Incidence of and characteristics associated with failed induction of labor

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Objective

• To determine the incidence of and characteristics associated with a standardized definition of failed induction of labor using diagnosis codes

Methods

• Design: retrospective cohort, 2016-2019
• Population: women with singleton pregnancies, intact membranes, and no prior cesarean delivery that were induced between 39-42 weeks gestation at 7 hospitals
• Outcome: failed induction of labor ICD10 diagnosis code (O61)

Results

• Sample size: 19,648 eligible pregnancies
• Induction rate: 36.7%
• Cesarean delivery rate: 21.3%
• Failed induction rate: 1.9%

Characteristics associated with ICD10 code for failed induction of labor. Adjusted model includes all variables listed.

Conclusions

• The rate of failed induction of labor is low
• Maternal age, black race, nulliparity, gestational age, and delivery BMI are associated with higher risk of failed induction
• The diagnosis code for failed induction of labor (O61) has poor positive predictive value