



IMPROVING MATERNAL
HEALTH IN HARRIS COUNTY

A Community Plan

A Project of Houston Endowment

APRIL 2018

As members of the Steering Committee for the Reducing Maternal Mortality planning effort, we support the findings and recommendations described in this document. We are committed to engage in the work, collaboration and advocacy required to achieve the goal of significantly improving maternal health in Harris County.

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More than 150 experts and community leaders in Harris County generously shared their time, knowledge, expertise and experience through interviews, focus groups, meetings, workshops and other efforts to develop this community plan. We are grateful for their contributions and commitment to ensuring that Harris County is a place where every woman's pregnancy, delivery and postpartum experience is successful and safe.

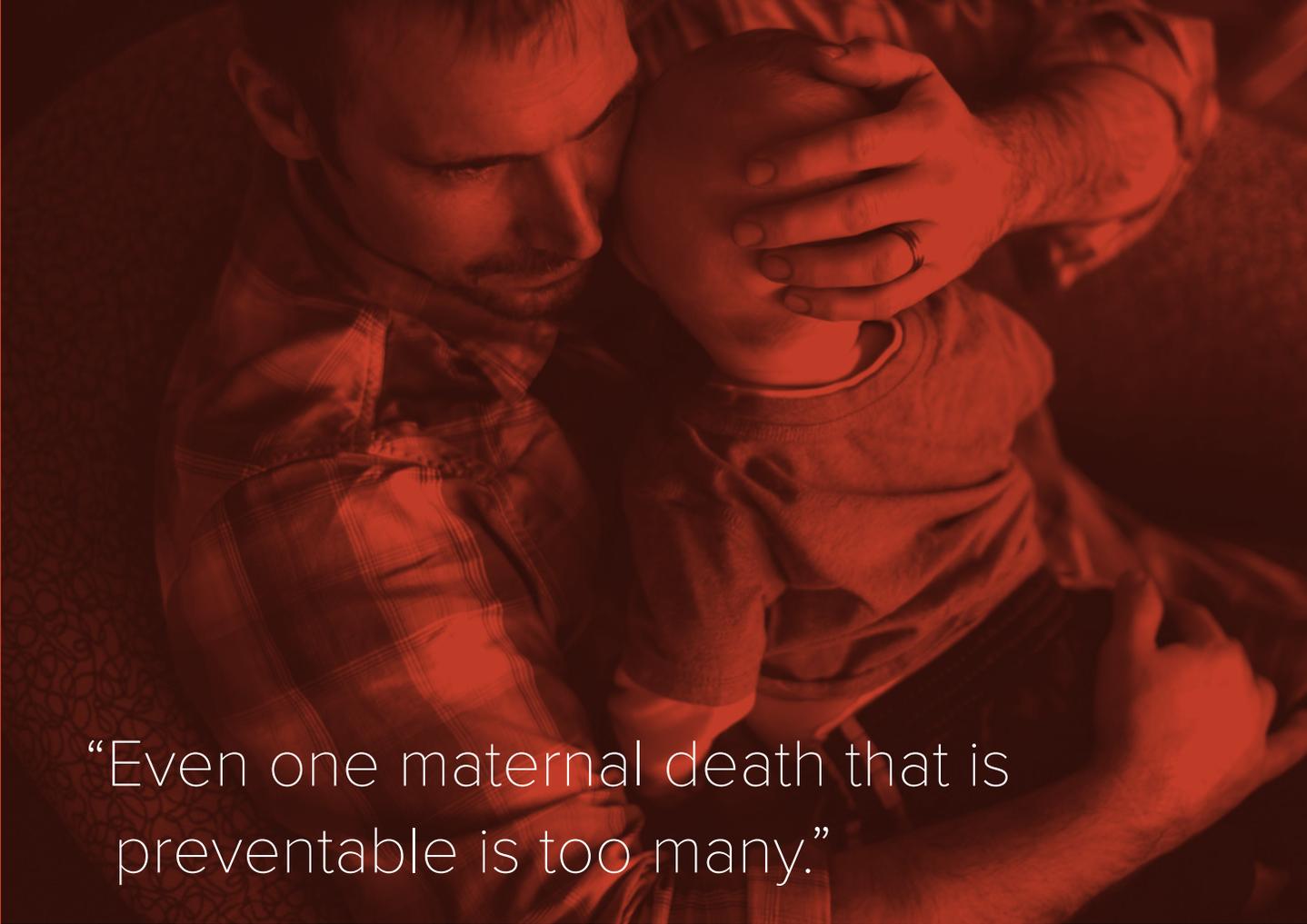
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“Even one maternal death that is preventable is too many.”

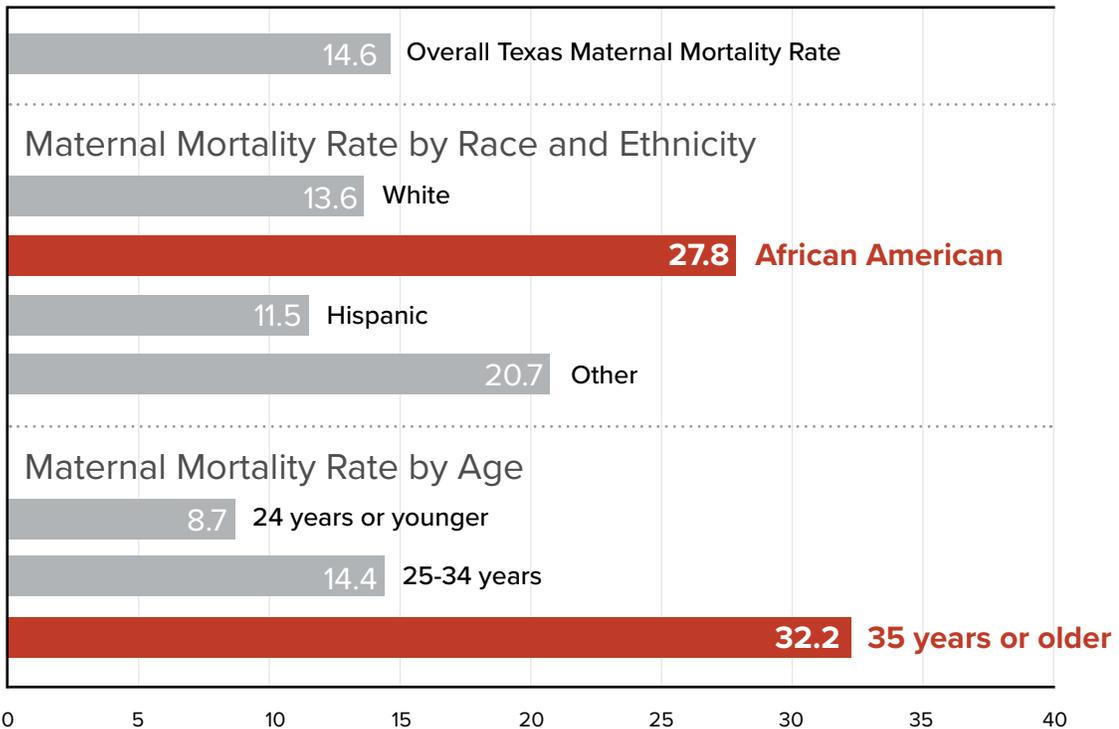
» Lisa Hollier, MD, Chair of the Texas Maternal Mortality and Morbidity Task Force and 2018-2019 President of the American College of Obstetricians and Gynecologists

Introduction

There is broad agreement among stakeholders that the incidence of maternal mortality and morbidity in Texas is unacceptably high, given that these conditions are largely preventable. There is also agreement regarding the need for improved data quality and methods for verifying maternal deaths and complications. The best data on the rate of maternal mortality in Texas comes from a study published in 2018 in the *Journal of Obstetrics & Gynecology*, which estimates the state's rate between 14.6–18.6 deaths per 100,000 live births. This puts Texas' rate in the middle of state rankings; it is noteworthy that the U.S. has the highest rate of maternal mortality among developed nations.

The 2018 study also found that while every woman, regardless of her background, is at risk for life-threatening complications from pregnancy, African American women and women over age 35 bear the greatest risk for maternal death.

