

2020 Hospital Volumes Can't Escape the Impact of COVID-19

After a year of battling the COVID-19 pandemic, the sting of the virus and the impact on hospital volumes across all settings continues to be well below pre-COVID-19 levels through Dec. 31, 2020.

Prior CHART reports have examined hospital patient volumes in 2020 at the mid-year point (through June 30) and through three quarters (Sept. 30). This updated analysis looks at preliminary volumes over the course of the full calendar year (CY) 2020 compared to CY 2019.

With a full year of data to evaluate, the most recent data shows that:

- inpatient admissions in 2020 declined 8.3 percent compared to 2019;
- outpatient visits fell by more than 16 percent; and
- visits to hospital emergency departments decreased by 27 percent versus the prior year.

These results show a continuation of the trend of declining patient activity at New Jersey acute care hospitals beginning in the second quarter of 2020 and coinciding with the start of the COVID-19 pandemic. The graphs show the cumulative year-to-date (beginning Jan. 1) change in patient volume in each setting at the close of the second quarter (June 30), third quarter (Sept. 30) and at year end (Dec. 31). The bars represent the percent decline in 2020 compared to the comparable periods in 2019.

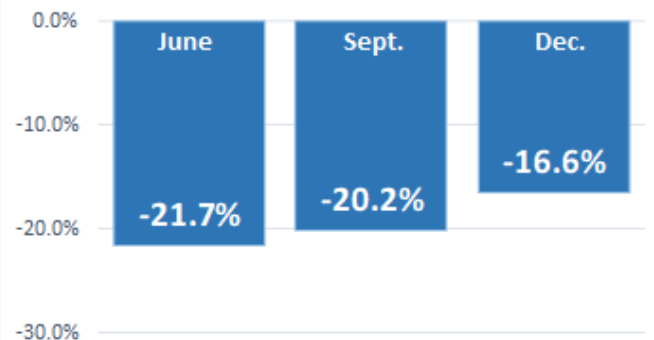
Change in N.J. Hospital Patient Volumes 2020 vs. 2019

(Year to date through month indicated)

