The safe motherhood initiative: The development and implementation of standardized obstetric care bundles in New York

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ABSTRACT

The medical literature demonstrates that inadequate hospital protocols or the lack of consistent protocols for diagnosis, management, consultation, and/or referral can lead to confusion and unnecessary variation in patient care. Incongruities in clinical settings have been repeatedly shown to compromise quality of patient outcomes. Accordingly, the development and adoption of standardized protocols as the best practice for addressing incidence of adverse events remains a top priority in health care quality and safety initiatives. Among the 127 hospital facilities that provide inpatient obstetrical care in New York State, adoption and uptake of standardized care management plans is sporadic at best. In 2001, to target the incidence of severe maternal outcomes and enhance the state of maternal health in New York, the American Congress of Obstetricians and Gynecologists (ACOG) District II and the New York State Department of Health developed the Safe Motherhood Initiative. Today, the Initiative demonstrates that maternal care outcomes are well served through an organized culture of obstetric safety. ACOG District II assists hospitals to optimize their delivery of obstetric care via three toolkits containing standardized protocols for the diagnosis, prevention, and management of the leading causes of maternal mortality and morbidity: hemorrhage, hypertension, and pulmonary embolus.

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Introduction

In 2001, the American Congress of Obstetricians and Gynecologists (ACOG) District II created the Safe Motherhood Initiative (SMI) in New York State. The SMI collected hospital-specific data from maternal death notification forms, on-site reviews, medical charts, interviews, death certificates, autopsies, and peer review committees. Hospitals voluntarily reported their deaths, which were then reviewed by the clinician experts on ACOG District II’s SMI Taskforce.

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In the early years, the Initiative received funding and direction from the New York State Department of Health.

Data was collected using a confidential system that allowed for comprehensive analysis of each pregnancy-related death. Over a 10-year period, ACOG District II released two SMI triennial reports suggesting recommendations for obstetric care, as well as systems improvements for facilities in New York State. A 2010 District II membership survey of over 4000 board-certified obstetrician-gynecologists across New York State demonstrated an urgent need for specific, standardized protocols, and clinical checklists to facilitate effective safety systems for inpatient obstetrics. Survey respondents indicated that perinatal safety protocols were needed for the following three subject areas: prevention of pulmonary embolism, management of massive obstetric hemorrhage, and prevention and management of severe hypertension.

A literature review indicated that hospitals and health systems markedly improved patient care by employing protocols to standardize clinical management. A study carried out at New York Weill Cornell Medical Center from 2003 to 2009, for example, found that implementing a uniform oxytocin protocol allowed staff to better manage the medication while increasing focus on patient care. Time and attention were not divested in following orders and care plans that varied from physician to physician. The study concluded that implementing a uniform protocol likely contributed to improved patient safety and helped prevent adverse outcomes.

In the United Kingdom, a national effort to reduce the incidence of pregnancy-related pulmonary embolism resulted in decreased mortality from this cause. Within the Hospital Corporation of America, processes associated with the diagnoses and management of multiple obstetrical complications has led to improved maternal and neonatal outcomes. Additionally, a significant reduction in the rate of birth trauma has been reported by hospitals that have identified areas of perinatal clinical risk and standardized the care plan using protocols. As a result of successes like these, uniform protocols based on ACOG and AAP standards have been recommended at hospitals across the country.

Legislators have also supported efforts to provide care based on standardized protocols and to improve patient safety. In May 2011, the Governor of Nevada signed into law a bill that requires patient safety committees in Nevada hospitals to create and adopt patient safety checklists. However, while governments and individual hospitals have responded positively to the implementation of standardized protocols, the rate of clinical adoption is largely intermittent, indicating the need for a large scale, coordinated effort.

ACOG District II’s Safe Motherhood Initiative found that system breakdowns due to the lack of appropriate care management plans were directly attributable to multiple maternal mortality cases. To address this subject, ACOG District II conducted an extensive bundle development and implementation process in a manner that was multidisciplinary, inclusive, and based on the following best practices as defined in literature: standardization, multidisciplinary engagement, and culture assessment.

### The obstetric bundle development process

#### Standardization

The medical literature demonstrates that inconsistent hospital protocols for diagnosis and management results in inadequate patient care. Discrepancies in clinical settings are unnecessary and have been repeatedly shown to compromise quality of patient outcomes. Accordingly, development and adoption of standardized protocols as a best practice for addressing incidence of adverse events remained a top priority during bundle development, whereas acknowledging the need for a “balance between standardizing practice and allowing professionals to use clinical judgment.”