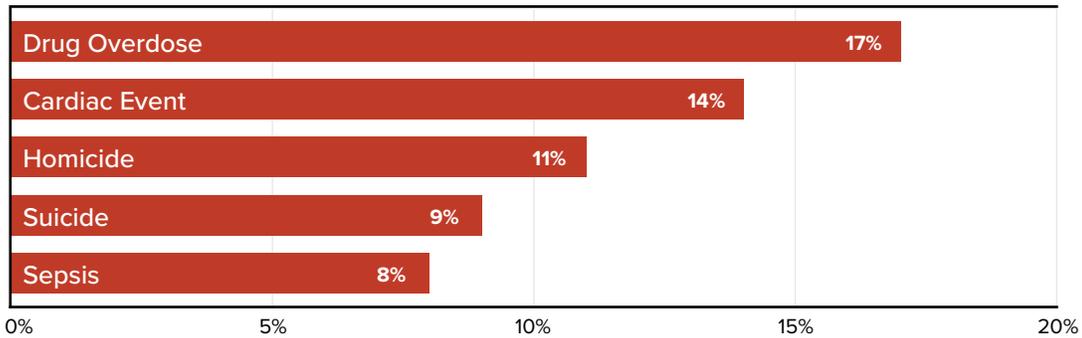
Texas Maternal Mortality Rates 2012, Deaths per 100,000 Live Births



Source: *Journal of Obstetrics & Gynecology* 2018; 0:1-8

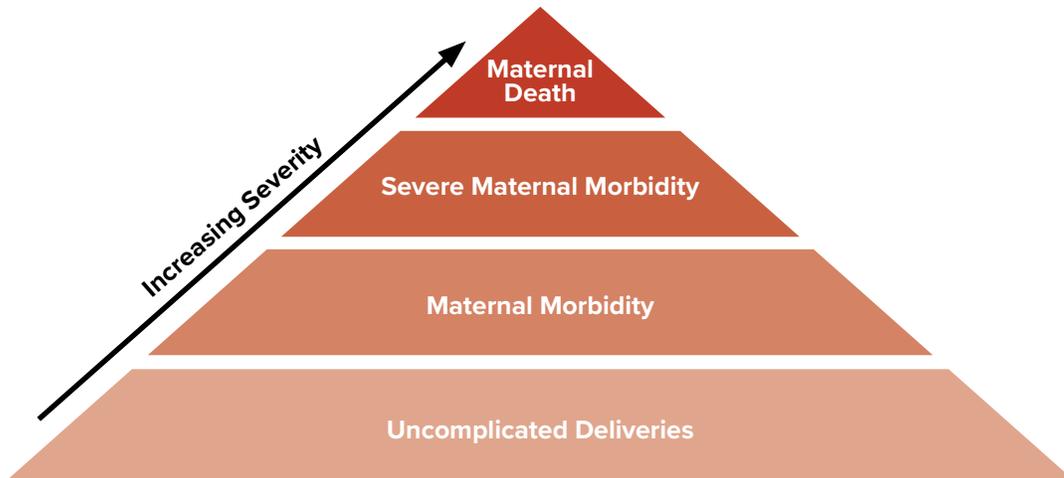
Additionally, a review of statewide maternal health issues conducted by the Texas Health and Human Services Commission in 2018 was able to identify the most common causes of maternal-related deaths in Texas. Between 2012 and 2015, the top causes of maternal deaths included: drug overdose, with the majority being due to overdose of illicit or licit prescription drugs; cardiac events, including heart attacks and heart failure after delivery; homicide; suicide; and infection/sepsis.

Top Causes of Maternal Death in Texas, 2012-2015 Percent of Total Maternal Deaths



“Overview of Maternal Health Issues”, March 2018, DSHS Presentation

Maternal mortality rates are only part of the story; that is, maternal deaths are a tragic outcome related to a much bigger problem. Every maternal death started as a complication, and life-threatening complications are as much as 50 times more common than maternal death.



Unexpected complications of pregnancy or labor and delivery that result in significant, negative short- or long-term consequences to a woman’s health are termed Severe Maternal Morbidity.

Maternal mortality and severe maternal morbidity can be prevented. The state Task Force as well as many other communities across the U.S. that are working to reduce the incidence of pregnancy-related deaths found that prenatal care and safety procedures at delivery can make a critical difference in women’s health outcomes. Further, addressing social and economic factors – through increasing access to health insurance, contraception, mental healthcare, substance abuse treatment and other community supports – can make positive improvements to women’s health.

Concerned by these trends, Houston Endowment convened a Steering Committee of leaders from a wide range of backgrounds – including healthcare, behavioral health, social services, research, business, government and philanthropy – to learn more about maternal health in Harris County and to develop a community-wide effort to reduce the rate of maternal mortality. The goal of the planning process was to develop a comprehensive, long-term strategy that incorporates clinical, community-based and systems-change strategies; capitalizes on existing initiatives and funding streams; tests innovative methodologies; and embraces advocacy when necessary.

Houston Endowment engaged an expert team led by Working Partner, LLC, to facilitate this one-year planning effort. Together, the six-member team contributed expertise in women’s health, maternal health, policy and advocacy, strategic planning, evaluation and community-based research, as well as deep, local knowledge of Harris County and its resources and challenges. The team compiled data to inform the development of the recommendations through multiple approaches:

- Research on rates of severe maternal morbidity in Harris County and Texas;
- Research on effective practices being implemented by providers and managed care organizations in Harris County;
- Analysis of innovative evidence-based approaches used in other communities, states and countries;
- One-on-one interviews with healthcare and social service providers (including individual private providers, community health clinics and large hospital systems), payers and community advocates;
- A survey and focus groups with women; and
- Meetings with the Steering Committee for guidance on information gathering and collaboratively assessing findings from the research.

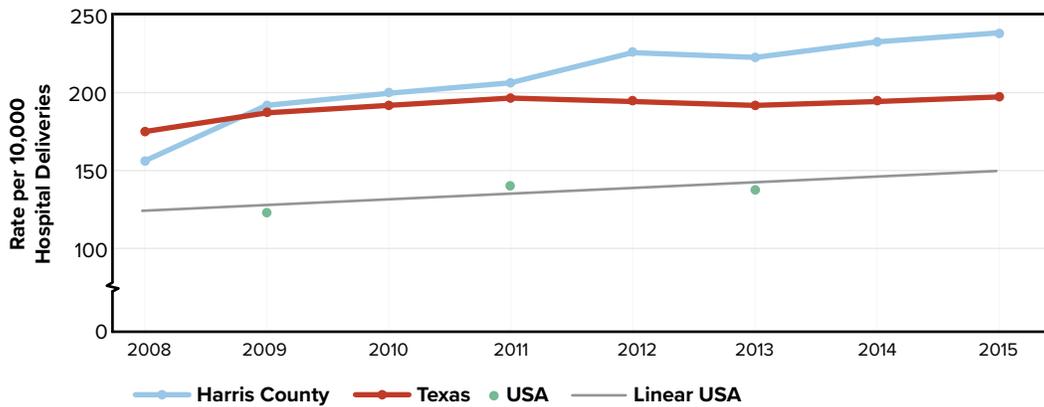
Throughout, the research process was guided by two Working Groups – one focused largely on the healthcare system and the other focused on women’s experiences. Together, these groups were made up of more than 80 local healthcare and social service experts and community leaders who advised on the process, added context and local knowledge and provided feedback on research findings. The Working Groups reviewed and assessed every best practice and recommendation that had been identified through the research process. The recommendations that follow represent a consensus of what Working Group and Steering Committee members want to achieve to improve maternal health in Harris County.

Recognizing that the causes of maternal morbidity and mortality are multi-faceted and complex – crossing clinical, community, cultural, socioeconomic and behavioral lines – the research process was intentionally comprehensive. With the guidance of Steering Committee Co-Chair Dr. Lisa Hollier, Medical Director of Obstetrics and Gynecology at Texas Children’s Health Plan and 2018-2019 President of the American College of Obstetricians and Gynecologists, the Steering Committee identified a cycle of women’s health to frame research and planning efforts.

Led by the research team, and in partnership with Dr. Cecilia Cazaban, MD, DrPH, Co-Director of the Center for Healthcare Data at the University of Texas School of Public Health, the Steering Committee first examined the general health – physical and mental – of all women of child-bearing age in Harris County. This information informed the scale of risk for maternal mortality and severe maternal morbidity among all Harris County women who might become pregnant.

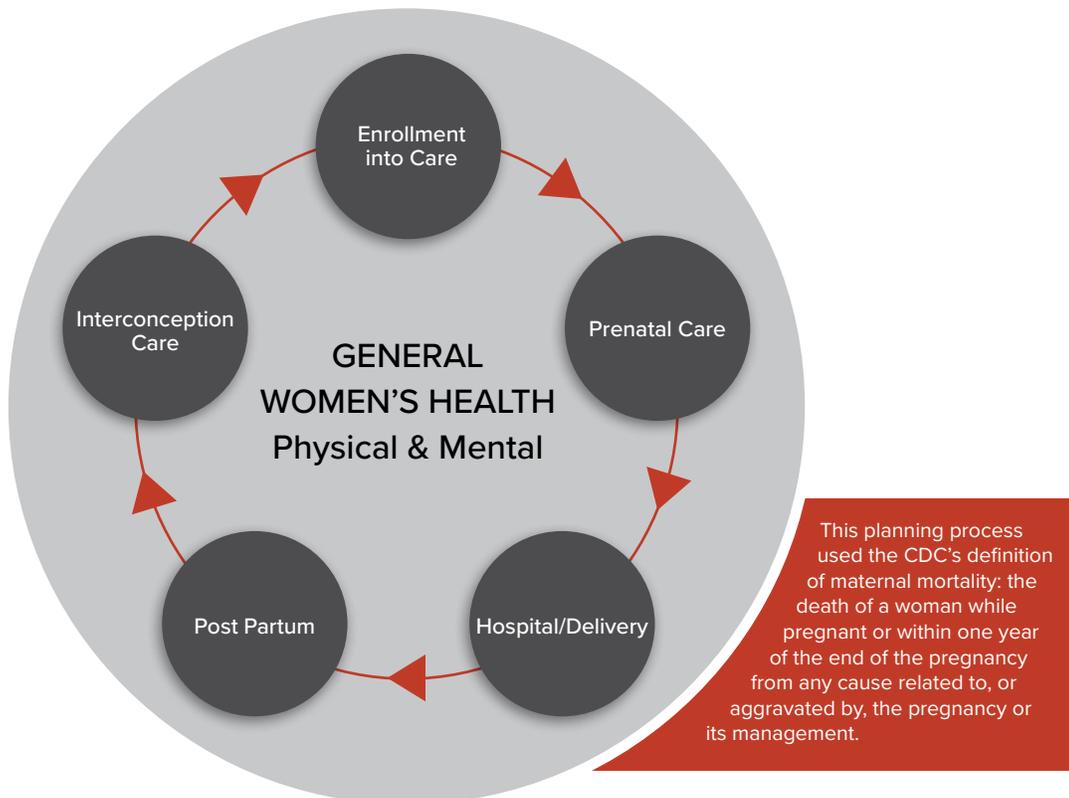
Dr. Cazaban and her team then examined hospital discharge data from 2008-2015 to determine trends in severe maternal morbidity (SMM) across Texas and Harris County. This research proved particularly informative, as it revealed that the rate of severe maternal morbidity in Harris County is not only higher than the Texas and U.S. rate; it is increasing. Between 2008 and 2015, the rate of severe maternal morbidity in Harris County increased by 53 percent, greater than the overall increase across Texas of 15 percent.

