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Are waiting rooms passé: A pilot study of patient self-rooming

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Abstract

Timeliness of care after patients arrive at the primary care office has received little examination. At two community family medicine clinics, an intervention was piloted replacing traditional waits in the waiting room with patients directing themselves to their exam rooms. We examined patient acceptability, experience of care, and staff time and cost savings before and after. Most patients (95%) preferred rooming themselves. Patient satisfaction remained high. Staff time and cost savings were achieved at both sites. Our findings suggest self-rooming is desirable to patients. Others interested in redirecting staff time towards value-added patient care tasks should consider trialing this intervention.

Keywords

Primary care; organizational innovation; appointments and schedules; patient-centered care

INTRODUCTION

Timeliness continues to be a common source of patient complaints (Pitts et al., 2010) and is the least studied of the six IOM aims in the ambulatory care setting (Leddy et al., 2003; Michael et al., 2013). The timeliness of care after patients arrive at the primary care office has received little examination (Murray & Berwick, 2003), even though improvements in this area has been associated with satisfaction and cost benefits (Michael, et al., 2013; Press Ganey Associates, 2009). In this paper, we describe outcomes from a novel intervention in two clinics where the traditional waiting room is bypassed by patients directing themselves to examination rooms.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

METHODS

We examine this intervention's acceptability to patients, the association between this intervention and the patient experience of timeliness, and estimate time and cost savings. This quality improvement project was determined exempt from institutional review board review.

The Setting

Patient self-rooming was piloted in two community family medicine clinics, Clinic A and Clinic B. This large public academic health system includes [school of medicine], [hospitals and clinics], and [clinical practice organization]. Clinic A had 7 physicians (4.0 FTE), 1 physician assistant (0.4 FTE), and an active panel of 13,144 patients who made 16,270 patient visits in 2008. During the same year, Clinic B had 4 physicians (1.9 FTE), 2 physician assistants (1.9 FTE), and an active patient panel of 7,689 patients with 11,873 visits.

Both clinic buildings were over 30 years old and had undergone renovations without considering effects on workflow. Prior to this pilot, patients would check in at reception and take a seat until called. Clinical staff would then escort patients to the scale and examination room.

The Intervention

Self-rooming was piloted at Clinic A in December 2008 with one physician's practice. A map of the clinic was created and all exam rooms were numbered with clear signage, visible to approaching patients. After checking in with the receptionist, patients received a folder with their room number and a map, and asked to go directly to their exam room. Once at the exam room, patients placed the folder in a pocket outside the open door.

Numerous visual and auditory cues supported this new workflow, including (1) folders by doors indicated exam room occupancy, (2) patient's room numbers were listed after check-in by the receptionist on the electronic health record schedule, and (3) the sound of patient labels printing near clinical staff areas. After determining a patient was waiting in an exam room, staff entered the room, escorted the patient to the scale, and back to the exam room where the visit proceeded as usual. If the patient ended their visit in the exam room, the patient returned the folder and room number to reception. If the patient did not end their visit in the exam room (e.g., they had lab or imaging tests), staff returned the folder and room number to reception, indicating room availability.

The intervention spread from the initial physician's practice in Clinic A to the rest of the clinic during the first 6 months of 2009 and to Clinic B in October 2009. Clinics A and B have since merged and use patient self-rooming in a new clinic building designed around this process.

Data Collection and Analysis

Acceptability from a patient standpoint was measured during the pilot at Clinic A by a self-administered, single-question paper survey given to patients at the time of check in and

returned to the receptionist upon leaving the clinic. The question asked: “Based on today’s experience, what would you prefer for future appointments?” The response categories were: (a) check in, be seated in waiting area, and then be escorted to the exam room by a member of our nursing staff; (b) check in and proceed directly to the exam room; and (c) any comments. This survey was conducted for two months and stopped because of the uniformity of response after 154 patients completed the survey.

