Urgent Care Shifts to Testing and Immunization During the Pandemic

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Abstract: Urgent care visits have increased since the start of the pandemic, but much of the growth is due to testing and vaccinations.

Many other healthcare settings have seen changes in the patient populations they see since the beginning of the COVID-19 pandemic. Prior to the pandemic, urgent care facilities were becoming popular alternatives to emergency departments for patients with urgent, but non-life-threatening, conditions. We wondered how the pandemic has impacted the volume and types of care sought in urgent care since many patients with respiratory symptoms may not need emergency care.

Urgent care visits grew slightly overtime prior to the pandemic with a seasonal trend of increased respiratory visits, like influenza or sinus infections, each year during the winter months. Urgent care volumes, like outpatient visit and emergency volumes, dropped in early 2020, as shown in Figure 1. The drop right before the COVID emergency declaration is likely due to both seasonal trends in respiratory infections and increasing COVID cases prior to the emergency declaration.

Weekly Urgent Care Volumes
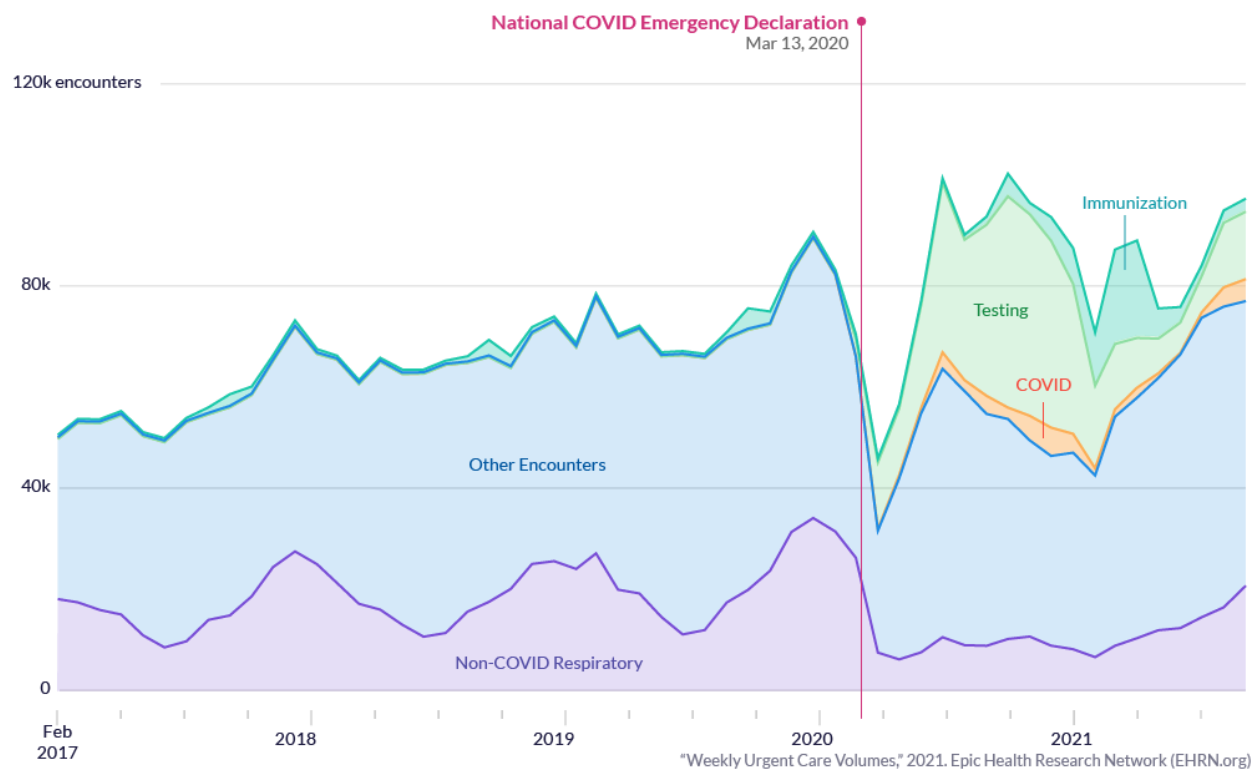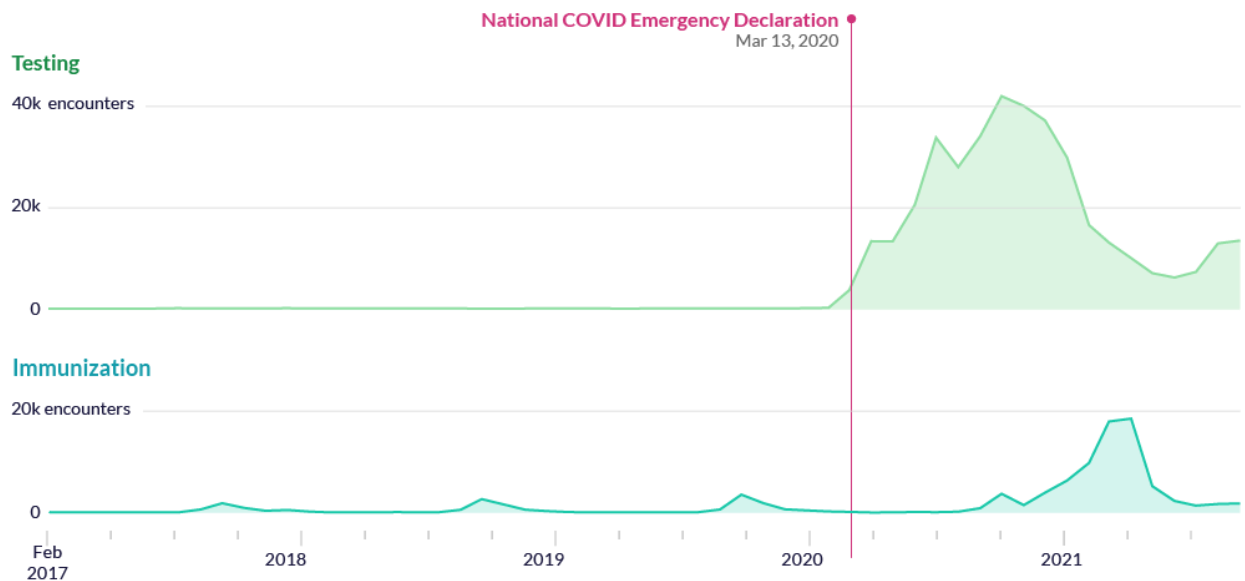
Feb 2017 – May 2021 n=3,500,269

