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Optimizing appointment reminder software to reduce the no-show rate in a rural outpatient setting

Patient no-show (N/S) rates in the outpatient setting have a large effect on healthcare systems nationwide. The use of technology, such as scheduling-reminder software, has been used to curb the N/S rate in many settings. There remains a paucity of data in both the effectiveness of such software and the demographic factors contributing to the N/S rate. **Objective:** Analyze the effects of Televox™ software optimization on N/S rate. **Study Design:** Prospective cohort study. **Setting:** Family Medicine residency practice site located in downtown of a small city (population 50,000). **Population Studied:** All scheduled patients who had an appointment scheduled at least 24 hours prior. **Intervention:** Prospective patient chart data modified for one month, ensuring updated fields in contact information, decreasing number of uncontacted patients. Patients were provided education regarding Televox™ system at the end of each appointment. **Outcome Measures:** Primary: The comparison of N/S rates from: when Televox™ was NOT Launched, after Televox™ was launched, and after our intervention. Secondary: the effect of a covariate on N/S probability; economic impact of N/S to our clinic. **Results:** Crude modeling shows a significant (16%) increase in a patient showing for visit [OR 1.16, p=.0310] after the intervention; this is not apparent after the launch of the software, but before intervention group [OR 1.09, p=.1195]. Age showed significance in the adjusted model – with a 1% increase in chance of showing for a visit correlating to a 1-year increase in age. Being an uninsured patient led to a 66% decrease in the chance of showing. December was statistically the lowest month of those captured regarding show rate. At an average captured N/S rate of 27%, our clinic missed an average of \$11,400.00 of billable funds a month. Conclusions: N/S rates may have decreased significantly by our optimization of Televox™ software, but data was marred by many confounders, such as the COVID-19 pandemic and shift to incorporate telehealth visits. Covariate data emphasizes disparity of self-pay patients. Adjusted modeling did not show a significant change in N/S rate, speaking to the need for further prospective datasets. Economic analyses reiterate burden of N/S visits on ambulatory clinics.

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