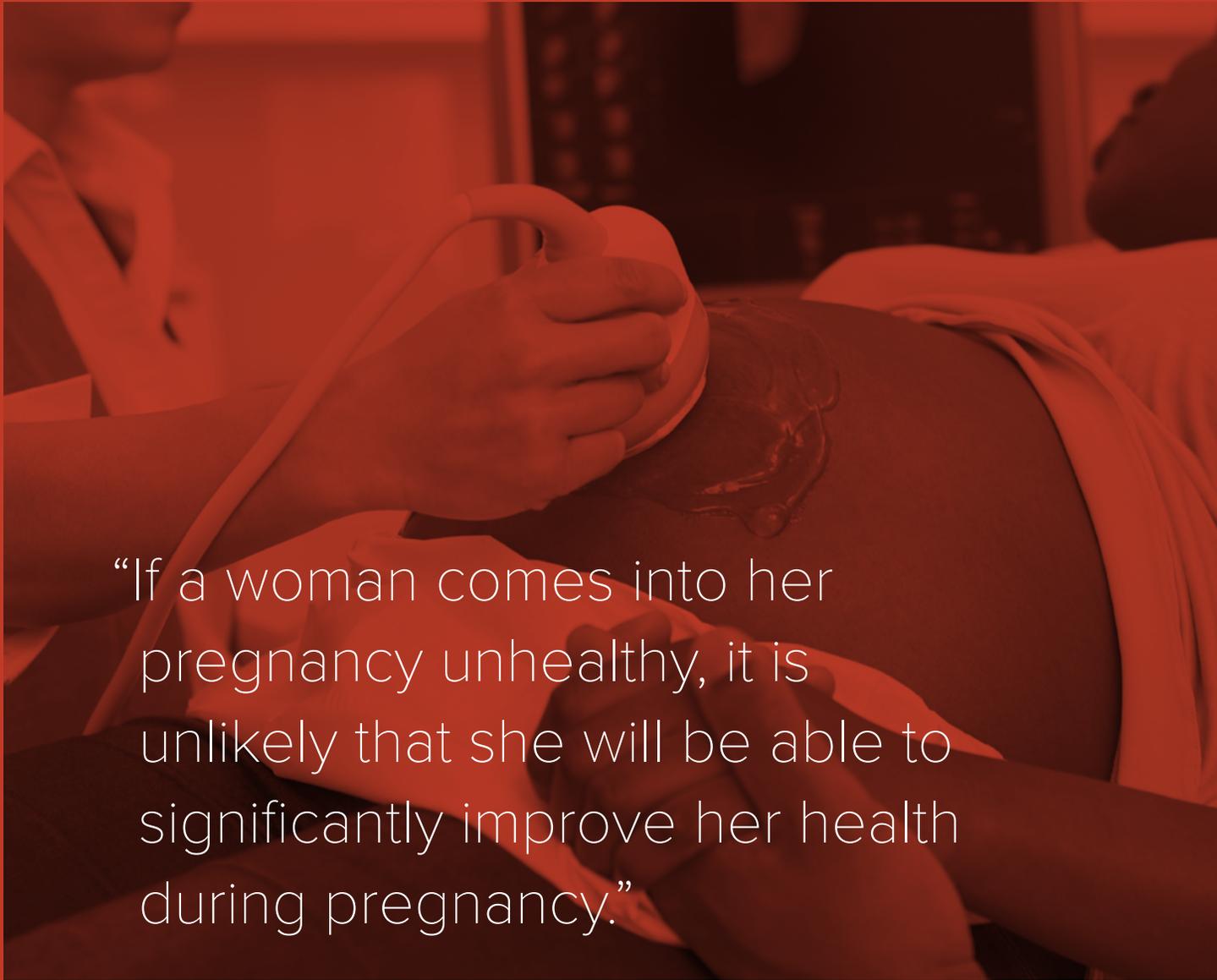
Trend of SMM in Harris County and Texas vs. USA (2008-2015)



Dr. Cecilia Cazaban, presentation to Houston Endowment Steering Committee on Reducing Maternal Mortality in Harris County, September 28, 2017

In addition, the Steering Committee examined the barriers to receiving prenatal and postpartum care in Harris County, including the policies and practices of public and private health insurance, because research shows that ability to pay is a major barrier to women receiving needed care. Concurrently, the research team interviewed dozens of healthcare and social service providers across the spectrum of women's health to learn about the practices already being implemented to address maternal mortality and morbidity. The team then cross-referenced these local innovations with current national and international evidence-based best practices.





“If a woman comes into her pregnancy unhealthy, it is unlikely that she will be able to significantly improve her health during pregnancy.”

» Sean Blackwell, MD, McGovern Medical School at UTHealth, Houston

Key Findings

The purpose of the research process was to identify systematically the forces that account for maternal morbidity and mortality in the Houston region, in order to help drive strategic recommendations for the Community Plan to improve maternal health in Harris County. The following are what the planning effort identified as the most important forces behind Harris County's high rate of maternal morbidity and mortality, as well as the disparities in how women experience healthcare, pregnancy and birth in Harris County.

I. In Harris County, the health of women before pregnancy is compromised by multiple unmanaged and/or untreated health problems. Left untreated, these conditions can be the source of severe complications at childbirth or after delivery, threatening the lives of women.

Clear and accurate data about the health of women is lacking in Harris County, and indeed, across the United States. While experts agree that the rate of maternal mortality is high and must be addressed, researchers are unclear about the actual rate of maternal mortality due to the poor quality of data used to assess the rate. Indeed, throughout the research process the planning team spoke with many healthcare providers and researchers who noted that data and research on maternal health issues are not only lacking, but are decades behind the level of research being applied to other health issues. As a result, the current research effort is based on the best information available.

Understanding these data constraints, two sources revealed an estimate of the general health of women of childbearing age in Harris County and of how many women are at risk for maternal mortality or severe maternal morbidity:

- The Behavioral Risk Factor Surveillance System (BRFSS) survey results for Harris County. The BRFSS survey collects data about Texas residents regarding their health-related risk behaviors, chronic health conditions and use of preventive services. The survey relies on self-reported data, but is generally accepted as representative of general health conditions and useful for identifying public health problems and developing interventions to address critical health issues.
- Hospital discharge data on women who delivered a baby in Harris County (years 2008-2015) and had one or more diagnoses or procedures identified by the Centers for Disease Control as indicators of severe maternal morbidity.

Based on BRFSS data for the years 2011-2015 among women aged 18-44, the health of women in Harris County is compromised by weight issues, as well as other chronic risk factors, including depression, intimate partner abuse and substance use. Specifically,

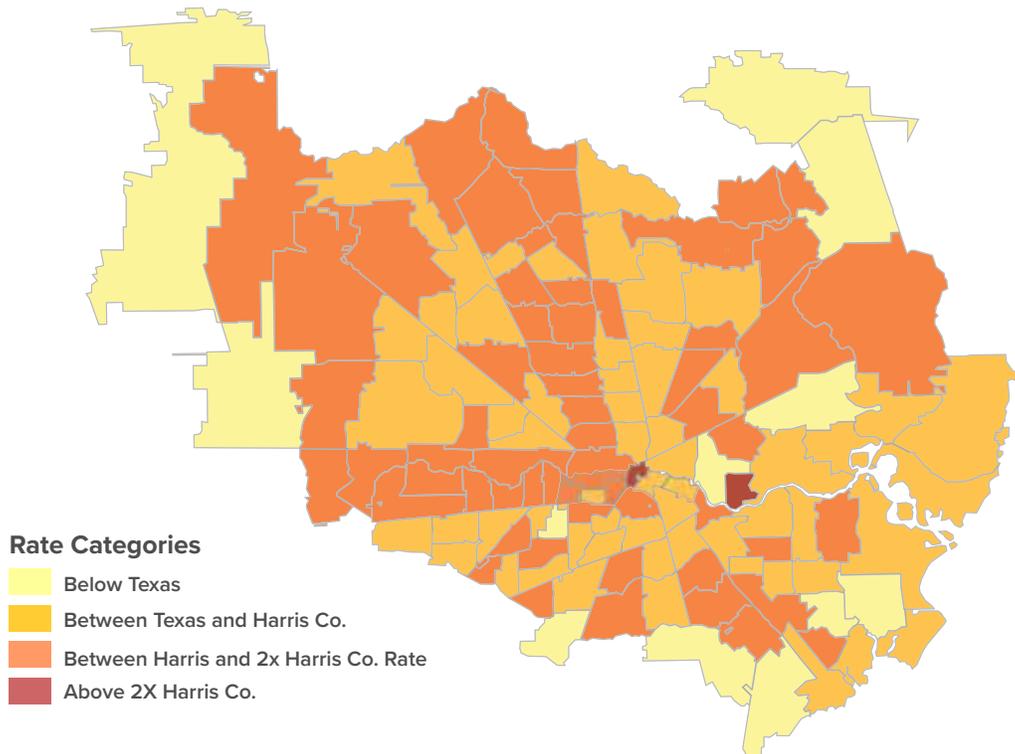
- 55 percent of women reported being at risk for being overweight or obese.
- 16 percent reported having had a doctor tell them they have a depressive disorder.
- 11 percent reported having had a doctor diagnose them with hypertension/high blood pressure.
- 2 percent reported partner abuse before, during or after pregnancy.
- 18 percent reported regularly taking prescription medication before pregnancy.

