



Executive summary: Reproductive Services for Women at High Risk for Maternal Mortality Workshop, February 11–12, 2019, Las Vegas, Nevada

Society for Maternal-Fetal Medicine (SMFM)

Introduction

Women at high risk for maternal mortality and morbidity have unique needs for reproductive health services, including contraception and abortion. However, barriers such as state legislation, access to trained providers,¹ and challenges in assessing and communicating risk often make it difficult for these women to obtain needed services.

To address these issues, leaders in obstetric care, family planning, and reproductive health law gathered for a 2-day workshop entitled “Reproductive Services for Women at High Risk for Maternal Mortality.” The workshop was held in conjunction with the 39th Annual Pregnancy Meeting in Las Vegas, Nevada, and was cosponsored by the Society for Maternal-Fetal Medicine, American College of Obstetricians and Gynecologists, Fellowship in Family Planning, and Society of Family Planning. Goals of the workshop were to review the following issues, discuss recommendations, and create consensus concerning assessment, counseling, and training:

- Current evidence on the role of family planning in the reduction of maternal mortality; existing barriers to accessing reproductive services
- Risks and benefits of termination services for high-risk pregnant women
- Risks of pregnancy continuation vs termination in various clinical situations; considerations when assessing women at high risk for complications
- Best practices for models of care to provide reproductive services for women at high risk for maternal mortality

This executive summary briefly reviews the main outcomes of the workshop. A research paper that presents detailed clinical guidance and proposes future research directions will be published at a later date.

Background

Evidence presented at the workshop demonstrates that although safe reproductive health services are needed and beneficial for women at high risk of pregnancy complications and maternal mortality, access is limited and inequitable across the United States.

- The maternal mortality rate in the United States has increased from 9.9 per 100,000 in 1999 to 26.4 per 100,000 in 2015.² This increase in mortality is especially pronounced among non-Hispanic black women, who had maternal mortality rates of 46 per 100,000 births in 2014.³
- Although abortion is a safe procedure, the abortion mortality rate is 3 times higher for black women compared with white women in the United States.⁴
- Family planning interventions can prevent 30% of maternal deaths worldwide, and safe abortion can prevent 13% of maternal deaths.⁵
- Women who are denied an abortion and who later give birth experience more serious health complications, including gestational hypertension and postpartum hemorrhage,⁶ more immediate anxiety,⁷ and greater poverty,⁸ than women who receive a wanted abortion.
- After 5 years, there is no significant difference in depressive or anxiety symptoms for women prevented from having an abortion and women who terminate a pregnancy.⁷
- More than 70% of older, reproductive-aged women with diabetes, stroke, ischemic heart disease, and lupus did not use a contraceptive method in 2011.⁹
- State regulations that place gestational, procedural, and provider limitations on abortion have detrimental effects on women seeking abortion care. Forty percent of women aged 15–44 reside in counties without an abortion provider. Twenty-five states have 5 or fewer abortion clinics; 5 states have only 1 clinic. As a result of these restrictions, women must often travel long distances to receive abortion care.¹⁰ State-regulated waiting periods further undermine a patient’s access to abortion and may place a patient beyond a gestational limit.¹⁰
- Socioeconomic barriers to obtaining an abortion include the Hyde amendment, which prohibits use of federal funds to pay for an abortion; lack of insurance coverage for abortion; and high out-of-pocket costs for abortion procedures and travel.¹⁰
- Two states have legislation in effect banning the dilation and evacuation procedure except when a woman’s life or health is severely compromised in the second trimester,

even though this procedure is associated with fewer complications and less time, pain, and expense than induction.^{10,11}

- Between 2004 and 2014, the percentage of rural counties in the United States with hospital-based obstetric services decreased from 55% to 46%, leaving women in many areas of the country without local access to basic obstetric care.¹² More than 24 million reproductive-aged women in the United States live in a county without a maternal-fetal medicine (MFM) subspecialist, compared with 38 million women living in a county with an MFM subspecialist. This disparity is most stark in rural regions, with the lowest ratio of MFM subspecialists to reproductive-aged women found in North Dakota, Wyoming, Arkansas, and Idaho.¹³
- MFMs who are trained in providing dilation and evacuation services during fellowship are 7.5 times more likely to offer the procedure when in practice than untrained fellows (95% confidence interval, 1.8–30).¹⁴

Key findings and preliminary recommendations

Workshop participants were assigned to 1 of 3 breakout groups to discuss the following key issues in greater depth and make preliminary recommendations: (1) how to assess risk in the high-risk woman for morbidity and mortality; (2) counseling for women at high risk for complications; and (3) training and access related to family planning and reproductive services.

