# A Partnership to Reduce African American Infant Mortality in Genesee County, Michigan

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# **SYNOPSIS**

A partnership in Genesee County, Michigan, has been working to reduce African American infant mortality. A plan was developed utilizing "bench" science and community residents' "trench" knowledge. Its theoretical foundation is ecological, grounded in a philosophy of public health as social justice, and based on the understanding that cultural beliefs and practices can be both protective and harmful. Partners agree that no single intervention will eliminate racial disparities and that interventions must precede, include, and follow the period of pregnancy. Core themes for the work include: reducing racism, enhancing the medical care and social services systems, and fostering community mobilization. Strategies include community dialogue and raising awareness, education and training, outreach and advocacy, and mentoring and support. The evaluation has several components: scrutinizing the effect of partnership activities on direct measures of infant health; analyzing changes in knowledge, attitudes, behaviors and other mediating variables thought to influence maternal and infant health; and effecting changes in personal and organizational policy and practice.

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Health status and health outcomes differ by race in the United States,<sup>1</sup> as does access to health care<sup>2,3</sup> and the quality of care received.<sup>4</sup> Infant mortality rates, as one indicator of health status and outcome, are no exception. While infant mortality rates have declined over the past 20 years, disparity remains constant between the rates for black and white infants.<sup>5–7</sup> Multibranched strategies have been proposed by expert panels to reduce this disparity.<sup>8,9</sup> What can be done at the community level where real people experience these outcomes?

### ONE COMMUNITY'S APPROACH

Located in southeast Michigan, Genesee County is populated by approximately 436,000 residents, of whom 20% are African American, according to 2000 Census data. The city of Flint is in the geographic center of Genesee County, with approximately 125,000 people, more than half of whom are African American.

In the early 1990s, a small group of Genesee County residents, local public health department workers, and faculty from the University of Michigan's Ann Arbor and Flint campuses received a four-year W. K. Kellogg Foundation grant to explore the development of a collaborative partnership as a means to improve the public's health. When grant funding ended, the group maintained its cohesion without outside assistance for three years, using the time to further develop internal relationships and encourage members to promote the partnership's successes beyond Genesee County's borders.

Starting in 1998, the partnership began to benefit from the renewed interest of many public and nonprofit sources of funding, as collaborative approaches to improving the public's health became fashionable. The partnership was awarded a Prevention Research Center grant from the Centers for Disease Control and Prevention (CDC), based on a theme of improving the health of families and communities. When CDC announced competition for its Racial and Ethnic Approaches to Community Health (REACH) grants in 1999, the partnership submitted an application and proposed to focus on reducing racial disparity in infant mortality rates, building in part on earlier work of a community coalition, Programs to Reduce Infant Deaths Effectively (PRIDE). Members of PRIDE had demonstrated a long-term interest in reducing infant mortality. They were interested, too, in more fully engaging some of the challenges required to first understand and then change individual and organizational practice in the local perinatal system and within human service, legal, and education systems that share with the health care system the goal of enhancing the community's quality of life.

A REACH grant was awarded by CDC and supplemented by a grant from the Ruth Mott Foundation. In 2001, REACH activities were coordinated locally with those funded under a Healthy Start grant from the Health Resources and Services Administration (HRSA). Also in 2001, the partnership attracted the attention of the Lawton and Rhea Chiles Foundation's Friendly Access initiative. Although the partnership was unsuccessful in its bid for funds from the Chiles Foundation, members were eager to both benefit from the program's focus on improving perinatal services and contribute local expertise to other Chiles program participants. Funds were raised locally from General Motors, the United Auto Workers, the C.S. Mott Foundation, the Ruth Mott Foundation, Mott Childrens Health Center, the Community Foundation of Greater Flint, and the three hospital systems to support additional partnership activities in 2003.

Over time, some partnership members have changed and the partnership has expanded. The partnership struggles periodically through conflicts of personality, introduction of new members, and differences in philosophy and approach. Yet the partnership continues, recognizing that these challenges are part of the process of people working together and that the outcomes sought through the partnership are the overriding goal.