Results of the hospital discharge data analysis are more informative for understanding the health of women who are pregnant and how many women are at risk for pregnancy complications or death. Based on the total number of hospital deliveries by year (2008-2015) and looking at women who had at least one diagnosis code indicating an incidence of severe maternal morbidity, the rate of severe maternal morbidity in Harris County in 2015 was 238 per 10,000 deliveries (2.4 percent), which was 20 percent higher than the Texas average, which was higher than the U.S. average.

More specifically, out of the 71,252 women who delivered in Harris County in 2015, one in five women (22 percent) had at least one condition that put them at higher risk for severe maternal morbidity, including hypertension, diabetes, obesity and mental illness, including depression and other conditions.

- Reflecting national and statewide trends, severe maternal morbidity rates were highest for African American women while Hispanic women and Asian women had the lowest rates.
- Women under age 20 and above age 40 were two times more likely to experience complications related to severe maternal morbidity.
- Women living in historically underserved communities had higher rates of severe maternal morbidity than the overall Harris County rate.

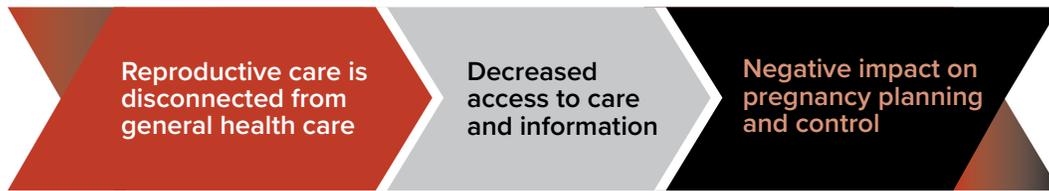
Rate of Severe Maternal Morbidity in Harris County in 2015, by Zip Code



II. In Harris County, reproductive health has become disconnected from women’s general health such that it is often not included in women’s regular primary care, limiting women’s access to critical health services.

Reproductive healthcare is a vital component of women’s preventive and primary care. Yet in Harris County and in many places across the United States, reproductive and sexual health is often fragmented among providers. For example, a primary care provider may see a woman for an annual exam and refer her to a specialist for a Pap test and discussion of contraception, if contraception is discussed at all. Conversely, an OB/Gyn may see a woman for an annual exam and refer her to a primary care provider for routine age-appropriate screening. This disconnected care can lead to important findings and important conversations being missed, and ultimately affect a woman’s health.

The Impact of Disconnected Care



When a full discussion of reproductive health and contraceptive options is integrated into a woman’s regular primary care, her ability to plan for pregnancy can be greatly enhanced. For example, one best practice being utilized in some health institutions is to ask every woman at every visit, “Would you like to become pregnant in the next year?” A woman’s response to this question can then lead to a deeper conversation either about how she can work toward a healthy pregnancy in the event the woman wants to become pregnant, or, if a woman does not want to become pregnant, about contraceptive care and the full range of contraception options available to her, including the effectiveness of each method.

However, based on the results of the women’s survey and focus group discussions, it is rare for women to be asked this question, or for women to have an opportunity to learn about and discuss the different options for contraceptive care with their providers. Indeed, many women in the focus groups felt that they did not have much say in the type of birth control they received. Some noted that they did not like many of the side effects of their contraceptive and yet were deterred by the high cost of changing birth control methods. As a result, many women said they left pregnancy “up to chance.”

Together, limited information and/or access to contraceptive care have negative implications for women who want to plan their pregnancy and their health outcomes. Based on results of the Pregnancy Risk Assessment Monitoring System survey² among women who reported in Harris County (2012-2014), 33 percent of women reported that their most recent pregnancy was unintended. Unplanned pregnancies are associated with late entry to prenatal care (an independent risk factor for maternal mortality in Texas) and with worse health outcomes for both the baby and the mother, including increased risk of postpartum depression and intimate partner violence.

III. Barriers to enrollment in publicly funded insurance and confusion about insurance coverage play a detrimental role in maternal health.

Women who enter prenatal care late, or fail to receive prenatal care at all, are at increased risk for severe maternal morbidity and mortality. However, accessing healthcare is increasingly difficult due to rising health insurance costs and other challenges to securing health insurance. For low-income women, accessing Medicaid is critical for a healthy pregnancy.

However, in Harris County and Texas as a whole, very low income thresholds for women to qualify for Medicaid and a cumbersome enrollment process often result in delayed access to prenatal care or some women never receiving health insurance coverage at all.

Determining eligibility for Medicaid can be complex. For a pregnant woman to qualify for Medicaid in Texas:

- She must be a U.S. citizen or qualified alien,
- She must be a Texas resident and
- Her household income can be no greater than 198 percent of the federal poverty level (FPL), equivalent to \$3,370/month for a family of three in 2017.

Medicaid and CHIP-P Eligibility Flowchart

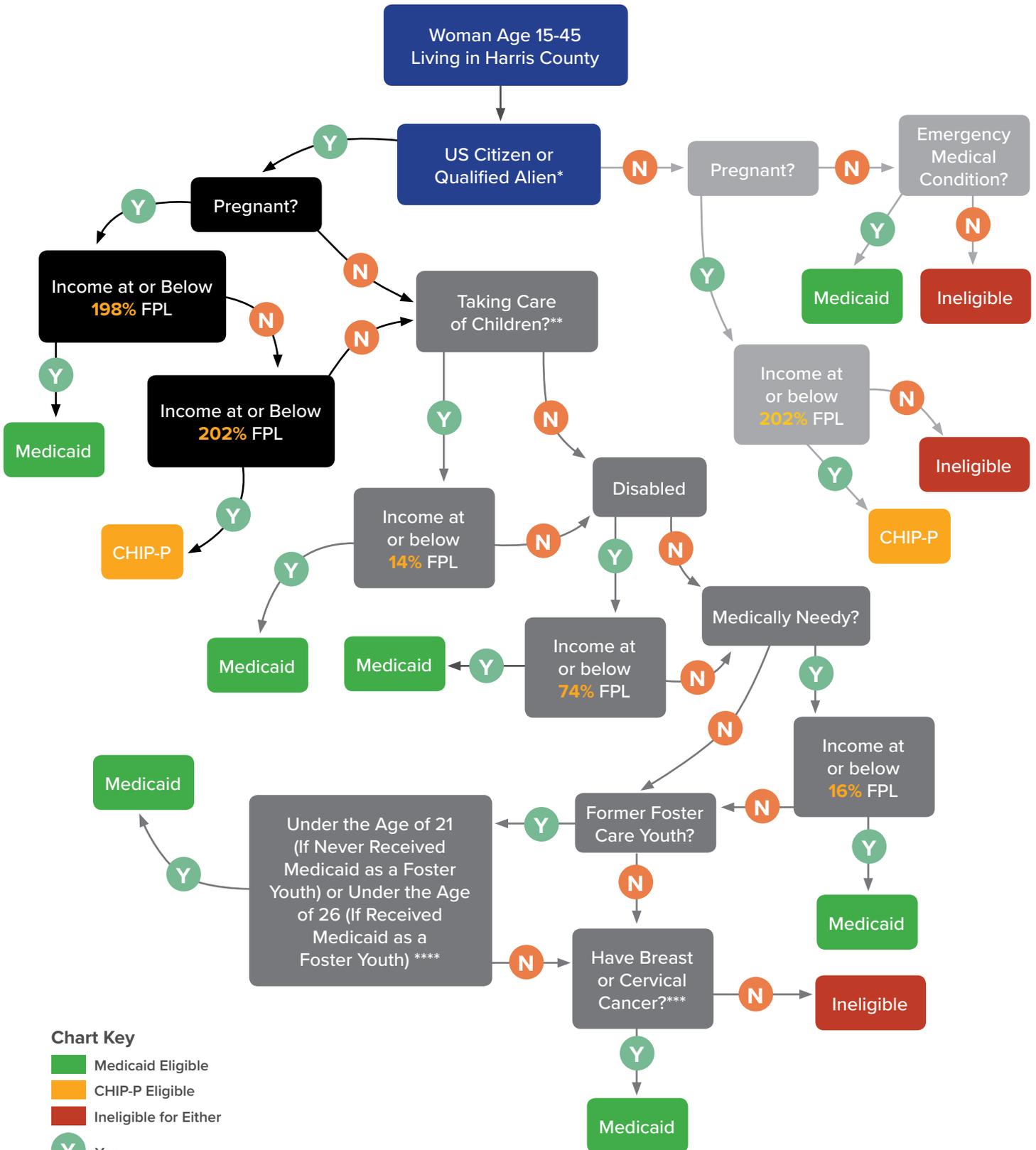


Chart Key

- Medicaid Eligible
- CHIP-P Eligible
- Ineligible for Either
- Y Yes
- N No

* See Notes on page 16

Medicaid and CHIP-P Eligibility Flowchart Notes:

* Qualified aliens include:

Legal permanent residents (LPR's = Any person that is not a US citizen who is residing in the US under legally recognized and lawfully recorded permanent residence as an immigrant. AKA "Permanent Resident Alien" "Resident Alien Permit Holder" "Green Card Holder").

