

A working epidural, quicker OR entry, and existing surgical consent decreased decision to incision time for urgent cesarean sections

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Abstract

BACKGROUND: The American College of Obstetrics and Gynecology has recommended that hospitals providing obstetrical care should have the capability to begin urgent cesarean deliveries within 30 minutes. Failure to meet this time has been taken out of context and criticized litigiously if a poor neonatal outcome occurs. The goal of our study was to introduce an intervention to improve our institution's decision to incision times to meet this standard.

METHODS: After IRB approval, interventions for urgent cesarean sections were introduced. This included (1) tracking, which required documentation of time of decision, anesthesia notification, OR entry, anesthesia release, prep completion, and skin incision; and (2) designation of a physician and nursing champion. A total of 236 consecutive urgent cesarean deliveries were compared (186 pre- and 50 post-intervention). Data were abstracted from patient charts. Statistical analysis was performed using Chi-squared, T-test, and Pearson's r test.

RESULTS: The intervention improved decision to incision times accomplished within 30 minutes from 33% to 46%. The intervention decreased the average time from 42 minutes to 36 minutes. Decision to OR entry averaged 15 minutes and OR entry to incision 20 minutes. Having a working epidural (86% vs. 59%), entering the OR within 15 minutes (70% vs. 10%), and having been previously consented for cesarean section at admission (52% vs. 37%) made it more likely to have a decision to incision time within 30 minutes. Identified contributing causes of delays were 58% none, 36% anesthesia, 8% patient, and 6% OR personnel.

CONCLUSION: When an urgent cesarean section was called, an intervention of designating a physician and nursing champion and then tracking key times in the delivery process decreased the average decision to incision time and made it more likely that it could be accomplished within 30 minutes. Having a working epidural, entering the OR within 15 minutes, and having been already consented were associated with decision to incision times within 30 minutes.