

Designing your patient's prenatal care "PATH"

Recommendations for maternity care professionals based on MiPATH.

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Prenatal care is one of the most common preventive services in the United States—over 98% of the almost 4 million patients who give birth each year receive at least some prenatal care. Until the COVID-19 pandemic, prenatal care delivery had remained largely unchanged since 1930. National guidelines recommend a uniform 12- to 14-visit schedule for all patients to deliver evidence-based services, such as laboratory testing, ultrasounds, and blood pressure monitoring. During the COVID-19 pandemic, maternity care practices across the country rapidly

implemented new visit schedules and telemedicine to reduce viral exposure while continuing to deliver necessary prenatal services. These experiences revealed how prenatal care could be delivered more flexibly both during and beyond the acute public health crisis.

Catalyzed by changes in prenatal care delivery launched during the COVID-19 pandemic, the American College of Obstetricians and Gynecologists (ACOG), in collaboration with the University of Michigan, convened a panel to redesign prenatal care delivery recommendations. The resulting Michigan Plan for Appropriate Tailored Healthcare in pregnancy (MiPATH) is a

paradigm shift in prenatal care delivery, providing a more individualized and flexible approach to prenatal care that matches recommended services to patients' medical needs, including chronic conditions and pregnancy complications, as well as social and structural determinants of health (SSDHs), which are nonmedical factors that influence patients' ability to access and engage in care.¹ Here we summarize the MiPATH panel process, translate key findings into recommendations for maternity care professionals, and address common questions about new recommendations.

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Evidence supporting new prenatal care recommendations

Prenatal care is a crucial preventive care service designed to improve the health of pregnant patients and their infants through (1) medical screening and management of chronic conditions and complications; (2) anticipatory guidance on pregnancy, delivery, and the postpartum period; and (3) support for SSDHs that affect patients' ability to access and engage in care.²⁻⁵ There is robust evidence supporting many specific prenatal care services (eg, maternal vaccination, detection, and management of anemia).⁶⁻⁸ However, supporting evidence for prenatal care delivery is much more limited, as highlighted by a systematic review completed for the MiPATH panel.⁹ Meta-analysis-level data demonstrate equal maternal and neonatal outcomes and fewer unnecessary interventions when prenatal visits are reduced from 14 to 9 for patients without medical conditions. However, the connection between prenatal visit number, monitoring, telemedicine, and pregnancy outcomes is less clear for patients with additional risk factors.⁹⁻¹¹ Early data from prenatal care models with reduced visit schedules and telemedicine launched during the COVID-19 pandemic report high patient and provider satisfaction and significant changes in care utilization, but safety data are limited.¹²⁻¹⁵ Thus, we lack important evidence on the traditional model of prenatal care and new prenatal care models launched during the COVID-19 pandemic, leaving an important gap in our knowledge of the safest and most effective methods of prenatal care delivery.^{5,16}

MiPATH panel process

The MiPATH panel utilized the RAND/

UCLA Appropriateness Method, a consensus-based process that combines existing evidence with expert opinion to determine the appropriateness (eg, balance of risks and benefits) for specific recommendations across populations. As prenatal care services are well established, the panel focused on prenatal care delivery and how those services are executed for pregnant patients. The panel included 19 interprofessional maternity care representatives from leading national professional and public health organizations. Key panel considerations included specific prenatal care delivery components, including visit frequency and monitoring of routine pregnancy parameters (eg, blood pressure, fundal height, fetal heart tones, and weight). These delivery components were considered across representative patient populations: (1) without medical conditions; (2) with chronic medical conditions (eg, hypertension and diabetes); (3) with pregnancy complications (eg, gestational diabetes, gestational hypertension, and history of early pregnancy loss); and (4) facing adverse SSDHs. As average-risk patients can be defined differently by region or individual health system, the panel selected a pragmatic definition of which patients to include in their deliberations: "pregnancies without significant medical, pregnancy, or mental health conditions that can be cared for by general maternity care professionals (eg, obstetrician-gynecologists, family medicine physicians, certified nurse midwives, and nurse practitioners)."¹⁷

MiPATH panel recommendations

The MiPATH panel envisioned a new method of delivering prenatal care that

includes tailored care schedules from the beginning of pregnancy based on an initial risk assessment and incorporation of patient preferences. A step-by-step approach to implementing tailored prenatal care plans can be found in **Figure**. Of note, although the panel envisioned comprehensive implementation of all MiPATH elements together, maternity care professionals may consider incremental adoption of individual elements as feasible in their practices.

