Introducing the Rural Maternity and Obstetrics Management Strategies (RMOMS) Program

■ Improving Rural Maternal Care through Network Models

Importance of Rural Maternal Health

All women of reproductive age should have access to high-quality, comprehensive prenatal and maternal care to ensure healthy pregnancies and birth outcomes. However, the 28 million women of reproductive age living in rural areas in the United States[1] face increasing challenges in accessing this care. Women in rural areas confront accelerating rates of rural hospital closure[2,3] and numerous social and economic barriers to care, such as poor transportation options and food insecurity. Compared to their urban counterparts, rural women face higher rates of poverty, lower health literacy, and lower educational levels.[2,4,5] As a result, rural women experience higher levels of maternal mortality and morbidity[6] and other negative maternal and child health outcomes. These challenges highlight the need for innovative, flexible models of care that offer high-quality services and address the unique barriers facing rural mothers.

> More than half of all rural counties lack access to a hospital obstetrics unit or to a single obstetrician.
>
> (Lewis et al).

RMOMS Program Background

The Health Resources and Services Administration (HRSA) through the Federal Office of Rural Health Policy (FORHP) and the Maternal and Child Health Bureau (MCHB) awarded three maternal care networks four-year cooperative agreements under the Rural Maternity and Obstetrics Management Strategies (RMOMS) program. Spanning from September 2019 to August 2023, RMOMS aims to develop financially sustainable and integrated network models to increase access to maternal and obstetrics care in rural communities and ultimately improve maternal and neonatal outcomes. The three awardees are developing models focusing on:

1. **Obstetrics service aggregation:** The consolidation and coordination of low-utilization services across providers can improve service quality and provider financial viability.

2. **Care coordination along the continuum of care:** By engaging multiple clinical and support service providers and coordinating care across these entities, awardee networks can improve care continuity and provide comprehensive services to high-need women.

3. **Telehealth and specialty care:** Telehealth and increased specialist access can reduce barriers to and costs of care, thus improving health outcomes for both routine and high-risk pregnancies.

4. **Financial sustainability:** Cost savings generated by these initiatives and the development of new payment models with Medicaid and other payers can improve provider financial sustainability and thus sustain access to care in the long run.[7]

> The President's FY2021 Department of Health and Human Services (HHS) budget in brief includes RMOMS as part of HHS' Improving Maternal Health in America initiative. The budget increases funding for RMOMS by $10 million above FY 2020, to a total of $12 million, to develop and test models that improve access to and continuity of maternal obstetrics care in rural communities. This program is funded through FORHP's Outreach Grant program.

This multifaceted approach ultimately aims to improve key health outcomes while achieving greater savings and establishing financial viability. If the programs are successful, they can serve as a model for other rural networks by offering a replicable and sustainable path to coordinated and high-quality services for at-risk rural mothers.

■ Meet the Awardees

The RMOMS awardees include the Missouri Bootheel Perinatal Network Project (BPN), the New Mexico Rural Obstetrics Access and Maternal Services (ROAMS) Network, and the Texas-RMOMS Comprehensive Maternal Care Network.

Missouri Bootheel Perinatal Network

BPN aims to improve maternal and infant health in Dunklin, Mississippi, New Madrid, Pemiscot, Scott, and Stoddard counties. The six target counties, all located within the Bootheel region in the southeastern part of the state, are home to nearly 30,000 women of reproductive age.[8] Within this region, all standard health status indicators are worse than in the state and nation, including asthma, diabetes, obesity, heart disease, high blood pressure, high cholesterol, and cancer mortality. Rates of low birthweight and infant mortality are also higher in these rural counties compared to the state and national rates. Maternal systems of care are often siloed and two major hospitals discontinued obstetrics services in 2014 and 2018, leaving many women in the region with no local services.

BPN has the largest network and expected patient population of the three awardees. The network, which is led by St. Francis Medical Center, includes four health care systems, six health departments, three behavioral health agencies, three support service agencies, a Federally Qualified Health Center (FQHC), and MO HealthNet (the state Medicaid agency). BPN will maintain partner engagement in this large and complex network through regular workgroup meetings.