ACOG District II included the following components of standardized clinical practice in their three bundles: algorithms, risk assessment tables, dosing tables, debriefing forms, and checklists. All protocols sought to minimize variability in practices and reduce practitioners’ reliance on memory. The use of checklists in obstetrics and gynecology is a widely recognized best practice in improving quality of care, and “practitioners should be familiar with and able to implement the practice recommendations.”

Furthermore, as each institution would inevitably have distinct issues, it was necessary to construct protocols that were homogenous across hospitals yet flexible enough for departments to adapt to their own needs. “When checklists or protocols are developed at the national level, it is often advisable to adapt them to individual practice settings.”

Therefore, as ACOG District II developed bundles at the state level, the guidelines were sufficiently streamlined so local hospitals across New York, with varying resources, were able to implement the standardized practices equally.

#### Multidisciplinary engagement

Implementation of bundles is often dependent upon the authority of the issuing organization and the level to which the protocols align with the clinicians’ experience. Additionally, “guidelines produced by end-users or by consensus methods increased clinical ownership, with improvements in compliance or desired practice up to 40%.” Recognizing the fact that obstetric emergencies involve cross-departmental staff, ACOG District II convened a team of obstetricians and gynecologists in addition to clinicians from other fields. If implementation of obstetric bundles is dependent upon on collaboration across specialties, it is vital for those practitioners to be involved in guideline development as well.

ACOG District II operated under the premise that effective protocols can only be developed with input from all parties involved in the obstetric event, both directly and indirectly. This stipulation further facilitated clinical buy-in as practitioners in related departments and fields, who would be affected by the new protocols, would not have the “guidelines imposed on them from external sources.” Team members were experts in their respective fields and dedicated to achieving the outcomes associated with the project. In addition to obstetricians and gynecologists, the three bundles
were developed with representation from anesthesia, neonatology, emergency medicine, family practice, pediatrics, cardiology, critical care medicine, and nursing, among others.

**Culture assessment**

Effective interventions are those that “address the needs of the target group” while remaining “relevant to the clinical context,” and successful implementation occurs when the environment has the necessary capacity and resources in place. For this reason, it is vital to evaluate the practices currently in use by hospitals and clinical teams. Protocols created without a baseline understanding of this clinical culture are likely to be ineffective because of redundancy or irrelevance.

To facilitate this, ACOG District II requested that the 90 obstetric hospitals across New York State participating in the Safe Motherhood Initiative submit their existing protocols for review. The multidisciplinary team was able to review the current use of checklists, national medical specialty guidelines, practice bulletins, and simulation techniques to identify existing procedures that could be adapted for standardization.

ACOG District II ultimately found that the protocols lacked the systematic approach needed for clinical efficacy; however, they were able to identify key elements and model language from which to develop uniform guidelines. Over the course of 18 months, the bundle development team held bimonthly conference calls and quarterly in-person meetings on how to best streamline and coordinate care based on hospitals’ feedback and evidence-based best practices.

**Bundle structure and composition**

ACOG District II modeled each bundle using the constructs of readiness, recognition, response, and reporting. Each construct addressed a different facet of the obstetric emergency, allowing the team to develop comprehensive care management plans rooted in the evidence-based best practices of standardization, engagement across disciplines, and incorporation of current culture. Figure 1 outlines this process.

ACOG District II’s tangible end products, or “bundle boxes,” are supplemented by the provision of additional implementation services and features—a combination based on best practices as defined in literature. Each bundle box is comprised of a binder with specific implementation guidance and teaching instruments such as Power Point slide decks, visual aids (posters and brochures), and portable binder-ring cards with checklists, algorithms, risk assessment tables, and medication dosing tables.

**The obstetric bundle implementation process**

**A multifaceted approach**

The most salient and ubiquitous finding in implementation research is that the most effective methods are multifaceted and incorporate a variety of implementation techniques. Evidence shows that multimodal approaches consistently outperform one-dimensional practices. Furthermore, though certain tactics are ineffective when used in isolation, they may be valuable when used in conjunction, or as part, of a greater process. Education on new protocols, for example, was “generally ineffective” and “showed a poor impact for implementing guidelines,” yet when included as a part of several sub-interventions, it “demonstrated a high efficacy for changing behaviors.” Indeed, many reputedly effective multifaceted interventions incorporated traditional dissemination, which, in isolation, has been shown to be ineffective.