- Asylees.
- Refugees.
- Aliens paroled into the US for at least one year.
- Aliens whose deportations are being withheld.
- Aliens granted conditional entry prior to April 1, 1980.
- Battered alien spouses and alien parents of battered children.
- Cuban/Haitian entrants.
- Victims of human trafficking.

** Children being cared for must be:

- Eligible for and/or receiving Medicaid.
- Living with the caregiver.
- Age 17 or younger, or 18 and going to school full time and expected to graduate before 19th birthday.
- Caregiver must be a parent, step parent, sibling, step sibling, grandparent, uncle or aunt, nephew or niece, first cousin, or a child of a first cousin.

*** In order to qualify a woman must be:

- Diagnosed and in need of treatment for biopsy-confirmed breast or cervical cancer, a metastatic or recurrent breast or cervical cancer, or certain pre-cancerous condition.
- Uninsured and not otherwise eligible for Medicaid, Medicare, or CHIP.
- Must be screened and diagnosed by HHSC Breast and Cervical Cancer Services (BCCS) provider.
- Screened for Medicaid eligibility by a BCCS provider, and application must be submitted to HHSC by the same provider (Woman cannot apply with HHSC on her own).

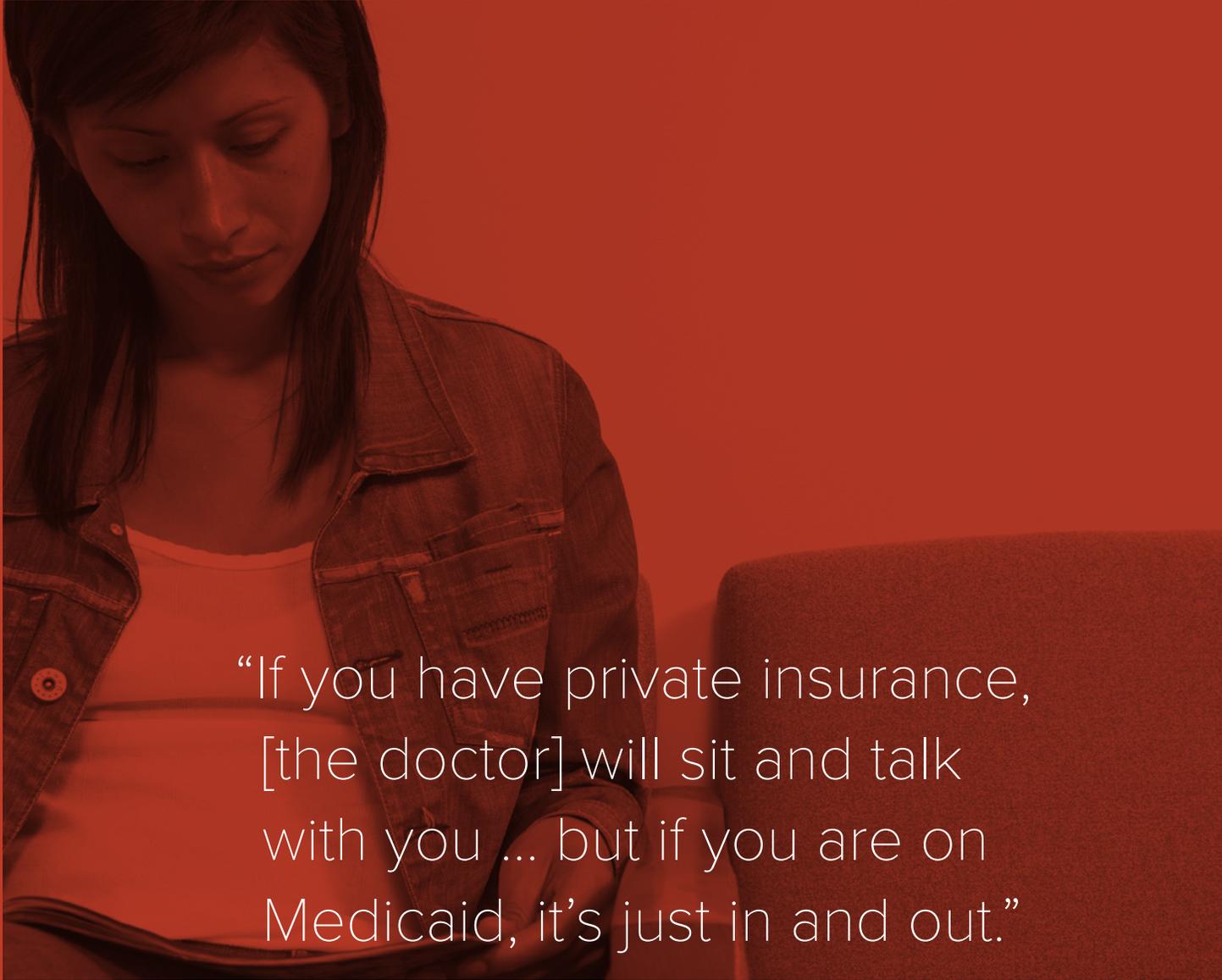
**** If a former foster care youth is not eligible under these criteria they may be eligible for the Former Foster Care Youth in Higher Education (FFCHE) program. Since this program is funded entirely by the state it is not considered Medicaid. Must be between ages 21 and 23 and enrolled in a higher education institution.

A pregnant woman who is a legal immigrant but not a U.S. citizen can qualify for CHIP Perinatal insurance. For these women, the household income requirement is 202 percent of the FPL; however, CHIP Perinatal covers only healthcare for the fetus, not for health issues related to the woman.

The complexity of eligibility and the low income requirements are part of the reason that Texas has one of the largest gaps in medical coverage in the United States. A woman whose income is only slightly higher than the required percent of FPL must find affordable health coverage elsewhere or pay for her pregnancy care and delivery out of pocket.

In addition to the challenge of meeting the eligibility requirements, the process of enrolling in Medicaid can result in delays in accessing care. Per state protocol, eligible women can receive a determination of their eligibility for Medicaid within 15 days of applying. However, women in the focus groups noted that in reality, it can take much longer before they are enrolled in Medicaid and entered into prenatal care. Two key issues affect when a woman ultimately receives coverage:

- *Submission of required documentation by the due date:* Once a woman submits her application for Medicaid, she has 15 days to submit required documentation. While the documentation is not necessarily burdensome, it could take some time to get a recent check stub or a letter from her employer, adequate proof of expenditures and proof of citizenship. However, if the woman does not submit her documentation within the required 15 days, she must start the process over again. For women who work, have children and other responsibilities, meeting the 15-day deadline can be difficult. For some, the challenge can be such a burden that they simply give up, go without prenatal care and present at an emergency room for delivery.
- *Securing a timely appointment with their prenatal provider.* Generally, a woman must have proof of Medicaid coverage before she can make an appointment with her provider.³ However, many women report that it can take up to 45 days before they can get in to see their provider, depending on the availability of their physician. In cases like these, women can be well past their first trimester before receiving prenatal care.



“If you have private insurance,
[the doctor] will sit and talk
with you ... but if you are on
Medicaid, it’s just in and out.”

» Woman in focus group

Another barrier to care created by the state public health program is the low reimbursement rate given to private providers. This has multiple impacts on the care women receive:

- Currently Medicaid reimburses private physicians for only a portion of the cost of each visit. As a result, private providers often limit the number of Medicaid patients they can serve, which creates challenges and delays for women seeking a provider who will accept Medicaid.
- Additionally, the low reimbursement rate to private providers often results in the providers reducing the time they can devote to that patient and her care. This in turn can hurt women's perception of the quality of care they receive, which may affect women's compliance with care recommendations. Focus group participants who reported utilizing Medicaid were more likely to report feeling they did not get excellent care.

And finally, regardless of the kind of insurance a woman has – Medicaid or private insurance – many women in the focus groups reported that confusion about what their insurance covers and a fear of incurring large, unexpected bills can create a disincentive to getting care when they need it.

IV. While many innovative programs to improve the quality of maternal healthcare are in place in Harris County, these practices need to be adopted by more providers to have a greater impact.

Some of the most exciting innovations in reducing maternal morbidity and mortality are happening in Harris County. These efforts are being spearheaded by large medical providers who are making systemic practice changes based on evidence-based studies, and by collaborations or pilot programs that are happening among a wide range of healthcare providers, social service organizations and government agencies and payers. However, many providers are not using these practices, which may weaken their ability to significantly affect women's health outcomes.

