in the 1970s, leading to a decline overall in blood lead levels for children in recent decades.⁷³ Even so, millions of houses still contain old leaded paint, and children are often exposed to lead through peeling chips of lead-based paints on walls or toys, or the faint dust created in homes with these paints. Some old homes also have pipes that contain lead, putting those who drink the water at risk of lead exposure. As a result, although the prevalence of childhood lead poisoning has declined over time, in many communities, a sizable number of children continue to have elevated blood lead levels. In fact, recent data suggest that the overall number of children with elevated blood lead levels may actually be higher than previously reported.⁷⁴

Low-income and minority children face a higher risk of lead exposure than White children. Overall, Black children are twice as likely to have higher levels as compared to their White counterparts.^{75,76} A study of Chicago's neighborhoods found that Black and Hispanic neighborhoods had much higher rates of lead toxicity compared to White neighborhoods, with Black neighborhoods much more heavily impacted than either White or even Hispanic neighborhoods.⁷⁷

Evidence indicates that CHWs can be an effective approach to identifying and addressing elevated blood lead levels in children. Given the place-based nexus of exposure, deploying trusted community outreach workers who can assess peoples' homes and connect them with remediation efforts, as well as treatment, can be particularly effective.

- » In Flint, MI, community leaders called for deploying CHWs to help families handle the toxic water crisis.⁷⁸ The **Crim Fitness Foundation Community Education Initiative School-Based Program**, in partnership with the Genesee Health Plan and the Charles Stewart Mott Foundation, placed CHWs in each of the 11 Flint Community Schools where they provided a wide range of services, such as conducting health assessments, helping children and families who are uninsured enroll in health care coverage, providing resources and referral services, and educating students, parents, caregivers, and neighborhood residents about health issues—including helping families address a range of health issues related to the contaminated water.⁷⁹
- » The **Sixteenth Street Community Health Center Childhood Lead Outreach Project** in Milwaukee, WI enlisted a team of CHWs, led by a nurse-coordinator, to visit families in their homes and succeeded in lowering blood lead levels over a four-year period. During home visits, teams drew blood samples to test for lead, conducted environmental assessments and scoring, provided lead poisoning prevention education, and demonstrated how to repair and clean household lead hazards. The program successfully lowered the blood lead levels (to <10 micrograms/dL) of children who had been missed by existing screening efforts. In addition, they reported unanticipated primary prevention benefits, including addressing other prevalent health problems like asthma, injuries, and violence for the broader community.⁸⁰

CHWs Are Critical to Eliminating Children's Health Inequities

CHWs have a promising track record of improving the health of children, particularly children of color or those with low family incomes. Among the most compelling benefits of deploying CHWs in under-resourced, marginalized communities where systematic and structural inequities fuel health disparities are that they:

- » Share lived experience with the communities they serve and ongoing trust relationships.
- » Are holistic and multi-faceted in the work they do.
- » Have a unique ability to serve as change agents in their communities.

This paper presents only some examples of the positive impact that CHWs can make in children's lives. Scaling models like those highlighted here could not only improve quality of care and outcomes for children in general, but also serve as an effective approach to addressing health disparities for children of color and underserved populations in more focused ways. As policymakers at the state and federal levels look for opportunities to transform health care delivery and promote equity, the effective, systematic use of CHWs can be a game changer, and should be integrated into system transformation efforts.

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For more information about achieving sustainable integration of CHWs into the health system, visit Families USA's **Community Health Workers Collaborative Resource Hub** at <http://www.familiesusa.org>.

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