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Title

Assessing impact of the COVID-19 pandemic on severity of chronic disease at diagnosis among safety-net populations

Priority 1 (Research Category)

Health Care Disparities

Presenters

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Abstract

Context: Delayed diagnosis can contribute to disease complications and their sequelae, especially in health disparity populations. The COVID-19 public health emergency (COVID-PHE) caused universal disruption in health care delivery. We assessed the impact of COVID-PHE on diagnosis of diabetes (DM) and hypertension (HTN) before and throughout the COVID-19 pandemic in Community Health Centers (CHCs), which serve as the primary care safety-net in medically vulnerable communities. Objective: To assess the impact of COVID-PHE on the diagnosis of DM and HTN among low-income, racially/ethnically diverse patients in safety-net settings. Study Design and Analysis: Retrospective cohort of patients newly diagnosed with DM or HTN. We compared HbA1c and blood pressure (BP) at patient diagnosis in the period prior to, and following, the COVID-PHE (2019 – 2022). Setting or Dataset: We used electronic health record data from CHCs that provide primary care services in the OCHIN multistate health center networks. Population Studied: 1,581,744 patients seen in 218 health centers in 13 states. The population of interest are patients with newly diagnosed DM or HTN during the study period. Intervention/Instrument: Observational study. Outcome Measures: A1c and BP at patient diagnosis. Results: The average A1c of patients in the 12 months prior to COVID-PHE was 8.06%, compared to averages 12 months (8.12%) and 24 months (8.05%) into the COVID PHE. The average BP of patients in the 12 months prior to the COVID-PHE was 139.7/84.2, compared to averages 12 months (139.4/84.1) and 24 months (140.2/84.2) into the COVID-PHE. Differences in A1c and BP at diagnosis were most variable for non-White, younger (under 18), and middle and older age (45 and older) groups. For example, the average A1c in Asian patients increased from 7.51% 12 months prior to the COVID-PHE to 7.56% and 7.61% 12 and 24 months into the COVID-PHE, respectively. Conclusions: Overall, the disease severity at time of diagnosis of DM or HTN did not differ before and during the COVID PHE. However, when examining subgroups, we found that populations that experience health disparities were affected negatively. However, CHCs maintained their ability to diagnose people with DM and HTN at similar stages of illness despite the pandemic. Further research into patient and workforce burden can identify

the factors related to disease severity at time of diagnosis, and can help to develop interventions for these populations.