2013-16

Safe Motherhood Initiative
As obstetrician-gynecologists caring for pregnant women, our job is to keep mothers and babies healthy and safe. When a maternal death occurs it is devastating for the family, the community, and for the entire healthcare team involved with the patient’s care. It is our professional obligation and our moral imperative as clinicians dedicated to providing high quality women’s healthcare to understand why maternal deaths and the stark racial and ethnic disparities occur and to develop actionable strategies for prevention.

In 2013, ACOG District II began to engage 117 obstetric hospitals statewide to participate in a voluntary program - the Safe Motherhood Initiative - to decrease and ultimately prevent maternal mortality and morbidity.

In this time, the SMI has brought together multidisciplinary clinical teams from rural regions of the state to major metropolitan academic medical centers to develop and implement standardized clinical protocols, or "bundles," on the three leading causes of maternal death -- hemorrhage, severe hypertension, and venous thromboembolism. With the active engagement of these hospital teams, the SMI has continued to educate providers, improve clinical practice, and change culture. While there is much more work to be done to continue to execute the bundles and sustain the momentum, the commitment of the SMI’s hospitals to make care safer is unwavering. The Safe Motherhood Initiative is not led by any one person or one institution -- it is led by each and every participating hospital and obstetric team member.

When we began this work, New York State’s ranking was 48th out of 50 states. Since that time our rate has dropped and New York is now 30th. While we have more work to do, we thank our hospitals for their continued dedication to reducing maternal mortality and morbidity throughout the state.

We are also thankful for our continued partnership with Merck for Mothers, the expertise and thoughtfulness of our steering committee and clinical workgroups, and the dedicated collaboration and commitment of our partner organizations such as the California Maternal Quality Care Collaborative (CMQCC), the Association for Women’s Health, Obstetric, & Neonatal Nurses (AWHONN), and the Association for Maternal-Child Health Providers (AMCHP). We would also be remiss if we did not express our sincerest appreciation for our statewide partners such as the New York State Department of Health, the New York City Department of Health and Mental Hygiene, the Health Care Association of New York State (HANYS), and the Greater New York Hospital Association (GNYHA). And finally, a ‘thank you’ to the Biostatistics Coordinating Center at Columbia University and Salus Global Corporation for their efforts with data collection and support for the SMI’s implementation.

It takes a community to eradicate maternal mortality and morbidity and as obstetrician-gynecologists we will continue to answer this calling. ACOG District II envisions a future where no family or community suffers the loss of a mother due to a preventable pregnancy-related death and the work of the Safe Motherhood Initiative will continue.

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SMI by the NUMBERS

94%
HOSPITAL UPTAKE IN THE SAFE MOTHERHOOD INITIATIVE

117
HOSPITALS PARTICIPATING

45
IMPLEMENTATION VISITS & GRAND ROUNDS

29
CONFERENCE CALLS & WEBINARS

14
STATEWIDE MEETINGS

100%
DEDICATION

98%
HOSPITALS REPORTED THAT SMI HAD DIRECT IMPACT ON PRACTICE IMPROVEMENTS

30
NYS RANKING FOR MATERNAL MORTALITY RATE (DOWN FROM 48TH)

94%
HOSPITALS REPORTED THAT SMI HELPED WITH UNDERSTANDING HOSPITAL CULTURE
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 diabetes.

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 clinical practices in obstetric hospitals throughout New York State. The goal was to develop clinical tools to effectively manage the three leading causes of maternal death - obstetric hemorrhage, severe hypertension in pregnancy, and venous thromboembolism.

Over 18 months, these experts met to 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 care management. The result of this labor-intensive process was the development and dissemination of three “bundles,” or care management plans, for obstetric hospitals to use and adapt to fit the ever-growing needs of their team.

While there is much more work to be done to continue to execute the bundles and sustain the momentum, ACOG District II is committed to continuing to support hospitals in their quality improvement efforts to reduce maternal mortality and morbidity in this state.