Much of the work in Genesee County to reduce infant mortality is grounded in "community-based public health."12,13 Among the tenets of this approach are that more than one person or organization is necessary to improve the public's health and that within our communities reside, at minimum, people with three different epistemological styles: those of academics, public health practitioners, and "grassroots folks." Each of these three styles has assumptions about ways of knowing, personal and institutional power, and its own salience and relevance to decision-making. The styles may offer different methodologies to improve health outcomes, and they may differ in prioritizing the most important criteria by which decisions should be made or "truth" known. Yet the resources of these three groups, when applied synergistically, can reduce disparity and improve health outcomes. Synergism requires people representing each of these styles to participate as equals as plans are made, programs and research are conducted and evaluated, and interpretations are formulated. Their participation as equal partners increases the likelihood that plans, activities, and results will be owned by all partners, adopted in practice, and just. Reform in the distribution of power and funding among groups is necessary, as is a greater appreciation for the length of time necessary to implement strategies that will result in lasting changes in knowledge, attitudes, beliefs, and practices. Time may need to be spent at the outset developing trust and sharing perspective among those who envision working as a team. Trust is preceded by consensus on purpose and shared experience gained over time in a space safe for frank, candid conversation and challenge to deeply held beliefs. The presence of personal relationships among at least several partners helps broker disagreement and broaden the original circle of partners to include new ones.

#### A FOCUS ON INFANT DEATH

Infant mortality was selected by the partnership as an area of focus for a number of reasons. Genesee County has among the highest infant mortality rates in Michigan.<sup>14</sup> Disparity between the infant mortality rates of the black and white populations in the county and in the city of Flint (Genesee County's largest city) rank among Michigan's highest. 15,16 Partners reasoned that the death of an infant is tragic and life-altering in itself but also signals the inadequacy of a community's commitment to its most vulnerable members. Infant death is readily measured and already measured annually. Improving poor outcomes for infants requires attention to the health and lifestyles of adults so changes in the decisions and practices of both individuals and organizations necessary to reduce infant death will mature into better practice and outcomes in other areas.

The perspectives of those working at the "bench" of science and of those living in the community "trench" were sought to inform the partnership's plan.

## Knowledge from the "bench"

According to the Michigan Department of Community Health, approximately 6,300 live births occur in Genesee County annually, and in 1997–2001, an average of 74.8 infants died annually. The county's fiveyear (1997–2001) average of 11.7 deaths per 1,000 live births was the highest among Michigan's most populous counties. In 1999–2001, Flint had the third highest rate (13.7 per 1,000 live births) among Michigan cities. The rate among African American infants in the county for the same three-year period was 21.7 per 1,000 live births, more than three times the white rate of 7.1 per 1,000, more than three times the statewide white rate of 6.0 per 1,000. In Infant mortality rates were 0.6 per 1,000 for the American Indian, Hispanic, Asian Indian, and Vietnamese populations

during the same three-year period (Unpublished data, Genesee County Health Department, 1990–2000), but there were fewer than six infant deaths in each of these groups, so a mortality rate is not reliable for each group. The African American infant mortality rate in Genesee County has been stagnant for a decade, with three-year averages of 20.9 per 1,000 live births for 1994–1996, 21.3 per 1,000 for 1995–1997, 22.7 per 1,000 for 1997–1999, and, as noted above, 21.7 per 1,000 for 1999–2001.<sup>14</sup>

The results of an early assessment targeted the partnership's work to areas where African American residents and African American infant deaths are concentrated. Figures 1 and 2 combine Genesee County data for 1998 through 2000 to illustrate infant mortality in urban, suburban, and rural ZIP Code areas of Genesee County. These graphic representations, when used in community meetings, generated a range of productive reactions that prose and data often did not: shock, awareness of disparities, a need to know "why," and recognition that someone in an official capacity finally "understood" the magnitude and scope of the problem.

Figure 1. Infant deaths in Genesee County, Michigan, not including cities of Flint and Burton, by ZIP Code and race/ethnicity, 1998–2000

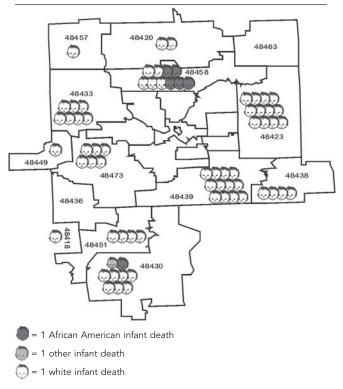


Figure 2. Infant deaths in cities of Flint and Burton, Michigan, by ZIP Code and race/ethnicity, 1998–2000