1 SCREEN FOR MEDICAL, SOCIAL, AND STRUCTURAL DETERMINANTS OF HEALTH

To tailor prenatal care delivery to patients' SSDHs, the panel recommended completing a pregnancy risk assessment—ideally between 6 and 10 weeks, or as soon as possible after a patient presents for care. Of note, the panel emphasized the importance of welcoming patients into care whenever they present, regardless of the timing. The needs assessment can be completed by any trained member of the team, including nurses, medical assistants, or the provider—in person or through telemedicine. Clinicians can reference ACOG Committee Opinion No. 729 for further information, including recommended screening tools.

2 VISIT FREQUENCY AND MONITORING SCHEDULE

Prenatal care plans, including visit frequency and monitoring, should be adjusted based on the results of a patient's needs assessment. Maternity care professionals can use the chronic conditions (eg, hypertension and diabetes), pregnancy complications (eg, gestational diabetes, gestational hypertension, and early pregnancy loss), and SSDHs (eg, food insecurity and

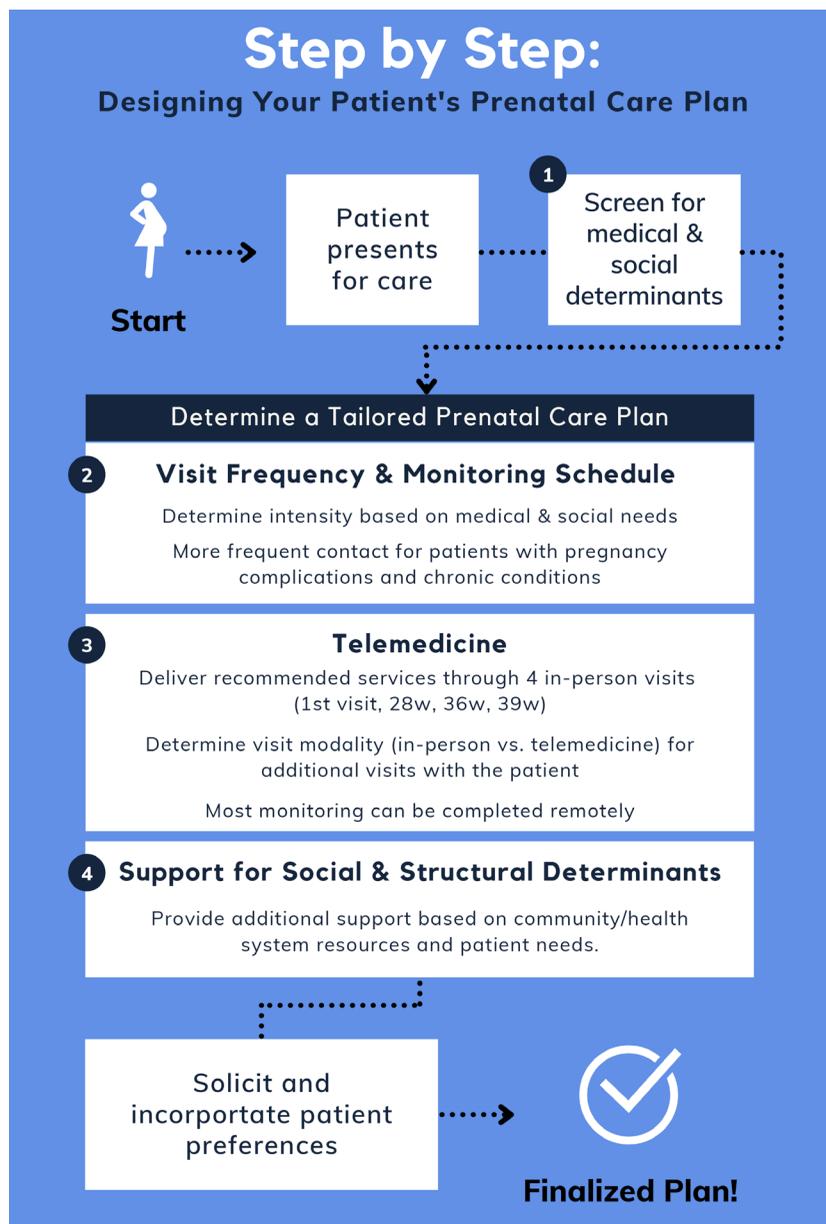
pregnancy-related anxiety) as models for other conditions experienced by their patients.

Prenatal care initiation: Patients without adverse medical, social, or structural determinants of health should ideally initiate prenatal care, including the first prenatal visit and ultrasound, between 7 and 10 weeks. For patients with chronic conditions, initiating prenatal care early can help with optimizing disease control as quickly as possible. Similarly, patients with a history of early pregnancy loss may benefit from an earlier first prenatal visit and ultrasound for reassurance.

