

## Perinatal “Bundles” Deliver Safety

Caring for patients in the perinatal setting can be complex and unpredictable. A multitude of factors can affect outcomes, including the level of maternal prenatal care, the variation in clinical protocols and staffing models, and the ability of clinicians to communicate as a team. Compounding these challenges are extraordinarily high medical malpractice premiums for obstetricians and hospitals and the severity of the awards or settlements in obstetric-related malpractice claims, whether caused by negligence or not.

### GNYHA/UHF Perinatal Safety Collaborative

In October 2007, GNYHA partnered with the United Hospital Fund (UHF) to launch the Perinatal Safety Collaborative (PSC). The PSC has brought together 44 hospitals (representing 126,867 deliveries) to improve the quality of obstetrical and perinatal care through the implementation of a standard set of patient care practices or the “perinatal safety bundle” (the PSC bundle). GNYHA/UHF developed the PSC bundle with input from a multidisciplinary advisory panel that included the American College of Obstetricians and Gynecologists (ACOG District II/NY) and The New York State Department of Health (DOH). The PSC bundle comprises three stand-alone bundles, or sets of practices, including two clinical practices—the Institute for Healthcare Improvement’s (IHI’s) elective induction and augmentation bundles—and a safety climate bundle. (See table on reverse.)

### The PSC Bundle

#### *IHI Clinical Bundles for Induction and Augmentation*

To minimize adverse outcomes related to induction and augmentation of labor, IHI developed the elective induction and augmentation bundles, which define when and how oxytocin should be used, require docu-

mentation of specific maternal and fetal parameters, and standardize practice protocols. GNYHA and UHF adopted both of the

IHI practices as part of the PSC bundle.

#### *Safety Climate Bundle*

The PSC addresses the development of a culture of safety in the perinatal setting not only through the foregoing clinical practices, but also through its Safety Climate Bundle, which includes the following:

#### *Safety Climate Survey*

The Joint Commission and others continue to recognize the “culture of safety” as a key component for patient safety improvement and require facilities to regularly “evaluate their culture of safety and quality using valid and reliable tools.”<sup>2</sup> Safety climate or culture of safety surveys typically focus on organizational culture, assess the staff perception of the unit, and help the organization identify opportunities for improvement.<sup>3</sup> When launching the PSC, GNYHA/UHF surveyed organizations’ safety climate to obtain a baseline score for each partici-

#### Using industry data, Premier, Inc. has identified six major contributing factors to obstetrical malpractice cases:<sup>1</sup>

- Failure to recognize fetal distress
- Failure to perform timely caesarean birth
- Failure to properly resuscitate depressed baby
- Inappropriate use of labor-inducing drugs
- Inappropriate use of vacuum/forceps
- Failure to communicate

pating hospital. PSC hospitals will be required to re-survey and identify new opportunities for improvement as the Collabora-

tive continues.

#### *Ongoing Teamwork and Communications Training*

Studies identify communication breakdowns as the root of 85% of all adverse events in obstetrics (OB).<sup>4</sup> Therefore, the Safety Climate Bundle addresses this breakdown through the following:

*continued on reverse*

<sup>1</sup>Landro, L. New Practices Reduce Childbirth Risks. Amid Soaring Liability Costs, Hospitals Curb Use of Drugs and Other Procedures to Speed Labor. 2006 Jul 12; *The Wall Street Journal*, [http://online.wsj.com/article/SB115266494103204113.html?mod=googlenews\\_wsj](http://online.wsj.com/article/SB115266494103204113.html?mod=googlenews_wsj)

<sup>2</sup>The Joint Commission. Accreditation Program: Hospital Leadership. 2008.

<sup>3</sup>Leape LL, Berwick DM. (2005). Five years after To Err is Human: What have we learned? *JAMA* 293:2384-90.

