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Title

Assess personal, health system, and geosocial risk factors for no-shows among patients in family medicine clinics

Priority 1 (Research Category)

Health Care Disparities

Presenters

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Abstract

Context. No-shows are a common problem in primary care settings that may lead to missed opportunities for patients to receive essential care leading to poor health outcomes, especially among individuals in the underserved populations. While the literature has gained more insights into the demographic and clinical-related underpinnings of no-shows, the potential role of social determents of health (SDOH) as risk factors for no-shows is not well understood.

Objective: To assess the relationship between patients' demographic, health system-related, and neighborhood-level SODH characteristics and the risk of no-shows among patients in family medicine practice.

Study Design: A retrospective longitudinal design using electronic health records (EHR).

Settings or Dataset: The study utilized EHRs from the enterprise data warehouse of a large academic medical center in southcentral Pennsylvania. Patients' home address was converted to geographic coordinates, and then matched to a specific census block group code. The geocoded address was linked to corresponding Census statistics as neighborhood-level SDOH measures.

Population Studied: Patients who had a primary care provider (PCP) at one of the 14 family medicine clinics of the health system and had at least one appointment at family medicine clinics in January-December 2022.

Outcome Measures: Patient no-show rate.

Results: A total of 258,614 appointments were made from 75,182 patients during the study period, including 7.8% no-show appointments from 20,256 patients. Of the 20,256 patients, 25% had two or more no-show events. The no-show risks were 15-20% lower among females and English speakers. African American, Asian, and individuals in the other race group were 1.24-1.52 times more likely to miss their appointments than their White counterpart. A significant increase (23-55%) in the odds of no-shows was found among individuals on Medicaid and uninsured, compared to those commercially insured. Persons with prior history of no-shows or same day cancellations were 6-25% more likely to miss their appointments. The no-show risk was also higher among people living in areas experiencing poverty and social disadvantage.

Conclusion: The risk of no-shows is affected by personal, health system, and geosocial contexts.

Future efforts aiming to reduce no-shows could develop personalized interventions targeting the at-risk populations identified in the analysis.