Executive Summary

Approximately 99% of the nearly 250,000 live births in New York State result in the discharge of a new mother and her baby. Yet, there are mothers who die or suffer severe permanent harm during delivery and/or within 42 days of delivery.* The three leading causes of maternal death among women in New York State are obstetric hemorrhage, severe hypertension in pregnancy, and venous thromboembolism. Many of these outcomes are preventable when appropriate and standardized care management is rendered.

New York State currently ranks 47th out of 50 states in its maternal death rate despite being home to some of the most clinically-advanced, state-of-the-art institutions globally. In 2010, there were 23.1 maternal deaths per 100,000 live births in New York State. Healthy People 2020, the federal initiative that provides science-based 10-year national objectives for improving the health of all Americans, calls for a reduction in the maternal mortality rate to 11.4 maternal deaths per 100,000 live births. Given the current landscape, New York faces an uphill battle.

ACOG District II has remained steadfast in its commitment to the health of pregnant women across the state since the inception of the Safe Motherhood Initiative (SMI) in 2001, and through the SMI it has studied adverse obstetric outcomes for nearly a decade. The SMI brought to light systematic problems and inefficiencies with care coordination and delivery that were preventable, uncovered the existence of co-morbidities that impacted women’s ability to compensate for and survive an obstetric adverse event, and revealed that most obstetric facilities struggle with implementing a guideline-based system whereby complications are expeditiously and effectively managed in high-risk populations. This remains the basis of ACOG District II’s work today.

Over the past several years a renewed focus by both governmental and non-governmental organizations has been placed on maternal death with particular attention paid to the steady increase in co-morbidities such as obesity and advanced maternal age. In 2013, ACOG District II began convening statewide, national, and international experts in the fields of obstetrics and gynecology, maternal-fetal medicine, nursing, midwifery, family practice, and anesthesiology to examine current hospital-based practices in 127 obstetric hospitals throughout New York State as they relate to the management of the three leading causes of maternal death. Over the course of 18 months, discussions were held on how to best streamline and coordinate care based on available clinical evidence, practice guidelines, protocols, and the ability of hospitals with varying resources to implement standardized approaches to obstetric hemorrhage, severe hypertension in pregnancy, and venous thromboembolism. The result of this labor-intensive process is this toolkit of three bundles, or care management plans, for birth facilities to use and adapt to fit the ever-growing needs of the obstetric team.

* The World Health Organization defines maternal death as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. To facilitate the identification of maternal deaths in circumstances in which cause of death attribution is inadequate, a new category has been introduced: Pregnancy-related death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death.

The bundles contained within this toolkit offer practical implementation guidance that will help to eliminate this variation and include an array of teaching tools to place you on the path to success.

ACOG District II would be remiss if it failed to address the most important aspect of improving care quality in obstetrics which is tracking adverse outcomes. In obstetrics, major adverse outcomes are often considered unavoidable because they are relatively rare compared to normal outcomes and causes may be difficult to discern without formal tracking processes. Tracking allows for better characterization of obstetrical trends for quality improvement, allowing obstetric teams to measure progress.

In addition to the materials offered herein, over the next year you will be asked to collect simple, yet specific, monthly data measures via a user-friendly interface for reporting appropriate measures to assess process adherence and outcomes. The interface created through the SMI and with our data partner, Salus™ Global, allows hospitals to:

- generate charts to track progress
- interact with other participating SMI hospitals via a community forum, sharing questions, successes, and even your challenges
- stay up-to-date on all educational offerings to increase performance and enhance team knowledge
ACOG District II has worked intimately with obstetric providers across the state and the country to develop the contents of this toolkit. SMI workgroup members and hospital participants had multiple opportunities to comment on, edit, and vet all materials contained within this toolkit among one another – a testament to their dedication and commitment to improving the care of all pregnant women across New York State.

The goal of this toolkit is to provide standardized guidance and support to obstetrician-gynecologists, multidisciplinary clinical staff, and hospitals to develop a comprehensive and standardized care management process for patients who may be at risk for maternal mortality.

