Improving Patient Safety in Obstetrics

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Disclosure:
I have no financial or commercial interests, or conflicts of interest, for this presentation
Historical Perspective

- **1970’s- “Quality Assurance”**
  - Retrospective collection of data
  - M+M’s

- **1980-1990’s- “Continuous Quality Improvement”**
  - Forward looking- apply “Systems Thinking”

- **2000’s- “Patient Safety”**
  - Redefinition of “Quality” to mean safe practices and good outcomes

- **2011-“Perinatal High Reliability”**
  - create a *Culture* and *Processes* that reduce system failures
  - Recognition that “a major factor in the reduction of patient harm, liability, and associated costs is to *provide better care*”
“Attempts to reduce medical malpractice loss through the promulgation of ambiguous, nondirective guidelines have served our specialty poorly in the past. Continued emphasis on such guidelines is likely to serve us just as well in the future”.
Reducing Obstetric Litigation through Alterations in Practice Patterns

- 70% of all closed claims involved substandard care.
- **Avoidable Bad Outcomes:**
  - 80% of VBAC Claims
  - 16% of Maternal Injury Claims
  - 54% of Shoulder Dystocia Claims

  *Obgyn* vol 112, no.6, Dec. 2008
2008 – Identified 4 actions that would have reduced payment by > 50%

- 24 hr In-House Obstetric Coverage
- Adherence to Protocols for “High Risk Medications”
  - Pitocin, MagS04, Misoprostol
- Conservative Approach to Managing VBAC
- Comprehensive, Standardized Procedure Note for all cases of Shoulder Dystocia
2009- Yale New Haven Experience
University Hospital- 4600 Del/ yr

- Incrementally Introduced Multiple Patient Safety Interventions from 2004 – 2006
  - Outside Expert Review- Organizational Safety
  - Protocol Standardization
  - Creation of Patient Safety Nurse position
  - Creation of Patient Safety Committee
  - Training in “Team” skills
  - Standardized Education in EFM interpretation

- Significantly Reduced the Adverse Outcomes Index 3.4 % to 1.75% over 3 years

- Improved “Safety Climate”
Hospital Corporation of America
114 hospitals, 220,000 del/ yr

FIGURE 3
Sentinel events by year (per 1000 deliveries)

FIGURE 2
Compensation payments by year

HCA- Five Basic Principles

- In any complex endeavor uniformity of process will improve results
- Each Member of the Team must speak the same language and be empowered to stop an unsafe process
- Cesarean delivery rates function poorly as a measure of quality, reduction in rates naturally flow from optimization of care
- Change systems of care to reduce adverse outcomes- standardize practice
- Peer Review
What did HCA Do?

- **Online Provider Education**
  - 1- EFM interpretation- educational and ensures common language for all care providers
  - 2- Operative Vaginal Delivery- uniform criteria and documentation
  - 3- Shoulder Dystocia- maneuvers and documentation
  - 4- Management of Post-partum Hemorrhage
What did HCA do? (cont.)

- Checklist Based Protocols-
  - Magnesium, Pitocin, Prostaglandins
- Elimination of Elective Deliveries < 39 weeks
- Prevention of Post-Cesarean VTE
- Perinatal/ Neonatal Collaboration
What is Next? “Perinatal High Reliability”
Creating a Culture of Safety

- Safety is the duty and responsibility of every team member
- Team interaction is collegial rather than hierarchical
- Respectful communication is valued and rewarded
- Routine Debriefing of Unexpected or Unusual Events
Creating a Culture of Safety (cont)

- Emergencies are rehearsed and expected
- Paradoxically- successful operations are seen as potentially dangerous.
- Absence of poor outcomes is not proof that the care is universally safe
Creating a Culture of Safety (cont)

- “there is an insidious but real danger in obstetrics where most of what we do turns out normal despite flawed process or outdated practice patterns”
- “Normalization of Deviance”
- It is inevitable unless evidence and professional standards are actively used and care is continuously monitored
Strategy for Achieving High Reliability

