We extracted the handover prevalence and associated outcomes directly from a recent analysis,1 and compared the handover prevalence to the National Anesthesia Clinical Outcomes Registry. Queries of the Anesthesia Quality Institute Participant User File from 2010 to 2013 identified 13,744,098 anesthetics with data available that specified distinct providers and had valid anesthesiologist, resident, and certified registered nurse anesthetist (CRNA) provider counts. We identified the number of handovers per case using a case-wise analysis on all possible combinations of provider counts. Unreported counts were imputed as zero and anesthesiologists were assumed to be working in only an oversight role when performing cases with residents and CRNAs. We identified outlier practice patterns and removed these from our dataset. Specifically, of the 179 practices included, we identified 11 practices (6%) that reported four or more providers associated with cases with a duration under an hour; the 1,145,588 cases (8%) from those practices were excluded from this analysis. We then analyzed the distribution of handovers per case.

Infographic created by Jonathan P. Wanderer, Vanderbilt University School of Medicine, and James P. Rathmell, Massachusetts General Hospital/Harvard Medical School. Illustration by Annemarie Johnson, Vivo Visuals. Data provided by the Anesthesia Quality Institute, Richard P. Dutton, M.D., M.B.A., Executive Director. Address correspondence to Dr. Wanderer: jon.wanderer@vanderbilt.edu.