**HOW TO USE THIS TOOLKIT**

While specific implementation guidance is included for each of the bundles within this toolkit, a hospital should assess its level of readiness to implement these bundles and its currently available resources to ensure implementation success.

**10 CLINICAL CONSIDERATIONS TO GET STARTED**

1. Assess current practice patterns for handling obstetric emergencies. Does a problem exist? Is the team knowledgeable about the warning signs and does it possess the ability to react quickly?

2. Are there certain processes that are broken and can be fixed? What are they and how would the obstetric unit go about changing them?

3. Identify administrative champions (key players) – those individuals who would likely rally around ways to improve the obstetric unit.

4. Convene department meetings to influence department culture, gather buy-in, and support the implementation of change to accomplish the goal.

5. Is upper hospital management such as the CEO and CMO involved in the activities of the obstetric unit? Invite these individuals to department meetings to showcase the unit’s work to standardize care management in the event an obstetric emergency occurs.

6. Assign or hire a patient safety officer and or perinatal safety nurse to coordinate the hospital’s/department’s efforts.

7. Translate the need for a culture change into malpractice risk to have the team understand the need from a different perspective.

8. What is the composition of the obstetric staff?

9. Is there strong clinical leadership?

10. Is the full obstetric unit knowledgeable about how to utilize the tools contained within this bundle?
**Definitions for Common Terminology**

The obstetric unit should be well-versed in the definitions of common terms used in this toolkit and within other patient safety and quality improvement initiatives. The following terms are among the most common and their definitions stem from evidence-based literature.

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<th>Term</th>
<th>Definition</th>
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| **Checklists**  | A list which is predominantly used for two reasons:  
1. to identify items or tasks that should be confirmed before or during the scheduling of a procedure or the performance of that procedure, and  
2. to facilitate documentation of what was accomplished or utilized during a procedure. The latter is done retrospectively, while the former is done prospectively. |
| **Bundles**     | A structured way of improving the processes of care and patient outcomes: a small, straightforward set of evidence-based practices — generally three to five that, when performed collectively and reliably, have been demonstrated to improve patient outcomes. |
| **Policies**    | Typically a set of non-negotiable rules designed to assure uniformity in the performance of specific tasks.                                                                                             |
| **Guidelines & Protocols** | Documents that aim to guide decisions and criteria regarding diagnosis, management, and treatment in specific areas of healthcare. Medical guidelines are based on an examination of current evidence within the paradigm of evidence-based medicine.  

The Institute for Clinical Systems Improvement defines protocols as step-by-step statements of a procedure routinely used in the care of individual patients to ensure that the intended effect is reliably achieved. They represent an algorithm or decision tree that tends to be very directive and provide the physician or health care providers with a clear path in care management that is problem-specific.  

Although the terms “guidelines” and “protocols” are often used interchangeably, guidelines tend to offer a wider range of options regarding the therapeutic considerations given a particular clinical situation; whereas protocols tend to be very directive, offering a limited set of responses to clinical problems. Protocols almost always derive from existing guidelines.  

Deviation from guidelines/protocols is acceptable in the care of an individual patient provided there is clear documentation explaining the need to do so. |
| **Order sets**  | Standardized instructions for the management of a particular disease, condition, or procedural intervention, presented as a group of orders. These orders can be individually selected or utilized as a group and signed by an authorized prescriber. Order sets allow for the initiation of all elements of a protocol to be completed at one time. |
COGNITIVE AIDS (tools that may assist you with implementation):

**Algorithm/Flowchart**
Intended to serve as a simplified summary and cognitive aid that provides treatment decision points for each stage of a procedure. (i.e., the number of tasks a nurse must perform in order to obtain emergency medications).

**Table chart**
A summary of a checklist; it provides an intermediate level of detail and is sufficiently simple to be contained on one page and to act as a cognitive aid.³

References:
2 Institute for Healthcare Improvement
3 California Maternal Quality Care Collaborative OB Hemorrhage Toolkit