While attention was focused on the alarming increases in the number of patients going to emergency departments (EDs) in Seattle, Detroit, Chicago, and New York City in March and April 2020, visits to EDs throughout the rest of the US plummeted. As public health interventions to minimize the spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) took effect, ED visits moderated even in cities hit hard by the first wave of the coronavirus disease 2019 (COVID-19) pandemic. These dramatic shifts in ED use raise questions about changes in care-seeking behavior among the public when experiencing acute illness and the recalibration that will occur in the months to come while we await an effective treatment for or vaccine against SARS-CoV-2.

Although there are no immediately available US national data to fully measure the magnitude of the effects of COVID-19, the lay press described decreases in ED visits by as much as half the normal volume. A report from the United Kingdom mirrored these trends, with a 25% countrywide drop within 1 week of their national lockdown. From these early experiences with the pandemic, we have learned 3 lessons regarding the demand for ED care. These lessons have important implications for health systems adapting to changing health care use patterns as the epidemiology of COVID-19 evolves and communities reopen.

First, ED demand is sensitive to factors related to the physical and social environment. Public health measures to counter the COVID-19 pandemic reduced the need for ED care by curtailing the spread of other infections and altering the epidemiology of injuries. A report from Japan described decreases in seasonal influenza activity concurrent with the COVID-19 response. Interventions such as closures, physical distancing, use of masks, and handwashing can be expected to reduce the transmission of many infectious diseases. These illnesses, particularly in children, are often why the public seeks care in EDs.

In addition, the epidemiology of injuries treated in EDs shifted. Reports using location tracking data confirmed that the public generally adhered to the initial calls to stay home. Less vehicular travel translated into fewer collisions. Cities reported decreases in violent crime incidence with social distancing, although this observation was not uniform. In contrast, concerns have been raised regarding increases in childhood injuries and poisonings given greater exposure to the home setting as well as domestic violence related to the stresses of lost wages, food insecurity, and social isolation.

Second, ED demand is sensitive to health care administrative and policy decisions. The COVID-19 pandemic disrupted norms for care delivery across all sectors of the US health system. In a matter of days, scheduled operations, procedures, and diagnostic tests were suspended to create additional hospital capacity. Meanwhile, primary and specialty care providers made rapid adjustments in practice models, including the use of centralized call centers and telehealth visits, while deferring less urgent encounters. Many of these tactics were specifically intended to better support patients at home and to divert them from the ED.

These responses have major cascades to ED care. When fewer health services are offered overall, there are fewer adverse effects from medical and surgical treatment and fewer opportunities for clinicians to direct patients to the ED. In turn, there is less reliance on the ED for management of complications such as sepsis, wound infections, and symptoms like pain and nausea linked to surgical procedures.
Finally, the pandemic reset how quickly and under what circumstances patients turned to the ED. In some cases, these care preferences are generally harmless, but in other cases, they may be very harmful, contributing to excess morbidity and mortality. Historically, patients have sought care in EDs for a wide range of self-limited conditions, such as upper respiratory infections, back pain, or sprains. Patients were now more willing to self-treat and monitor at home because of concerns that they may be exposed to COVID-19 or assumptions that EDs were repurposed primarily for COVID-19 illness. Patient preferences for ED care are also shaped by financial risk, which has been exacerbated by the loss of health insurance stemming from the rapid increase in unemployment.

Leading indicators for treatment of time-sensitive, high-mortality, and high-morbidity emergency conditions, such as cardiac catheterization activations for acute myocardial infarction, declined, suggesting patients were not seeking necessary care. It will be important to track the incidence of these conditions to determine whether these have been altered by SARS-CoV-2 infection or measures designed to stem the COVID-19 pandemic. Emerging evidence suggests that these effects may worsen underlying health disparities and disproportionately harm patients with most disadvantage. Previous analyses have shown that even small delays in emergency care related to infrastructure disruptions result in increased mortality.

The early months of the COVID-19 pandemic in the US demonstrate that ED care-seeking behavior is sensitive to an array of external factors. Before COVID-19, EDs performed a wide range of functions in the US health care system. They were critical settings for triage, stabilization, and treatment of patients with time-sensitive conditions, main points of entry to hospital inpatient and intensive care units, and always accessible locations for the evaluation of acute symptoms of serious conditions, self-limited illnesses, and minor injuries. Longitudinal, quantitative studies of ED use will be needed to determine whether these trends are temporary or permanent. Qualitative studies will be needed to determine the extent to which changes in use are associated with the physical and social environment, policy responses, administrative decisions, and alterations in patient and health care professional reliance on the ED.

The pace at which ED visits return to prepandemic levels will be partially tied to how politicians, policy makers, and administrators unwind pandemic response decisions and partially tied to patient preferences for ED care. Enduring anxiety associated with the perceived risks of contracting COVID-19 and lasting access to on-demand substitutes for ED visits, such as telehealth visits, can be expected to influence where the public seeks care for acute needs for the foreseeable future.

ARTICLE INFORMATION
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Conflict of Interest Disclosures: Dr Kocher reported receiving grants from the Agency for Healthcare Research and Quality, Blue Cross Blue Shield of Michigan and Blue Care Network, and the Michigan Department of Health and Human Services outside the submitted work. Dr Macy reported receiving grants from Blue Cross Blue Shield of Michigan outside the submitted work.

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