



Improving Maternal And Infant Outcomes

Listening, Responding and Healing Social Systems

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Maternal and infant health outcomes are at a crisis level in the United States. Despite advances in medicine and the presence of vast health care resources, women in the U.S. are more likely to die from complications from pregnancy or childbirth than women in similarly developed nations.¹

Maternal and infant mortality rates reflect many societal factors that highlight health disparities. The factors that drive these disparities are complex and may lead to, or even cause, poverty. Barriers to health and health care include access to food, housing and education; mental health issues; transportation; and access to culturally relevant health services.

Wide racial and ethnic disparities in maternal mortality rates have been reported for decades. While data reporting methods have varied, the results consistently reveal that maternal mortality rates for Black, non-Hispanic women are three to four times greater than for white women in the U.S.² In addition, the Maternal Health Task Force at the Harvard T.H. Chan School of Public Health further reports that while women of color have poorer access to high quality reproductive health services than women who are white, they are also discriminated against in the health care system and experience higher rates of disrespect and abuse. There is evidence that the stress associated with these experiences of racial discrimination can increase the risk of negative perinatal outcomes for Black women. These socioeconomic and racial disparities can lead to a general cycle of poverty, which leads to higher maternal mortality rates.³

Persistent inequities and disparities in maternal and infant health raise important questions about how society and its systems shape the destiny of persons in poverty by shaping, in part, their personal identity. What becomes real to a person is complex and is often partly defined by what we think others think of us. In other words, are broken social systems contributing to how some women in poverty might subconsciously fulfill an expectation of society that they will fail in their responsibilities? Is it possible to improve maternal and infant health by enabling a positive personal identity through a better response to the social needs related to the perinatal experience?

GETTING STARTED: MATERNAL HEALTH SOCIAL SYSTEMS INITIATIVE

In 2019, Ascension responded to this opportunity to identify broken social systems and developed solutions as a pathway to improved maternal health outcomes by launching the Maternal Health Social Systems Initiative. Early and adequate prenatal care promotes healthy pregnancies through screening and management of a woman's risk factors and health conditions while encouraging healthy behaviors during pregnancy. A number of studies have demonstrated an association between fewer prenatal visits and poorer





pregnancy outcomes, such as low birth weight, preterm birth and infant mortality.⁴ By reviewing data on prenatal appointment attendance, Ascension identified ministry markets within our larger health system where this initiative would have the greatest impact. For years leading up to 2019, the no-show rate for prenatal appointments in Milwaukee, Wisconsin, was more than 20%. Using that data, we approached the social barriers to good perinatal care by utilizing the newly developed Ascension Social Response Framework, a simple, unconventional care model that prioritizes listening to and organizing learnings from individuals in the communities we serve. By doing so, we have developed data-driven solutions that address systemic social barriers. While the solutions are specific to the maternal population, the framework applies to any problem that requires deeper understanding.

LISTENING AND ENGAGEMENT: BUILDING TRUSTING RELATIONSHIPS

Deep listening reveals complex underlying issues of not only vulnerable persons, but also the complexity of accessing existing solutions. To assist women through this complex arena, maternal health navigation was identified as an essential element that links the woman, her community and the clinical setting. The role of the maternal health navigator is critical in identifying and connecting patients to existing Ascension and community-based resources. Walking alongside the woman, guiding and assisting her through barriers to prenatal care, allows for a “warm handoff” to clinical services, while building trusting relationships with our patients, community and clinical providers.

Early on, it became evident that communication was a leading barrier to prenatal care. Phone numbers and addresses were not always current, voicemail boxes were often full and many cell phones were out of service. The addition of a community health worker allowed the maternal health team to find ways to communicate with patients outside of the traditional methods. This one-on-one engagement with women became the foundation for building a trusting relationship, but the success lies in the selection of the right maternal health navigator and community health worker. Society’s prejudices are often lev-

eled against this very vulnerable population. The health care workers must be able to recognize a patient’s struggles and vulnerability, and then respond without judgment. Further, the relationship must promote free agency and decision-making, rather than create new dependencies.

Lastly, the maternal health navigator and community health worker must have a working knowledge of the community and its resources, in addition to the ability to navigate the health care systems and providers. These capabilities and attitudes allow for a trust-building relationship that is centered in mutual respect. Once this relationship is formed, appointment attendance and engagement in the care process improve.