Providing practical implementation guidance to eliminate clinical care variation with an array of teaching tools placed Safe Motherhood Initiative hospitals on the path to success.
The SMI used several different platforms to engage and educate physicians, nurses, and allied professionals on the bundles including in-person quarterly SMI meetings, workgroup calls, webinars, on-site implementation visits, and grand rounds – all with the express aim of offering customized quality improvement assistance with bundle implementation and sustainability.

The educational resources developed and offered through the SMI were determined by expert workgroups with direct input from participating hospitals’ feedback on the types of education most needed within the obstetric unit. Alternatively, recommendations were made to hospitals on how best to integrate these resources and optimize their labor and delivery units based on the SMI bundles. These recommendations included:

- Establishing consistent processes to document debriefing and huddles
- Pursuing conversations with hospital leadership and administration to support and facilitate processes to standardize obstetric care
- Ensuring accessibility of the SMI’s educational resources and using simulation and drills to reinforce utilization of these materials in emergency situations
- Reviewing protocols for each bundle in collaboration with other affected departments such as emergency medicine and anesthesia

Incorporating a multifaceted approach to learning optimized the integration of the Safe Motherhood Initiative hospitals and aided in bundle implementation.
our implementation

The Safe Motherhood Initiative relied on a multifaceted approach with a variety of implementation techniques to teach clinicians step-by-step processes to alleviate and manage an adverse obstetric event.

The SMI’s bundle implementation process was comprehensive and varied. Through trusted clinical leadership and change agents at the local, state, and national levels, the SMI was presented and championed through hospital site visits and grand rounds. Resources and support were easily accessible online, in print, and through respected colleagues.

However, buy-in is equally as important. Apprehension over new protocols and culture change can be barriers to incorporating new practices. To address this, the SMI relied heavily on clinical champions as avenues of change. The use of hospital core team leaders was shown to be one of the most effective methods of bundle implementation. The SMI applied this strategy and suggested hospitals use senior-level hospital administration, department chairs, attending physicians, nurse managers, risk managers, and patient safety officers as advocates to facilitate staff participation in the bundles.

Process and outcome data measures were built into each bundle to examine implementation trends within each hospital and across hospital levels of care. The data measures were aligned with other state and national reporting requirements to alleviate redundancy. A significant factor that enabled data collection is the fact that the reporting is not penalized or regulated by an outside governing body. Furthermore, hospitals were able to input and utilize their SMI data for self-assessment purposes.

Further explore the SMI’s implementation process in the March 2016 issue of Seminars in Perinatology.

Emphasizing active engagement of multidisciplinary team members in the implementation process is paramount for success and sustainability.
Clinical best practices and medical research is a dynamic field. Any tool or resource of a clinical nature requires constant upkeep in order to ensure that the most relevant guidelines are being adhered to.

The SMI convened hospital participants quarterly at academic medical centers across the state to comprehensively review each bundle to incorporate the latest research and evidence for optimal maternal health outcomes. As time progressed, these quarterly meetings became avenues for networking and shared learning, as well as opportunities to engage in dynamic conversations around challenging cases related to the bundles - bringing "real life" scenarios to the classroom.

As with any ongoing quality improvement initiative, ACOG District II understands that sustainability is challenging. Staff turnover, updates in guidelines, and changing team dynamics can all pose significant obstacles, especially in healthcare. However, the momentum gained and the dedication exhibited by 94% of New York’s obstetric hospitals is a testament to the desire for change from the bottom up.

The Safe Motherhood Initiative is dedicated to sustaining quality improvement initiatives within labor & delivery units statewide.
Our hospitals