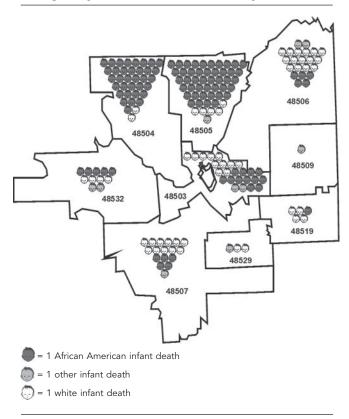


Figure 3 illustrates the cause of infant death as recorded by Genesee County medical examiners for 1998–2000. When a perinatal periods of risk (PPOR) assessment was performed for the 240 infants who died in Genesee County in 1998-2000, the most significant area of risk was found to be "Maternal Health/ Prematurity," which was associated with an infant mortality rate of 5.3 per 1,000 live births. Of the three other risk areas assessed in the PPOR review, "Infant Health" was associated with the second highest infant mortality rate (2.1 deaths per 1,000 live births), followed by "Maternal Care" (1.8 per 1,000) and "Newborn Care" (0.6 per 1,000) (Personal communication, Leslie Lathrop, Fetal Infant Mortality Review Coordinator, Genesee County Health Department, November 2002).

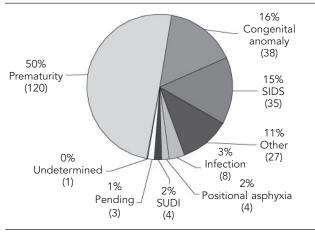
According to the Michigan Department of Community Health, the percent of Genesee County infants with low birthweight has remained fairly steady since 1990. The percent of preterm births and the number of live births to teen mothers have decreased. The percent of live births to mothers who had received "adequate" and "adequate plus" prenatal care increased

from 79.5% in 1990 to 85.5% in 1999. A preliminary analysis of infant death in 2000 reveals a higher percentage of low birthweight among African American infants (14.5%) than among white infants (6.9%). Among infants of normal birthweight, the neonatal infant mortality rate was 4.8 per 1,000 live births for African American infants and only 0.7 per 1,000 for white infants, while the postneonatal infant mortality rates were 6.2 per 1,000 for African American infants less than one year of age and 1.7 per 1,000 for white infants less than one year of age (Personal communication, Jianli Kan, MD, DrPH, Division of Family and Community Health, Michigan Department of Community Health, November 2001).

Infant mortality for both the non-Hispanic black and non-Hispanic white populations has declined continuously nationally since 1979<sup>7</sup> but remained level for African Americans in Genesee County during the 1990s. 18 From 1985 to 1996, the number of women in Genesee County entering care in the first trimester increased by 20% for white and African American women having singleton births, while late or no prenatal care dropped by 30% and low birthweight incidence remained relatively constant. 18 A higher percentage of Genesee County women enter prenatal care in the first trimester than is the case for women in the state of Michigan as a whole. 18

Lower birthweight is typically associated with higher infant mortality. Lifestyle decisions may contribute to lower birthweight, but the exact mechanisms are unknown. In the United States, neonatal intensive care and technological innovation account for much of the

Figure 3. Infant deaths in Genesee County, Michigan, 1998–2000, (N=240)



SUDI: sudden unexplained death of an infant

SIDS: sudden infant death syndrome

drop in infant mortality. Back-to-sleep campaigns and declining smoking prevalence have reduced post-neonatal deaths attributed to SIDS but these recommendations have been adopted less frequently in communities of color.<sup>19</sup> Human service interventions may influence lifestyle decisions and outcomes, especially for conditions such as diabetes and hypertension, but it is difficult to change deeply rooted behaviors during the short period of pregnancy alone. Despite varied interventions, disparity remains great and constant over time between infant mortality rates for African American and white infants in the U.S.

# Knowledge from the "trench"

Partners organized focus groups and less formal dialogue sessions to provide community residents with opportuntities to share their thoughts. These revealed that the term "African American" provided personal grounding for families whose history and genealogy have been destroyed by the slave trade. "Blackness" and the concept of race, generally, were seen as artificial constructs developed to denigrate a people. Community residents also pointed out that there is no prototypical African American. African Americans are as diverse as any other racial, ethnic, or cultural group. However, being an African American in American society is a fundamentally different experience from that of being white, and one must factor into any plan to reduce disparity the uniqueness of each experience and how it might influence the thought and actions of people of either group.

