

OCTOBER JOURNAL CLUB:

ER CENSUS AND HOSPITAL ADMISSIONS DURING COVID-19

By The Numbers

20%

% of Americans who visit the ER at least
1x/year
(Centers for Disease Control)

145 million

of annual ER visits in the US (Centers for
Disease Control)

\$1,016

Avg cost of ER visit in 2017
(Medical Expenditure Panel Survey)

\$100-150

Avg cost of Urgent Care visit
(Frank Ritucci, American Academy of Urgent Care Medicine)

Study Design

Jefferey et al's article reported a **cross-sectional** study design. A cross-sectional study is an observational design that is devoid of any intervention on the part of investigators. It can often be seen in a retrospective method (looking back in time), and often uses a large database from a healthcare system or centralized national-level organization, such as CDC or NIH databases. Most robust cross-sectional studies can derive strong correlations between variables, but can rarely deduce causation.

Additional Sources

1. [Invited commentary on this paper by David Shriller, MD, MPH](#)
2. "The Price We Pay", Marty Makary, MD
3. "Out-of-Hospital Cardiac Arrest during the Covid-19 Outbreak in Italy, NEJM



ARTICLE: "Trends in Emergency Department Visits and Hospital Admissions in Health Care Systems in 5 States in the First Months of the COVID-19 Pandemic in the US"

SOURCE: [JAMA Internal Medicine, 8/3/2020](#)

AUTHORS: Molly M. Jeffery, PhD et al.

Summary

Jeffery et al investigated the incidence of ER visits and Hospital Admissions using existing databases during the first four months of 2020 as the Covid-19 Pandemic began to peak in the United States. Investigations were led at 5 major academic healthcare systems in CO, CT, NY, MA, and NC, and covered rural, suburban, and large urban areas. The observational study demonstrated a 41.5-63.5% drop in ER visits, as well as an increase in hospital admissions, which had a much wider range of increases of 22-149%, depending on location. In particular, Most Sinai Medical Center in NYC saw the highest admissions increase at 149%. Among other themes, this study underscores the need for universal healthcare coverage. Points discussed included:

- Reasons behind decreased ER visits, including non-emergent care normally treated in the ER and cost differences in an ER vs. urgent care visit
- Demographics who may use ER as safety net fail to get the care they need during this time
- Italian study that demonstrated 58% increase in sudden cardiac death during pandemic, possibly due to failure to visit the ER.
- More investigation into data of this study to find stratified differences in ER usage based on age, income, and community setting (rural vs. urban) would have been interesting.
- Limitations of the study could include the lack of baseline data in previous years
- Invited commentary included likelihood of many sick outpatients triaged directly to the inpatient setting and bypassing the ER to reduce transmission.

Session summaries and commentaries were given by Kate Roberts, Nataly Montero, Lucy Meehan, and Christina Wira