For this reason, ACOG District II created a bundle implementation process that was comprehensive, varied, and included numerous forms of education, support, and indicators of credibility. Through trusted clinical leadership and change agents at the local, state, and national level, the Safe Motherhood Initiative was presented and championed through hospital site visits and grand rounds. Resources and support were reliable and easily accessible online, in print, and through respected colleagues. Meetings, discussions, and problem solving were facilitated through regular calls and conferences.

**Clinical ownership**

Understanding that clinician buy-in is a pertinent factor in the Safe Motherhood Initiative’s success, ACOG District II introduced the project via a letter to the Chief Executive Officer of each obstetric hospital in New York State—a total of 127. The correspondence described the state of maternal health in New York, and how the Initiative would effectively address the disparities in care, increase patient safety, decrease adverse maternal health outcomes, and effectively enhance institutions’ overall level of care quality.

In addition to outlining the comprehensive development process, the letter stated how each hospital was asked to voluntarily participate in the Initiative and what the ensuing return on investment would be for each hospital. By structuring this communication as a form to sign-on to the project, ACOG District II received written commitments from 118 of the hospitals and additional hospitals continue to commit to the Initiative today.

**Leadership**

On a more micro-scale, buy-in must also be espoused at the clinical level, as practitioners’ perceived insignificance of new care management protocols might be a barrier to uptake. To address this, ACOG District II relies heavily on clinical champions as agents of change. Within the hospital setting, the use of respected colleagues as core team leaders has been shown to be one of the most effective methods of bundle implementation as this augments the importance of a new course of action. ACOG District II applied this strategy and suggested hospitals use senior-level hospital administration, department chairs, attending physicians, and nurse managers risk managers, patient safety officers as advocate leaders to facilitate staff participation in the bundles. Promotion of the Initiative was shown to be important at all levels of hospital hierarchy. Sample letters written for CEOs were
designed to offer public and community attention to the work within the obstetric departments. Practitioners experiencing ongoing support from leadership are subsequently empowered to enact change.

**Interactive education**

Although education is a necessary component of implementation, solely providing it in a didactic manner is known to be ineffective. Material that is passively disseminated, such as in email or on websites, also does not result in lasting change if used alone. For this reason, ACOG District II emphasizes active engagement in the learning process and includes practitioners and representatives across all disciplines involved in the obstetric event. Rather than only concentrating on changes in protocol, bundle education is provider-focused and emphasizes the role of clinicians in executing the new care management plans. Education takes many forms but includes monthly webinars, grand rounds, and quarterly in-person meetings at rotating hospitals statewide, conference calls, and implementation visits.

**Bundle implementation visits**

ACOG District II conducts educational outreach in the form of implementation visits to offer guidance and instruction specific to a hospital’s needs. The visit is not regulatory or punitive in nature, and is offered as a vehicle to help institution standardize care management plans for prevention of maternal death. Each hospital has an individual and tailored approach to bundle implementation and ACOG offers support and expertise to facilitate quality improvement. After expressing interest in a visit, obstetric unit staff will complete a pre-visit questionnaire, which enables Safe Motherhood Initiative faculty to better understand and tailor the visit to the hospital’s individual implementation needs. Faculty, hospital staff, and ACOG District II then participate in multiple pre-visit calls to develop the tailored agenda. It is recommended that the hospitals schedule the implementation visit during a regularly scheduled Obstetrics and Gynecology Department meeting with invitations extended to representatives from related fields and affiliated hospital obstetric staff, if applicable. For example, ACOG District II encourages attendance from anesthesia, neonatology, emergency, pharmacy, the blood bank, patient safety, risk management, and information technology. Senior-level administrations are also encouraged to attend, in addition to community gynecologists and family practice physicians. This article further emphasizes the best practice of multidisciplinary engagement and greatly facilitates local conversation.

Two OBGYN faculty members, a nurse, and ACOG District II staff who assist the hospitals and their clinical teams to identify barriers, challenges, and systems issues lead each visit. If suitable, the regional perinatal center hospital chairperson or his/her designee is also in attendance. The SMI faculty members provide a brief overview of the Safe Motherhood Initiative, review the hospital’s specific methods and clinical considerations, and offer guidance to overcome routine barriers. ACOG District II also requests that the hospital review de-identified case presentations from recent maternal mortality and morbidity incidents. The selected cases are presented to the Safe Motherhood Initiative team to provide teachable moments, allowing for an open dialogue that integrates the content of the bundles with the care management provided to demonstrate possible opportunities for quality improvement.

