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Understanding and Improving Patient Arrival Rates at an Urban Ambulatory Medicine Resident Clinic

Teresa Lee, MD
Department of Medicine, Sidney Kimmel Medical School, Thomas Jefferson University, teresa.lee@jefferson.edu

Shuwei Wang, MD
Department of Medicine, Sidney Kimmel Medical School, Thomas Jefferson University, shuwei.wang@jefferson.edu

Susan Truong, MD
Department of Medicine, Sidney Kimmel Medical School, Thomas Jefferson University, susan.truong@jefferson.edu

Albert Lee, MD
Department of Medicine, Sidney Kimmel Medical School, Thomas Jefferson University, albert.lee@jefferson.edu

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Understanding and Improving Patient Arrival Rates at an Urban Ambulatory Medicine Resident Clinic

Teresa Lee, MD, Shuwei Wang, MD, Susan Truong, MD, Albert Lee, MD
Department of Medicine, Sidney Kimmel Medical School, Thomas Jefferson University, Philadelphia PA

BACKGROUND

- Missed appointments (cancellations and no-shows) can have a significant negative impact on outpatient clinical practices.
- Wasted time slots may delay patient care and lead to suboptimal medical management.
- Practices and physicians can experience lost time and revenue and, in the case of resident clinics, fewer training opportunities.

AIMS

- To improve the arrival rate of patients at the Jefferson Hospital Ambulatory Practice (JHAP) by 10% over a 10-month period from July 2016 using a combination of additional reminder calls and targeted clinical summaries from physicians.

INTERVENTIONS

- Participants: JHAP resident physicians and patients in the Monday clinic.
- Design: Electronic Health Record chart review and survey data.
- Intervention:
  - **Document scheduling** (July 2015): confirmed that patient contact information is updated at each appointment booking and cancellations/no-shows are recorded consistently.
  - **Double call policy** (July 2015): added a live phone reminder 1 day prior to appointments (in addition to existing automated calls).
  - **Targeted clinical summary** (January 2016): had residents fill out summary cards at each Monday appointment emphasizing key instructions for follow up.
  - **Survey** (January-March 2016): conducted patient and provider survey to assess perceived factors contributing to no-shows and cancellations.

RESULTS

- **Figure 3**: Run chart of monthly no shows (A), cancellations (B), and arrivals (C) at JHAP by academic year. Initiation of key interventions in 2015 are indicated by green triangles (△). (D) Visit outcomes averaged per year. Error bars indicate standard deviation. Data were analyzed as intention-to-treat using unpaired student’s t-tests for outcomes in the study period compared to the prior two academic years. Double asterisks (**) denote p-value <0.005.

- **Figure 4**: Patient vs. resident perceptions of causes of no-shows/cancellations. Left: Patient survey on reasons for missing appointments when calling to cancel (by front desk) or after no-showing (via physician phone call) (a = +0.61). Right: Residents were asked to categorize the above reasons in order of perceived contribution to patient no-shows/cancellations (a = 0.55).

DISCUSSION

- The baseline arrival rate at JHAP over the previous two academic years (2013-2015) was 52-53%, with 23-25% no-shows and 22-25% cancellations.
- Our interventions led to a sustained decrease in average no-show rates (19%) during the study period, resulting in more openings for patients needing urgent appointments.
- This was, however, accompanied by a concomitant increase in cancellations (27%) leading to no overall change in arrival rates (54%).
- Patient and resident perceptions of the causes of missed appointments differ, with patients more likely to cite external factors when compared to residents.

LIMITATIONS

- Incomplete resident adherence to the summary card intervention may limit the impact on arrival rates.
- Length of follow-up may be insufficient to detect increased arrival rates following the summary card intervention.
- Lack of stratification (e.g., Mondays vs. all weekdays, patients who received clinical summaries vs. all patients) could preclude detection of effects in the targeted population.

NEXT STEPS

- Future interventions should address factors that patients perceive as major causes of missed appointments, including conflicting obligations and transportation.
- Possible areas to explore include expanded hours (e.g., evening/weekend appointments), more convenient scheduling options (e.g. online booking/cancellation, ability to coordinate appointments between multiple specialties), or transportation assistance (vouchers, referral for medical transport services).
- Primary provider continuity is another potentially important factor that deserves further study.