Early postpartum contact: QI project to increase postpartum visits, screenings, and referrals

By Genevieve M. Hofmann, DNP, WHNP-BC, and Amy Nacht, DNP, CNM, MPH, FACNM

The postpartum period is a vulnerable time in women's lives. Postpartum care in the United States is often inconsistent and fragmented. Nationally, 40% of women forgo postpartum follow-up. In May 2018, the American College of Obstetricians and Gynecologists released a committee opinion recognizing this critical time and advocating for more patient–provider contact during the postpartum period.[1] Many postpartum patients are not seen until 6 weeks after delivery. Telephone support during the early postpartum period is a way to bridge this gap in care, provide more continuous support, and improve attendance at the comprehensive 6-week postpartum clinic visit.[2–4] In Colorado, 10% of postpartum women report symptoms of postpartum depression and self-harm is the most common cause of pregnancy-related mortality.[5] Gestational diabetes, precursor to type 2 diabetes, is on the rise.[6] Low rates of comprehensive postpartum follow-up mean screenings for these health concerns are not being completed.

Purpose

This quality improvement (QI) project was implemented to address a low (35%) 6-week postpartum attendance rate of patients at the University of Colorado School of Medicine (UCSOM) resident clinic in Aurora. The purpose of this QI project was to implement and evaluate outcomes of a nurse-initiated, early-contact phone call to postpartum patients about 1 week after discharge. The goal was to increase attendance at comprehensive 6-week postpartum appointments and subsequent screenings in this setting.

Methods

This QI project went before the University of Colorado, College of Nursing Proposal Review Board, and was approved in spring 2019. As its goal was to modify existing practices to improve the effectiveness of these processes, this project was not considered human subject research and did not require review by the Institutional Review Board.

The population included low-risk postpartum women who delivered at the University of Colorado hospital between June 1, 2019, and August 31, 2019, with a discharge plan for a scheduled routine 6-week postpartum clinic appointment. Women were included if they received prenatal care at UCSOM resident clinic, scant or no prenatal care, or prenatal care with an outside provider that could be tracked in the electronic medical record. Patients with pre-existing comorbidities already scheduled for early postpartum clinic follow-up were excluded.

Prior to implementation of the intervention, a 3-month retrospective chart review was performed from October 1, 2018, through December 31, 2018, to obtain baseline prevalence data including 6-week appointment attendance and rates of screening and referrals for depression and diabetes (N = 60). Baseline and intervention groups were similar in terms of age, parity, language, delivery type, and payor source, decreasing the impact of confounding variables.

Using Kotter's 8-step model of change and Plan-Do-Study-Act (PDSA) cycles, a prospective nurse-initiated, early-contact phone-call intervention to postpartum patients was started over the 3-month study period to inquire about patient well-being and mood, breastfeeding, and any other postpartum concerns (N = 67). This call confirmed that patients were scheduled for and aware of their 6-week appointment and the need for fasting diabetes testing at that appointment. PDSA cycles were

used to identify eligible patients, and a list of eligible patients' medical record numbers (MRNs) was recorded daily on a spreadsheet used for data collection. Throughout the intervention, a list of MRNs was emailed by the project leader twice weekly to the resident clinic nurse, notifying her that she had been assigned early-contact postpartum calls. A standard documentation template was created to guide and document the phone calls. This template guided the nurse to document successful contact, the 6-week appointment date, order testing for gestational diabetes as needed, and record length of phone call for standardized data collection. Nurses were instructed to make two contact attempts to each patient. The intervention was first tested with one nurse who received individualized education about early-contact intervention and guidance on using the template. Rather than using a formal test, real-time feedback was solicited. The intervention was expanded to include four nurses.

Patient satisfaction with early-contact intervention was assessed through a patient survey at the 6-week postpartum appointment adapted from the Primary Care Satisfaction Survey for Women and the Satisfaction with Maternal and Newborn Health Care Following Childbirth scale.[1] University of Colorado Hospital Office of Patient Experience provided input into effectively adapting the survey. Survey Monkey surveys were sent monthly to participating nurses to assess workflow.

Data analysis

Measures of frequency were used to compare baseline and intervention groups and evaluate outcomes including successful patient contact, length of phone call, 6-week appointment attendance, screening for depression with Edinburgh Postnatal Depression Scale (EPDS), completion of 2-hour glucose tolerance test, and referral for elevated EPDS and continued diabetes management. At baseline, only 21 patients (35%) attended their 6-week appointment (N = 60). The chi-square for independence test evaluated the relationship between receiving an early-contact intervention and 6-week appointment attendance.