Prenatal visit frequency and monitoring: The panel identified 2 schedules for prenatal care delivery: a flexible schedule (visits every 6 weeks until 28 weeks, every 4 weeks until 36 weeks, every 2 weeks until delivery) or a more intense schedule, similar to current recommendations (visits every 4 weeks until 28 weeks, every 2 weeks until 36 weeks, weekly until delivery). Patients without adverse medical, social, or structural determinants of health may engage in shared decision-making with their maternity care professional to select a schedule that meets their needs and preferences. Monitoring of routine parameters should match visit frequency.

For patients with medical conditions, prenatal care should be delivered with the more intense schedule, with an increased frequency of monitoring routine parameters. For patients with chronic hypertension, blood pressure should be monitored more frequently than the recommended visit schedule in the first and second trimester. If the patient cannot complete home

FIGURE Step-by-Step Guide for Implementing MiPATH Prenatal Care Recommendations in Practice



monitoring of blood pressure (eg, does not have access to a high-quality blood pressure cuff, has not been trained to use it, or the office cannot support home monitoring), maternity care professionals should consider additional prenatal

visits. Patients who develop pregnancy complications should transition to the more intense prenatal visit schedule once they receive a diagnosis.

The panel emphasized the importance of screening for SSDHs and

assisting patients with identified needs. However, for patients who can be connected with resources within the health system or community to address their needs (eg, an online support group for pregnancy-related anxiety or ride share service for transportation insecurity), modifications to prenatal care delivery are usually not necessary. Maternity care professionals should consider using the more intense visit schedule for patients with low health literacy and pregnancy-related anxiety. Similarly, for patients who face intimate partner violence, in-person visits may be the only opportunity for a patient to escape their abuser, so telemedicine should be used with caution. If resources for adverse SSDHs are not available within the health system or community, patients and maternity care professionals may consider the more intense prenatal visit schedule for close follow-up if this does not add undue burden for the patient.

3 TELEMEDICINE

All in-person prenatal care services can be streamlined to 4 visits: the first prenatal visit, 28 weeks, 36 weeks, and 39 weeks.⁵ For other visits, telemedicine is a reasonable option for prenatal care delivery if preferred by the patient. Telemedicine should be completed by video, if possible, but can be completed by phone if patients lack access to broadband internet or smart devices, or if a practice has not yet developed telemedicine infrastructure. Patients must have access to high-quality home devices that they have been trained to use for telemedicine visits. Although the panel did not recommend specific devices that should be required, given the importance of detecting high blood pressure in pregnancy, at least a home

blood pressure cuff should be available.^{12,14,17} Unfortunately, home devices are not yet universally covered by insurance for pregnant patients receiving routine prenatal care, although patients can purchase the devices using a health savings account or pay for them out of pocket.^{18,19} Practices should consider how to ensure equitable access to telemedicine for patients who cannot afford home devices through advocacy or donations.¹⁵

4 SUPPORT FOR SOCIAL AND STRUCTURAL DETERMINANTS

Over 40% of health outcomes in the United States are driven by SSDHs, yet routine prenatal visits are poorly designed to address these nonmedical factors.²⁰ It is important for maternity care professionals to identify and acknowledge patients' adverse SSDHs, but they may not have sufficient training, time, and resources to address patients' identified needs.^{21,22} Instead, maternity care professionals should work closely with social services professionals to ensure patients are connected to health system and community resources. Practices may consider establishing partnerships with public health agencies, their local ACOG leadership, nonprofit organizations, and other community groups.^{23,24}

Looking to the future

MiPATH recommendations are a promising way to incorporate patients' needs and preferences into prenatal care. Screening for SSDHs from the beginning of pregnancy allows care teams to understand their patients' diverse needs, and in turn, proactively adjust care delivery. Traditional prenatal care models require over 40 hours of care per pregnancy, including laboratory tests,

prenatal visits, and travel. For patients who work, have childcare obligations, or face transportation barriers, reduced visit schedules and telemedicine can decrease the burden of prenatal care. For patients with chronic medical conditions and pregnancy complications, such as diabetes and hypertension, use of home monitoring allows for closer surveillance of routine pregnancy parameters and empowers patients to be an active part of the maternity care team. Finally, addressing SSDHs through appropriate social services, not additional prenatal visits, can ensure patients receive the right service at the right time from the right team member.

The rigorous, consensus-based MiPATH guidelines represent the first major shift in prenatal care delivery since 1930. Change is hard. Maternity care professionals have delivered high-quality, comprehensive prenatal care through the traditional model for decades, but the pandemic has revealed that we can deliver prenatal care more flexibly for our patients by leveraging care tailoring and technology to ensure every patient has a prenatal care plan designed to meet their needs. ■

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FOR REFERENCES VISIT
contemporaryobgyn.net/MiPATH