Emergency department doctors ask: "Where did all the patients go?"

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During the early days of the COVID-19 pandemic in New England, emergency department visits for medical emergencies—including

psychiatric problems, trauma and heart attacks—declined by nearly a third, raising concerns among clinicians that critically ill patients were not seeking the care they needed for fear of coronavirus infection.

Comparing emergency department (ED) visits in two major urban hospitals and three community hospitals in the Mass General Brigham system for the months of March and April 2020 with the same period in 2019, Joshua J. Baugh, MD, MPP, Sayon Dutta, MD, MPH, and colleagues in the Department of Emergency Medicine at Massachusetts General Hospital (MGH) found that ED volumes—the total number of patients treated—declined by 30.9% from one year to the next.

"Our health system experienced decreases in nearly all non-COVID-19 conditions presenting to EDs during the initial phase of the pandemic, including those requiring specialty consultation and urgent inpatient procedures. Findings have implications for both public health and health system planning," Baugh and colleagues wrote in a study in the *American Journal of Emergency Medicine*.

"While more people with less serious conditions may have stayed away from the emergency department, many cases that we would not have expected to decrease went down as well," Baugh says. "For example, people requiring catheterization of their hearts for potential heart emergencies, people requiring appendectomies for appendicitis, people requiring consultation for an acute psychiatric episode—across the board we saw that patients with other conditions weren't coming in at the rate that they usually do."

As was widely reported at the time, some patients who might otherwise have sought care for non-emergency conditions opted not to go to a hospital out of fear of contracting COVID-19 during the first surge of the pandemic, and some may have sought care at primary care practices or urgent care clinics.

"Some of the changes we saw may have been attributable to reductions in risk from lockdowns, people driving less, and being outside less, but we don't think that lifestyle changes adequately account for the full effect that we saw," says Baugh.

"Obviously, we saw many more patients with COVID-19 who otherwise wouldn't have been there," Dutta adds, "and a lot of the resources that those patients needed were available because those other patients did not show up. So this expectation that COVID-19 would add to the overall hospital volume or emergency department volume didn't turn out to be true."

The retrospective study included data on all ED patients at five hospitals in the Mass General Brigham health system (formerly Partners HealthCare). The hospitals included MGH and Brigham and Women's Hospital, both Harvard-affiliated quaternary-care referral hospitals with designated centers of excellence for emergency care of patients with trauma, heart attacks and strokes. The three other hospitals are community-based centers that included one that is a designated level-three trauma center, heart attack center and stroke center, and two others that are designated stroke centers.

The investigators drew on electronic health records for data on patient demographics, Emergency Severity Index, primary diagnosis in the ED, bedside procedures performed, subspecialty consultations requested, and related procedures occurring during each patient's hospital stay.

More information: Joshua J. Baugh et al, The cases not seen: Patterns of emergency department visits and procedures in the era of COVID-19, *The American Journal of Emergency Medicine* (2020). DOI: 10.1016/j.ajem.2020.10.081

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