Within the first six months of the Ascension initiative, there were early signs of progress and a steady decline in the number of missed appointments in Wisconsin, which continues to be sustained at an all-time low. Additionally, there is a continued increase in infants born full term (3.9%) and at a healthy birth weight (3.1%) among the women served compared with those without the social support of the initiative during the same time frame. The team also has responded to the needs of more than 700 women referred from

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multiple sources including OB and primary care clinics, the emergency department or community partners. It is well known that responding to these variables contributes to the long-term health of the mother, child and community. These results led to the expansion of the initiative across several ministry markets, including Florida and Michigan, with a goal to reach all markets within the next 12 months.

THE IMPACT OF COVID-19

Maternal health has been in crisis since long before the pandemic. The social systems that women and families routinely access and rely on are increasingly scarce or are unable to meet the high community demand exacerbated by COVID-

19. Rideshare and public transportation services are being reduced and even eliminated, access to nutritional support has decreased, childcare centers have closed, and policies limit who may accompany patients to their visits. The unintended consequences of these changes can leave pregnant women even further separated from the prenatal care they need. Ascension has implemented the following solutions to respond to identified barriers heightened by the pandemic.

FOOD ACCESS: BRIDGING THE GAP

Optimal maternal and fetal outcomes are dependent upon the intake of sufficient nutrients to meet maternal and fetal requirements.⁵ Reducing household food insecurity is an intervention that can contribute directly to improved maternal nutritional status, thus improving these outcomes. High community demand during the pandemic has led to an increase in food insecurity among pregnant and postpartum patient populations. The maternal population is not only at increased risk for complications due to nutritional deficiencies, but many of these women also are vulnerable when it comes to food resources in general, compounding vulnerability with nutritional deficiencies.

To address this problem, we developed a systematic and scalable food access program to bridge the timing gap between when the need is identified and when the woman is able to access community-based food programs. At the time of service, women and families in need may receive a bag of nutritionally sound food items along with assistance in accessing appropriate and available community resources to continue that support.

FOOD ACCESS: NUTRITIONAL EDUCATION AND SUPPORT

Pregnant women are at increased risk for iron deficiency anemia, gestational diabetes and hypertensive disorders. When these conditions are poorly managed, there is an increased risk to maternal health and pregnancy outcomes. Conversely, evidence suggests that nutrition education and counseling may support optimal gestational weight gain, reduce the risk of anemia in late pregnancy, increase birth weight and lower the risk of preterm delivery. Dietary counseling and education

may be more beneficial when women also are provided with nutritional support.

That pairing of nutritional support and education led Ascension to develop diagnosis-specific food boxes that are initiated by prescription and then dispensed through the pharmacy. The boxes

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contain not only the food items, but also recipes and educational materials. The food boxes provide concrete examples of good nutritional choices for patients who can then make better purchasing decisions at grocery stores. The boxes may also allow patients to try unfamiliar foods that they might have been hesitant to try due to limited finances. Patients may discover that they and their families like these choices and choose them again — resulting in healthier patterns of nutrition.

CHILDREN'S WAITING AREA

In March of 2020, efforts to control the spread of COVID-19 were being implemented across the United States. New processes, including calling ahead to screen mothers for symptoms, encouraging them to attend appointments alone, and providing a telehealth option, were implemented but have proven to be insufficient. The continuation of virtual learning for the majority of school systems and subsequent lack of childcare options within communities made attending appointments even more difficult for pregnant women. While these efforts to control the spread of COVID-19 are important, health care practitioners were often unaware of the impact of certain policy changes on access to health services, including routine prenatal care.

Keeping in mind the importance of offering solutions that are easily accessible to the patients, Ascension created a children's waiting room to



promote access for patients seeking essential prenatal care. In partnership with nursing programs, an area adjacent to the clinical setting was designated where nursing students could supervise children while their mother attends her appointment, which may include ultrasound, iron infusions or routine prenatal visits.

MOBILE COMMUNITY OUTREACH

Appointment attendance for socially and medically high-risk pregnant women is essential. It is also critical that we continue to manage prenatal needs while using proper infection control precautions. New infection control processes have been implemented to protect providers, patients and the public. While these new processes are important, they can increase patient fear and concern that the hospital and clinic environments are unsafe. Additionally, the availability of proper personal protective equipment is often limited, which can leave the patient and family members feeling more vulnerable. These added stressors to women who are already at-risk may contribute to poor health outcomes.