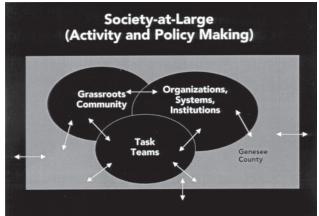
Local residents attributed infant mortality to the government, parents, the health care system and its practitioners, poverty, and lack of insurance (Isichei PAC. Focus group views: a report to the REACH team. Spring 2001). Government programs were thought to be poorly designed and underfunded. Police were viewed as not doing enough to reduce the supply of illegal drugs in the community and as unable to stem ubiquitous violence, which cheapens human life and makes an infant's life less important. Parents were viewed as immature and irresponsible about sex, prone to physical and emotional violence and stress, without knowledge of community resources or services, without awareness about environmental dangers from tobacco, chemicals, and drugs, without adequate parenting skills, and, in some cases, prejudiced against practitioners from another racial/ethnic group. Community members noted that responsibility for child care is often delegated to children who themselves are too young, grandparents who are "too old for it," or relatives without a good record of caring for babies. The health care system was seen as providing insufficient preventive care, as not welcoming to the poor, and as requiring long waits for service. Practitioners were seen as spending too little time with patients, speaking in an incomprehensible technical language and jargon, and failing to make necessary referrals. They were also perceived as discriminatory and racist with a sole interest in the unborn baby to the exclusion of the parents. Local residents also noted that near-poverty leaves little money for insurance and a healthy diet.

# CONCEPTUAL AND LOGIC MODELS FOR WORK IN GENESEE COUNTY

The current plan to reduce infant mortality in Genesee County is based on three themes: reducing racism on the part of health care workers, administrators of health care organizations, educators who train health care workers, and community members; retooling the perinatal care system; and fostering community mobilization. Each theme involves more specific strategies and activities to reduce African American infant death. Themes evolved over more than a year of discussion in several community groups. Slowly evolving has been specialization in the work of each partner organization within a broader shared work plan.

Figure 4 illustrates the plan's Ecological Model. Representatives of partner organizations, other grassroots community groups, and other local organizations interact with one another. Activities are designed to spread awareness and increase the frequency of better personal and professional practice and to influence policy making and resource allocation decisions in local organizations. Membership in all groups is "po-

Figure 4. Conceptual model for work in Genesee County Society-at-Large



rous," affording exchange across organizations, as illustrated by the dotted lines of the ovals. Genesee County and its residents live, work, and interact within a larger state and national society, as represented by the rectangle. Influence moves in both directions, as indicated by the arrows. Partners recommend each other to positions of influence in the larger society as a means to contribute to the work of other groups and learn from them.

Figure 5 illustrates the Logic Model that informs local work. Interventions change the vision, attitude, culture, and decision-making of individuals and organizations; within local education systems; within the public health, business, and medical care systems; and within families. These changes are expected to lead to reduced African American infant mortality and to reduced disparities in other measures of health status. Each of the plan's themes is explored further below.

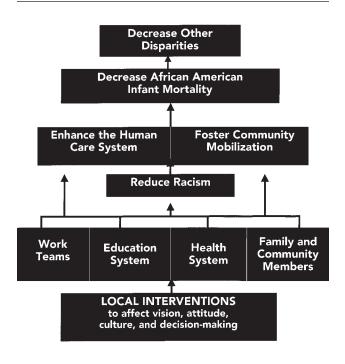
# **EXPLORING THE THEMES**

## **Racism**

Racism is alive in the United States. Each person, regardless of color, is shaped by racism.<sup>20</sup> Racism combines beliefs about physical appearance (color) with the power to enforce those beliefs through a system of legal, economic, political, psychological, and social controls that work to the detriment of people of color. These controls may be completely invisible to those "without" color yet ubiquitous to those "of" color. For example, a white person may describe an African American's negative experience in the health care system (or any other setting) as a coincidence or as an isolated incident. Yet, for a person of color, history and experience inform this experience through a different filter, one that remembers prejudice, overt racism, and hatred. Patients' perceptions and stereotypes influence their utilization of health care services as well as their willingness to comply with the advice they receive. Conscious and unconscious racial stereotypes held by providers and patients influence the care provided and received. Together, these patient and provider biases and stereotypes are a lethal mix. A recent Institute of Medicine report concludes that prejudice or biases, overt or otherwise, contribute to disparities in health care quality and service delivery.<sup>21</sup> According to the report, "healthcare providers' diagnostic and treatment decisions, as well as their feelings about patients, are influenced by patients' race or ethnicity."

