Abstract

Automated Patient Navigation Platform Increases Referral Conversion for Surgical Consultations

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Abstract

Background: Provider organizations often lack closed-loop systems to convert referrals for surgical consultations, relying on patients to proactively follow-up and schedule their initial evaluation with surgeons. Referrals that do not promptly converted into appointments result in delays in care and lost revenue opportunities.

Objective: The aim of this study was to evaluate the impact of an automated referral navigation platform on referral conversion rate and scheduling efficiency.

Methods: Referral information, prompts to schedule appointments, and appointment reminders with digital wayfinding services were delivered to patients using time-released text messages and emails via an automated HIPAA-compliant software platform (Medumo, Inc, Boston, MA). All patients who were referred for evaluation by General Surgery, Oral Medicine, Otolaryngology, and Urology at our institution for 16 weeks starting February 12, 2018 were enrolled in the automated referral navigation program (intervention cohort). Exclusion criteria were incomplete referral information and absence of email address and cell phone number in the medical record. The primary outcome metric was conversion rate of referrals to appointments within 12 business days. Outcome metrics on scheduling efficiency included conversion rate of referrals to appointments within 2 business days and percent of patients contacted within 24 hours of referral. Success of patient navigation was measured with appointment no-show rates, digital wayfinding service utilization, and patient satisfaction. All outcomes of the intervention cohort were compared to referrals made in the 16 weeks ending February 11, 2018 (baseline cohort).

Results: During the intervention period, there were 4991 patients enrolled in the referral navigation program. Compared to the baseline cohort, the conversion rate of referrals to appointments within 12 business days increased from 63.4% to 65.6% (P=.01). Efficiency with which referrals were converted to appointments improved: referral conversion rate within 2 business days increased from 40.0% to 52.0% (P<.01) and patient contact rate within 24 hours increased from 54.5% to 95.9% (P<.01). For appointments scheduled during the study period, no-show rate decreased 22.7% (5.7% to 4.4%, P=.01) and utilization of the digital hospital wayfinding service increased 1777.6%. Average satisfaction score was 4.4/5.0 for the referral navigation program.

Conclusions: Implementation of a software platform that facilitates referral capture with appointment navigation increased referral conversion, boosted efficiency of appointment scheduling, and improved patient preparedness with fewer no-shows in surgical specialties.

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KEYWORDS

mobile text reminders; referral conversion; patient navigation

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