The efforts that are taking place in Harris County fall into five areas of best practices:

- *Enrollment supports.* In response to the barriers that women encounter enrolling into Medicaid, some providers have enrollment experts in the clinics to help women enroll into Medicaid, and, if appropriate, into the state's Healthy Texas Women program. As well as assisting women to enroll into public insurance programs, some larger providers and safety-net clinics see women under the presumption of eligibility, which eliminates delays in accessing care.
- *Creating systems to eliminate variations in practice.* Best practices do not have their expected impact if one person uses them and another does not. One of the most significant changes that can be made within a large medical practice to improve care for all women is to ensure that systems are in place such that all practitioners are engaging in the same effective practices, such as:
 - » Conducting risk assessments;
 - » Screening all pregnant women for substance use;
 - » Conducting common training in best practices for obstetricians and labor/delivery nurses;
 - » Utilizing safety bundles, or standardized protocols, to respond to or avoid life-threatening incidents and
 - » Providing physicians with comparative quality outcome metrics.
- *Engaging in systematic care coordination.* Here efforts revolve around making a full range of resources available – such as high-risk care, mental health supports and care coordination – to address the needs of all pregnant women. Systemic care coordination also includes processes to ensure daily communication among all providers for each patient, whether it is outpatient or inpatient care.
- *Bringing care to patients where they are.* Accessing a provider or a specialty center can be a major barrier for women who have transportation issues, family responsibilities or high-risk conditions that make travel difficult. These barriers can be mitigated while increasing patient satisfaction and care quality through innovations such as basing maternal-fetal specialists at suburban hospitals, nurse-family partnerships, home visits for high-risk patients and integrating behavioral health into primary care and OB/Gyn practices.

- *Shared education and peer-to-peer support.* Group prenatal visits, like Centering Pregnancy programs, and group discharge sessions have been shown to be effective in increasing women’s compliance with prenatal and post-natal visits, answering questions women have about their pregnancy in a relaxed setting and leveraging the power of peer support.

The implementation of these practices in Harris County is promising; however, more providers need to embrace them to have a significant impact. Some providers may experience barriers to implementation, especially private physicians. Private physicians provide prenatal care to the majority of the county’s pregnant women each year. While most of these providers recognize that many women need other resources – including mental health, social supports and substance use treatment – to ensure a healthy pregnancy and outcome, many do not have the time, resources or knowledge about programs available to women, which in turn creates barriers to women receiving the care they need.

Under the Healthy Texas Women program, low-income women who qualify (Texas resident, U.S. citizen or qualified immigrant, aged 18 to 44)⁴ are eligible for pregnancy testing, sexually-transmitted infection testing, breast and cervical cancer screening, contraceptive counseling and postpartum depression screening, as well as help managing chronic diseases like diabetes, high blood pressure and high cholesterol. The Healthy Texas Women program can play an important role in helping women manage their health and family planning before they get pregnant. For pregnant women who receive Medicaid, the Healthy Texas Women program can play a vital role in postpartum care, since women lose their Medicaid insurance 60 days after delivery. Although women on Medicaid are supposed to automatically transition into the Healthy Texas Women program for postpartum coverage, this transition does not always take place.

v. Safety-net providers do not appear to be providers of choice for many women seeking obstetric care.

While safety-net providers such as federally qualified health centers are often able to offer social services and other supports women may need, focus group findings indicate that these community clinics are not providers of choice for women seeking obstetric care. Much of the barrier relates to the perception that they will see different doctors at each visit, experience long waits, and not know who or where they will deliver their baby. Additionally, patients potentially have the “luxury” of being able to go to a private provider utilizing Medicaid. These factors all result in safety-net providers not playing a large role in maternity care in Harris County.

VI. In subtle and unintentional ways, women’s health in Harris County has been subjugated to the health of babies so profoundly that the health of women of childbearing age is often not prioritized.

This finding emerged through focus group discussions with women, who struggled to answer questions about how they cared for their own health post-delivery. Every woman could talk about how she cared for her new baby and the challenges of caring for an infant while also taking care of work and household responsibilities, but few could talk about how they cared for their own health. There were many instances where women described their experiences in seeking or not seeking care based on the needs of their children rather than their own need; some women noted that they did not have time to care or think about themselves.

Once the issue was raised in the focus groups, a more thorough review of the research findings revealed that many systemic policies and practices may further the concept that women’s health is less important than their babies’ health. Just a few of the examples include:

- State and national policy that allows low-income women access to public health insurance only after they become pregnant and terminates public health insurance 60 days after birth, or, in some cases, right after delivery.
- The relative lack of resources and attention given to the physical, emotional and social support needs of women after birth, compared to the attention and resources devoted to infants, such as well-known education interventions like Text 4 Baby and Go Before You Show that are focused only on the infant’s health.
- Hospital discharge practices that are brief, focus minimally on caring for the woman while emphasizing care of the infant and often rely on printed instructions that are technical and can be difficult for women to understand.
- Common practices among healthcare providers that incentivize good health behaviors in pregnant women by focusing on how the behavior can improve or protect the health of their baby rather than improve or protect the health of the women.

While many of these policies and practices are well-intentioned, the cumulative effect on how women perceive the importance of their own health is inadvertently detrimental to their own health outcomes.

VII. The high rate of disparities in care and outcomes for African American women is driven in part by implicit bias around women, income and race that is endemic throughout the healthcare system.

Implicit bias is unconscious stereotyping – it happens below the level of conscious thought and thus is extremely difficult to recognize and control. While evidence suggests that healthcare providers experience implicit bias at the same level as the rest of the U.S. population, the consequences of implicit bias in the healthcare sector can be profound. In its groundbreaking 2003 report, *Unequal Treatment*, the U.S. Institute of Medicine concluded that unrecognized bias by healthcare providers adversely affects their communication with, and the care they offer to, members of stereotyped groups, including African Americans, poor people and women. Hundreds of research studies have since supported that conclusion, demonstrating that implicit bias related to gender, income and race results in significant disparities in care, especially for African American women.

A health disparity is a health difference that is closely linked with social, economic or environmental disadvantage.



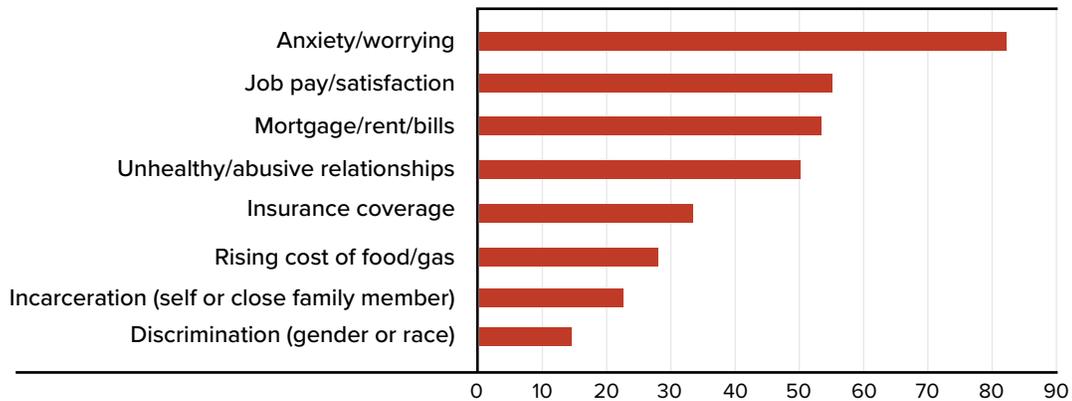
“The original doctor I had
always shut me down when
I asked questions”

» African American focus group participant

These disparities can affect women in many aspects of their life. For example, implicit bias causes African American women to experience more stress throughout their lifetimes, which adversely affects their health. Their reproductive health may also be impacted; social and demographic biases have been shown to affect practitioners’ recommendations for long-acting reversible contraceptive methods. During labor, African American women tend to be offered pain medication later than are white women. African Americans are less likely to be diagnosed and appropriately treated for heart disease, which is a leading cause of maternal death, both before and after delivery. Postpartum depression and anxiety are also under-diagnosed and undertreated in African American women.

Issues related to implicit bias emerged very clearly through the focus groups. Among participants, African American women were more likely to cite lack of empathy/care in their exchanges with providers than Latina and white participants, express frustration with their interactions with the healthcare system, and report a number of stressors that lead to anxiety in their daily lives.