Continuous and persistent personal, organizational, and community-wide efforts are necessary to undo racism and its effects on white people and people of color. Lifestyle and professional decisions are made with one

Figure 5. Logic model



eye focused on the past toward history, education, culture, and belief and another tracking the present for confirmation of sameness, indication of change, and general news about community life. Collective cultural memory of the past, derived from shared personal experience, influences how systems of care will be used and how they will operate in the present. The cultural legacy from the Tuskegee experiments has been explored elsewhere.<sup>22</sup> Duluth, Minnesota, offers another example of how events in the distant past are roots from which present day decision-making grows.<sup>23</sup> In 1920, the John Robinson Show Circus passed through the city as part of the celebration of the 50th anniversary of the city's founding. Three African American men, staff of the traveling show, were falsely accused of the rape of a white woman and jailed, based on the testimony of a local teenager. The next day, community residents stormed the jail, forcibly removed the accused, and lynched them from a nearby lamp post. There was only one funeral parlor in town that would prepare the bodies for burial. From that day to the present, African Americans in Duluth regularly use that funeral parlor. Much to its credit, the city of Duluth now supports efforts to "eradicate racial injustice to promote healing and reconciliation."24

# The perinatal system

In the automobile industry, retooling is the process by which manufacturers change hardware and software from year to year to produce new car models. The current perinatal system needs retooling to more effectively serve people of color. Unlike in the movie *Field of Dreams*, systems of care are built but people do not necessarily come. And if they do, they may not be served well or feel comfortable expressing their needs.

Great pride is taken in the perinatal systems in our communities nationwide. They have helped to reduce infant mortality. Yet they must change to become more successful. Within a perinatal system that values medicine so highly, the practice of medicine may be necessary but not sufficient and sometimes even irrelevant to the lives of patients. Participants in the clinical encounter may not understand one another. The jargon, demeanor, cadence, training, bias, and accents of colloquial, technical, and scientific language can be barriers to effective communication and care. Dialogue rather than lecture should become the accepted framework for clinical encounters. What occurs "on the average" in clinical encounters leaves too much room for variation. What would be acknowledged as best practice for each encounter should find its way into every patient's appointment every time. Systems for reimbursement of care will need to provide incentive for these changes.

Aspects of our present educational system for health care professionals need to change in order to produce practitioners whose counsel is more easily heard by, and relevant to, the lives of their patients. Systems of care should give greater emphasis and funding to outreach, advocacy, mentoring, and support for patients outside the office setting. Some of the people performing these tasks will have life experiences, personal styles, or backgrounds that make them more acceptable to patients than formally degreed professionals. These tasks can provide employment opportunities and are a means to introduce the worlds of community, practice, and academe to each other.

# Community mobilization

Fixing the world requires personal change among those who organize for change and among those with whom they interact so that each community resident, organizational staff person, and faculty member can share what is known and learned in the many settings in which each interacts. Ever-widening circles of more broadly informed people can, over time, change culture in ways that improve birth outcomes.

#### STEPS TOWARD IMPROVEMENT

Activities in Genesee County are designed to promote personal, professional, and organizational change. Dramatic short-term gains in infant mortality are not expected. Instead, new roots for long-term and sustainable effects are being set.

## Reducing racism

During 2001 and 2002, six Undoing Racism seminars have reached approximately 195 community residents, health professionals, educators, and students. The People's Institute for Survival and Beyond, the organization responsible for the development of the Undoing Racism seminars, designed the two-and-a-half-day training to "educate, challenge and empower people to 'undo' the racist structures that hinder effective social change." These seminars challenge white participants to view racism through the eyes of people of color and to explore how racism manifests itself in this country. They also challenge African American participants to move from isolation, reticence, complacency, and acceptance to more active engagement in efforts to reduce racism.

Among seminar participants, 38% described themselves as African American, 2% as Asian, 2% as Hispanic, and 58% as white; 2% did not identify their race/ethnicity. Participants were not assessed for their level of interaction with pregnant or postpartum women, but discussions during each of the seminars revealed that many participants worked directly with pregnant or postpartum women. While long-term follow-up of participants has not yet been completed, the evaluations conducted at the end of each seminar revealed immediate impact. Sixty-two percent of the respondents felt their attitudes about racism had been changed "significantly" or "a great deal." Sixty-nine percent admitted a "significant" or "great deal [of]" change in their knowledge about racism. Fifty-seven percent of the respondents expressed a belief that they would change the way they would act in the workplace.

Two Healing Racism workshops reached an additional 25 individuals. Healing Racism workshops use weekly meetings over a two-to-three-month period to move participants through an exploration of individual, institutional, and internalized racism. The curriculum is intended to educate, heal, and motivate individuals toward a journey of self-liberation and social action.