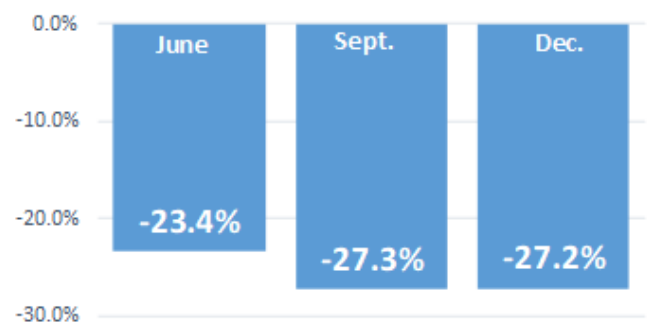
Inpatient Admissions



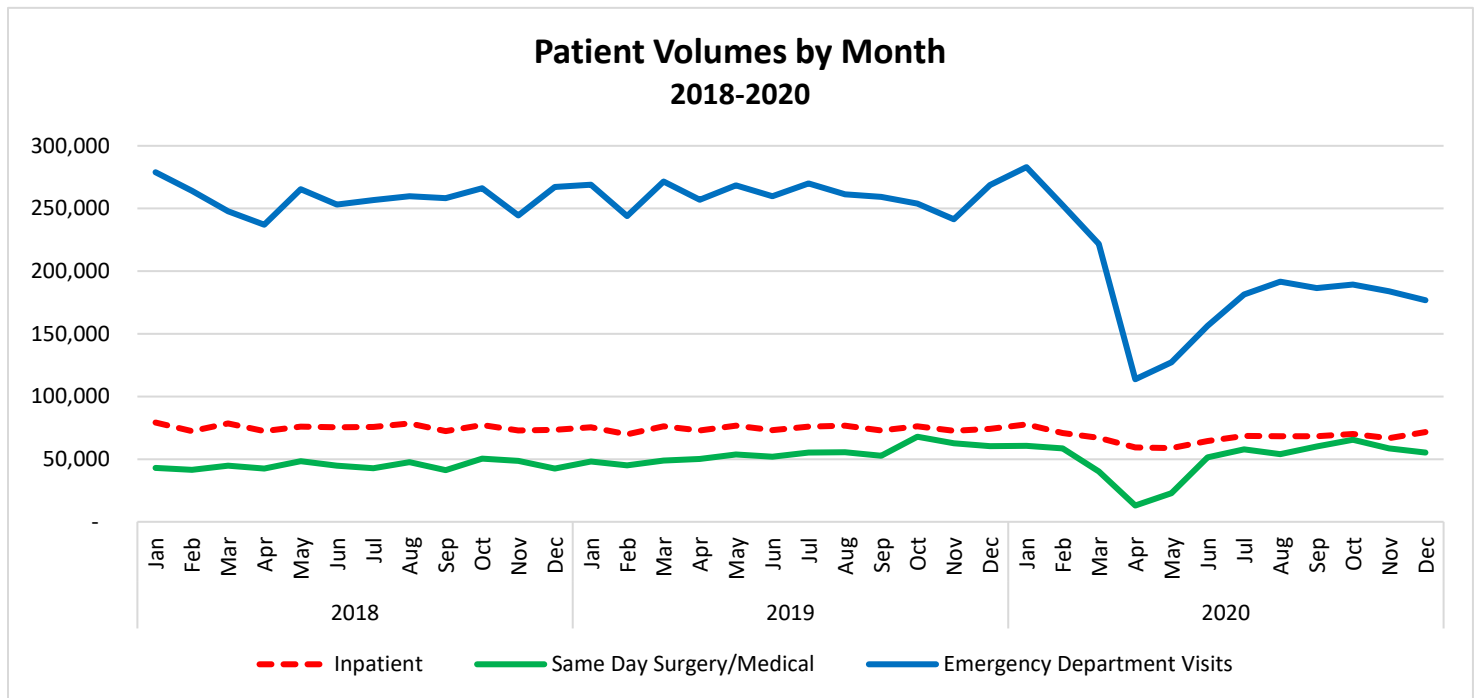
Outpatient Visits



Emergency Department Visits



While the numbers above are self-reported and based on quarterly survey data, a review of the patient-level Uniform Bill claims from the N.J. Discharge Data set shows similar declines. The following graph shows – on a month-by-month basis – the number of hospital inpatient discharges, “same day” visits for medical or surgical procedures, and visits to emergency departments (excluding those that resulted in an inpatient admission) for calendar years 2018, 2019 and 2020.



Volumes across all three settings remained fairly constant throughout 2018 and 2019, as well as through the first two months of 2020. In March 2020, however, the number of patient encounters began to drop. This was most evident in the emergency department, where visits declined by 51 percent in April and 48 percent in May when compared to 2019 visits for the same months.

The full impact of COVID-19 on hospital utilization in 2020 is staggering. Between Jan. 1, 2020, and the end of the calendar year, the claims data shows that New Jersey hospitals treated 1 million fewer patients versus the year before – a net reduction of 21 percent. This figure includes inpatient admissions, same-day medical and surgical procedures, and emergency department visits. Although patient-level claims data for hospital outpatient services is not available, we can estimate the portion of the more than 11 million annual visits to clinics and other hospital outpatient settings impacted by the pandemic from a statewide perspective. All told, total patient encounters at New Jersey hospitals in 2020 declined by 2.8 million, or 18 percent, compared to 2019.

