

Understanding and Improving Health System Disparities in ED Wait Times

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The objective of this proposal is to form a multidisciplinary team including patient stakeholders to characterize the root causes of disparities in ED wait times and develop and test an intervention to address those causes. Mounting evidence reveals the effects of ED wait times on patient satisfaction, length of stay, care quality, and hospital costs. This proposal will develop and test of novel methods to leverage the electronic health record to improve disparities in ED wait times and thereby improve clinical operations and patient experience. We will query and analyze data from the electronic health record (EHR) to map the process from ED arrival to departure to admitting floor and guide subsequent qualitative data collection through semi-structured interviews, direct observational techniques, and focus groups to trace sources of ED wait time disparities. We will then engage key stakeholders through focus groups to develop an EHR intervention designed to address contributors to disparities in ED wait times identified by root cause analysis. We will test this intervention for feasibility and preliminary estimates on effectiveness. We will interview key stakeholders for feasibility endpoints, such as acceptability. We will assess effectiveness using an interrupted time series analysis with our intervention as a dichotomous indicator variable. The grant activities will not only yield novel findings on the etiology of disparities in ED wait times, but also build capacity within the health system to utilize these relationships to establish a learning laboratory with our team that facilitates ongoing evaluation of disparities in care delivery.