ABSTRACT

- **Objective:** To describe a change in mail notification approach at a Veterans Affairs hospital and its impact on appointments.
- **Methods:** A new notification system was implemented in which the information on the notice was limited to the date, time, and location of the appointment. Previously, the notice contained information about patients’ appointment time in addition to listing methods of rescheduling, patient account information, and a variety of VA policies presented in a disorganized manner. We assessed whether there was a reduction in number of patients who had to be redirected by clinical staff at the ophthalmology clinic at the Long Beach Veterans Affairs Hospital.
- **Results:** The mean number patients who visited the clinic mistakenly during the 14 days prior to the new notification system was 14.93 (SD = 6.05) compared with 9.4 (SD = 3.45; \(P = 0.005\)) during the 15 days after.
- **Conclusion:** A simple abbreviated notification has the potential to improve patient understanding and can increase clinical efficiency, ultimately reducing health costs.

Across the United States, patients at Veterans Affairs (VA) hospitals are routinely informed of their clinic appointments via both telephone and conventional mail notifications. Prior studies have confirmed that appointment reminders reduce no-show rates, thus increasing clinical efficiency and decreasing health care costs [1–10]. At the same time, avoiding occasions where patients who do not have an appointment arrive erroneously also enhances efficiency, allowing clinic staff to focus their attention on patients assigned to their clinic.

Recently a new notification system was implemented at our medical center. This new notification system involves a folded mailer delivered by the US Postal Service that provides patients only with the essential information necessary for timely arrival at the correct location to their appointments. The telephone notification system that works in tandem with this has been retained. In this report, we describe the change and the results seen in our clinic.

**METHODS**

**Setting**

The Veterans Affairs Long Beach Healthcare system maintains a large teaching medical campus in Long Beach, CA. The medical center and its community clinics employ more than 2200 full-time employees and provide care for more than 50,000 veterans. There are 37 outpatient clinics located on the main campus.

Our study was conducted in the outpatient ophthalmology clinic, located on the main campus. The clinic is open 8 AM to 4 PM Monday through Friday and sees on average 30 to 40 patients per day with a front desk staffed with 2 secretaries. When a patient arrives to the clinic, their information (name, social security number, date/time of appointment, etc.) is looked up in a national database. If the patient arrives at the incorrect location, time is additionally spent redirecting patients.

**Notification System**

In the prior notification scheme, patients were mailed in an envelope a notice printed on 8.5" x 11" paper that included their appointment time and also listed methods of rescheduling, their account information, and a variety of VA policies presented in a disorganized manner (Figure 1). The new notice is a 4" x 5" folded card stock mailer that provides only the time, date and location of appointment in the message section, containing a map and driving directions on the back of the card (Figure 2).

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Assessment

We assessed the effectiveness of this new notification system by monitoring the number of patients who arrived at our clinic by mistake. The 2 clinic secretaries recorded daily on a piece of paper the number of patients who arrived in clinic requesting the services of another office. In addition, the clinic secretaries were asked at the end of each day to estimate the average time required to redirect patients to their correct destination per encounter, including collecting patient information in the VA national database, redirecting them with verbal and pictorial instructions, asking technicians to assist patients with redirection, calling other clinics to ensure timely arrival, etc.

RESULTS

During the 14 days prior to the change in notification system, the mean number patients per day who visited the clinic mistakenly was 14.93 (SD = 6.05). After the implementation of the new notification system, the mean number was 9.4 (SD = 3.45; \( P = 0.005 \)) for the 15-day period after the change was implemented.

The mean number of minutes required to redirect patients was estimated to be 2.28 minutes prior to the change and 2.53 after (\( P = 0.507 \)), which equates to an average of 40.64 minutes per day in the initial study period and 22.93 minutes per day in the second study period (\( P = 0.05 \)). Assuming a secretary makes on average $22/hour, the Long Beach VA spent an average of $14.90 and $8.41 per day, respectively, redirecting mistaken patients to their correct clinic before and after the new notice system was implemented.

DISCUSSION

The Veterans Health Administration is America’s largest integrated health care system, and is one of the few health systems—and by far the largest—that is virtually paperless [11]. Their medical records are nearly wholly electronic. The VA’s use of electronic health records has significantly enhanced the quality of patient care and improved productivity [12]. Their ongoing mission includes identifying and evaluating strategies that lead to high-quality and cost-effective care for veterans.

Effective appointment notifications have the potential to increase productivity and thus save money. Developing tailored methods of informing patients of the time and location of their clinic appointment improves the accuracy with which patients arrive at large medical campuses, which translates into a more efficient clinic flow. The simpler, abbreviated notification implemented at our VA appears to improve patient understanding of time/location of their clinic appointment, based on the decreased number of patients arriving in error to the ophthalmology clinic. It is unclear which specific aspect of this new mailed notification system is responsible for our results (addition of map, new layout, down-scaling of notification etc). Limitations to our study included reliance on the secretaries’ subjective reporting of time/spent redirecting and limiting our data collection to one clinic. In addition, patients arriving at appointments may have received the old notice. Further investigations are underway to study appointment notification improvements across various hospitals and clinics.

In summary, efficiency is a key component in allowing the Veterans Affairs to provide quality care for the patients under its purview. We show that an abbreviated notification system was associated with a reduction in the need to redirect patients arriving by mistake to our office. Assuming that this abbreviated notification system would benefit the 37 outpatient clinics at the VA in Long Beach, CA as it did with the ophthalmology clinic, this
new notification system has the potential to save $240 dollars/day and generate a yearly savings of $87,689.

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References

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