<sup>4</sup>Landro, L. New Practices Reduce Childbirth Risks. Amid Soaring Liability Costs, Hospitals Curb Use of Drugs and Other Procedures to Speed Labor. 2006 Jul 12; *The Wall Street Journal*, [http://online.wsj.com/article/SB115266494103204113.html?mod=googlenews\\_wsj](http://online.wsj.com/article/SB115266494103204113.html?mod=googlenews_wsj)

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## Electronic Fetal Monitoring (EFM) Training and Certification

Timely and accurate interpretation of fetal heart rate tracing is essential to the well-being of mother and fetus.<sup>5</sup> As EFM is crucial for managing patients in the perinatal setting, all members of the labor and delivery (L&D) team must be proficient in interpreting EFM tracings and feel comfortable expressing and escalating concerns to the team as necessary. Hospitals participating in the PSC are required to adopt “certification requirements” in EFM to privilege OB staff and to implement standardized nomenclature related to EFM (both verbal and documented). In order to support PSC hospitals in these efforts, GNYHA and UHF have hosted 10 training programs in EFM, teamwork, and communication. In addition, the Healthcare Association of New York State (HANYS), in partnership with ACOG, has recently launched a complementary initiative that offers training in EFM to obstetric professionals.

## Standardized Communication Strategies

Hospitals participating in the PSC are required to standardize communication strategies for patient hand-offs, multidisciplinary rounding, and critical situations. By implementing and consistently utilizing a standardized

communication strategy for emergent patient situations as well as

required to implement an effective escalation policy. Studies show that labor and delivery unit hierarchies discourage both nurses and physicians from raising concerns. An effective escalation policy creates a culture of safety that empowers staff to voice concerns and demonstrates senior leadership’s support for staff input.

## Rapid Response Drills

Serious adverse OB outcomes, while rare, are costly both in terms of patient suffering and health care resources. GNYHA/UHF is leveraging its Collaborative experience in rapid response systems to help participating PSC hospitals develop and drill using a “rapid response” approach to manage perinatal patients who present urgent or emergent clinical findings (e.g., maternal hemorrhage, shoulder dystocia).

## Progress to Date

The PSC hospitals regularly share best practices and valuable clinical information through monthly conference calls and hospital visits. Additionally, the PSC is collecting and analyzing data on a set of adverse events to quantify improvement in both processes and outcomes. Using a medical record review form, the PSC hospitals will periodically submit data to GNYHA, as well as complete a self-assessment form related to compliance with the PSC

bundle. GNYHA will aggregate responses and provide hospitals with regular reports. GNYHA and UHF are committed to expanding the Collaborative, which they believe is a model for improving perinatal safety throughout the region. ■

*For additional information on GNYHA’s Perinatal Safety Collaborative, please contact Lorraine Ryan or Gina Shin at GNYHA.*

### IHI Elective Induction Bundle Elements

Assess gestational age to ensure that the gestational age is  $\geq 39$  weeks

Monitor fetal heart rate for reassurance of fetal status

Assess pelvis to determine dilation, effacement, station, cervical position and consistency, and fetal presentation

Monitor and manage hyperstimulation (tachysystole)

### IHI Augmentation Bundle Elements

Document estimated fetal weight

Monitor fetal heart rate for reassurance of fetal status

Assess pelvis to determine dilation, effacement, station, cervical position and consistency, and fetal presentation

Monitor and manage hyperstimulation (tachysystole)

### Safety Climate Bundle Elements

#### Safety Climate

Implement initial & periodic safety climate survey process

#### Team Work and Communication

Provide ongoing formal team training to all perinatal staff

Require EFM certification for perinatal staff

- Define certification requirements for all staff
- Develop requirements for ongoing training and recertification
- Create protocols to address non-compliant staff

Conduct ongoing simulated rapid response drills to assess response to emergent situations (e.g., maternal hemorrhage, shoulder dystocia)

Implement 2x daily interdisciplinary rounds

Implement standardized communication strategies (e.g., SBAR or other) for:

- “Hand-offs”
- Critical situations
- Escalation policy

Incorporate use of standardized nomenclature in all communications:

- Verbal
- Documentation
- EFM interpretation

routine patient hand-offs and multidisciplinary rounding, communication among labor and delivery team members will improve. As part of the PSC, GNYHA and UHF developed and distributed a pocket guide to the SBAR (Situation-Background-Assessment-Recommendation) technique, a standardized approach that ensures patient information is consistently and accurately communicated.<sup>6</sup> In addition, the PSC hospitals are re-

<sup>5</sup>Simpson KR. Measuring Perinatal Patient Safety: Review of Current Methods. JOGNN 2006; 35:432-442.

<sup>6</sup>The Institute for Healthcare Improvement, <http://www.ihl.org/IHI/Topics/PatientSafety/SafetyGeneral/Tools/SBARTechniqueforCommunicationASituationalBriefingModel.htm>