JOGNN

IN FOCUS

Improving Staff Communication and Transitions of Care between Obstetric Triage and Labor and Delivery

Kathleen O'Rourke, Joseph Teel, Erika Nicholls, Daniel D. Lee, Alyssa Covelli Colwill, and Sindhu K. Srinivas Q8

Correspondence
Kathleen O'Rourke, MSN, RNC-OB, Hospital of the University of Pennsylvania, Ravdin 7, 3400 Spruce St., Philadelphia, PA 19104.
kathleen.orourke@uphs.upenn.edu

Keywords
communication
labor and delivery
patient handoff
pregnancy
safety
transition of care
triage

ABSTRACT

Objective: To improve staff perception of the quality of the patient admission process from obstetric triage to the labor and delivery unit through standardization.

Design: Preassessment and postassessment online surveys.

Setting: A 13-bed labor and delivery unit in a quaternary care, Magnet Recognition Program, academic medical center in Pennsylvania.

Participants: Preintervention (n = 100), postintervention (n = 52), and 6-month follow-up survey respondents (n = 75) represented secretaries, registered nurses, surgical technicians, certified nurse-midwives, nurse practitioners, maternal-fetal medicine fellows, anesthesiologists, and obstetric and family medicine attending and resident physicians from triage and labor and delivery units.

Methods: We educated staff and implemented interventions, an admission huddle and safety time-out whiteboard, to standardize the admission process. Participants were evaluated with the use of preintervention, postintervention, and 6-month follow-up surveys about their perceptions regarding the admission process. Data tracked through the electronic medical record were used to determine compliance with the admission huddle and whiteboards.

Results: A 77% reduction (decrease of 49%) occurred in the perception of incomplete patient admission processes from baseline to 6-month follow-up after the intervention. Postintervention and 6-month follow-up survey results indicated that 100% of respondents responded *strongly agree/agree/neutral* that the new admission process improved communication surrounding care for women. Data in the electronic medical record indicated that compliance with use Q1 of admission huddles and whiteboards increased from 50% to 80% by 6 months.

Conclusion: The new patient admission process, including a huddle and safety time-out board, improved staff perception of the quality of women's admission from obstetric triage to the labor and delivery unit.

JOGNN, ■, ■–■; *2017*. https://doi.org/10.1016/j.jogn.2017.11.008

Accepted November 2017

Kathleen O'Rourke, MSN, RNC-OB, is a clinical practice leader in the Labor & Delivery/Perinatal Evaluation Center, Hospital of the University of Pennsylvania, Philadelphia, PA.

(Continued)

The authors report no conflict of interest or relevant financial relationships.

Problem Description

Accurate communication about a pregnant woman's history and current status is critical when her care is transitioned between providers. Handoffs that occur during the admission process between the obstetric triage and labor and delivery teams can have a great likelihood of error and inefficiency, and inefficient handoffs can lead to decreased satisfaction of the staff and the women in their care. Incomplete and/or ineffective communication at this point can result in delays in timely administration of antibiotics and magnesium sulfate, missed communication about allergies or comorbidities, missed placement of intrauterine devices and bilateral tubal ligations after birth, and inefficient work flow. Staff members at the study setting identified these issues, which were caused by an inefficient and cumbersome admission process. Resultant errors decreased the overall satisfaction of the staff and the women.

Available Knowledge

Preventable medical errors are leading causes of death in the United States (Makary & Daniel, 2016). These errors can occur on the individual or systems level, and miscommunication is a major contributing factor (James, 2013; Makary & Daniel, 2016). The Joint Commission identified the need to standardize nursing handoffs to improve patient care and decrease the

FLA 5.5.0 DTD ■ JOGN297_proof ■ 27 December 2017 ■ 6:20 pm ■ ce

The transition process from obstetric triage to the labor and delivery unit led to delays, errors in care, and perceptions of incomplete handoffs.

Joseph Teel, MD, FAAFP, is an assistant professor of Clinical Family Medicine and Community Health; the Medical Director, Penn Family Care; and the Director of Family Medicine, Obstetrics, Hospital of the University of Pennsylvania, Philadelphia, PA.