Figure 1. Urgent care encounters over time, grouped by the reason for the visit. The red line represents the point at which COVID-19 was declared a national emergency in the United States.

Overall utilization quickly rebounded after the declaration and continued to grow as urgent care pivoted to infectious disease testing in the second half of 2020. This increase represented a significant change in the distribution of the types of visits seen in urgent care as testing peaked at nearly 40% of urgent care visits in October 2020.

With the introduction of the COVID vaccine in December 2020, urgent care again pivoted to provide more immunizations. Immunization visits at urgent care are typically seen at small volumes, peaking at around 3-4% of visits in the late fall, likely due to the timing of influenza vaccinations, as shown in Figure 2. However, in 2021 immunization visits peaked at nearly 20% of urgent care visits in March of 2021, a five-fold increase from previous peaks.

Weekly Urgent Care Volumes by Reason for Visit
Feb 2017 – May 2021 n=3,500,269

"Weekly Urgent Care Volumes by Reason for Visit," 2021. Epic Health Research Network (EHRN.org)

Figure 2. Urgent care encounters over time, with COVID-19 testing encounters shown in light green and immunization encounters shown in dark green. The red line represents the point at which COVID-19 was declared a national emergency in the United States.

Overall, urgent care utilization has grown since 2017. Since the COVID-19 emergency declaration in March of 2020, urgent care had shifted to provide more testing and immunization and less non-COVID respiratory care. As testing and immunization visits typically have different requirements than other types of urgent care visits, these data suggest that healthcare organizations may want to reevaluate staffing and scheduling models to account for the increase in these types of visits.

These data come from Cosmos, a HIPAA-defined Limited Data Set of more than 120 million patients from 141 Epic organizations including 832 hospitals and 13,421 clinics, serving patients in all 50 states. This study was completed by two teams, each composed of a clinician and research scientists who worked independently. The two teams came to similar conclusions.

Data Definitions

Term	Definition
Urgent Care Encounter	An encounter with a type of Urgent Care, or an encounter that occurred in a department with a department type of Urgent Care or Urgent Care Center.
Positive COVID-19 PCR Test	A lab test linked to LOINC codes 95942-9, 95941-1, 95380-2, 95423-0, or 95422-2 with a discernable positive result.
COVID-19 Encounter	An urgent care encounter where the primary billed diagnosis is mapped to ICD-10-CM code U07.1 or SNOMED code 186747009 or where a Respiratory diagnosis was the primary billed diagnosis along with a Positive COVID-19 PCR Test given during that encounter.
Respiratory Encounter	An urgent care encounter where the primary billed diagnosis is mapped to SNOMED codes 106048009 or 50043002.
Skin Condition Encounter	An urgent care encounter where the primary billed diagnosis is mapped to ICD-10-CM codes M79.89 or R22.0 or SNOMED codes 95320005, 23502006, 84849002, 196341005, 19824006, 128045006, 430348006, 80659006, or 111859007.
Injury Encounter	An urgent care encounter where the primary billed diagnosis is mapped to SNOMED code 417163006.
Pain Encounter	An urgent care encounter where the primary billed diagnosis is mapped to SNOMED code 22253000.
Ear Encounter	An urgent care encounter where the primary billed diagnosis is mapped to SNOMED code 118236001.
Eye Encounter	An urgent care encounter where the primary billed diagnosis is mapped to SNOMED code 118235002.
Gastrointestinal Encounter	An urgent care encounter where the primary billed diagnosis is mapped to SNOMED code 386617003.
Urinary Tract Infection Encounter	An urgent care encounter where the primary billed diagnosis is mapped to SNOMED code 118238000.
Testing Encounter	An urgent care encounter where the primary billed diagnosis is mapped to ICD-10-CM codes Z20.828, Z03.818, or Z20.822 or SNOMED code 243790003.
Immunization Encounter	An urgent care encounter where the primary billed diagnosis is mapped to SNOMED code 304250009.