Following the site visit, ACOG District II composes a report for the hospital that includes a summary of the meeting. To date, 9 implementation visits have been conducted with 10 more currently being scheduled.

According to research, “the greatest reported effects attributed to educational strategies were associated with
educational outreach...which typically consisted of practice visits by educators.7 This method has been linked to “up to 68% relative improvement in process or compliance.”7 Feedback from hospitals regarding the content and quality of the implementation visits has been consistently positive. Clinicians report that the dialogue created during and as a result of the visit is fundamental to the Safe Motherhood Initiative’s success in their institution. Based on this, ACOG District II has determined that site visits are one of the most effective tools in facilitating compliance and understanding of bundle implementation.

Grand rounds

Another method in which ACOG District II actively involves clinicians throughout the implementation process is via presentations at hospitals’ grand rounds. Grand rounds have traditionally been used in the medical field as unique opportunities to learn and engage in dialogue with colleagues and clinical leaders. Safe Motherhood Initiative grand rounds are an opportunity to review strategies for implementation, and review specific clinical components embedded in each of the bundles.

Physicians local to the hospital, who are familiar with the institution’s clinical culture, deliver the grand rounds. They are practicing OB/GYNs themselves, which lends credibility to the information they present. Conducting outreach and education by this method facilitates bundle acceptance at the hospital level, and integrates the Safe Motherhood Initiative into the existing clinical environment.

Resources and support

The provision of comprehensive support is a necessity for successful implementation. Evidence indicates that one of the largest barriers to compliance with new protocols and guidelines is insufficient capacity and the perceived lack of support.11 To feel empowered and capable to perform, clinicians must operate in an environment with resources in place to assist and reinforce. These resources must furthermore be readily available as “changes in practice are less likely to be implemented if...information retrieval is not readily available at the time of decision making.”11 (p.463)

Bundle boxes

ACOG District II provides easily accessible support through their bundle boxes. Each toolkit contains: Power Point slide decks with specific implementation guidance, visual aids, algorithms, risk assessment tables, medication dosing tables, debriefing forms, and checklists. Materials are provided in a durable binder, and on laminated ring cards and posters. The content can be tailored to individual institutions and is continuously updated so practitioners are certain they are implementing the most up-to-date practice recommendations. Bundle box materials can furthermore be accessed online, free-of-charge, in PDF form through the Safe Motherhood Initiative website.

The Safe Motherhood Initiative website

The Safe Motherhood Initiative website is a comprehensive resource offering the following tools:

- **Bundle materials:** In addition to offering the bundle box materials online, ACOG District II provides resources specific to each bundle, including but not limited to debriefing forms, flow sheets, implementation checklists, practice simulations, and drill exercises. If hospitals wish to obtain additional bundle boxes or hard copies of specific implementation tools, they are able to print materials freely or order items online through the website.

- **Implementation tools:** As with any ongoing quality improvement initiative, ACOG District II understands that it is challenging to maintain consistent progress. Staff turnover, updates in hospital policy, internal culture, and changing team dynamics all pose significant obstacles. To address that, ACOG District II staff provides an extensive amount 24/7 online and phone support and SMI faculty volunteer their time to answer clinical questions and offer themselves as resources. In addition, the SMI offers an educational video series with accredited Continuing Medical Education (CME) and a continuously updated list of frequently asked questions with detailed answers. Relevant journal articles, slideshow presentations, and guidance documents are also provided.

- **Spotlight and list of participating hospitals:** In an effort to increase awareness of the Safe Motherhood Initiative, ACOG District II lists all participating hospitals and offers a Spotlight feature. This section highlights institutions that are making a marked difference in maternal health through their commitment to patient safety and obstetric care quality.

- **Data resources:** Safe Motherhood Initiative core team leads are able to log into the data portal and input their institution’s monthly data requirements. This is also the central location where individuals may go to learn about data collection form updates, view and compare their hospital’s data reports, and access a regularly updated tip sheet. Hospitals who volunteer their data have the unique ability to compare and contrast their own results to other hospitals within the state.