The network's overarching goal is to increase access to prenatal, labor and delivery, and postpartum services for mothers and babies with an initial focus on mothers with high-risk pregnancies. BPN intends to increase service availability through several primary strategies:

> "The collective impact effort is to bring together multiple stakeholders, not just the health care providers and health departments, but the voice of the community through those smaller agencies that may be providing case management through support, education, and referral resources." - BPN network leadership

- Expand training opportunities and bolster inpatient and emergency obstetric care through hospital-based simulations and educational offerings to emergency medical services and non-delivering hospitals;

- Extend the network's racial equity educational programs to partners with the goal of reducing racial and ethnic inequities in health care access and outcomes;

- Use telehealth to expand the network's prenatal and postpartum clinic care and support services, including specialty care and ancillary services (e.g., nutrition consultants); this process will include soliciting community input for telehealth decisions, utilizing technical assistance resources from national telehealth programs, and collaborating with state and national maternal health organizations to obtain medical equipment for telehealth clinical partners; and

- Develop standardized processes for assessing risk and making referrals, including leveraging current regional patient navigation/care coordination service providers, aligning referral processes, and developing a risk assessment tool and decision tree to guide care protocols.

## New Mexico Rural Obstetrics Access and Maternal Services (ROAMS)

The ROAMS network includes rural Colfax, Taos, and Union counties in northeastern New Mexico, a mountainous, geographically isolated area with a population of just 50,000, including over 9,000 women of reproductive age.[8] The network serves a high-poverty population and reports numerous pressing maternal health challenges, including high prevalence of unplanned and teen pregnancy, maternal and infant mortality, and substance use disorder. Women face significant geographic and socioeconomic barriers to maternal care; in Union County in the far northeastern corner of the state, there are no obstetrics services at all. ROAMS has the smallest and most isolated patient population of the three awardees.

Holy Cross Medical Center in Taos County serves as the lead agency for the ROAMS network, which consists of three Critical Access Hospitals (CAHs), an FQHC, a home visiting program, and Centennial Care (the state Medicaid agency). In addition, ROAMS plans to work with several support service providers in the three counties and to establish a telehealth relationship with a maternal-fetal medicine (MFM) specialist. The network ultimately aims to improve access to care in its underserved service area, improve maternal health and family education and outreach, and achieve greater financial and network sustainability for maternal and obstetrics services.

To achieve these goals, the ROAMS network plans to:

- Establish a relationship with an MFM specialty provider for high-risk pregnancies to help mothers receive care closer to home for as long as possible;

- Create and maintain in-office and home telehealth services, including telehealth Grand Rounds and collaboration with the MFM provider, to reduce geographic barriers to access and patient travel times;

- Establish two new prenatal clinics in underserved areas;

- Promote greater utilization of support services by offering advertising and social media assistance to support service agencies and employing patient navigators to connect pregnant women to local offerings; and

- Promote greater enrollment in Medicaid and increased Medicaid reimbursement for obstetrics services to help sustain ROAMS.

ROAMS will also promote collaboration between stakeholders through a Governing Council and incorporate feedback from mothers through surveys and a Mothers Advisory Council.
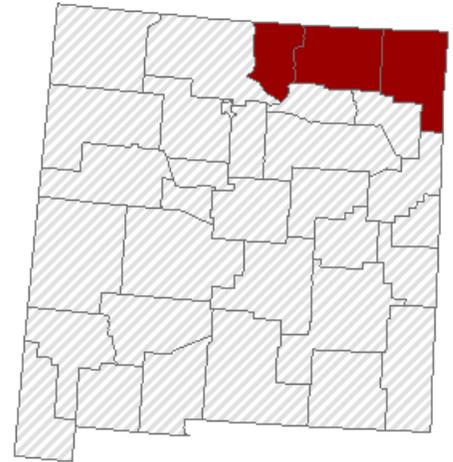
> "By developing an MFM relationship, we are hoping to…work with the higher-risk pregnancies for a little bit longer. [Women] may [still] have to do labor and delivery at a high-risk facility, but we're hoping through our MFM relationship, we can support them locally for a longer period of time." - ROAMS network leadership