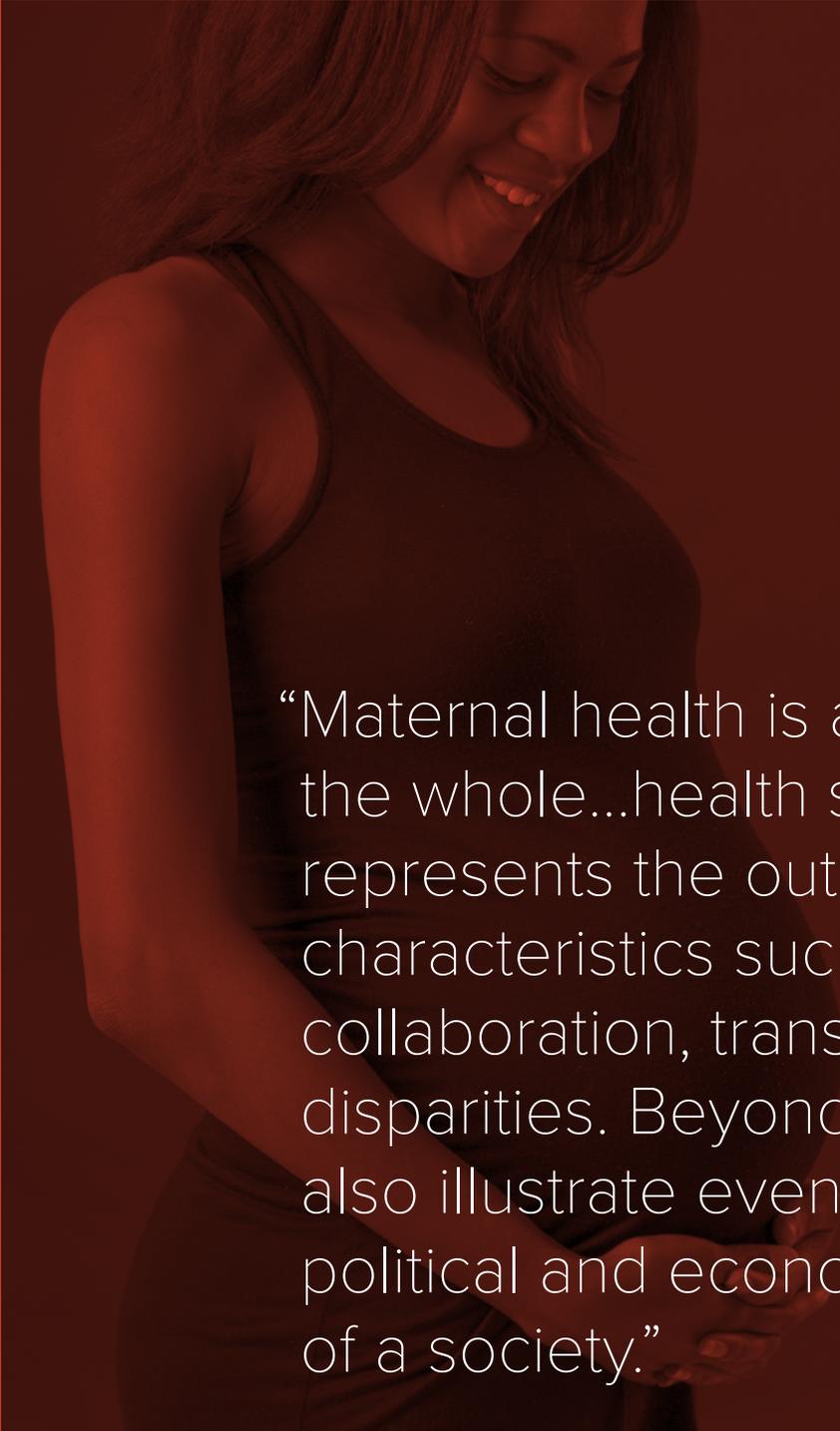
Stressful Situations that Women Reported as Having an Impact on Their Health



Survey Results from Women’s Experience Focus Groups Conducted in Fall, 2017

“Racial and ethnic disparities in obstetric and gynecologic outcomes and care are prevalent and persistent. In order to provide the best care possible for all women, obstetrician–gynecologists must be keenly aware of the existence of and contributors to health disparities and be willing to work toward their elimination.”

» The American College of Obstetricians and Gynecologists Committee Opinion, 2015, reaffirmed 2018

A photograph of a woman with long dark hair, wearing a dark tank top, smiling warmly while gently holding her pregnant belly. The image is overlaid with a semi-transparent dark red filter. The text is positioned to the right of her torso.

“Maternal health is a reflection of the whole...health system and represents the outcome of...other characteristics such as intersectoral collaboration, transparency and disparities. Beyond these, it can also illustrate even the sociocultural, political and economic philosophy of a society.”

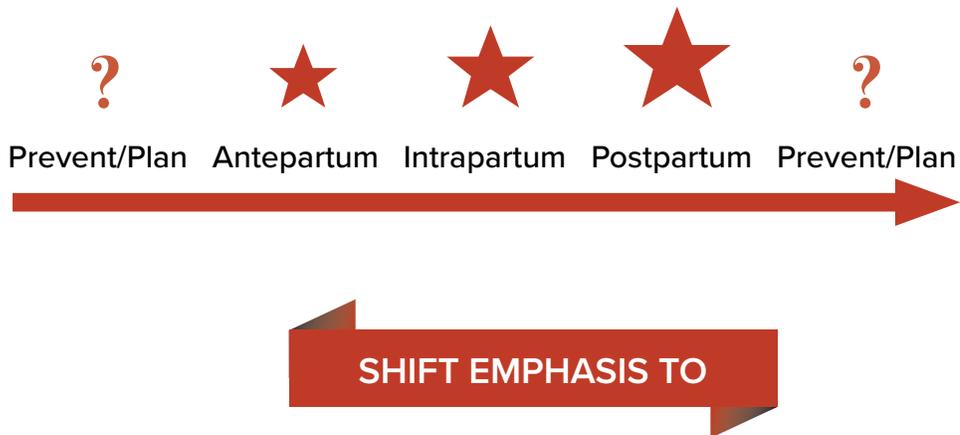
» Sajedinejad, S., et al. (2015). Maternal mortality: a cross-sectional study in global health. *Globalization and Health*, 11, 4.

Recommendations

The research process revealed a strong interest in taking action to improve maternal health in Harris County and identified several local and statewide efforts already working on some aspect of improving healthcare for women. As a result, when developing their goals and objectives for the Community Plan, the Steering Committee sought to leverage existing initiatives and build on current efforts and interests. Another criteria for the Community Plan was that it would recognize the various forces that are driving maternal health throughout a woman's life-course and be comprehensive in addressing the forces at each stage.

Finally, the Steering Committee aimed to prioritize actions that were strategic with the promise of having a high impact. Accordingly, beyond the individual goals and objectives presented below, perhaps the most significant recommendation of this Community Plan is to shift the focus of our community efforts from reacting to postpartum issues to putting greater emphasis on prevention and prenatal care. This can be done by increasing awareness about the issue, improving the overall health of women, ensuring that women access prenatal care sooner and recognizing the critical role of providing culturally appropriate care, mental health and social supports to women during and after pregnancy.

Current Sequence of Care



Desired Sequence of Care



With this shift in mind, the following are recommendations for action to improve maternal health in Harris County. It should be noted that many of these recommendations do not offer detail as to how they should be implemented; this was intentional. Given the scale and complexity of what is needed to improve maternal health, making change will require both individual and collective efforts. It is the hope of the Steering Committee that health and community leaders will adopt some of these practices in their own organizations. In these cases, how that is achieved should be at the discretion of these leaders who understand the opportunities and conditions within their institutions. For efforts that are best achieved collectively, the Steering Committee invites all stakeholders to join them in crafting approaches to implement the recommendations in a way that is appropriate and effective for our community.

Recommendation 1: Improve data collection and analysis on women’s health to clarify understanding of the incidence of maternal mortality and to guide our efforts to reduce maternal mortality and severe maternal morbidity.

As described in the earlier section on the general health of women, current data on maternal health is insufficient to ensure a confident understanding of the true cause and rate of maternal mortality.

Action Item:

- Create a countywide databank on the quality and safety of hospital care and the incidence of maternal mortality and severe morbidity up to 364 days postpartum. The databank should be developed with the input and support of large healthcare systems and key community health clinics. Once data is collected and analyzed, findings should be shared with providers to inform reductions in variations in practice and improve overall quality of care.

Such a databank would improve data relating to maternal mortality and morbidity and provide a better, clearer understanding of the extent and nature of the problem in Harris County and a platform for tracking the impact of local efforts.

“Maternal mortality is the tip of the iceberg regarding the poor performance of the United States in women’s health. It is critical that we first establish better data systems to document the problem and then develop systems that focus on women’s health, not just when they’re pregnant, but throughout the life-course.”

» Eugene Declercq, Community Health Sciences, University of Maryland School of Public Health

Recommendation 2: Conduct a public awareness campaign that supports and encourages women to prioritize and care for their own health.

As is evident in the literature and underscored by the voices of the women who participated in focus groups, it is sometimes difficult for women to concentrate on their own health. But healthy babies need healthy mothers, and every woman should have every opportunity to be healthy before, during and after pregnancy.

Action Items:

- Develop and implement a public awareness campaign intended to increase understanding about the importance of a mother’s health, and to give women access to information on caring for their own health.
- Within healthcare organizations, implement campaigns that span the organization, from receptionists to specialists, to communicate the importance of person-centered care – rather than diagnosis-centered – in order to help prompt healthcare institutions to take a more holistic approach to women’s health.

The power of public health awareness campaigns is well-documented, with success stories ranging from campaigns that influenced the increased use of child car seats to those that influenced the decreased use of tobacco products. A community conversation around maternal health that begins with the woman’s needs is an important step in giving women the power to take control of their health.

Recommendation 3: Address implicit bias by making sure that available tools are implemented as widely as possible.

While it may be a difficult issue to acknowledge, addressing implicit bias is a critical step toward reducing maternal mortality and morbidity. Recognizing that this is a challenging area in which to realize change, the recommended action is to focus on making sure that available tools to address implicit bias are implemented as widely as possible.