- **Patient support:** ACOG District II offers a variety of Safe Motherhood Initiative materials in a patient-friendly format, and links to credible, outside community, and state and national resources including Northern Manhattan Perinatal Partnership in Harlem, Merck for Mothers, the Tara Hansen Foundation and the Preeclampsia Foundation.

- **Public relations and media:** The SMI website houses state and national Safe Motherhood Initiative project announcements, press releases, and news reports. Audio of the six radio spots for patient awareness that were aired on iHeartRadio are also available on the SMI website. This consumer-centered campaign aided in recognition and awareness and promoted clinician desire to participate.

- **Information on the calls and meetings:** Details on each of the Safe Motherhood Initiative monthly calls and quarterly meetings are available online, including call recordings, agendas, and PDFs of presentations.
The provision of feedback is an integral component of the feedback and collect suggestions for subsequent calls District II distributes a survey following each call to solicit invited to participate in a question and answer session. ACOG issues regarding bundle content and implementation lead the from across New York State takes part in each conference monthly conference calls and quarterly in-person meetings. ACOG District II provides this intensive environment via Implementation literature specifically identifies the need for resources and support to be interactive, repetitive, and ongoing, as isolated opportunities are not conducive to learning. ACOG District II provides this intensive environment via monthly conference calls and quarterly in-person meetings.

An average of 100 Safe Motherhood Initiative members from across New York State take part in each conference call. Safe Motherhood Initiative faculty who reviews pertinent issues regarding bundle content and implementation lead the 90-min session. After a 30-min presentation, listeners are invited to participate in a question and answer session. ACOG District II distributes a survey following each call to solicit feedback and collect suggestions for subsequent calls' topics. Member response has been consistently positive, saying the dialogue cultivated with peers and colleagues is relevant, empowering them to further bundle implementation and the Safe Motherhood culture within their own institutions.

Understanding the importance of collaborating in person, ACOG District II also holds Safe Motherhood Initiative meetings across New York State. Since 2013, members have attended nine in-person conferences across Manhattan, the Bronx, Buffalo, Saratoga Springs, Long Island, Syracuse, and Albany. Each well-attended, daylong meeting is hosted by a different Safe Motherhood Initiative hospital and includes lectures and presentations, providing updates and solutions to pertinent bundle implementation issues. The atmosphere is one of inclusion and engagement as attendees are encouraged to give presentations, engage the audience and collaborate on implementation strategies. These quarterly meetings provide an excellent forum for clinicians to assemble with Safe Motherhood Initiative colleagues across the state. The meetings foster network building between attendees, creating a multidisciplinary support system and a conducive learning environment.

Audit and feedback

The provision of feedback is an integral component of the bundle implementation process as practice changes without evidence of improvement are unlikely to be sustained. Feedback should originate from a credible source and be delivered in a timely manner. ACOG District II embedded feedback mechanisms in each of the bundle implementation strategies, recognizing the need for ongoing review and evaluation. The Safe Motherhood Initiative data requirement enables ACOG District II to evaluate the project's success and identify areas of improvement. By monitoring rates of change in the reported measures, an institution's success or stagnation can be assessed. Obstetric teams are also able to compare reports with other hospitals' to better understand their progress in the Safe Motherhood Initiative implementation process. ACOG District II also regularly compiles data summaries and provides them to hospitals as an additional feedback mechanism.

Data reporting is also vital during the preparation and planning for an implementation visit. If, for example, a measure in the venous thromboembolism data form is consistently misreported, Safe Motherhood Initiative faculty will locate and identify the origin of the issue and address it at the visit.

Penetration

An initiative's sustainability is directly related to its penetration within the target population. By implementing the Safe Motherhood Initiative using evidence-based best practices in a multifaceted and harmonized approach, ACOG District II facilitated clinical adoption, allowing the Initiative to diffuse through the State's obstetric network.

- Data collection: Data reporting requirements are built into each bundle and are used as process and outcome measures. The Safe Motherhood Initiative relies on the trends in data to monitor rate of bundle implementation within each institution. The initiative's data measures are furthermore aligned with other state and national reporting requirements, ensuring that clinicians' efforts are not duplicative and tiresome. However, a significant factor that enables data collection to be a penetrative, sustainability measure is the fact that the reporting is not penalized or regulated by an outside governing body. Hospitals are able to input and utilize their Safe Motherhood Initiative data purely for self-assessment purposes.

