Impact of a Digital Health Intervention on Postpartum Appointment Attendance

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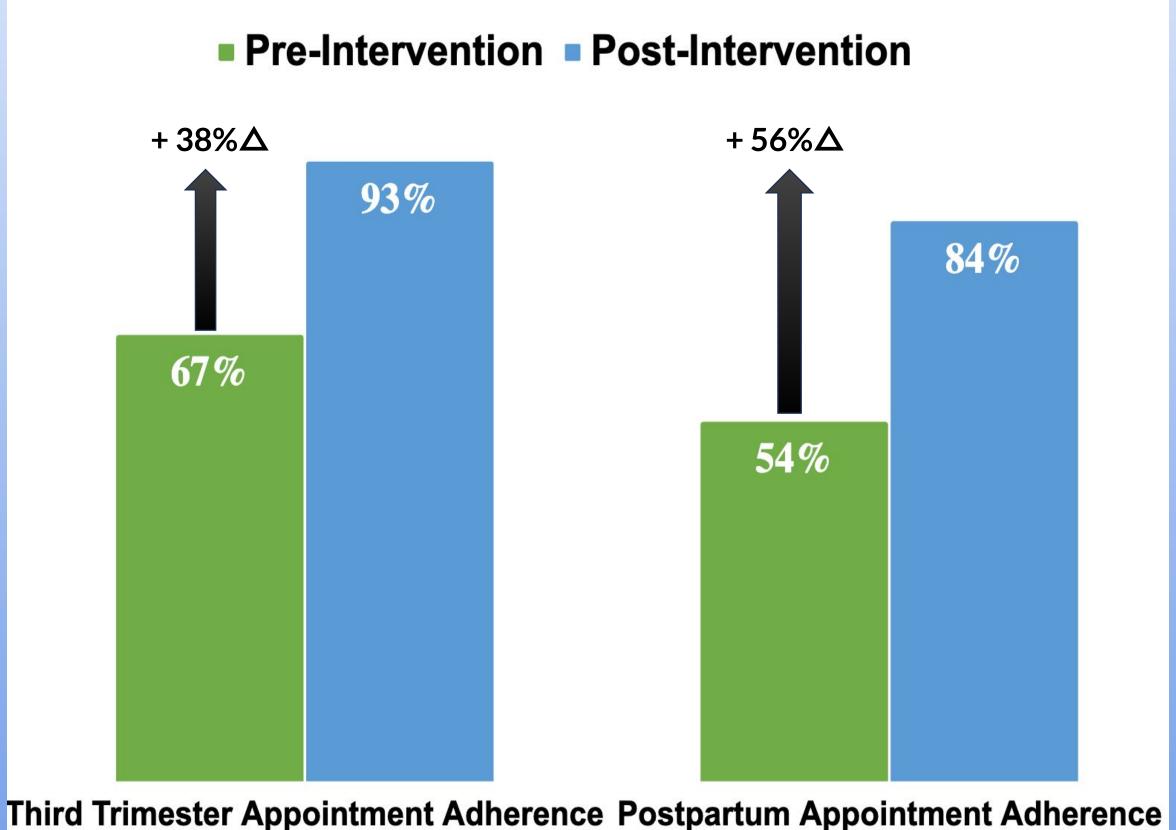
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BACKGROUND: Appointments during pregnancy and postpartum are key opportunities for ensuring long-term health and safety. However, research indicates up to 50% of patients miss their postpartum appointments and historically marginalized populations have lower rates of adherence. Suboptimal engagement with the healthcare system remains a significant obstacle to addressing maternal health inequities.

OBJECTIVE: The purpose of this study was to determine whether a digital health platform that combines educational/motivational text messages with Contingency Management principles (e.g., points earned for healthy behavior adherence that can be redeemed for rewards) is an acceptable and impactful intervention among pregnant women.

METHODS: English-speaking pregnant women from an urban healthcare center OB/GYN clinic participated in a pilot 5-month trial during their third trimester through two months postpartum. Participants received daily educational and motivational text messages, and could earn points for health-related activities. Engagement with health behaviors were compared to baseline rates provided by the clinic.

The rewards- and messaging-based intervention increased third trimester appointment attendance by 38% and postpartum appointment attendance by 56%



RESULTS:

- Participants were 30 ±5.4 years old; 56% identified as Hispanic/Latinx, 22% non-Hispanic Black, and 13% Asian; 47% had < a high school diploma; 87% received Medicaid; 70% had household incomes <\$48,000; and 48% were nulliparous.
- Participants attended 93% of their third trimester prenatal visits (compared to the clinic average of 67%) and 84% attended their postpartum visit within 6 weeks of giving birth (compared to the clinic average of 54%).
- 86% said the intervention was motivating and 94% felt the messages positively impacted whether they made healthy choices during the day.
- In revenue terms, the clinic estimated an eight-fold return-on-investment from the modest patient incentives (\$45 per participant) based upon average appointment reimbursements.

CONCLUSIONS: This pilot data suggests that pregnant women from historically marginalized populations serviced by CMS found a messaging-and Contingency Management-based digital health intervention supportive and motivating, and the intervention seems promising for improving third trimester and postpartum appointment attendance. Future research should include a randomized controlled study design and longer-term follow-up on clinical outcomes.

Research and development for the Aqueduct platform was funded by the National Institutes of Health (NIH) National Institute of Nursing Research (NIHR44NINR020320).

