

ANESTHESIOLOGY



Infographics in Anesthesiology: Resident Anesthetic Case Types What types of cases do anesthesiology residents spend their time performing?



We queried the Anesthesia Quality Institute Participant User File for National Anesthesia Clinical Outcomes Registry; 8,081,101 anesthetics were available in the dataset performed between 2010 and 2013 in 113 practices across 906 facilities. Of those, we identified 20 academic practices that included cases performed by residents in training; in these academic groups 1,620,317 anesthetics were performed, 615,708 (40%) of those were done by 1,030 residents. Cases were split into resident/nonresident cases and total minutes per distinct CPT code were calculated; similar codes were combined and labeled with brief, easy-to-understand names. Labor epidurals overshadowed the other data, due to the long duration of many of these anesthetics, so they were removed. Using wordcloud package version 2.4 with R version 2.15.1 (The R Project for Statistical Computing, open source statistical software, available at <http://www.r-project.org/>), a time-weighted comparison word cloud for the top 100 procedures for each group was created that shows the per-procedural time as a percentage of total time each group spent performing anesthesia for specific case types (larger print represents greater percentage of time in case type). Residents spend the most time performing anesthesia for fracture treatment, cesarean section, and spine fusion; nonresidents spent the most time performing anesthesia for colonoscopy, cataract, and coronary artery bypass graft (CABG) surgeries.

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