The SMI data measures are also included in list of "triggers" for quality reviews, even in the absence of poor outcomes, in order to identify cases of near misses. Examples of near misses include patients who were not treated for severe hypertension, or if a patient requires greater than four units of packed red blood cells. The information from internal hospital quality assurance reviews is then used for SMI data reporting.

- Quality improvement: A significant impact of the Safe Motherhood Initiative is the inclusion of data measures within institutions' own quality improvement processes. All hospitals undertake versions of quality analyses, where the goal is to determine if the appropriate level of care was delivered during an adverse event. In conducting
internal reviews of poor maternal outcomes, a number of hospitals have reported that the adoption of Safe Motherhood Initiative’s suggested guidelines and algorithms have better enabled them to define adherence to hospital specific standards of obstetric care within their own institutions. This level of uptake and inclusion within hospital policy is highly indicative of the Initiative’s success and penetration within the existing clinical culture.

**Scalability**

In order for a public health initiative to be sustainable, it must be developed and implemented in a way that is able to maintain growth, relevance, and efficacy in a variety of environments. ACOG District II achieved this by adhering to overarching goals and objectives. The implementation process is a continuous undertaking that requires ongoing process monitoring and evaluation. The goals and objectives, outlined in Figure 2, have accompanying milestone markers that are easily replicable by other institutions, organizations, and regions.

**Financial incentives**

Hospitals that voluntarily participated in the SMI agreed to standardize clinical practice by implementing, as appropriate to their institution, key elements within the three bundles. As a condition of their work, hospitals were offered financial remuneration by the Initiative, if they completed the following tasks:

- Accept the benefit of peer support for the development and updating of labor and delivery unit protocols.
- Review and amend existing protocols and procedures to reflect key current elements of the bundles.
- Actively participate in regional in-person quarterly teaching days, monthly calls, and bi-monthly educational webinars. (Travel and hotel costs reimbursed for the 3-hospital core team leads.)
- Maintain system changes using a structure, process, and outcome model.
- Understand the use of core elements to improve sustainability.
- Use protocols and checklists in an effort to reduce memory reliance.
- Promote teamwork and communication by standardizing core clinical knowledge for the obstetric team.
- Report monthly data to illustrate and publish project success.
- Complete an initial culture assessment survey, a baseline data survey and a concluding process survey.
- Host SMI taskforce members on-site for implementation assistance as requested.

Participating hospitals are asked to engage in a data reporting system developed for each of the three clinical areas. ACOG District II subcontracted with the Canada-based Salus Global Corporation (www.salusglobal.com) to develop a hospital data tracking and collection portal for auditable measures in the areas of postpartum hemorrhage, preeclampsia, and pulmonary embolism. This data does not include any patient identifying information or dates of service, but will allow for research into patient cohorts and commonalities.

Through a subcontract from ACOG District II, Columbia University’s Department of Obstetrics and Gynecology has been named the data and biostatistics-coordinating center (BCC). The tasks of the BCC will include the following:

- The development of the questionnaires and data collection forms.
- Review and perform data entry with error-checks for consistency and completeness.
- Create data analytic files for subsequent statistical analyses.
- Carry out elaborate statistical analyses to examine how variability in hospital and physician characteristics is associated with pregnancy-related maternal deaths and “near-miss” events.

For the reason that the data entry is so important to the analysis of the bundle implementation and resulting effects on the reduction of maternal morbidity and mortality, ACOG District II believes it is imperative to offer financial remuneration to hospitals that volunteered their qualitative data. The methodology developed for hospital payments was based on hospital level and completion of all tasks by the first quarter of 2016. The following amounts were allotted:

- $5000—Level 1 and 2 hospitals
- $4000—Level 3 hospitals
- $2000—Regional perinatal centers (RPCs)

**Conclusion**

The standardization of protocols is an evidence-based best practice as indicated by improved patient safety outcomes and a higher quality of care. However, successful implementation of protocol changes is often just as dependent on
socio-psychological factors as it is upon guideline compliance. When changes in protocol are introduced, it must be understood that adherence to these practices is, in reality, “alignment of clinicians with each other through the vehicle of guidelines.”

The concern is not with the protocols themselves, but rather the fact that a performance adjustment is required.

To effectively address this underlying barrier, ACOG District II employed a multifaceted implementation approach based on the following tenets: clinical ownership, leadership, interactive education, provision of varied support resources, and sustainability. The level of adoption within the State indicates success of the Safe Motherhood Initiative, as over 90% of New York’s obstetric hospitals are active participants in the project.

REFERENCES


