

Background

- Outpatient non-attendance, or no-shows, produce major consequences for both patients and providers¹⁻³
- A recent review of 42 studies found that telephone reminders, which are mostly automated, were the most effective system to reduce no-shows (9.4% reduction)⁴
- Our Internal Medicine Clinic continues to have high no-show rates (27.1%) despite automated reminders
- We sought to understand the impact personal phone reminders by staff may have on no-show rates vs automated reminders
- We were particularly interested in evaluating whether PGY1 no-show rates were impacted at the beginning of their training

Methods

- Our outpatient teaching center is divided into two separate sections, Firms A and Z
- Each firm has its own resident panel, patient sets, and dedicated staff
- All patients receive automated phone reminders 48 hours prior to their office visit.
- Only Firm A patients also received a personal phone reminder by a staff member during the first 4 months of the 2016 academic year
- We analyzed the effect of this additional personal phone reminder versus automated reminders in improving no-show rates

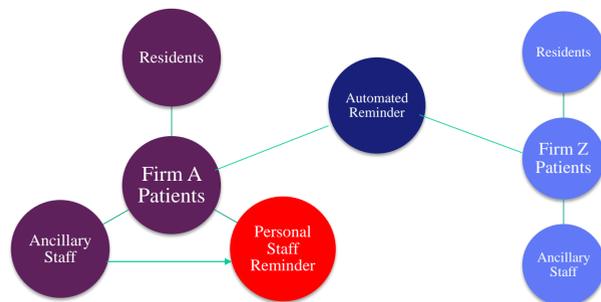


Figure 1. Firm A and Z each have their own Patient Sets with separate Resident Panel and Ancillary Staff. All patients receive Automated Reminders. Only Firm A Patients received Personal Reminders

Results

- 4,121 scheduled clinic visits from 6/22/15 - 10/31/15 were analyzed
- 1,067 (25.9%) no-shows occurred over this 4 month period
- The mean average scheduled visits per resident was 72.4 for firm A and 75.0 for firm Z which was similar (p=.7188)
- The average rate of cancelation per resident was also similar in both firms (A=22.2%, Z=21.3% p=.3951)
- The average rate of no-shows per resident was significantly less for firm A (A =22.2%, Z= 29.3%, p=.0324)
- The average rate of clinic visits was higher for firm A (A=55.6%, Z = 50.7%, p = 0.0421)

Mean Averages Clinic Encounters Per Resident from 6/22/15 - 10/31/15

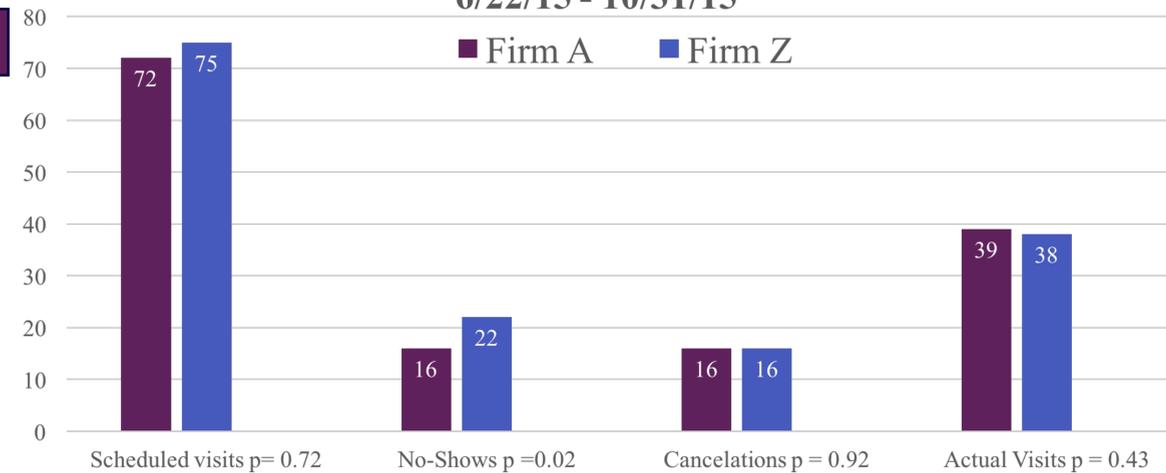


Figure 2. Mean number of encounters per resident. No statistical significant difference was found between scheduled visits, cancellations, and actual visits. Mean average no-shows were significantly less in Firm A.

- No-show rate were similar for each PGY
- PGY1's did have a lower no-show rate in firm A although the numbers were not statistically significant (A=23.5%, Z=29.2%, p=.0639)

No-show Rates by PGY from 6/22/15 – 10/31/15

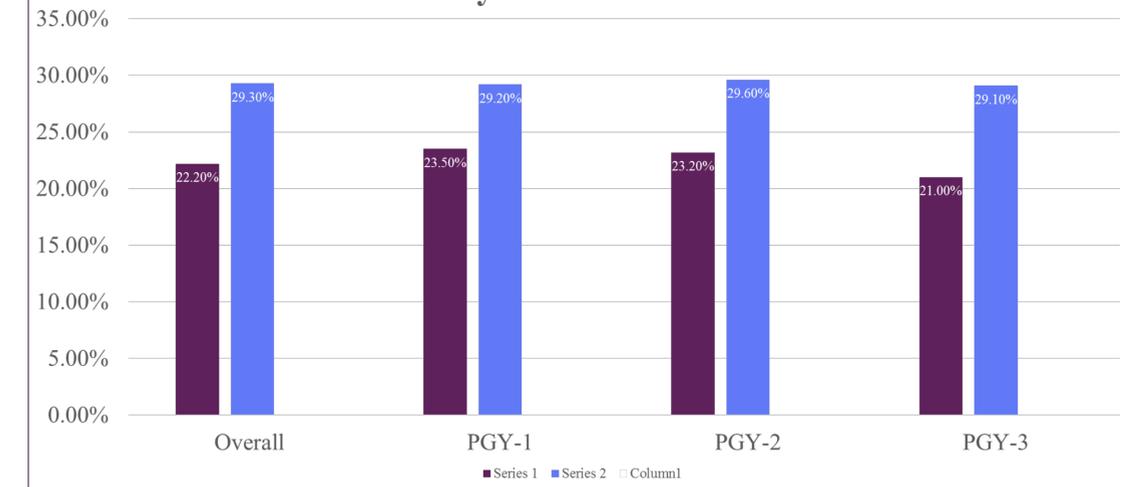


Figure 3. Average rate of No-Shows by PGY. Overall No-Show rates were 22.2% in Firm A and 29.3% in Firm Z which was statistically significant. This trend is observed across PGY in each respected firm.

Conclusions

- Personalized reminders may have resulted in significantly less no-shows
- Despite the cheaper and convenient alternative of automated telephone reminders, personalized reminders can reduce no-shows and lead to more efficient care and better outpatient training
- Personalized reminders can also increase initial R1 clinic visits and subsequent continuity experience
- Lack of statistical significance for R1 data from our review may be from small sample size (firm A n=10, Z n=10)

Sources

¹Bech, M. (2005). "The economics of non-attendance and the expected effect of charging a fine on non-attendees." *Health Policy* 74(2): 181-191.
²DuMontier, C., et al. (2013). "A multi-method intervention to reduce no-shows in an urban residency clinic." *Fam Med* 45(9): 634-641.
³Tang, N., et al. (2010). "Trends and characteristics of US emergency department visits, 1997-2007." *JAMA* 304(6): 664-670.
⁴Stubbs, N. D., et al. (2012). "Methods to reduce outpatient non-attendance." *Am J Med Sci* 344(3): 211-219.