Adirondack Medical Center - Saranac Lake
Albany Medical Center
Alice Hyde Memorial Center
Arnot Ogden Medical Center
Auburn Community Hospital
Aurelia Osborn Fox Memorial Hospital
Bassett Medical Center
Bellevue Women’s Care Center
Bronx-Lebanon Hospital Center
Brookdale University Hospital
Brooklyn Hospital Center - Downtown
Brooks Memorial Hospital
Burdett Care Center
Canton-Potsdam Hospital
Catskill Regional Medical Center
Champlain Valley Physicians’ Hospital
Claxton-Fergusson Medical Center
Columbia Memorial Hospital
Cortland Regional Medical Center
Crouse Hospital
FF Thompson Hospital
Faxton-St. Luke’s Healthcare
Flushing Hospital Medical Center
Glens Falls Hospital
Good Samaritan Hospital Medical Center - West Islip
Good Samaritan Regional Medical Center - Bon Secours
Guthrie Corning Hospital
Health Alliance Hospital - Broadway campus
Hudson Valley Hospital Center
Huntington Hospital
Jamaica Hospital Medical Center
Lenox Hill Hospital
Lewis County General Hospital
Long Island Jewish Medical Center
Lutheran Medical Center
Maimonides Medical Center
Massena Memorial Hospital
Memorial Hospital of William & Gertrude
Mercy Medical Center - Women’s Clinic
Mercy Medical Center
Millard Fillmore Suburban Hospital - Kaleida Health
Montefiore Medical Center - Weiller Division
Montefiore Medical Center North - Walden Division
Mount Sinai Hospital
Mount Sinai Hospital "Mt. Sinai East"
Nassau University Medical Center
Nicholas Longworth Hospital
Newark-Wayne Community Hospital
New York Methodist Hospital
New York Presbyterian - Allen Hospital
New York Presbyterian - Columbia University Medical Center
New York Presbyterian - Lower Manhattan Hospital
New York Presbyterian - Queens
New York Presbyterian - Weill Cornell Medical Center
North Shore University Hospital - LIJ
North Shore University Hospital - Forest Hills
Norwalk Hospital
Northern Westchester Hospital
NYC Health + Hospitals - Bellevue Hospital Center
NYC Health + Hospitals - Coney Island Hospital
NYC Health + Hospitals - Elmhurst Hospital Center
NYC Health + Hospitals - Harlem Hospital Center
NYC Health + Hospitals - Jacobi Medical Center
NYC Health + Hospitals - Kings County Hospital Center
NYC Health + Hospitals - Lincoln Medical & Mental Health Center
NYC Health + Hospitals - Metropolitan Hospital Center
NYC Health + Hospitals - North Central Bronx Hospital
NYC Health + Hospitals - Queens Hospital Center
NYC Health + Hospitals - Woodhull Medical & Mental Health Center
NYU Langone Medical Center
Olean General Hospital
Oneida Healthcare Center
Orange Regional Medical Center
Oswego Hospital
Our Lady of Lourdes Memorial Hospital
Peconic Bay Medical Center
Richmond University Medical Center
Rochester General Hospital
Rome Memorial Hospital
Samaritan Medical Center
Saratoga Hospital
Sisters of Charity Hospital
South Nassau Communities Hospital
Southampton Hospital
Southside Hospital
St. Barnabas Hospital
St. Barnabas Hospital - The Bronx
St. Barnabas Hospital - Brooklyn
St. Barnabas Hospital - Staten Island
St. Barnabas Hospital - Westchester
St. Catherine of Siena Hospital
St. Charles Hospital
St. Francis Hospital - Brooklyn
St. John’s Episcopal Hospital - South Shore
St. Joseph’s Hospital Health Center
St. Luke’s Cornwall Hospital of Newburgh
St. Luke’s Roosevelt - Roosevelt Hospital Division
St. Mary’s Hospital of Amsterdam
St. Peter’s Hospital
Staten Island University Hospital
Stony Brook University Medical Center
SUNY Downstate Medical Center
Upstate University Hospital - SUNY Community Campus
Unity Hospital
Vassar Brothers Hospital
Westchester Medical Center
White Plains Hospital Center
Winthrop University Hospital
Woman’s Christian Association Hospital
Women & Children’s Hospital of Buffalo University
Wyckoff Heights Medical Center
Wyoming County Community Hospital

Our sincerest appreciation to obstetric teams statewide that have committed themselves to providing high quality health care to the pregnant women of New York State.
Quantitative data on key obstetric data measures were collected beginning in September 2014 for five consecutive quarters, submitted via a secure portal created by Salus Global Corporation, and analyzed by a team of epidemiologists at the Biostatistics Coordinating Center at Columbia University. The data measures were agreed upon by all hospitals based on several factors, and comparative hospital reports were supplied to the hospitals in 2016. Analysis of this data is currently in progress.

