

## 45 Emergency Department Medication Cost Changes After Implementing a Residency Program

Courtney Rich, Japheth Baker, Andres Gomez, Caitlin Corker Relph, Abby Pitts

**Background:** Residency programs require funding but published cost estimates do not currently consider the potential for direct patient care cost a residency may have on the hospital bottom line. Understanding the influence of a residency program on medication costs is essential for optimizing resource allocation and expectations from stakeholders.

**Study Objective:** Residency programs may affect clinical practice patterns and expenditures, yet their direct effects on medication costs in emergency departments (EDs) are not well identified. This study evaluated changes in medication utilization and expenditure following the implementation of an emergency medicine residency program in a rural ED.

**Methods:** We conducted a retrospective analysis of medication data from July 2018 through June 2023 at Magnolia Regional Health Center, a rural hospital in Corinth, Mississippi. Medications administered in the ED were extracted from the EMR; including cost to hospital, cost to patient, and date of administration. Data were divided into pre-residency (July 2018–June 2020) and post-residency (July 2020–June 2023) periods. Trends in overall medication costs and the top 10 medications by expenditure were compared over this period.

**Results:** After initiation of the residency program, medication costs and patient charges sharply increased, peaking within the first post-implementation year. Mean annual medication expenditure rose from \$33,921 before residency

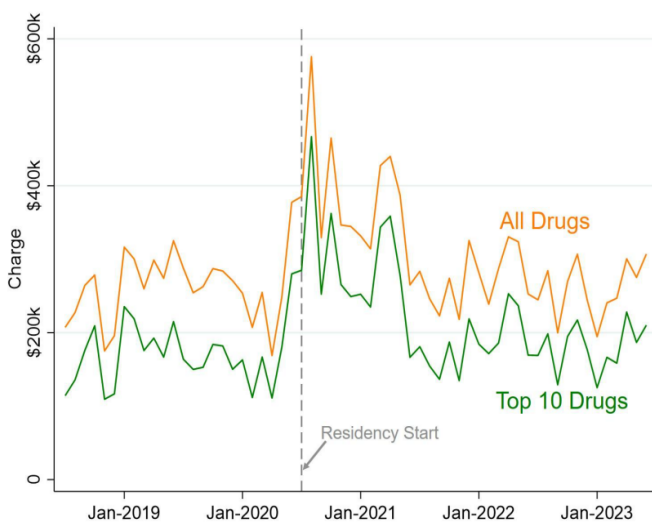


Figure 1: Medication charges over time. The green line represents aggregate charges for the top 10 drugs. The orange line represents aggregate charges for all drugs. The residency start date is indicated by a dotted line.

to \$51,294 in the first post-residency year, then stabilized to \$35,533 thereafter. These changes appeared independent of medication use related to COVID-19. Shifts in medication formulary, including use of Tenecteplase in place of Alteplase and the reduced use of Crotalidae polyvalent immune Fab following the pandemic, influenced expenditure trends.

**Conclusion:** Implementation of an emergency medicine residency program was associated with a transient increase in ED medication expenditures that normalized within one year. Residency programs may modestly affect short-term pharmacy costs but do not appear to increase long-term expenditures in rural emergency settings.

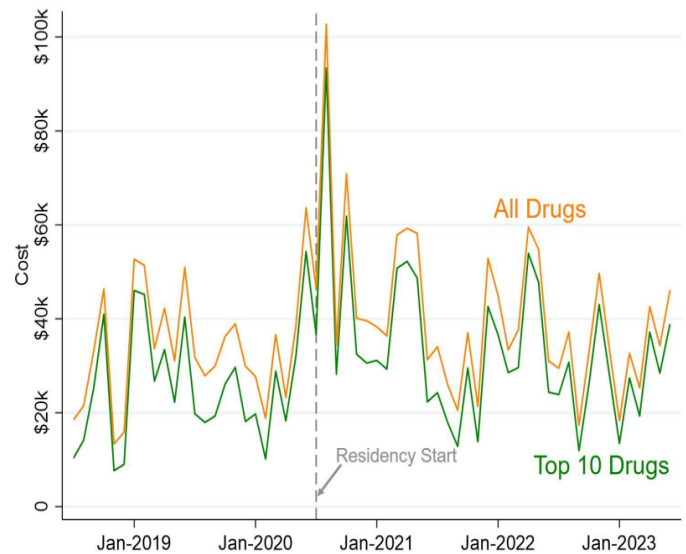


Figure 2: Medication costs over time. The green line represents aggregate costs for the top 10 drugs. The orange line represents aggregate costs for all drugs. The residency start date is indicated by a dotted line.

## 46 Building Tomorrow’s Educators: How Resident-As-Teacher Day Shapes Teaching Confidence and Career Choices

Karly Farr, James Ahn, Paul Kukulski

**Background:** The ACGME requires that residents be trained on how to teach. Senior residents spend approximately 25% of their clinical time teaching, and medical students report that 1/3 of their clinical learning comes from residents. In 2006, SAEM published a suggested curriculum for resident-as-teacher (RAT) training for EM residents; as of 2016, 60% of EM residency programs identified as having a RAT curriculum. It is not currently known how a RAT curriculum impacts attitudes around teaching or aspirations for future careers involving teaching.

**Objectives:** Our study aimed to determine if RAT training impacted teaching practices or career aspirations of PGY2 EM residents. We hypothesized that confidence to teach would