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The author reports no conflict of interest.

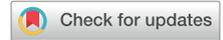
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Impact of team training on visit cycle time in ambulatory reproductive health care centers



OBJECTIVE: TeamSTEPPS is an evidence-based teamwork improvement program that teaches communication strategies to promote a culture of safety and commitment to high-quality patient care. The program emphasizes skill building in leadership, communication, situation monitoring, and mutual support to foster high-performing teamwork. As interactions among staff and clinicians in the ambulatory care setting become more effective and efficient, patients may spend less time in the clinic, and medical errors may decrease. We launched a 5-year initiative in 2014 to implement TeamSTEPPS in a large network of ambulatory reproductive health care centers in the United States and evaluated its impact on visit cycle time.

STUDY DESIGN: The implementation of our TeamSTEPPS initiative has been described previously.¹ This analysis describes outcomes of visit cycle time (patient intake

to discharge) among 18 health centers at 2 reproductive health organizations before and after TeamSTEPPS implementation. Participating centers were not involved in any other initiative to improve clinic flow during the study period. Health care centers measure cycle time using an electronic system that staff updates when patients check in for their appointment and check out at the end of the encounter. For each health center, we analyzed cycle time for the 6-month period before TeamSTEPPS implementation and for a 6-month period after a 6-month washout period following implementation. We evaluated cycle times for the most common visit types. To eliminate outliers, we excluded visit times below the fifth percentile and above the 95th percentile for each specific visit type within each health center.

We present data as the mean with standard deviation. We used Student *t* tests to compare visit cycle times before and

TABLE

Mean cycle times of the most common visit types at 18 health centers before and after TeamSTEPPS implementation

Visit type	Visit duration (min) before TeamSTEPPS	Visit duration (min) after TeamSTEPPS	Decrease (min) per visit ^a	P value	Hours saved
All	85.9 ± 59.8 (n = 31,136)	81.6 ± 59.7 (n = 34,655)	4.4	< .001	2515
STI testing	63.6 ± 34.3 (n = 9183)	60.4 ± 42.6 (n = 11,174)	3.3	.001	606
Contraception	57.4 ± 17.5 (n = 6598)	56.9 ± 17.3 (n = 5941)	0.5	.09	52
Surgical abortion	186.0 ± 56.3 (n = 5616)	183.0 ± 56.2 (n = 5728)	3.5	.005	334
Well woman visit	69.5 ± 20.0 (n = 4098)	65.2 ± 19.3 (n = 5367)	4.3	< .001	387
Medical abortion	107.0 ± 30.2 (n = 2440)	105.0 ± 26.3 (n = 2769)	1.9	.02	88
Refill	25.0 ± 11.4 (n = 1696)	21.3 ± 9.4 (n = 2035)	3.8	< .001	127
Medical abortion follow-up	53.6 ± 17.7 (n = 1525)	52.1 ± 17.0 (n = 1641)	1.6	.01	43

Data are mean ± SD.

STI, sexually transmitted infection.

^a Any discrepancies with prior columns are due to rounding.

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after TeamSTEPPS implementation. We used SAS 9.4 (SAS Institute, Cary, NC) and GraphPad Prism (GraphPad Prism version 6 for Windows, GraphPad Software, La Jolla, CA) for data analysis. The Institutional Review Board at Beth Israel Deaconess Medical Center approved this research.

RESULTS: Together the most common visit types accounted for 68.5% of all visits; there were 31,156 visits prior to TeamSTEPPS implementation and 34,655 visits after implementation. These visit types consisted of contraception visits, well-woman visits, testing for sexually transmitted infections, surgical abortion, medical abortion, contraception refill visits, and follow-up visits for medical abortion. Among these visit types, overall mean cycle time decreased by 4.3 minutes after TeamSTEPPS implementation ($P < .001$), for a total time savings of 2515 hours after TeamSTEPPS. With the exception of contraception visits, the mean overall cycle time decreased significantly for each visit type (all $P \leq .02$; Table).

CONCLUSION: Team training improves visit cycle time in ambulatory health care settings. Reducing the total amount of time that patients spend at visits may improve patient satisfaction, which we previously have shown increases following TeamSTEPPS implementation² and allows for more walk-in and urgent appointments. Although our data cannot exclude other contributing factors or confirm that time savings translated into provider or clinic room utilization, they do suggest that even small team-driven improvements in cycle time have a dramatic impact on patient access, particularly in high-volume settings. ■

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Text message remote monitoring reduced racial disparities in postpartum blood pressure ascertainment



OBJECTIVE: Nearly 50% of maternal morbidity and death occurs after delivery, one-third of which occurs in the first week after delivery.¹ The American College of Obstetricians and Gynecologists recommends close monitoring of patients with

hypertensive disorders for the first 72 hours and again at 7–10 days after delivery, given the timing of peak blood pressures after delivery² and the need for optimal blood pressure management in this period of increased risk of stroke and