Abstract

Background and Purpose: Labor induction is on the rise worldwide and accounts for 25% of deliveries in the United States. The procedure is associated with increased costs, hospital stay, and decreased patient satisfaction with birth experience. There is variation in hospital and provider IOL practices. Optimization of the labor induction process has the potential to impact care outcomes. The purpose of this quality improvement project was to examine the feasibility of implementing an evidence-based labor induction toolkit at an academic medical center and secondarily to evaluate the impact of the program on clinical outcomes and patient-provider communication.

Methods: This quality improvement project utilized a prospective pretest/posttest interventional design. An interprofessional team of 15 providers participated in a 12-week labor induction learning series. The toolkit focused on advancing provider knowledge of labor induction best practices, increasing adherence to evidence-based guidelines, and shared decision-making skill development. The outcomes evaluated included feasibility, length of stay for labor admissions, elective induction rate, *normal-term-singleton-vertex (*NTSV) cesarean rate after IOL*, and* the effect of the intervention on patient-provider communication. Patient-Provider communication was assessed with two validated tools: The Mothers Autonomy in Decision Making Scale (MADM) and the Patient-Practitioner Orientation Scale (PPOS).

Results: Of the 15 provider participants 7 providers completed the pre-test surveys; and 9 completed the post-test. Provider orientation to shared decision-making improved as evidenced by mean PPOS score from 75 (pre-test) to 82 (post-test). Induced patients who experienced a labor induction in the study period were asked to complete an anonymous survey 17 returned a completed pretest survey. Post-intervention, 29 patients returned a completed survey. Patient experience was measured using the Maternal Autonomy in Decision Making (MADM) Scale. There was no significant difference between the mean pre-test MADM score (39.35) and mean post-test MADM score (39.14). An improvement was noted in the overall patient satisfaction scores. No improvement was noted in clinical measures like NTSV cesarean rate or Length of Stay. The elective induction rate increased during the study period.

Conclusion: The labor induction toolkit-based implementation demonstrated feasibility, provider acceptability, improved provider orientation toward shared decision-making, but no significant change in patient perceived engagement in shared decision-making. Overall patient satisfactions scores improved. No improvement was noted in unit-level quality measures of length of stay, elective IOL rate, or NTSV (or low risk) cesarean rate.

Keywords: Induction of labor, quality improvement, obstetric standardization