The following sections summarize the findings and recommendations reported by each breakout group.

1. Assessing risk in the high-risk woman

A high-risk pregnancy can be defined as one that places the woman, fetus, or infant at risk for death or residual injury and typically requires additional resources, procedures, or specialized care to optimize outcomes. Examples of maternal conditions that can result in a high-risk pregnancy include cancer, diabetes, heart disease, and hypertension. Examples of fetal conditions include fetal growth restriction, fetal anomalies, and infections.

Assessing the level of risk that a pregnancy imposes is a crucial first step in determining the course of pregnancy care and in guiding decisions about whether to continue or terminate the pregnancy. Risk assessment should include factors that can exacerbate or mediate the risk of pregnancy for a woman with one of these conditions, including the severity of the maternal or fetal condition, the woman's capacity to manage the condition, her desire to be pregnant, and the availability of obstetric care providers in her geographic area. The woman's tolerance of risk is also an important consideration that should provide the context for patient-centered, shared decision-making.

Risk assessment and counseling ideally should be initiated during the preconception period to prevent unintended or undesired pregnancy and to ensure that high-risk women

are referred to a family planning or MFM subspecialist as appropriate. Telehealth consultation and electronic medical records can be used to ensure that all subspecialty providers are aware of a woman's high-risk pregnancy status and to coordinate contraceptive counseling efforts and messaging for specific patients. Long-acting reversible contraception methods are the most effective in preventing pregnancy and are also extremely safe for most women with preexisting health conditions. A shared decision-making approach should be used when counseling women about their contraceptive options. In addition to efficacy and safety, patient preference and acceptability, along with respect for a patient's autonomy in making reproductive life choices, are important considerations in this discussion.

Once a woman becomes pregnant, assessment should focus on identifying existing comorbid and fetal conditions; evaluating the status of maternal and fetal disease; and determining the woman's mental health condition, life circumstances, and preferences for the pregnancy. Providers must be cognizant of racial biases and disparities in provision of such counseling and act as advocates to achieve reproductive justice for all patients.

Risk should be frequently reassessed and discussed with the woman as the pregnancy progresses. Questions that should be considered in an ongoing risk assessment during pregnancy include the following:

- Does the diagnosis of a "life-limiting" fetal condition, including lethal fetal conditions, require extreme medical intervention if there is little or no prospect of long-term ex utero survival without severe morbidity or extremely poor quality of life, and for which there is no cure?
- Does continuing the pregnancy confer any fetal benefit?
- Are there indications that incur a combination of maternal and fetal morbidity that would necessitate discontinuing the pregnancy?
- What is the emotional or psychological impact to the woman's mental health of continuing the pregnancy?

Evidence-based criteria for assessment of high-risk women during the preconception period and recommendations regarding pregnancy choices and timing are lacking. Risk-scoring systems, such as those developed for heart disease, often do not account for changes in disease severity over time—a key determinant of a woman's level of risk when contemplating pregnancy. Development of practical tools to help facilitate risk assessment in high-risk women during the preconception period should therefore be a target for future research.

2. Counseling for women at high risk

Counseling should begin with questioning to elucidate a woman's understanding of her risk of pregnancy, support individuals that should be involved in shared decision-making discussions, and the woman's preferred language to be used during discussions (eg, using baby vs

fetus). Providers should be aware of and work to alleviate barriers in numeracy, language, and health literacy that may limit a woman's understanding of her risk and options. Counseling should include a discussion of pregnancy intent, timing, and treatment options that are available should she become pregnant. Because multiple conversations over time will likely be needed, providers should elicit the woman's values early on in the counseling process and adjust their approach based on feedback from the woman. Throughout counseling, obstetric care providers should respect their patient's autonomy and reassure patients that they will continue to provide care regardless of a patient's choice of treatment.