More workshops of each type are scheduled. One organization required all of its supervisors to participate. Other local organizations in the health care system have now begun to send administrative, credentialed, and support staff. Requests to attend have begun

to arrive from surrounding communities. Planning is underway with local continuing medical education entities to incorporate these topics into training programs.

Cultural Competence in Health Care, a new course taught for both undergraduate and graduate students at the University of Michigan–Flint, discusses the impact of race on the distribution, availability, accessibility, and acceptability of health care. This course was developed as part of the local work plan. Students are encouraged to examine their personal and professional lives for opportunities to apply what they have learned. The course has an immediate impact on the current medical care workforce since it enrolls many people who are seeking credentials for advancement in their present place of employment. The course also affects a new generation of health professionals whose knowledge about current and best practices is first formed at the university.

# Retooling the perinatal system

An assessment of the existing perinatal system of care in Genesee County revealed pride among those who work in it, commitment to better health, and commitment to the application of technological advancements. It also identified patient dissatisfaction, alienation, and isolation from the system of care.

One outcome of partnership activities is that the capacity of a local community- and faith-based organization has been expanded to employ a greater number of paraprofessionals whose purpose is to improve the interaction between high-risk pregnant women and infants and the system of care. State funding through Maternal Infant Health Advocacy Services (MIHAS) supported advocacy services provided to the general population until April 2003, when the governor and legislature eliminated funding as part of a state budget reduction strategy. Federal funds through both a HRSA Healthy Start grant and a CDC REACH grant support paraprofessional services focused in geographic areas experiencing the highest infant mortality rates. These paraprofessionals, known locally as Advocates, are women indigenous to the high-risk community, with life experience similar to those they work with. Advocates are trained to provide social support to pregnant and parenting women and to connect families with resources to address basic needs such as housing, food, and medical care.

Women who are eligible to receive support must be low-income and/or have experience with any of the following risks: single parenting, social isolation, teen parenting, history of abuse or neglect (either as victims or perpetrators), depression, low level of educa-

tion or intellectual functioning, or high risk of HIV/ AIDS. Seven Advocates, each with an average caseload of 25-30 clients, work with women throughout pregnancy and, in some cases, until the child reaches two years of age. Federal grant funding for the Advocates is intended for services to reduce African American infant deaths, and nearly all of the Advocates' clients are African American. Advocates work one-on-one with individuals and sponsor monthly support groups, a yearly picnic, and a yearly baby shower to encourage women to better control their own health. They provide information about infant health and mortality, diabetes, and smoking cessation. The organization that employs the Advocates has also developed a network of 25 faith-based groups that promote messages about preventive health and help women understand the range of community services that are available to them.

A formal arrangement has been created to coordinate services between Advocates and degreed health workers. This has integrated the work of the two groups through case conferencing, has produced joint use of identical intake, assessment, and case record forms, and has reduced the number of times clients are asked the same questions and identical responses are inscribed on different forms. Multidisciplinary teams of Advocates and degreed workers (nurses, social workers, and dieticians) use a home visitation model to reach families. The teams provide intense case management services to pregnant and parenting women. The combination of training—both academic and life experience—enhances opportunities for clients to identify with, hear, and trust the team and to have team members more attuned and sensitive to the context of their clients' lives. Advocates have participated in grand rounds and in aspects of residency training, thereby raising knowledge and awareness among hospital staff.

State and local funding supports a Fetal Infant Mortality Review (FIMR) Team, which brings together members of the community from diverse systems and backgrounds to review de-identified case records pertaining to infant deaths. This team identifies risk factors, determines which factors reflect systemic problems amenable to change, develops recommendations for change, and assists in the implementation of those recommendations.

Medical record abstractions conducted by the FIMR Team and a review by local health department staff of existing prenatal assessment tools from a representative sample of prenatal providers confirmed little consistency in practice. Few practitioners screened comprehensively for psychosocial factors that can be

predictive of poor outcomes. A work team consisting of representatives from each of three local hospital systems has developed a prenatal risk assessment tool based on American College of Obstetrics and Gynecology (ACOG) guidelines,26 which is now in a pilottest phase. The instrument assesses psychosocial factors, producing more consistent and accurate data than are currently collected. In addition to content reflecting ACOG guidelines, the tool includes questions pertaining to the father's involvement with care, other sources of support, stress, and domestic violence. It is hoped that questions such as "How will you get to your prenatal visits?" "Whom do you count on for support or help?" "Do you feel stressed?" "Are you afraid of your partner or any one else in your life?" "and "Where will your baby sleep?" will prompt discussion, increase medical providers' ability to identify earlier in pregnancy factors known to affect outcomes and to more consistently make referrals to ancillary services, and lead to better rapport between provider and patient. The tool and the method of data collection were reviewed and approved by the Institutional Review Board at a local medical center and were further reviewed by another medical center's Quality Council. Testing of the assessment tool at five pilot sites was begun in 2002. While informal feedback has been used to modify the tool, a formal survey of those who are testing the tool will be implemented in 2003. The tool is designed to be used in conjunction with The Family Pages, a guide published through a collaborative effort involving several local organizations including a local Rotary Club, a health center, and a local public health department. The guide provides families with information on supportive resources.

