Impact of Integrated Maternal Health Services on Reducing Non-Medical Risk Factors
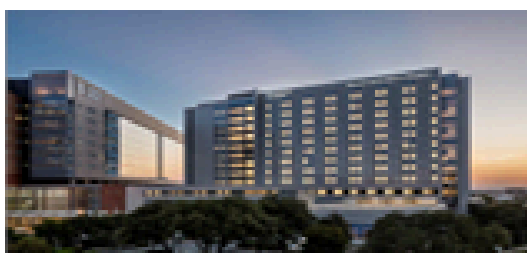
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Introduction

Organization

University Health is the largest health system in San Antonio and comprised of two hospitals and 25 outpatient and school-based clinics. It is the only health system in San Antonio and South Texas designated as:

- Adult and Pediatric Level 1 Trauma Center
- Level I Stroke Center
- Level IV Maternal Center with a Level IV NICU

In January 2024, the Health System's Women & Children's Hospital opened its doors. It is designated as:

- Level IV Maternal Care Center for high-risk cases
- Level IV NICU for premature infants
- Baby-Friendly

Services offered include:

- Stork One Maternal Transport Service via ground or air transport for high-risk obstetric patients
- A 24/7 Emergency Obstetric Women's Center
- Access to Maternal-Fetal Medicine specialists

Background

Texas has one of the highest maternal mortality rates, with about 51 deaths per 100,000 births from 2020 to 2022. Significant health disparities in South Texas include limited access to prenatal care, insufficient social support services, and lack of mental health care availability.

Purpose

The Mama Bexar (pronounced bear) Program aims to implement an Integrated Maternal Health Services (IMHS) model by:

- Improving clinical pathways
- Assessing non-medical drivers of health
- Addressing health disparities
- Enhancing access to mental health care

The goals of the program are:

- Promote involvement of communities experiencing disparities
- Convene task force for model refinement and planning
- Implement in Bexar County and expand to rural areas
- Maintain quality improvement initiative
- Promote awareness on pregnancy wellness in the first trimester
- Focus group input paired with marketing campaign

Methods

Mama Bexar Model

Consists of four multidisciplinary navigation teams each with a navigator, a nurse and a counselor

- Navigators conduct risk assessments and connect clients with community resources.
- Nurses focus on health-related concerns, ensuring compliance with perinatal visits, and providing targeted education.
- Licensed Professional Counselors deliver mental health services, including therapy sessions and miscarriage support referrals.

The program integrates respectful care by having:

- One team with a staff fluent in Spanish dedicated to Spanish-speaking patients
- Another team focuses on serving patients who speak other languages, particularly refugees from Southwest Asia and North Africa.

Eligibility

Eligibility for the program is determined through risk assessments based on Non-Medical Drivers of Health and PHQ-9 screenings:

High Risk: Individuals with two or more non-medical drivers of health and/or a PHQ score of 15 or higher, a mental health referral requested, a history of substance use disorder (SUD) in the past year, and one or more chronic conditions (e.g., diabetes, hypertension, obesity)

At-Risk: Individuals with two non-medical drivers of health and/or a PHQ score of 15 or higher, a mental health referral requested, a history of SUD in the past year, or the presence of a chronic disease

Low Risk: Individuals with one or no non medical drivers and a low PHQ score, without a desire for a mental health referral.

Re-screenings conducted in the third trimester and within two months postpartum

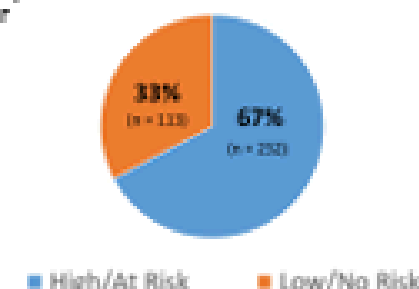Table 1. Non-Medical Trends over 8 Months in Program

N = 345 Enrolled Patients	Start	End	Trend
Financial Resource Strain	67.5%	61.4%	Improving (↓)
Food Insecurity	57.7%	46.7%	Improving (↓)
Housing Stability	0.4%	0.4%	No change (--)
Transportation Needs	29.9%	26.7%	Improving (↓)
Alcohol Use	0.0%	0.0%	No change (--)
Depression	8.7%	0.9%	Improving (↓)
Physical Activity	61.2%	63.5%	Worsening (↑)
Social Connections	89.3%	90.1%	Worsening (↑)
Stress	30.1%	26.4%	Improving (↓)

As illustrated in Table 1. Non-Medical Trends over 8 Months in Program, there was a decrease in the percentage of women reporting financial strain, food insecurity, transportation needs, depression, and stress.

Results

The IMHS model shows potential in monitoring key outcome measures related to maternal and infant health. 345 women were enrolled in the Mama Bexar Program from August 2024 to March 2025. Data showed:

- 30% of patients had Spanish as their preferred language
- 5% of patients had Pushto as their preferred language
- 10% were Black or African-American
- 67% of patients had 2 or more non-medical needs or PHQ15 or greater

Next Steps

Continued attention and innovative solutions are necessary for improving physical activity and social connections with specific initiatives including emphasizing health and nutrition, implementing Mama Bexar education sessions, improving access to perinatal support groups.

Key indicators include mental health status, social determinants of health, substance use, hypertension, diabetes, obesity, gestational age, weight, access to prenatal care in the first trimester, attendance at postpartum visits, and maternal mortality and morbidity rates.

- Monitor health outcomes of maternal and infant patients, to include maternal morbidities (mental health, substance use, hypertension, diabetes, etc.) and mortality rates, gestational age and weight, cesarean rates, etc.
- Expansion of the model to rural areas in Texas Public Health Region 8 that were served by the HRSA-funded Rural Maternal and Obstetrics Management Strategies (RMOMS) Program

References

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