Patient satisfaction was measured through a monthly standardized mail survey sent by Press Ganey to a randomly selected group of patients. Patients mailed the survey to Press Ganey who then provided clinics with biannual summaries. For both clinics, 31–50 responses were returned during each six-month measurement period examined for this study (response rate: ~20%). The pre-intervention data was collected during 8/1/08 to 1/31/09. The post-intervention period was collected during 2/1/10 to 7/31/10 when both clinics were fully using the self-rooming process. We examined three questions from this survey: (1) the wait before going to the exam room, (2) the wait in exam room before seeing the care provider, and (3) the overall care received during the visit. Response options to these questions were on a scale of 1–5 (very poor, poor, fair, good, and very good). Responses from the two time periods were dichotomized (poor/poor/fair, good/very good), compared, and differences were tested using the Mantel-Haenszel chi-square method.

Annual time and cost savings from the intervention were approximated based on the time saved by staff no longer needing to walk from the waiting room to an exam room. First, clinics’ blueprints were examined to calculate the difference in average distance for conventional and self-rooming. Next, this difference was multiplied by an estimated walking speed of 195 feet per minute to calculate the travel distance saved (Kraft, 2006). This travel distance was multiplied by the average number of clinic visits per month, then multiplied by the cost of a medical assistant’s salary and benefits (0.33 cents/minute at the time the intervention occurred) and by 12 to estimate annual cost savings.

RESULTS

Acceptability

Of the 154 patients who completed the acceptability survey, 146 (95%) preferred being checked in and proceeding directly to the exam room (self-rooming) as compared to conventional rooming. Patients commented that self-rooming was more timely (“a lot quicker,” “easy, fast, saves time for the nurse”) and provided more privacy than a waiting room where you might feel uncomfortable running into someone familiar. Moreover, proceeding directly to the exam room kept contact with sick patients to a minimum and avoided parents having to re-settle small children again.

Patient Satisfaction

For these clinics, satisfaction with waiting and overall care was high before and after the intervention. Satisfaction with the wait before going to the exam room, satisfaction with the wait in the exam room before seeing the care provider, and satisfaction with overall care received during the visit did not significantly change ($p < 0.05$).

Time and Cost Savings

The monthly time savings derived from patient self-rooming was 6 hours and 46 minutes at Clinic A, and 5 hours 58 minutes at Clinic B. These time savings translated into about \$1,612 and \$1,422 in annual cost savings at Clinic A and B, respectively.

DISCUSSION

In this paper, we present results from a pilot study examining the feasibility of a patient self-rooming process. To our knowledge, this is the first examination of patient self-rooming in the literature. In this era of primary care redesign, staff are participating in more tasks related to team-based care and population management (Goldberg et al., 2013; Maeng et al., 2012; Nielsen et al., 2012), such as patient outreach, care management, and medication refill management. Our findings present an opportunity to reallocate staff time to clinical tasks like these that add value to patient care.

Currently, primary care is undergoing redesign through the patient-centered medical home model. As this transformation is planned, there is an opportunity for innovation that challenges the status quo. Why should patients have to wait? In modern society, we no longer wait at airline check-in desks, we have kiosks. At the grocery store, we don't need to wait in line, and instead check ourselves out through express lanes. In hotels, we find our own rooms. Therefore, can the large waiting rooms of the past be considered passé?

This pilot study was limited in design due to patient acceptance not being measured longitudinally, provider satisfaction not being measured, and interventions not being completed simultaneously. These limitations indicate potential areas of future research. At [health system], the self-rooming model informed the design of a new building that will be studied for effects on team-based care. Anecdotally, this unique design has prompted visitors from other health systems and has promoted similar construction in the state.

In summary, we found patients welcomed self-rooming and found the privacy this process entailed especially desirable. We also found that patient satisfaction with wait times remained constant. This process added value to the clinic workflow by allowing medical assistant time to be reallocated to clinical tasks rather than walking to and from the waiting room repeatedly throughout the day. Clinical teams may want to consider trialing this radical innovation in their setting as a way to improve efficiency and decrease waste inherent in many traditional workflows.

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