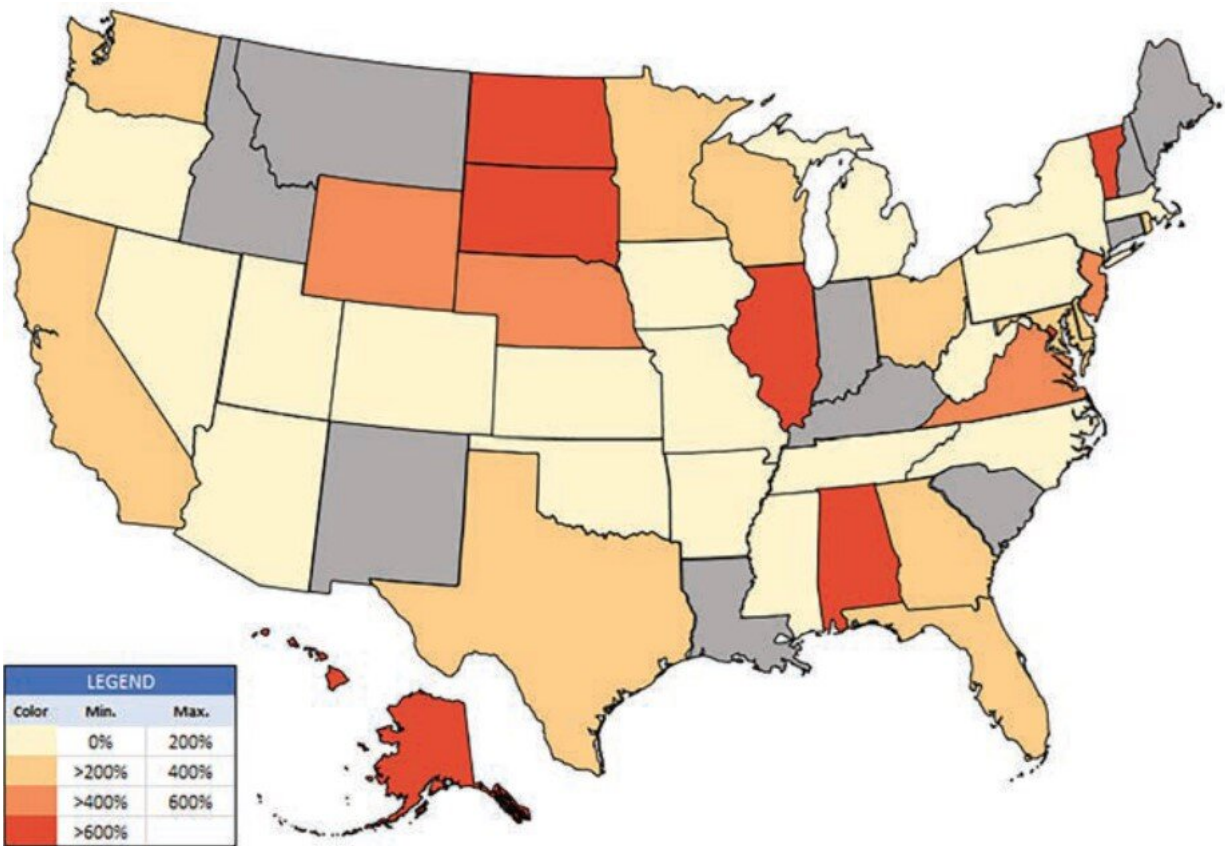


Use of chest, abdominopelvic CT for traumatic injury increased from 2011 to 2018

August 24 2022



Percentage change in utilization from 2011 to 2018. N.B. Data for certain states (gray on map) cannot be individually shared, due to data use agreement. Credit: ARRS/AJR

According to ARRS' *American Journal of Roentgenology (AJR)*, from

2011 to 2018, national utilization of chest and abdominopelvic CT for trauma-related emergency department (ED) encounters increased in commercially insured patients—especially for single-encounter thoracabdominopelvic CT examinations and for minor injuries.

"Given concerns of increased cost and incidental findings detection, further investigation is warranted to explore the potential benefit of single-encounter thoracabdominopelvic CT examinations in patients with minor injuries, as well as strategies to optimize order appropriateness," wrote first author Ninad V. Salastekar, MBBS, MPH, from the department of radiology and imaging sciences at Emory University School of Medicine.

Using national claims information extracted from the IBM MarketScan Commercial Database, Dr. Salastekar's team identified trauma-related ED encounters via 2011–2018 MarketScan files. ED encounters were organized using the Injury Severity Score (minor, intermediate, major) via International Classification of Diseases codes, then assessed for chest CT, abdominopelvic CT, and single-encounter thoracoabdominopelvic CT examinations.

Ultimately, in commercially insured patients, national utilization of single-encounter thoracoabdominopelvic CT per 1,000 trauma-related ED encounters increased from 3.4 in 2011 to 9.8 in 2018 (adjusted incidence rate ratios, 1.16 per year). Additionally, rates rose from 1.1 to 4.6 (1.18) for minor, 6.4 to 16.4 (1.16) for intermediate, and 99.6 to 179.9 (1.08) for major injuries.

Because their [retrospective study](#) used national claims data from commercially insured patients—excluding the majority of Medicare- or Medicaid-eligible individuals, while entirely excluding the uninsured—"the findings may not generalize to such populations," the authors of this *AJR* article cautioned.

More information: Ninad Salastekar et al, Utilization of Chest and Abdominopelvic CT for Traumatic Injury From 2011 to 2018: Evaluation Using a National Commercial Database, *American Journal of Roentgenology* (2022). [DOI: 10.2214/AJR.22.27991](https://doi.org/10.2214/AJR.22.27991)

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