- Safety is the overarching value and strategy
- Trust, Transparency and Teamwork
- Physician “leadership and active participation is necessary, can not be assumed, and is easy to avoid”
- Expectations for professional behavior are explicitly outlined
- Consistently adequate staffing of RN’s and ancillary personnel
- Educational Infrastructure for the entire team
<table>
<thead>
<tr>
<th>Sources of conflict</th>
<th>Approach</th>
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<tr>
<td>Differing expectations for information needs, communication content and style</td>
<td>Team training</td>
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<td>Structured communication tools (eg, situation, background, assessment, recommendation [SBAR]; structured hand-offs)</td>
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<td>Board rounds</td>
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<td>Huddles</td>
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<td>Attentive listening</td>
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<td>Failure to communicate rationale; inattention to concern; concerns remain unresolved</td>
<td>Routinely ask for plan and reasoning</td>
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<td>Persistently restate concerns until resolved</td>
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<td>Consider instituting a laborist in-house if provider fatigue is a frequent concern or service is large with many primary providers</td>
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<td>Ensure adequate staffing and break relief</td>
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<td>Ratify plan before concluding conversation</td>
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<td>Differing “world views” (eg, oxytocin wars’); fetal monitoring methods, interpretation, and management of complex tracings</td>
<td>Standardize oxytocin protocol</td>
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<td>Standardize fetal monitoring language and application</td>
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<td>Provide regular interprofessional case reviews to discuss management, role model expression of concern, and positive resolution of differences</td>
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<td>Standardize expectations for notification of complications</td>
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<td>Articulate and plan for potential problems early in care</td>
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<td>Individuals take responsibility for collaboratively discussing differing views</td>
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<td>Avoid professional stereotyping as an explanation for behavior</td>
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<td>Consider instituting laborist in-house (especially at night)</td>
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<td>Disruptive behavior</td>
<td>“Good citizen” policy consistently enforced</td>
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<td>Individuals and peers stand up to unprofessional behaviors</td>
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<td>Administrative commitment to addressing any chronic issues</td>
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<td>Availability of anonymous incident reporting system</td>
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Adapted from Knox et al.,34 Agency for Healthcare Research and Quality,23 Provonost et al.,50 American College of Obstetricians and Gynecologists,36 and Simpson.37

* An obstetric hospitalist; 5 Tug of war between physicians and nurses over the management of oxytocin.

Sources of Conflict:

- Differing expectations for informational needs
  - communication content and style
- Failure to communicate rationale
  - Inattention to concerns, remain unresolved
- Differing World Views
  - “Pitocin Wars”, EFM interpretation
- Disruptive Behavior
Specific Recommendations for Improving communication

- Differing Expectations for Informational Needs
  - Team Training, “TEAMSteps”
  - SBAR communication tools and training
  - Board Rounds with Nurses and Providers
  - Huddles
  - “Attentive listening”
Specific Recommendations for Improving Communication (cont.)

- **Failure to Communicate Rationale**
  - Routinely ask for plan and reasoning
  - Persistently restate concerns until resolved
  - Ratify plan before concluding conversation

- Ensure adequate staffing and breaks

- Consider “Laborist” if provider fatigue a concern, or large service
Specific Recommendations for Improving Communication (cont.)

• Differing World Views
  ◦ Standardize oxytocin protocol
  ◦ Standardize EFM language and application
  ◦ Regular inter-professional case reviews
  ◦ Standardize expectations for notification of complications
  ◦ Articulate plan for potential problems early in care
  ◦ Avoid professional stereotyping as explanation for behavior
  ◦ Consider instituting a Laborist- especially at night
Specific Recommendations for Improving Communication (cont.)

- **Disruptive Behavior**
  - “Good Citizen” policy consistently enforced
  - Individuals and peers stand up to unprofessional behaviors
  - Administrative commitment to addressing chronic concerns
  - Anonymous incident reporting
OB Patient Safety Credit Program

Reduce risk while you qualify for a patient safety credit of up to 10 percent and 18 hours of CME credit.
Qualification Requirements

Participants must meet three requirements within 12 months of signing up for the program:

1. Complete the Perinatal Safety Bundle courses, an online curriculum developed by Advanced Practice Strategies (APS). The education portion consists of four courses:
   - Advanced Fetal Assessment and Monitoring (7 modules)
   - Operative Vaginal Delivery
   - Managing Shoulder Dystocia
   - SBAR+R: Structuring Communication in Healthcare