One of the local hospitals also developed and implemented a prenatal care utilization survey. The purpose of the survey was to learn more details about women's experience with prenatal care and perceived impediments to prenatal care. Results of the survey will be used to compare experiences among women receiving adequate, intermediate, and inadequate care, as defined by the Kotelchuck Index.<sup>27</sup> One hundred fifty women were interviewed in 2001-2002.

A perinatal data system is also under construction. Preliminary planning has explored linking of data from the prenatal risk assessment tool with hospital delivery records from the three hospital systems and with electronic birth certificates, neonatal intensive care unit records, and death certificates. The database will provide a mechanism for examining trends in birth outcomes in Genesee County, for reviewing patterns of practice and content of care, for providing institutions

with their respective outcome data (in aggregate form), and for more appropriately directing prevention efforts.

#### Fostering community mobilization

Five Community Dialogues have been held at which local residents, medical professionals, educators, clergy, and students gathered to engage in dialogue about the causes of, and potential solutions to, infant mortality. A consortium of consumers and health professionals has been established to develop mechanisms for educating one another about maternal and infant health and to examine strategies to improve components of the health care system. Two interventions among adolescents aim to reach young people during critical periods of maturation to hone life skills, increase their knowledge of their ethnic heritage and history, and improve self-image. With assistance from adult mentors, the adolescents have established a network for mutual support and mentoring.

Through the FIMR process, participants have developed recommendations to address specific shortcomings within the perinatal system. The same work group that developed the prenatal risk assessment tool receives the FIMR recommendations. Group members discuss the recommendations and advance relevant suggestions within their respective organizations. In addition to the Prenatal Risk Assessment Tool and the Family Pages, recommendations successfully advanced through work teams include Medical Examiner Directives and a "Face Up to Wake Up" safe sleep T-shirt campaign conducted in hospital nurseries.

A media campaign initiated in Fall 2001 was designed to produce a response from the community at large. Billboards were placed throughout neighborhoods with the highest African American infant mortality rates with the message "Black babies die three times more than other babies. They don't have to." Anecdotal feedback from the campaign reveals little awareness of disparities in infant mortality and of the high rate among African American infants.

A "One-Stop Shop" is co-located with a job development and training center and offers a supportive environment for counseling, WIC services, healthy food demonstrations, banking, and education on child safety and other health issues.

An African Culture, Education, and Development Center is now open, providing young people and adults with a place to learn about and reflect upon African American history, including the effects of slavery and the contributions of African Americans to American and world culture.

Work is also underway with public housing tenants

to expand their knowledge about nutrition and healthy eating using sponsored dinners, gardening projects, and food preparation demonstrations. One communitybased organization has received a grant for a fitness program to reduce overweight and obesity among African American women of childbearing age. Asset mapping by Advocates in targeted neighborhoods revealed that groceries stores were scarce in neighborhoods with high infant death rates. The few grocery stores that did exist provided limited and substandard produce and meat. It was not unusual for Advocates to notice spoiled or rotten items in the "fresh" food section of these stores. The inability of local residents to easily access fresh foods made it difficult for those with limited or no transportation to apply lessons learned in their nutrition classes. Twenty-four raised garden beds have been planted at the homes of 12 WIC program participants, affording them the opportunity to raise their own fresh fruits and vegetables and to showcase them at a community dinner attended by more than 200 community residents.

Additional interventions to mobilize African American community members include a "Middle Passage" experience and Black Unity Spiritual Togetherness (BUST) retreats, both intended to enhance pride and self-respect and expand awareness of African American history. The Middle Passage allows African Americans to experience a simulated version of the journey of Africans taken as slaves to America. BUST retreats challenge participants, where appropriate, to undo self-hatred and change negative behaviors that may be passed from generation to generation. Partner organizations operate numerous other programs to enhance the economic, health, and social well-being of area residents and are working increasingly to cross-refer to each other's programs.