As an alternative to attending visits in the clinic or hospital setting where patients may be fearful of exposure to COVID-19, Ascension created a prenatal outreach program. A care team, including a certified nurse midwife, is readily available to be deployed to support the community health worker along with all the supplies needed to ensure the safety of all involved. Patients are given thermometers and masks and educated on personal safety as well as the importance of routine prenatal care. Prior to the home visit, the community health worker also calls to assess the need for supplies such as diapers, wipes, food and bottled water, which can be provided at the visit. After visiting the patients in the community, they are more inclined and better equipped to attend their visits in the clinic setting.

COMMUNITY OUTREACH: A SURVIVOR'S STORY

In 2015, Wisconsin reported its highest Infant Mortality Rate disparity between Black (14.5) and white (4.7) infants, with Black infants three times more likely than white infants to die before their first birthday.⁶ The majority of Wisconsin infant deaths occur in the Milwaukee central city and

can be attributed to complications related to prematurity (delivery before 37 weeks of pregnancy). The City of Milwaukee has a premature birth rate of 12.9%, well above that for the county (12.0%) and the state (9.9%).⁷ Milwaukee is also one of the most segregated cities in the U.S., with some of the greatest disparities for health and social outcomes, which contribute to the daily stressors experienced by pregnant African American women.⁸ Jequeta Hamm, a lifelong resident of Milwaukee, knows very well the everyday stressors and barriers expecting mothers face. In 2010, Hamm gave birth to a healthy baby girl; however, despite her persistent complaints of feeling unwell and pleading with providers to assess her condition prior to discharge, she was sent home. Three days after discharge, she awoke, gasping for air, unable to breathe. Hamm found her discharge instructions and called the clinic for advice. She was instructed to go to the emergency department and was admitted to the hospital with high blood pressure, pulmonary edema and congestive heart failure. "I feared for my life. Here I am in the hospital, away from my new baby, not knowing if I was going to live," she said. After almost a month-

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long hospitalization and cardiac rehabilitation, Hamm was sent home and told by her provider "you probably shouldn't have any more babies and you need to live a stress-free life."

At that time, Hamm knew she wanted to have more children but was very afraid of the health consequences. In 2018, she decided to undergo an extensive cardiac work-up to see if pregnancy would be safe. The examination revealed it could be safe, but she would have to be closely monitored. On April 27, 2020, Hamm gave birth to Rayasia Cousins, who was born healthy and without complication. Unfortunately, this was during the peak of the COVID-19 surge in her community. Within 36 hours of delivery, Hamm and Rayasia

were discharged, where they could recover in the safety of their own home. Several days later, Hamm began to develop headaches and called her provider for advice. She returned to the clinic, was told everything was OK and went home. Things were not OK, and the next day symptoms worsened. Due to a lack of transportation and child-care, she was not able to go to the hospital for evaluation. Fortunately, the Ascension Wisconsin maternal health team had just launched the mobile outreach program. The community health worker contacted Hamm, went to her home with a certified nurse midwife and performed an evaluation. Her blood pressure was extremely high, and she was admitted directly to the hospital where she spent four additional days for treatment.

“I feel more hospitals should have programs like this. They went above and beyond to take care of me. Where were y’all when I had my last baby? I feel like they sent me home to die. I kept telling them something was wrong with me, but they didn’t listen,” said Hamm. She states the key to the program is the relationship she has created with the community health worker. Instead of waiting 2 to 3 hours for a nurse to call back from the doctor’s office, she can quickly text or call the community health worker with questions or concerns, always knows who she is going to talk to, and trusts the information and advice she is given.

CONCLUSION

These learnings and experiences are examples of the socioeconomic conditions and racial biases that contribute to a general cycle of poverty which leads to higher maternal mortality rates. As the work continues to grow in ministry markets across Ascension, patterns are beginning to emerge that allow us to identify focused opportunities to bring a system-wide approach to advancing health equity. The application of the Social Response Framework continues to illuminate opportunities for growth and support of our most vulnerable populations.

We are called to respond to the needs of all, but those with the greatest needs require the greatest response. We strengthen the whole of the community by responding to the needs of people who are most vulnerable.⁹ The time is now to respond to the maternal health crisis in a way that reflects our deep listening and love for all.

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NOTES

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