Descriptive, Exploratory Examination of Post-operative Telephone Follow-Up and Emergency Department Presentations

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**Objective**

To describe the occurrence of post-operative telephone call follow-up with patient by OB/GYN residents after cesarean delivery, along with the number of ED presentations prior to outpatient post-operative follow-up at a Michigan-based Health System.

**Background**

Unnecessary ED visits burden an already overwhelmed medical system. Systems of post-operative telephone follow-up attempt to assuage any potential minor health-related issues during the post-operative period while at the same time further building the level of trust in the provider-patient relationship. The use of telephone follow-up in place of a post-operative outpatient visit has been explored. Follow-up phone calls performed by residents are a standard of care at our institution for all patients delivered via cesarean section by the laborist service. However, the utility of phone calls for reducing preventable emergency department presentations has not yet been studied.

**Design/ Methods**

Hospital records of patients 18 years of age and older who delivered via low transverse cesarean section between January 1, 2017 and December 31 2018 were reviewed. Data were reviewed to ensure inclusion criteria met, including delivery performed by resident (laborist) service, gestational age at delivery ≥34 weeks, low transverse cesarean delivery, and presentation to outpatient follow-up within 6 weeks of delivery. Data were excluded if patient required use of a translator or if patient was re-admitted to the hospital prior to outpatient follow-up. Chart review through outpatient EMR identified whether a phone call was made within 5 days of discharge following cesarean delivery and whether the patient presented to the ED prior to her outpatient follow-up appointment. As the standard of care at our institution, phone calls are standardized to inquire about bleeding, pain, voiding, and tolerating diet, then further customized at the residents' discretion regarding any additional follow-up or concerns of the patient.

**Data Analysis**

Data were compared via descriptive 2 x 2 contingency tables. Bivariate correlations as well as Chi-square analysis were also performed. All statistical analyses were performed by the Biostatistician (SJW) utilizing SPSS Version 25 analytic software.

**Inclusion Criteria**

- Cesarean deliveries n = 580
- Laborist service n = 184
- Private attending n = 396
- English-speaking n = 182
- Interpreter n = 2
- GA > 34 weeks n = 180
- GA <34 weeks n = 2
- Outpatient follow-up n = 147
- No outpatient follow-up n = 33

**Results**

- Phone call but also ED
- Phone call without ED
- No phone call but ED
- No phone call or ED

**Discussion**

**Findings:** No significant correlation observed between postoperative phone calls and ED presentations (correlation = 0.05, P = 0.471). Post-operative phone calls were documented for only 36.73% of patients included within this study.

**Limitations:**

- Difficulty documenting telephone contact with new patients (midwife/family medicine primary cesarean deliveries) through outpatient HER
- Unmeasured possible confounding variables:
  - Reason for ED presentation
  - Comorbid conditions
  - Resident vs midwife/family med prenatal care
  - Primary vs repeat cesarean delivery
  - Parity

**Conclusions**

The results from this study suggest that there may not be any influence of resident post-op telephone follow-up on reducing patient presentations to the ED after cesarean delivery. However, it did serve to demonstrate the lack of resident compliance with the post-operative follow-up standard of care within our program (a compliance rate of 36.73%), opening the possibility for future studies examining the underlying cause for poor resident telephone follow-up with post-operative patients. Further studies could, along with collecting data on possible confounding variables, also focus on expanding the participant pool to additional health systems to increase the external validity of results.

**Sources**