# **EVALUATION**

Faculty and staff at the University of Michigan–Ann Arbor have adapted the national Pregnancy Risk Assessment and Monitoring System (PRAMS) into a Flint Healthy Infant Survey (FHIS). FHIS will provide baseline data about maternal behaviors, attitudes, beliefs, and circumstances before and during pregnancy and during the period immediately following pregnancy, among women in the targeted ZIP Code areas. FHIS has been piloted extensively, and a sample frame has now been developed. Two preliminary observations from the pilot testing illustrate the type of detail it is hoped full implementation will provide. Few respondents reported discussion of family planning dur-

ing prenatal visits. Poor adherence to recommendations to place infants on their backs to sleep was also noted, as was the infrequency with which health care practitioners discussed sleep position during prenatal visits. Evaluators and other partners are eager to field the FHIS to further examine infant health and safety practices in Genesee County.

A process evaluation is exploring group decision-making within the partnership. Twenty-five team members were interviewed by a doctoral student from the University of Michigan School of Public Health, and results from these interviews have been shared with team members. The interviewer sought information about meeting structure, perceived norms for decision-making, and perceptions about financial management of grant activities, power, cultural diversity, and professional roles. Preparations for a second round of interviews are underway, including design of a follow-up study instrument.

Evaluations of specific interventions are ongoing, as is training for community members to learn more about evaluation methodology. Under the auspices of the University of Michigan's Prevention Research Center, team members attended a series of evaluation workshops that provided technical assistance on the nature of, and requirements for, successful evaluation. These training sessions provided an opportunity for partners to develop measures for activities, outputs, and outcomes associated with their interventions.

Infant mortality is easily measured and often accepted as a fundamental indicator of a community's health. Racial disparity in infant mortality rates, and in other measures of community health status, are increasingly identified as a reflection of systemic failures. The challenge is to understand the factors responsible for these failures and to organize individual, programmatic, and governmental policy changes to produce improvement.

Many voices must be heard to better understand the reasons for disparities and to create access to, and trust and confidence in, the systems designed to promote and maintain health. In addition, the expectations for those involved in providing medical and social services must be retooled to include a reduction in disparities as an explicit outcome of their work.

In Genesee County, Michigan, and in other parts of the United States, African American babies are at a greater risk of dying than babies of other races. They don't have to be. The work described in this article is one community's attempt to begin conversation about difficult and controversial topics, to change the content of academic training, to reorient the daily practice and decision-making of both community members and the professionals who serve them, and to make creative and coordinated use of the range of financial resources and opportunities that can support this work. Local team members believe that individual lifestyle changes and changes in professional and organizational practice have the potential to "infect" other personal and professional lifestyle decisions and thereby improve practice and reduce other health disparities.

This article describes the work of the following organizations and individuals to reduce African American infant mortality in Genesee County: FACED (Yvonne Lewis), Flint Family Road (Helen Williams), Flint Neighborhood Roundtable (Lee Bell), Flint Odyssey House-Health Awareness Center (E. Hill Deloney, Ella Greene-Moten), Genesee County Community Action Resource Center (Charlene Acker), Genesee County Health Department (Robert Pestronk, Marcia Franks, John McKellar, Tonya Turner, Joey Conley, Roberta Campbell, Leslie Lathrop, Dawn Scharer, Wendy Courser, Terrel Besser, Priya Nair, Lillian Wyatt, Gary Johnson, Carolyn Ratza), Genesys Regional Medical Center (Joanne Herman, Sheila Hopson, Andrew Kruse), Greater Flint Health Coalition (Stephen Skorcz, Cameron Shultz), Hurley Medical Center (Victoria McKinney, Abdelaziz Saleh, Brenda Knaack, Kimberly Van Slyke, John Hebert), McLaren Regional Medical Center (Susan Schneberger, Kathy Reynolds), Mott Childrens Health Center (Carol Burton, Sue Marr, Libby Richards, Larry Reynolds, Norman Carter), PRIDE Coalition (Michael Giacalone, Jr.), Priority Children (Jerry Johnson), University of Michigan-Flint (Suzanne Selig, Elizabeth Tropiano, Mary Periard), University of Michigan School of Public Health (Toby Citrin, Harold Pollack, Mark Zimmerman, Susan Morrell-Samuels), Program Designers, Process, Outcome Evaluators, Inc. (Barbara J. Guthrie, Maureen Kirkwood). Lillian Wyatt, Tonya Turner, and Jessica Pestronk provided helpful editorial suggestions.

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