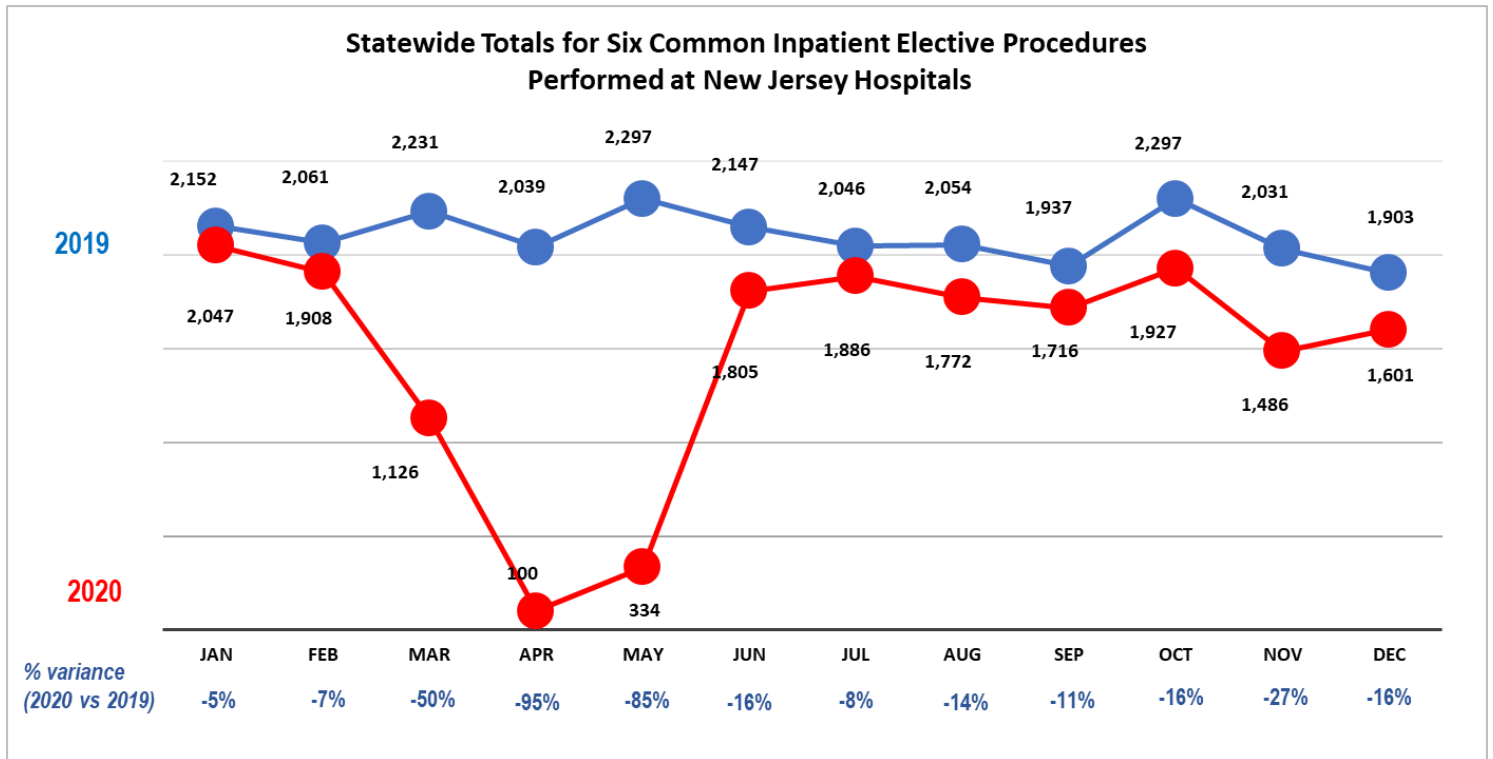
Elective Procedures

CHART has previously examined whether elective procedures were returning to pre-COVID-19 levels following the Governor’s temporary yet mandatory ban on electives.¹ Initially, the number of hospital claims submitted for six common elective procedures performed in the inpatient setting (Bariatric Sleeve Gastrectomy, Pacemaker Insertion, Spinal Fusion, Right Knee Replacement, Left Knee Replacement, and Hernia Repair) were totaled for both the two-month period the ban was in effect and for the two months after it was lifted.

¹ Gov. Murphy’s Executive Order 109, which called for a suspension of medical and dental “elective” procedures during the COVID-19 response, was in effect from March 27 through May 26, 2020. In order to simplify the discussion about volume trends, CHART considered the months of April and May 2020 in their entirety to represent the two-month period the ban was in effect, even though it began in late March and ended in late May. The order defined an elective procedure as “any surgery or invasive procedure that can be delayed without undue risk to the current or future health of the patient as determined by the patient’s treating physician or dentist.”

As anticipated, the number of claims for these six procedures in June and July 2020 (the two months immediately following the ban) increased from April and May 2020 (the two months the ban was in place). However, when compared to the same two-month period from 2019, it was clear that fewer procedures were being scheduled and performed in 2020. This same pattern existed when we expanded our analysis to include the five-month period following the rescinding of the ban (June through October 2020) compared to the same months in 2019.

In this year-end update we examine the number of inpatient claims for the six common elective procedures by month for calendar year 2020 compared to claim counts for the same procedures performed during the same months in 2019.



The above graph reveals a continuation of the trends seen earlier: Elective procedures have rebounded since the state-mandated ban effective in April and May, but remain well below prior year levels.

While there is some fluctuation by month (with July bridging the gap to less than a 10 percent variance), on average the number of inpatient claims for the period June through December 2020 is approximately 85 percent of procedures performed in the same months in 2019. As with previous reports, the apparent volumes decline in the latter months of 2020 (November and December) may be overstated due to the inherent lag between the date of service and the date the claim shows up in the statewide hospital dataset.

In 2020, hospitals appropriately prioritized the treatment of COVID-19 patients, and in doing so were successful in bending the mortality curve. To date, hospitals have successfully discharged more than 75,000 coronavirus patients, including an estimated 7,000 mortalities that were averted through improvements and innovations in care delivery. But the impact of the pandemic reaches far beyond just the patients who contract the virus. Delayed and foregone hospital care by non-COVID-19 patients will have a long-term impact on hospitals as they navigate how best to meet the medical needs of the communities they serve well into 2021.

Visit www.njha.com/chart/ for additional resources.