Erika Nicholls, BSN, RNC-EFM, is a labor and delivery charge nurse, Women's Health Department, Hospital of the University of Pennsylvania, Philadelphia, PA.

Daniel D. Lee, MD, is a urogynecology fellow, Department of Obstetrics & Gynecology, Hospital of the University of Pennsylvania, Philadelphia, PA.

Alyssa Covelli Colwill, MD, is a family planning fellow and instructor of obstetrics and gynecology, Department of Obstetrics & Gynecology, Oregon Health and Science University, Portland, OR.

Sindhu K. Srinivas, MD, MSCE, is an associate professor and Director of Obstetrical Services, Hospital of the University of Pennsylvania and Vice-chair for Quality and Safety, Department of Obstetrics & Gynecology, Hospital of the University of Pennsylvania, Philadelphia, PA.

occurrence of errors (Taylor, 2015) and identified failures in health care provider communication with patients as a major root cause of serious sentinel events reported from January 2014 to October 2015 (The Joint Commission, 2015).

Sehgal, Green, Vidyarthi, Blegen, and Wachter (2010) conducted a survey with a multidisciplinary team that used whiteboards at the bedside to provide better communication and care. The results indicated that each member of the multidisciplinary team valued the use of the whiteboard as a tool to improve teamwork, communication, and patient care (Sehgal et al., 2010). According to Xiao, Schenkel, Faraj, and Mackenzie (2007), the use of handwritten whiteboards is instrumental to support collaborative work. Tan, Hooper Evans, Braddock, and Shieh (2013) used inpatient whiteboards to improve patient awareness of the care team, to communicate plans for admission and duration of admission, and to improve overall patient satisfaction.

Rationale

This quality improvement (QI) project was conceived using Donabedian's framework (1988), which is often applied in health care settings to examine quality of care. According to this conceptual model, three categories are used to evaluate quality of care: structure, process, and outcomes. Structure is the setting in which care is delivered, process is the interactions between patients and providers throughout the delivery of health care, and outcomes are health care and its effects on patients and populations. We chose this framework because it can be used to identify opportunities to improve communication among health care providers. In our study, structure was represented by whiteboards and enhancements to the electronic medical record (EMR). The process elements included time-out huddles with health care teams and the women in their care and enhanced documentation to ensure accountable and safe care. Outcomes were health care provider perceptions of the effect of the intervention on improved quality of care.

Specific Aim

The specific aim of this project was to standardize the admission process with admission huddles and safety time-out whiteboards to improve staff perceptions of the admission process and to demonstrate increased compliance with the new practices.

Methods

Context

The setting for this study included a 13-bed labor and delivery unit in a Magnet Recognition Program, Baby-Friendly academic medical center in urban Pennsylvania with more than 4,100 births annually. Each month, there are approximately 300 admissions to the labor and delivery unit from the adjacent obstetric triage unit, which evaluates 800 women per month. The six-bed triage unit is also equipped with one ultrasound room, a consultation room, and four reclining chairs for patient evaluation. The medical center is a referral center for high-risk pregnancies in disadvantaged urban communities; therefore women often have medical comorbidities that place them at greater risk for poor outcomes.

In January 2015, health care providers raised concerns about ineffective communication, incomplete handoffs, nonstandardization of the admission process, and the negative effect of these issues on the quality of care provided. In response to these concerns, an interprofessional QI team, including clinical nurses (registered nurses [RNs]), certified nurse-midwives (CNMs), obstetric and family medicine attending and resident physicians, a quality and safety officer, and two project managers, was assembled. This QI team met regularly and solicited feedback from health care providers that indicated a need to improve communication. Previous efforts to address the problem of communication had failed for a variety of reasons. The team admissions approach required too much time and effort for care to be effectively coordinated. This led to inefficiency, including restricting timely patient throughput and increased work demands. As a result, this approach was eventually phased out, which necessitated a more efficient and safe model of care.

With this in mind, the QI team assessed the current handoff process by observing communication exchanges between health care providers during transitions in care, auditing documentation in the EMR, and debriefing with health care providers. They found that the roles and responsibilities of health care provider team members were not clearly defined, essential