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ASSESSING PATIENT PERCEPTIONS OF PRE-VISIT METHODS TO REDUCE WAIT TIME AND PROVIDER BURDEN

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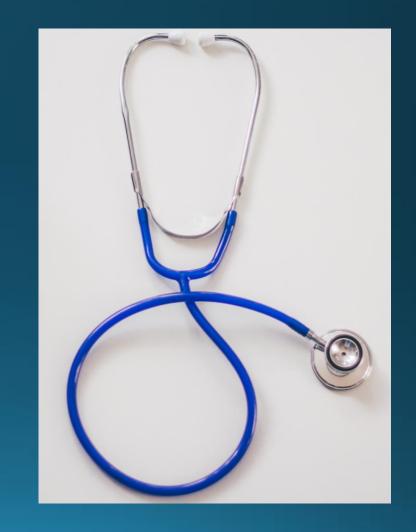
July-August 2021

Project Mentor: Laurie Schedgick-Davis, DO



Defining the Problem

- Ambulatory healthcare is the most widely used segment of the American healthcare system,¹ comprising approximately 25% of U.S. healthcare expenditures.²
- Due to multiple factors, patients at ambulatory settings tend to experience long wait times. Contributing factors include variable arrival times, cumbersome check-in and screening processes, and patient charting.
- In addition to the economic burden incurred by this issue, numerous studies and anecdotal evidence demonstrate its negative impact on patient satisfaction and well-being.





Defining the Problem

- In a 2013 study at the Florida Department of Health with 262 preimplementation and 285 post-implementation participants, "a strong and inverse relationship between patient satisfaction and wait times in ambulatory care settings [was] demonstrated." 3
- Nearly a quarter of patients [have]...walked out of a waiting room, choosing to reschedule or even cancel rather than wait any longer."⁴
 This has a highly negative impact on overall community health.
- Per a 2016-17 study at Keck Medical Center, "Measuring and shortening cycle time has the potential to improve patient experience, staff satisfaction, and patient access by moving more patients through in a shorter cycle time." 5



Community Perspectives

"The process could be improved by offering pre-visit electronic submission of a patient's past medical history as well as vaccine status. This could be submitted before the visit and ideally imported into the electronic medical record."

Laurie Schedgick-Davis, DO

Family Medicine Specialist at Brookfield Primary Care & Pediatrics "Any information that could be gathered ahead of time would greatly expedite the visit. Checking in and gathering data while rooming patients takes up a significant amount of time and often negatively impacts both providers' schedules and the patients' experiences."

– Julia Auerbach, MD

Family Care Physician at Brookfield Primary Care & Pediatrics



Intervention and Methods

PROJECT AIMS:

- Providers and clinical quality improvement teams have long proposed using pre-visit questionnaires to simplify office visits.
- We will seek to gain insight into patient perspectives regarding these proposals while simultaneously capturing the quantitative factors (such as wait time duration) driving those perspectives.
- We will also seek to collect results that may inform a decision to transition to pre-visit data collection at Brookfield Primary Care & Pediatrics and affiliated clinics.

INTERVENTION AND METHODS:

- Provide an in-office survey to patients at Brookfield Primary Care & Pediatrics over a set time period. The survey should be conducted prior to physician visits and will (A) collect quantitative data on visit/wait times and (B) assess patient perceptions on pre-visit data collection.
- Organize results and present how patients feel about providing information prior to visits.



Survey

- 1) What time were you supposed to arrive at your appointment?
- 2) What time did you arrive at your appointment?
- 3) At what time during this visit were you first seen by a physician, resident, or medical student?
- 4) Would you prefer to answer routine health screening information (e.g. vaccinations, medications, operations, etc.) in the office during the visit or at home prior to the visit?
- 5) If at home, how would you prefer to provide information?
 - Digital form
 - Phone call
 - Providing forms in person prior to visit



Results

- 30 patients participated in the study over a course of four standard clinical days.
- 50% of all patients surveyed said they would prefer to fill out health information ahead of time, and 23.3% said they have no preference either way.
- Of all patients surveyed, 80% noted that, if they were to fill out information ahead of time, it would be through online forms. 6.7% had no preference, 6.7% preferred phone, and the remainder said they would do it in the office only.
- 50% of patients were late to their appointment, with an average late time of 7.6 minutes. On average, pre-screening procedures for patients lasted 15.8 minutes, after which point the patient was seen by a physician.



Effectiveness of Project and Limitations

Effectiveness:

- The project design allowed for indepth observation of multiple days at the clinic and discussion with patients regarding their viewpoints. This was the most accurate sample of a standard day at the clinic.
- Patients were surveyed in the office directly, allowing for accurate and immediate feedback.
- The office environment allowed for real-time verification of patient check-in and waiting times.

Limitations:

- We could not capture every demographic due to the shorter period of dedicated survey time.
- To maintain focus, the project could not fully explore the subjective driving factors behind each patient's answers.





Recommendations for the Future

- Given the strong patient support for using online forms to increase visit
 efficiency, it would be advisable to conduct a formal study with a larger
 pool of patients over a longer time period.
- Given that these forms would likely reduce wait time for patients who are checking in, it is reasonable to explore transitioning to pre-visit questionnaires and integrating them with the electronic medical record (EMR) at the clinic. A similar solution has been suggested in the Family Practice Medicine Journal.⁶
- I would like to use these results as the impetus for further discussions on pre-visit form implementation with providers, administrators, and the clinical technical team in Brookfield, CT. This could potentially lead to a meaningful study during the fourth year of medical school.



References

- 1. "Ambulatory Medical Care Utilization Estimates for 2006." National Health Statistics Reports, no. 8 (August 6, 2008): 1–29.
- 2. Centers for Medicare and Medicaid. "National Health Expenditure Data," 2010. https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata?redirect=/nationalhealthexpenddata/25_nhe_fact_sheet.asp
- 3. Michael, Melanie, Susan D. Schaffer, Patricia L. Egan, Barbara B. Little, and Patrick Scott Pritchard. "Improving Wait Times and Patient Satisfaction in Primary Care." *Journal for Healthcare Quality* 35, no. 2 (2013): 50–60. https://doi.org/10.1111/jhq.12004.
- 4. Hedges, Lisa. "Reducing Patient Wait Times in Practices: Data-Driven Tips." *Software Advice*, October 6, 2020. https://www.softwareadvice.com/resources/reducing-patient-wait-times/.
- 5. Robinson, Jehni, Melody Porter, Yara Montalvo, and Carol J Peden. "Losing the Wait: Improving Patient Cycle Time in Primary Care." BMJ Open Quality 9, no. 2 (May 1, 2020): e000910. https://doi.org/10.1136/bmj0q-2019-000910.
- 6. Schappert, Susan M., and Elizabeth A. Rechtsteiner. Sinsky, Christine A., Thomas A. Sinsky, and Ellie Rajcevich. "Putting Pre-Visit Planning Into Practice." Family Practice Management 22, no. 6 (December 2015): 34–38.

IMAGES:

https://www.pexels.com/photo/computer-desk-laptop-stethoscope-48604/

https://www.pexels.com/photo/a-person-wearing-blue-surgical-gloves-7723623/



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Consented: ___X___

Name: Julia Auerbach, MD

Name: Laurie Schedgick-Davis, DO