

Spotlight on Perinatal Care Coordination

Issue Brief from the New York State Maternal Mortality Review Board

The audience for this issue brief is obstetrician-gynecologists (ob-gyns), midwives, nurse practitioners, physician assistants, mental health providers, social workers, emergency medicine providers, internists, family medicine providers, and other medical and clinical multi-disciplinary team members taking care of people in the perinatal and postpartum periods.

Introduction

The New York State Maternal Mortality Review Board (Review Board) chose to create a Care Coordination issue brief after identifying a consistent need for a maternity medical home model in their maternal mortality case reviews. The maternity medical home model was the subject of one of the Review Board's key recommendations in the *New York State Report on Pregnancy-Associated Deaths in 2018-2020*: "The Department should convene a multidisciplinary group of key interested parties to develop standard guidance on implementation of a maternity medical home model that prioritizes women with chronic conditions. In addition, New York State should provide funding to support a pilot project of the maternity medical home model."¹

Additionally, the lack of continuity of care and care coordination were among the most common contributing factors associated with pregnancy-related deaths during 2018-2020.² Care coordination involves the communication between providers about a patient's multiple medical needs. Care coordination is especially vital during pregnancy, delivery, and the postpartum period because it ensures that women have access to resources, services, and medical care that are crucial for maternal health.

This issue brief uses a composite case of a fictitious patient to incorporate key aspects of care coordination that were identified in actual cases during the Board's review of 2018-2020 pregnancy associated deaths. Specific recommendations follow the case description.

Composite Case

Patient is a 28-year-old G3P1011 living in a medium-sized city in New York with her partner and daughter. She has a history of one miscarriage and her five-year-old daughter was born vaginally at term. Her previous pregnancy was complicated by gestational diabetes and pre-eclampsia. Her past medical history is asthma that is controlled with daily budesonide 80 mcg/formoterol 4.5 mcg (Symbicort): 2 inhalations twice daily and prescribed as needed (PRN) for symptoms. Throughout the duration of the pregnancy, her asthma became severe.²

Over the past five years since her last pregnancy, the patient received sporadic care, with records showing elevated blood pressure (all greater than 120/80 and some greater than 140/90) during four gynecology visits, seven pulmonology visits, and nine visits to the emergency department (ED), six of which were for asthma exacerbations managed with steroids. She did not have follow-up or treatment for her chronic hypertension. She did not have a primary care physician. There were no concerns during the mental health assessments at gynecology yearly visits.

During her first prenatal visit at 14 weeks, her obstetrician noted her high blood pressure (143/92, repeated 146/97). She was prescribed nifedipine XL 30mg for chronic hypertension. It was noted that "patient sees pulmonology for asthma management." The obstetrician did not order any additional testing, and no records were requested.

At 28.2 weeks, she was diagnosed with gestational diabetes. She was referred to a maternal fetal medicine physician and a nutritionist and given testing supplies by her obstetrician with instructions on how to take her

¹ https://health.ny.gov/community/adults/women/maternal_mortality/docs/maternal_mortality_review_2018-2020.pdf

² <https://aafa.org/asthma/asthma-diagnosis/>

blood sugars. Nurse home visiting was ordered for the patient by a maternal fetal medicine physician to assist in blood sugar management, but it is unclear if she ever received the visit. At 30 weeks she presented to the emergency department for asthma exacerbation and received oral steroids taper. Emergency department physician recommended follow-up with pulmonologist and obstetrician.

At 32.4 weeks, she presented to her obstetrician for worsening exercise intolerance. Her blood pressure was 138/83 on 30mg of nifedipine XL. The obstetrician encouraged patient to reach out to pulmonologist for evaluation of asthma medications.

Patient attempted to reach out to asthma provider, made an appointment for 7 days later, but presented to the emergency department for worsening shortness of breath 5 days later at 33.2 weeks gestational age. In the emergency department, she is diagnosed with an asthma exacerbation and given outpatient oral steroids for 5 days, discharged, and encouraged to contact her pulmonologist and her obstetrician for follow up appointments. There was no confirmation of follow-up appointments made or completed timely.

