

A Simple Digital Reminder Improves Use of Intrapartum Ultrasound Prior to Vacuum-Assisted Delivery: A Prospective Interventional Study

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Objective

To test whether a low-cost digital nudge embedded in routine departmental communication increases documented intrapartum ultrasound assessment before vacuum-assisted delivery.

Methods

- Prospective interventional study
- Delivery ward with ~12,500 deliveries annually, of which about 12% are vacuum-assisted.
- A three-month baseline (3,157 deliveries and 373 vacuum-assisted) was followed by standardized reminder messages in a departmental group including all residents and senior obstetricians.
- Primary outcome was the proportion of vacuum-assisted deliveries preceded by documented intrapartum ultrasound.

Results

20% to 50%

Documented intrapartum ultrasound before vacuum delivery

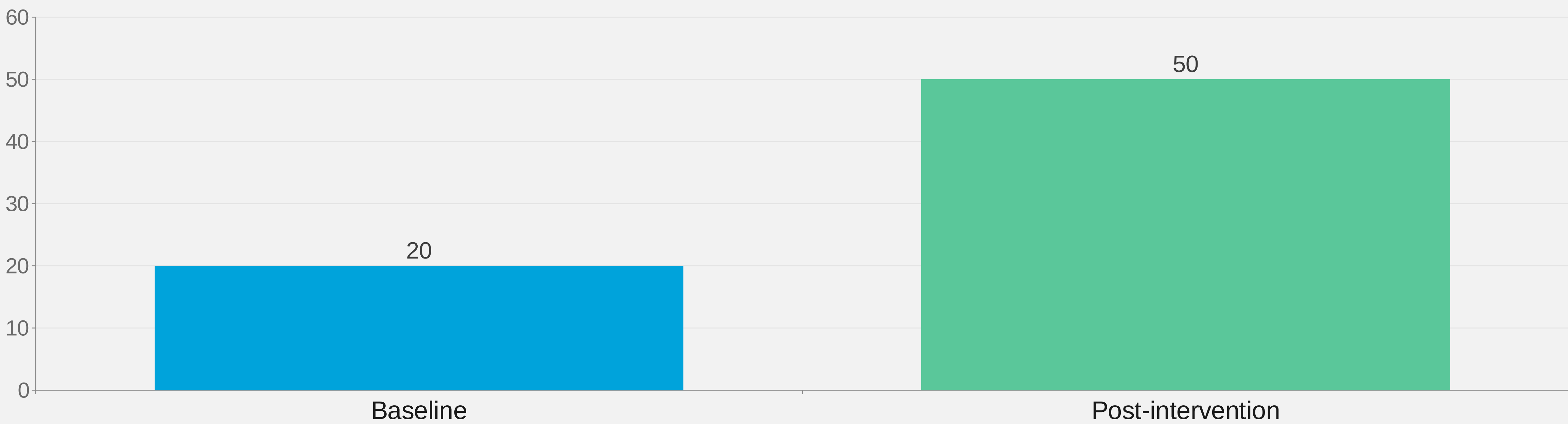
+30%

Percentage point absolute increase, with a continued upward trend

~370

Vacuum-assisted deliveries in the three-month baseline period

Vacuum deliveries preceded by documented intrapartum ultrasound (%)



Setting, intervention and outcomes

Item	Detail
Annual deliveries; vacuum-assisted	~12,500; ~12%
Baseline period	3 months, ~3,100 deliveries, ~370 vacuum
Intervention	Standardized reminders in departmental messaging group
Primary outcome	Documented ultrasound before vacuum delivery
Delivery delay or adverse outcomes	None observed
Largest gains	Residents and delivery-ward senior obstetricians

Conclusion A simple, low-cost digital nudge within existing communication channels substantially increased adherence to intrapartum ultrasound before vacuum-assisted delivery, without delaying delivery or increasing adverse outcomes. The approach is scalable to other busy delivery wards.