

## Forty Year Update of the Obstetric Anesthesia Workforce Survey

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**BACKGROUND:** Nationwide obstetric anesthesia workforce surveys have been conducted every 10 years since 1981 in the United States (US). This new survey is the 10-year follow-up to the latest survey conducted in 2011. Anesthesia providers from US hospitals were surveyed in 2022-2023 and asked to provide data for their hospital from 2021. These surveys provide data on trends in the obstetric anesthesia workforce, methods of practice, and highlight areas of success and areas for improvement in the field. Our primary hypothesis was that the provision of obstetric anesthesia services has changed in the last ten years.

**METHODS:** A stratified random sample of hospitals was generated based on both geographic strata (using the US Census Bureau's nine regions) and delivery strata (number of births per year). Delivery strata is defined as follows (deliveries per year): >4500 (stratum 1), 3000-4499 (stratum 2), 1500-2999 (stratum 3), 500-1499 (stratum 4), <500 (stratum 5). Questionnaires containing 32 questions were sent via email and physical mail to the primary provider of obstetric anesthesia services at these hospitals. Data collection was facilitated via the REDCap survey database. All statistical inferences were performed at a significance level of 0.05.

**RESULTS:** There were 246 responses from the 1179 total hospitals (response rate of 20.9%). 48.4% of L&D units utilize the care-team model for anesthesia (physician anesthesiologists + non-physician anesthetists). Overall, 69.5% of L&D units have physician anesthesiologists present during L&D weekday hours. Only 29% of L&D units use independently practicing CRNAs, mainly concentrated in stratum 5 hospitals. Epidural anesthesia remains the predominant method of anesthesia during labor, used in 70% of cases in 2021. High proportions of stratum 1-3 hospitals employ a variety of patient safety measures including the presence of massive transfusion protocols (MTPs) at 99% of these hospitals.

**CONCLUSIONS:** Anesthesiologists are present in the majority of L&D units overall. The epidural continues to be the most commonly used method of analgesia for labor. The implementation of patient safety measures is increasing across hospital strata, but smaller hospitals are slower to implement these measures. There remain significant challenges in achieving uniform standards of obstetric anesthesia care. Obstetric anesthesia surveys, updated every ten years, continue to provide information about changes in obstetric anesthesia practice and differences in practice between large and small delivery services.