Seven days later her partner calls 911 for extreme shortness of breath. As the emergency medical services team evaluates her, she becomes unconscious, apneic, and pulseless. Cardiopulmonary resuscitation (CPR) is started, and she is transferred to the nearest hospital where a perimortem cesarean-section is performed. The patient is not able to be resuscitated. Cause of death on the autopsy report was acute and chronic asthma. Her newborn had APGAR (Appearance, Pulse, Grimace, Activity, and Respiration) scores of 2/3/5 and had a prolonged neonatal intensive care unit stay.

Discussion and Recommendations

This case highlights the urgent need for integrated, coordinated care for pregnant women with chronic health conditions. Multi-disciplinary clinicians caring for patients of reproductive age should discuss such chronic health conditions with patients prior to pregnancy to help optimize their health.

This case is an example of chronic disease management of asthma. Multi-disciplinary clinicians should be aware of data that shows asthma was one of the most common pre-existing medical conditions in pregnancy-related deaths.³ Asthma severity can change throughout the duration of pregnancy. If asthma is left uncontrolled in pregnancy, this can result in maternal and infant morbidity and mortality. Primary care physicians, obstetric clinicians, pulmonologists, and emergency medicine clinicians should employ recommendations from this care coordination issue brief to optimize asthma management. For more information on the treatment of asthma in pregnancy, clinicians can refer to the Clinical Expert Series titled *Asthma in Pregnancy* published in the journal *Obstetrics & Gynecology* (The Green Journal).⁴

Recommendation 1

A maternal medical home should be initiated for pregnant women, especially those with chronic health conditions.

- a. A maternal medical home is a medical model that offers holistic support throughout the pregnancy and postpartum period that integrates a multidisciplinary team of healthcare professionals and community-based supports. Key features include routine check-ups, acute and chronic condition management, mental health support, pregnancy care navigation, and assistance with non-medical needs like transportation, housing, food assistance, and assistance with making appointments.
- b. If a maternal medical home is not able to be provided, a multidisciplinary collaboration between specialists to provide coordinated medical care and additional psychosocial services, social support, and medical education, should be provided. This can be done virtually. Examples include a physician-to-physician call to discuss and coordinate care, regular meetings where the care of high-risk obstetric patients are discussed between providers in the practice and support staff to

³ https://www.health.ny.gov/community/adults/women/maternal_mortality/docs/maternal_mortality_review_2018-2020.pdf

⁴ Sigelko AD, Strek ME, Wolfe KS. Asthma in Pregnancy. *Obstet Gynecol.* 2025;146(1):39-58. Published 2025 Jun 5. doi:10.1097/AOG.0000000000005948

coordinate care, and dedicated obstetric patient navigators within a practice.

- c. The implementation and sustainment of a maternal medical home model will be significantly accelerated and strengthened by collaboration between providers and public and private payers.

Recommendation 2

Patients with multiple chronic health conditions or risk factors should prompt a referral to a home visiting program. These referrals should be facilitated by the hospital or practice where appropriate.

- a. Perinatal and Infant Community Health Collaborative
- b. Nurse Family Partnership
- c. Healthy Families New York
- d. Community Health Workers
- e. Other locally available services

Recommendation 3

A warm handoff to outpatient care is ideal from the Emergency Department. When a warm handoff is not feasible, Emergency Departments should:

- a. Utilize integrated electronic medical record (EMR) communication when available to notify outpatient providers of the emergency department visit.
- b. Provide accurate contact information (name, phone number, address) for obstetric clinics, relevant specialists, and other support referrals at discharge.
- c. Ensure discharge instructions are clear and complete, including:
 - Contact details for follow-up providers.
 - Guidance for scheduling appointments.
 - Printed or electronic access to emergency department test results.
 - Available in plain language, and in a language that the patient reads.
- d. Leverage available resources, such as patient navigators or social workers—when present—to assist in coordinating care.
- e. Advocate for systems-level support, including investment in technologies that support care connection and follow-up tracking.