Texas-RMOMS Comprehensive Maternal Care Network

The TX-RMOMS network aims to improve access to continuous, comprehensive, and integrated obstetrics services among women of reproductive age residing in the Val Verde service region (Val Verde County) and the Uvalde service region (Uvalde, Edwards, Real, Kinney, and Zavala counties) in southwest Texas. Compared to the state, these service areas have higher teen birth rates, larger physician-to-patient ratios, and lower median incomes. Over 20,000 women in the service regions are of reproductive age[8] and most are Hispanic (71.4 percent in the Uvalde service region, 81.7 percent in the Val Verde service region).[9]
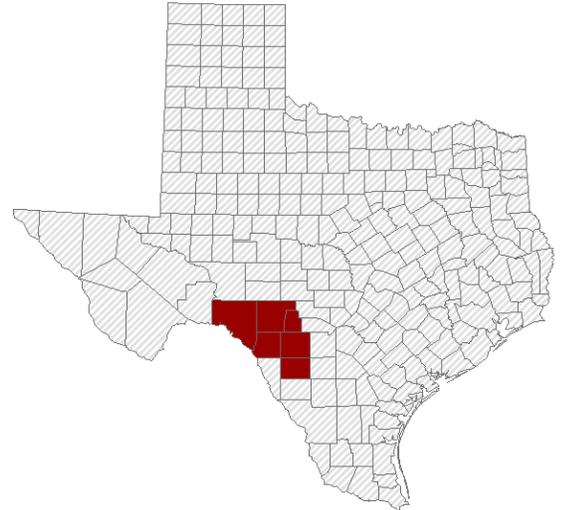
The TX-RMOMS network brings together several health systems and stakeholders with the common goal of ensuring access to coordinated maternal health services from prenatal through postpartum care. University Health System, a nationally recognized teaching hospital and clinical network in San Antonio, serves as the lead agency. University Health System has historically served the urban San Antonio metropolitan area, but with the support of the RMOMS grant, the hospital is expanding its reach to include women residing in high-need rural service regions close to the Texas-Mexico border. Other partners in the TX-RMOMS network include a CAH, an acute care hospital, rural health clinic, an FQHC, and the Texas Health and Human Services Commission (the state Medicaid agency). TX-RMOMS also collaborates with state- and locally-funded programs, including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and Healthy Start.

The TX-RMOMS network plans to implement the following strategies to accomplish its goals:

- Recruit new staff to bolster network capacity, including perinatal case managers, behavioral health consultants (BHCs) within local clinics, and hospital-based nurse coordinators;

- Implement enhanced Perinatal Case Management (PCM) Services based on a Healthy Start-like model;

- Enhance skills of participating network providers through telehealth consultation and training;

- Improve access to clinical and care management services through telehealth, thereby reducing the need to travel to receive advanced services at University Health System in San Antonio; and

- Develop sophisticated care navigation and referral processes by using PCM and BCHs to assist with insurance navigation, behavioral health needs, and comprehensive post-delivery care.

> "We have been able to use the RMOMS project as a catalyst to bring together many community organizations to create a comprehensive maternal and child health program that will eventually serve women throughout the duration of their reproductive lifecycles. Many collaborators see this project and its goals as essential for this community and are eager to participate." - a TX-RMOMS network partner

■ Assessing the Impact of the RMOMS Program

Mission Analytics Group, Inc. and Insight Policy Research (Mission/Insight) were contracted by FORHP to conduct an independent evaluation of the RMOMS program. The evaluation will thoroughly document the awardees' models and implementation facilitators and barriers to support the future replication of networked maternity care delivery systems. In addition, it will assess network impact on access to care by analyzing the utilization of key services over time, such as the receipt of prenatal care in the first trimester and referrals to behavioral health services for at-risk mothers. Finally, the evaluation will measure changes in major health outcomes, including maternal morbidity and mortality, as well as high-cost services, such as neonatal intensive care unit stays. Each model has similar ultimate goals, but the evaluation will strive to capture how each network addresses the needs of its unique community of rural mothers.

The evaluation will rely on both quantitative and qualitative primary and secondary data. Each year, awardees will submit data on participant demographics, clinical and support services, and health outcomes. These data will be used to describe awardee patient populations and track service utilization and health outcomes over time. Through annual progress reports, awardees will submit network-level measures that demonstrate the breadth and reach of their networks. Mission/Insight will also conduct phone interviews and site visits to discuss and document awardees' service models across the continuum of care. In addition, the evaluation will be informed by secondary data, including aggregate measures submitted by awardees through HRSA's Performance Improvement Measurement System (PIMS) and vital statistics data accessed through state agencies.

The evaluation will disseminate findings to a wide audience of policymakers, researchers, public health and social service agencies, direct service providers, and public stakeholders to encourage the replication of successful approaches and to further the evidence base. Dissemination products, including public webinars and topic-specific issue briefs, will address the impact of coordinated networks on maternal health care utilization and outcomes, describe the characteristics of and steps for building an effective network, and contribute to the national conversation about improving maternal health for high-need rural mothers.

■ Technical Assistance

University of North Carolina at Chapel Hill, the Georgia Health Policy Center, and other partners were contracted by MCHB to develop the Maternal Health Learning and Innovation Center (MHLIC). The MHLIC provides training and technical assistance to nine State Maternal Health Innovation program award recipients as well as the three RMOMS awardees to improve maternal health outcomes. MHLIC is also a national hub connecting maternal health learners with maternal health "doers" across the country, including cataloging and disseminating best practices related to maternal health improvement.

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