A useful framework for counseling a woman about the continuation of pregnancy is to review outcomes along a dual continuum that range from low maternal risk and good fetal outcome to high maternal risk and poor fetal outcome. Women with underlying medical conditions should be informed about all available management options, including continuation of the pregnancy, termination, neonatal palliative care, and fetal or maternal treatments. The discussion should clearly outline the timing and logistical restrictions of selecting a given treatment. It should be explained that expectant management is a decision with both short-term and long-term implications for maternal and fetal outcomes and that continuation of a pregnancy may also limit a woman's access to services. The literature supporting the safety of termination should also be reviewed; termination has consistently been shown to be a safer option than pregnancy and childbirth¹⁵ and may be life-saving for a woman with a high-risk health condition.¹⁶ If a woman with a high-risk medical condition wishes to continue the pregnancy, anticipatory guidance about her risks should be provided as the pregnancy progresses. Counseling at the time of termination or during the postpartum period should involve plans for contraception or care prior to a future pregnancy, if a future pregnancy is desired. For high-risk women, counseling at this time should address whether the risks would be different in a subsequent pregnancy and include referrals to other specialties to mitigate future problems.

To facilitate care coordination for high-risk women, efforts should be made at the community level to establish early, frequent, and direct communication and build partnerships between family planning and MFM providers. At the institutional level, family planning should be involved in meetings about maternal and fetal treatment options for high-risk women and in discussions about best practices for patient flow, referrals, and counseling. Further, nontraditional medical and community resources should be leveraged to provide continuity of care for high-risk women. This may include community health workers, midwives, and perinatal support.

3. Training and access

Increased training for MFM subspecialists in contraception and abortion services can be achieved through

dissemination of family planning curriculum materials, such as the Kenneth J. Ryan Residency Training Program Didactic Curriculum, and provision of training programs in contraception, mifepristone use, and performing dilation and evacuation at a network of locations or at the provider's home institution. Optional rotations for MFM subspecialists and family planning subspecialists in maternal-fetal medicine and family planning, respectively, would introduce interested fellows to needed skills, particularly if they will be practicing later in their career in a region without these subspecialties. Within an institution, professionalism training around reproductive health services is also recommended.

Advocacy efforts to address the need for increased access to contraception and abortion services should be directed toward broadening access to teleabortion and telemedicine consultations for abortion and contraception for high-risk women and removing Risk Evaluation and Mitigation Strategy and institutional restrictions on choices of care. System-wide barriers to care, such as proscriptive lists of indications that qualify for pregnancy termination or requirements for approval by hospital boards, hinder access to potentially life-saving and injury-preventing care and interfere with the doctor-patient relationship. Relationships with partnership organizations and perinatal quality collaboratives already doing work in this sphere should be leveraged to develop more cohesive messaging about the risks of pregnancy and treatment options for high-risk women that will reduce maternal morbidity and mortality. Finally, racial and economic inequities that impede women's access to high-quality care (including pregnancy termination) and lead to poor outcomes must be corrected by committing to providing culturally competent and responsive care.

Conclusion and research gaps

Although workshop participants proposed many recommendations for assessment of risk, counseling, and treatment and access to reproductive health services for women at high risk for maternal mortality, significant research gaps in evidence to guide best-practice care for this population remain. Issues proposed for further research include the following:

- Development of evidence-based tools for assessment of risk during the preconception period
- Best practices in counseling high-risk women about reproductive health treatments (contraception, abortion)
- Risk stratification guidelines for specific conditions to determine treatment options along a continuum of care
- Determination of the effects of state and federal legislation imposing limits (gestational age, genetic testing outcomes) to abortion on maternal morbidity and mortality
- Evaluation of the impact of reproductive health programs for high-risk women
- Inclusion of high-risk women in studies examining medication abortion

It is hoped that this workshop serves as a catalyst for developing evidence-based guidelines and position statements on reducing the barriers for high-risk women to obtain reproductive health services and strengthens relationships among MFM subspecialists, family planning subspecialists, and generalist obstetrician-gynecologists to increase collaboration and support for high-risk women.

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