Outcomes

Overall, 25 patients (37%) in the early contact group (N = 67) attended their 6-week postpartum appointment. Early postpartum contact did not significantly improve 6-week postpartum follow-up rates ($P = .78$). During the study, 47 patients (67%) were successfully contacted and 21 successfully contacted patients (45%) attended their 6-week postpartum appointment ($P = .13$; *Table 1*, *Table 2*). The average call time for patients was 6.7 minutes (standard deviation [SD] 4.2) and for non-English speaking patients was 9.4 minutes (SD 4.3). Although overall attendance rates remained low in baseline and intervention groups, those attending their clinic appointment received screening for depression and diabetes and were appropriately referred.

Table 1. Comparison of baseline and intervention group no-shows

	Kept 6-week postpartum appointment	No-show 6-week postpartum appointment	Total
No early contact (Baseline group)	21	39	60
Early contact (Intervention group)	25	42	67
Total	46	81	127

Table 2. Successful versus unsuccessful contact and no-shows in intervention group

	Kept appointment	No-show appointment	Total
Successful contact	21 (45%)	26 (55%)	47
Unsuccessful contact	5	14	20
Total	26	41	67

Over 90% of patients agreed they had enough time to address their concerns during the phone call, the nurse was caring and kind, and talking to a nurse soon after discharge was important. Of nurses providing the early-contact phone call, 100% stated it was "non-burdensome" to their daily workflow.

Limitations

A small sample size receiving the intervention over a short 3-month intervention period was likely inadequate to demonstrate statistically significant change. This project included medically low-risk women mostly insured by Medicaid who received care in an academic medical center and may not be generalizable to the population at large. Recall bias and low response rates may have impacted patient experience/satisfaction survey results.

Implications for women's health

An early postpartum phone call is a simple, easy-to-expand, and replicative intervention. This project demonstrates that postpartum patients are open to and satisfied with a brief, alternative means of contact that does not take place within the clinic. Important secondary outcomes occurred from receiving an early-contact phone call. For example, one patient who received an early postpartum phone call com-

plained of headache, the nurse assessed her symptoms, and recommended that she present to the emergency department. The patient was diagnosed with severe preeclampsia and was re-admitted for treatment.

Early postpartum contact is best practice. It is feasible and acceptable as demonstrated by successful contact rates, brief call duration, and patient and nurse surveys. By continuing to investigate alternative approaches, including using patient portals, text messaging, and virtual or telehealth visits to achieve more continuous contact with postpartum patients, a significant opportunity exists to be at the forefront of this necessary paradigm shift. This shift can improve the care we provide patients and their families during the often vulnerable and traditionally neglected postpartum period.

Genevieve M. Hofmann is Instructor at the University of Colorado School of Medicine in Aurora. Amy Nacht is Assistant Professor at the University of Colorado School of Medicine and Director of the College of Nursing Interprofessional Programs and Midwifery Fellowship, Anschutz Medical Campus, University of Colorado College of Nursing in Aurora.

References

1. American College of Obstetricians and Gynecologists. ACOG committee opinion no. 736: optimizing postpartum care. *Obstet Gynecol.* 2018;131(5):e140-e150.
2. Lavender T, Richens Y, Milan SJ, et al. Telephone support for women during pregnancy and the first six weeks postpartum. *Cochrane Database Syst Rev.* 2013;(7):CD009338.
3. Centers for Medicare & Medicaid Services. Resources on strategies to improve postpartum care among Medicaid and CHIP populations. Technical assistance resource. February 2015. https://www.medicaid.gov/medicaid/quality-of-care/downloads/strategies-to-improve-postpartum-care.pdf.
4. Danbjørg DB, Wagner L, Kristensen BR, Clemensen J. Intervention among new parents followed up by an interview study exploring their experience of telemedicine after early postnatal discharge. *Midwifery.* 2015;31(6):574-581.
5. Metz TD, Rovner P, Hoffman MC, et al. Maternal deaths from suicide and overdose in Colorado, 2004–2012. *Obstet Gynecol.* 2016;128(6):1233-1240.
6. Centers for Disease Control and Prevention. Gestational diabetes. 2019. https://www.cdc.gov/diabetes/basics/gestational.html.
7. Camacho FT, Weisman CS, Anderson RT, et al. Development and validation of a scale measuring satisfaction with maternal and newborn health care following childbirth. *Matern Child Health J.* 2012;16(5):997-1007.