Action Items:

- Implement the American College of Obstetrics and Gynecology (ACOG) AIM safety bundles and assessment tools related to cultural competency within healthcare institutions and associations across Harris County. Key components of the Safety Bundle include:
 - » Understanding the role that practitioner bias can play in health outcomes and healthcare;
 - » Raising awareness of health disparities among clinicians, support staff and administrators through grand rounds presentations, team meetings and resident and student lectures; and
 - » Recommending and supporting quality improvement projects that identify and develop initiatives to target specific disparities within local healthcare systems.
- Engage local organizations with expertise in addressing bias to help train providers on best practices in providing balanced information and non-judgmental care related to contraceptive care and maternity services.
- Work to influence medical education and training, where socialization practices occur that introduce these implicit biases and then become solidified during residency.

Recommendation 4: Improve the general health of women by increasing access to primary health services in as many ways as possible.

Increasing health insurance coverage for women is essential to ensuring early, continual access to primary care and prenatal services.

Action Items:

- Expand access to Medicaid in Texas to help women address health issues before, during and after pregnancy.
- Implement a countywide initiative to enroll women in the state's Healthy Texas Women program, and provide more effective education about coverage. Consider modeling this effort on successful expedited enrollment initiatives implemented in other states, such as Louisiana's coordinated online system, which provides women with an answer in under five days.
- Increase women's access to health resources and providers by creating an app specific to Harris County that has information about women's health services and providers.

Recommendation 5: Integrate reproductive health and contraceptive care more completely into primary care.

Unplanned pregnancies are associated with greater risks to the health of the mother. With one-third of pregnancies in Harris County being unplanned,⁵ reducing the incidence of unplanned pregnancies could have a significant impact on reducing maternal mortality and morbidity.

Action Items:

- Encourage and train all primary care providers to inquire about women's pregnancy intentions, to counsel women on preparing for a healthy pregnancy and to provide women with the full range of birth control options. For example, the one key question – “Do you want to become pregnant within the next year?” – can be integrated into a standard visit.
- Increase contraceptive care capacity, including supporting the cost of long-acting reversible contraceptives (LARCs) to make them more accessible to low-income women.

This recommendation is responsive to widespread support for this idea, and leverages the work already underway by several foundations, academic institutions and community organizations to increase access to high-quality reproductive and sexual healthcare in Harris County.

Recommendation 6: Simplify and expedite enrollment into publicly funded health insurance and coverage programs.

Continuity of care is essential for monitoring and treating women at risk for severe maternal morbidity and mortality. However, continuity of care can be disrupted by gaps in health coverage.

Action Items:

- Work with the state to simplify and expedite enrollment into Medicaid and CHIP-Perinatal to ensure that women are able to enter care sooner.
- Work with the state and managed care organizations to determine a means by which all providers presume health insurance eligibility of low-income women, including limiting the financial exposure for providers who see pregnant women on the assumption that they qualify for Medicaid or CHIP-Perinatal.
- After delivery, ensure that women on Medicaid transition smoothly into the state's Healthy Texas Women program or to high-quality safety-net providers.

Ample evidence has demonstrated that adopting strategies to ensure that women access care sooner and follow up with care after delivery yields positive benefits to women's health outcomes.

Recommendation 7: Increase access to providers that accept Medicaid and implement efforts that will enhance the patient/provider relationship and care compliance.

The challenges women encounter in finding providers that accept Medicaid can mean the difference between receiving needed care in time and a spiral of unmanaged risk factors that can lead to irreversible harms. In addition, access to a broader range of services that other providers can offer can meet the multiple needs that women have expressed.

Action Items:

- Support safety-net providers, including federally qualified health centers, to be better prepared to serve women before, during and after pregnancy.
- Have safety-net providers mirror the perceived advantages of private practices, e.g. by hiring dedicated OB/Gyn staff and negotiating delivery arrangements with specific hospitals.
- Encourage providers to embed best-practice alerts into their electronic health records. This will also support efforts to measure the adoption and impact of best practices on women's pregnancy outcomes.
- Encourage providers – both private providers and safety-net providers – to implement group prenatal visits, such as Centering Pregnancy programs, as a way of replacing short, sometimes impersonal prenatal visits with longer, more meaningful and productive group visits.
- Identify key referral resources – mental health and substance use are top needs – and invest start-up funding to connect these resources to private providers and safety-net providers. To the extent possible, ensure seamless referrals that include feedback and data sharing between women's healthcare providers and these resources.
- Improve provider communications with women and increase women's access to information by exploring cross-disciplinary mobile health solutions.
- Encourage providers to communicate the importance of postpartum visits and develop postpartum care plans with women during prenatal care visits.

Leverage Technology

Mobile solutions are revolutionizing maternal health. Worldwide, mobile-phone based programs are increasing pregnant and parenting women's health knowledge, access to care and medical and social support in innovative ways. GiftedMom, Zero Mothers Die, Safe Delivery, MAMA and Mobile Midwife are just a few examples. In the United States, several states are piloting mobile solutions as well, especially around motivating women to enter care and helping them access real-time information on providers and coverage.

Recommendation 8: Continue to support implementation of best practices by healthcare providers in Harris County and encourage more providers to adopt the practices.

The efforts to improve maternal health practices within clinical settings - in Harris County and through various statewide initiatives – are exciting. They should be supported, and where possible, linked, so as to systematize them and increase their impact.

Action Items:

- Advocate for countywide adoption of best practices by participation in emerging statewide initiatives focused on maternal health, including those being led by the Southeast Texas Regional Advisory Council and the Texas Collaborative for Healthy Mothers and Babies.
- Expand the use of best practices that are being implemented at some local institutions to all providers across Harris County. Key practices include:
 - » Using standardized risk screening, brief intervention and warm referral - specifically for substance use, depression and domestic violence - at evidence-based times during pregnancy and postpartum, up to one year post-birth.
 - » Adopting the Council on Patient Safety in Women's Healthcare and Alliance for Innovation on Maternal Health standardized protocols for patient care within hospitals.
 - » Expanding the use of obstetrical hospitalists. Hospitalists have been shown to improve patient outcomes while reducing costs and increasing community physician satisfaction.
 - » As part of regular training by hospitals, requiring obstetricians and labor and delivery nurses to be trained in best practices and to conduct regular practice drills for emergencies, often known as situation simulation training.
 - » Measuring physician adherence to best practices within hospitals and sharing individual results compared to peers.
 - » Providing more simplified post-delivery discharge instructions, like the Association of Women's Health, Obstetric and Neonatal Nurses' (AWHONN) Post-Birth Warning Signs flyer, that provide information to women about complications after delivery, what to look for and who to call in case of emergency.
 - » Encouraging providers to schedule earlier and more frequent postpartum follow-up visits with women who have risk factors for cardiovascular disease.

Statewide Initiatives in Maternal Health

The Southeast Texas Regional Advisory Council (STRAC) is a coalition that fosters collaboration to educate communities and to collectively deliver appropriate care with appropriately trained providers. For maternal health, STRAC is working to establish standards of care and protocols for consideration and adoption by area hospitals, EMS agencies and other providers.

The Texas Collaborative for Healthy Mothers and Babies is a collaboration of over 150 healthcare providers, scientists, hospitals, state agencies, advocates and insurers whose goal is to design projects, collect research data, and develop strategies and evaluation plans to improve birth outcomes in Texas.

Recommendation 9: Identify and fund innovative partnerships between providers and community organizations that provide women with support during and after pregnancy.

Postpartum care is crucial for managing health complications that are identified before, during or after pregnancy; screening for postpartum depression; and discussing family planning needs. Equally important are social supports during what can be a stressful first year after delivery.

Action Items:

- Convene local social service providers that can provide services to pregnant and postpartum women to share knowledge about what is currently available in Harris County and develop coordinated approaches to connecting these services to providers.
- Implement innovative efforts that provide support for women after birth, especially for women identified to be at high risk. Consider leveraging mobile solutions, especially texting strategies, to build community and improve communication and follow-up with women post-birth.
- Building on the recent state legislation allowing pediatricians to screen new mothers for postpartum depression at well-child visits, assist in developing effective approaches to screening and making referrals. Consider expanding this innovation on screening for postpartum depression to other key social service agencies, such as the local providers of the state's Women, Infants and Children nutrition program.

Will you commit to actively engage in the work to significantly reduce maternal mortality and morbidity in Harris County?

ENDNOTES

- 1 Overview of Maternal Health Issues. Texas Health and Human Services presentation given in March, 2018. Found at <https://www.dshs.texas.gov/mch/DSHS-Maternal-Mortality-and-Morbidity-Presentations-and-Publications/.asp>. Represents confirmed Maternal Deaths, 2012-2015
- 2 The Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance system designed to monitor maternal attitudes and behaviors before, during, and after pregnancy. Conducted in partnership with the CDC and the Texas Department of State Health Services (DSHS), Texas PRAMS is a population-based assessment that monitors the health and behaviors of new mothers in Texas
- 3 Many community health clinics will “presume eligibility” and assist women in finalizing their Medicaid application.
- 4 15-17 year-olds are also eligible if a parent enrolls them
- 5 Pregnancy Risk Assessment Monitoring System survey among women who reported in Harris County (2012-2014)