BACKGROUND

The volume of deliveries at the Froedtert Birth Center has been increasing as has the number of procedures performed. Delays in the start of the first scheduled cesarean remain a chronic frustration for providers, personnel, and patients despite a number of previous interventions. Delays in the start of the first scheduled cesarean adversely affect the:

- Procedure schedule for entire day
- Physicians’ schedules, leading to delays for clinic patients
- Glucose control for diabetic mothers
- Patient’s satisfaction as she must remain hungry longer
- Providers and personnel uniformly agree that change is needed but resist making changes in their particular workflows—expecting the other groups to change theirs.

AIMS

By November 2016, 80% of the first scheduled cesareans of each day will begin on time.

Secondary goals:

- By August 2016: 90% of preoperative lab results will be available prior to patient arrival
- 90% of admission orders will have been completed prior to patient arrival
- 100% of OB attendings will arrive early enough
- By September 2016:
  - 90% of first scheduled cesareans will be audited
  - 90% of audit sheets will have complete information

STUDY METHODS

First Intervention: The issue was discussed at the Labor and Delivery Quality Improvement Meeting (L&D QI).

We identified a need for:

1. An audit tool to collect data on the first scheduled cesarean
2. Developing consensus for targets:
   - Admission orders completed prior to scheduled patient arrival
   - CBC, T+S and RPR completed prior to scheduled patient arrival
   - Discharge: patients who live far away and are scheduled to arrive ≥ 2.5 hrs before procedure start
   - OB attending at bedside at least 30 minutes prior to scheduled incision time
   - Roll into the operating room at least 30 minutes prior to scheduled incision time
   - Procedure start time target: 2 hours after scheduled patient arrival

Second Intervention: Data reviewed at a second L&D QI Meeting showed inadequate performance. All stakeholders were reminded of target times via e-mails. The audit sheet was updated to include the names of nurses directly involved with patient care to better capture any reasons for expectations not being met.

Third Intervention: After our second intervention, we still were not at our target goals, so we began to send e-mails to obstetricians, anesthesiologists, and nursing staff involved. Data was gathered into monthly reports which were then shared with providers and staff via email, calling out for special notice, those trios who had met expectations.

RESULTS

Mean Operating Room Roll-in Time Delay: Improved p=0.001

Mean Procedure Start Time Delay: Improved p=0.001

CONCLUSIONS

Although we did not reach our goal of 80% on-time performance, we significantly improved the rate of on-time cesareans and reduced the mean delay in the start of the first daily cesarean, improving patient flow and care within the Birth Center.

The largest improvement was Anesthesiology’s decision to provide increased services in response to the data. They now provide two full teams each day.

Improved patient flow and the beginning of cultural change were accomplished via an e-mail: an educational tool. Educational interventions usually weak and short lived. This approach was chosen because our culture, including physicians and administrative leadership, did not support a stronger type of intervention.

This technique may help others facilitate important process improvement in change-averse and complex care environments.