A program evaluation survey was developed by key bundle workgroup leaders and disseminated to all SMI hospitals. Survey completion afforded ACOG District II the opportunity to understand how hospitals perceived development and implementation of the initiative, what programmatic aspects were successful and unsuccessful, and how best to coordinate future data collection efforts.

In a post-evaluation analysis of the SMI in summer 2016, engaged hospitals attested to the value the initiative provided to their obstetric teams across the state.

Respondents agree that ...

- **Data Reporting was Integral to Implementation**: 94%
- **Helped to Learn More About Hospital Culture**: 94%
- **Provided Implementation Strategies**: 96%
- **Impacted Practice Improvements Directly**: 98%
- **Provided Tools to Train Staff in VTE**: 98%
- **Provided Tools to Train Staff in HTN**: 98%
- **Provided Tools to Train Staff in HEM**: 100%

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**Bundle Implementation Progress**

- **Not Implemented**: 1.83%, 5.66%, 13.21%
- **In Progress**: 24.53%, 32.00%, 95.89%
- **Fully Implemented**: 73.58%, 62.00%, 50.04%
Changing culture & practice takes time. Bundle implementation occurs over a continuum and is not in identical stages at the various hospitals across the collaborative. Many lessons have been learned through the implementation of the SMI. The SMI has appeared to have had a positive impact on process measures, and potentially on maternal morbidities. However, collecting more data over a longer period of time would be necessary to identify statistically significant differences in the measures studied across all three bundles.
What have you found most valuable about the Safe Motherhood Initiative?

"Site visits and the multidisciplinary team support. The fact that this was driven and supported by ACOG."

"Streamlining practice to comply with recommendations and bringing awareness to the hospital level the need for response to OB emergencies"

"Having the support of ACOG to change physician practice"

"Consistent direction which helped change our culture"

"Pushing us to increase patient safety using evidence-based practice"

"Monitoring outcomes through data collection has proven to be very helpful in our QI process"

"Having a strategic bundle with checklist and algorithms help in education and compliance"

"Attempting to standardize care among hospitals"

What improvements, if any, would you make to the Safe Motherhood Initiative?

"Needed to continue data collection for a little longer. The data collection and reporting were incentives to follow the protocols."

"I think this program should be continued and have more site visits that are mandatory for each site."

"More availability of cooperative discussion with other hospitals"

"Continuation of the data component."

"Look at different levels and help hospitals who have all private practice physicians get buy in to changes."

"Monitoring outcomes through data collection has proven to be very helpful in our QI process."

"Continue the work started; Continue to improve the clinical guidelines; Implement the MEOWS system to help in early diagnosis and management, especially for hemorrhage"

"Better training for checklists. Better integration with EMRs."
LESSONS LEARNED

Multidisciplinary clinical ownership of the SMI was key for engagement and implementation of the three bundles.

Providing tailored implementation support through site visits was highly valuable in certain situations.

Funding was critical to success.

Sustainable change takes time and requires consistent effort with an effective feedback loop.

NEXT STEPS

Enhancing the statewide maternal mortality review process in New York State that results in sharing data and lessons learned with the provider community to develop actionable strategies for prevention

Partnering with the New York State and New York City departments of health and hospital associations on quality improvement/implementation

Supporting national initiatives to share our expertise

Seeking resources to sustain our progress and engagement
ACOG District II and the Safe Motherhood Initiative team wish to thank Merck for Mothers for the financial support to help us carry out the goals of the initiative, as well as to all of our participating hospitals, statewide partners, and clinical colleagues who are making childbirth safer for the women of New York State.

Merck for mothers
Committed to Saving Lives

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