2. Develop a written protocol for communication (SBAR+R or similar) between the physician or CNM and the labor and delivery (L&D) nurses to be used in the event that any of the situations shown below occur. Our regional patient safety/risk manager can help in developing the protocol.
   - Nonreassuring fetal heart rates using the guidelines as outlined in the APS Advanced Fetal Assessment and Monitoring course and any other change in the fetal tracing that the physician or CNM feels is reportable
   - Elevated systolic BP of >140 mm Hg or diastolic BP of >90 mm Hg
   - Vaginal bleeding
   - Meconium
   - Suspected abnormal presentation
   - Elevated maternal temperature >100.4 or per hospital protocol
   - Other criteria that the physician or CNM has identified (e.g., rise in fetal heart rate baseline of greater than 10 bpm, more than five variable decelerations in X minutes)

3. Post the communication protocol in L&D, and implement it in coordination with nursing leadership.

Call (800) 421-2368, extension 1243, or go to www.thedoctors.com
• “What is not acceptable is to keep doing what we are doing, hope that we will never have a potentially avoidable bad outcome, and wait for tort reform to solve the problems imposed on us by an inherently unjust legal system”

• Berkowitz- AJOG July 2011
Perinatal Community

Leadership and Sponsor
- Leadership help establish aims & goals
- Senior Executives support sponsor
- Assist in identification of needed resources and develops plan to provide
- Competent trained available staff

Reliable Design Reduce Variation
- Implement oxytocin and vacuum bundle
- Develop standard protocols for response to obstetrical emergency
- Design care process improvements based on trigger tool analysis, event detection, sentinel event
- Establish credentialing of core competency and training for all
- Use ACOG/AWHONN guidelines for documentation and staffing
- Standardize administration of high alert medications – oxytocin, magnesium sulfate, epidurals

Effective Teamwork
- Adopt common language and interpretation of EFM with multi-disciplinary training i.e. NICHD criteria
- Implement techniques for effective communication i.e. SBAR
- Establish reliable techniques for handoffs
- Establish Team Response Protocols
- Establish a just culture – create consistent expectations for performance and behavior across all disciplines
- Implement Huddles
- Design Simulations

Patient/Family Centered Care
- Add patients and families on design teams, advisory groups
- Co-create and discuss a plan of care with the patient and family
- Conduct Patient/Family Focus Groups
- Engage patients & families as partners in care
- Communicate openly and honestly with family and patients at regular intervals
- Do what you say, mean what you do
- Include patients and families on improvement teams

- Reduce harm to 5 or less per 100 live births
- Zero incidence of elective deliveries prior to 39 weeks
- Augmentation Bundle(s) Composite or Compliance great than 90%
- Improve organizational culture of safety survey scores in Perinatal units by 25%
- 100% of participating teams will have documentation of Patient & Family Centered Care
STRATEGIES TO IMPROVE OBSTETRIC PATIENT SAFETY

Fetal Heart Rate Patterns
- Use universal technologic language for fetal heart rate (FHR) patterns
- Encourage all staff to interrupt process if they believe patient is at risk
- Clearly delineate responsibility

Induction of Labor
- Counsel patient
- Monitor and document FHR and contractions
- Standardize protocols
- Have present personnel familiar with uterine stimulants
- Have available team for cesarean delivery, if necessary

Oxytocin for Augmentation
- Document preadministration assessment of maternal pelvis and cervix, as well as fetal position and station
- Administer lowest dose that affects cervical change
- Standardize protocols
- Use same terminology

Macrosomia and Shoulder Dystocia
- An estimated fetal weight above 4,500 g and prolonged second stage of labor may indicate cesarean delivery
- Following resolution of dystocia, document interventions and notable events
- For patient with prior dystocia, review case and counsel patient

Trial of Labor After Cesarean
- Discuss with patient risks and benefits of trial of labor after cesarean (TOLAC) and elective repeat cesarean delivery; document discussion
- Use TOLAC consent forms, if available
- Have available team for cesarean delivery, if necessary