

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 US.
- 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. This is the fifth decennial survey, providing data from 2021.
- Primary Hypothesis: the provision of obstetric anesthesia services and the techniques employed by anesthesia providers have changed since 2011.

OBJECTIVES

- Assess the current trends in the:
 - provision of obstetric anesthesia services in the US
 - techniques used by these providers
- Implementation of safety initiatives in hospitals providing L&D services

METHODS

- Selected a stratified random sample of 1179 hospitals from 5 delivery size strata, 9 geographic strata (Figure 1)
- Survey containing 32 questions sent to the primary provider of obstetric anesthesia services at these hospitals
- Data collection facilitated by REDCap

*Official statistical analysis pending as of March 2024

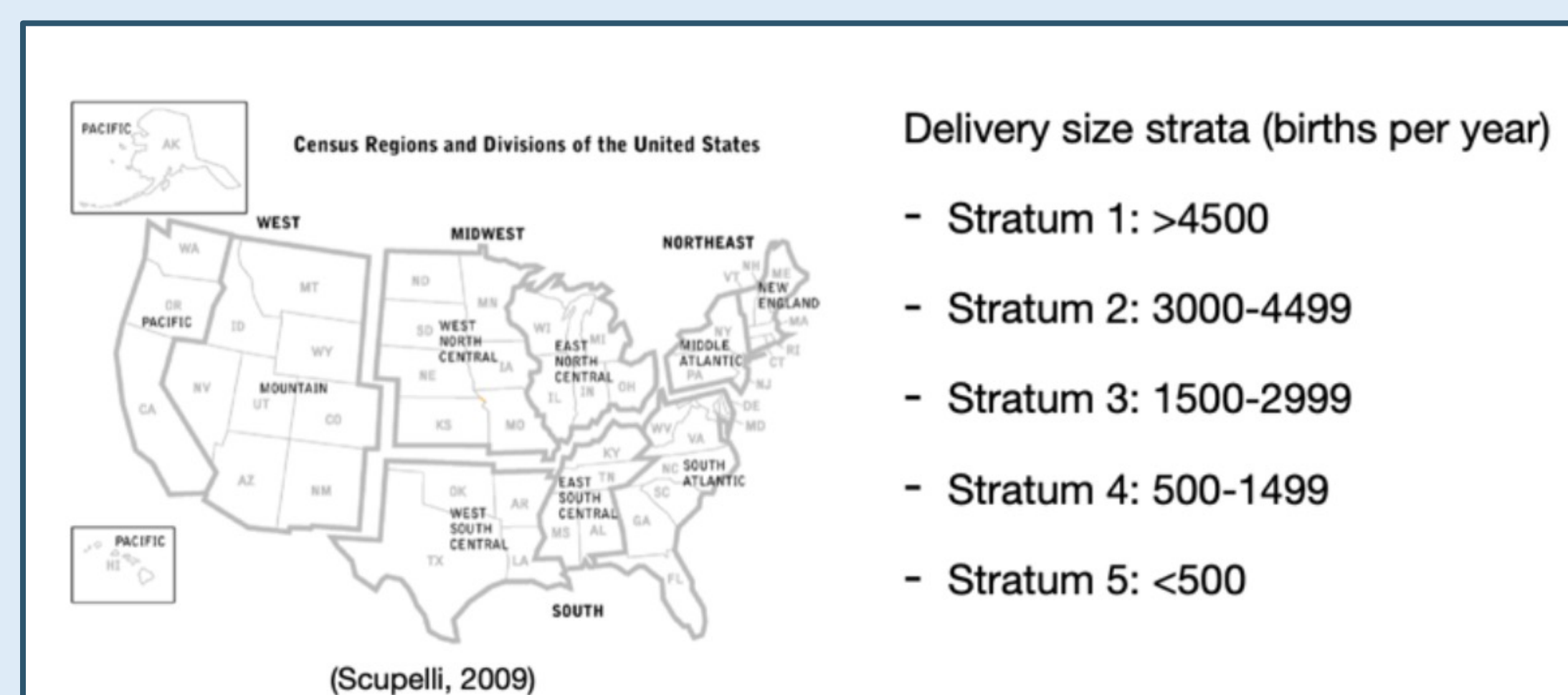


Figure 1

RESULTS

Provision of Obstetric Anesthesia Services

OB Workforce Survey Year	Number of US Hospitals Providing Obstetric Care
1981	4163
1991	3545
2001	3160
2011	2900
2021	2846

Table 1

The number of hospitals providing OB care continues to decline, down 32% since 1981.¹

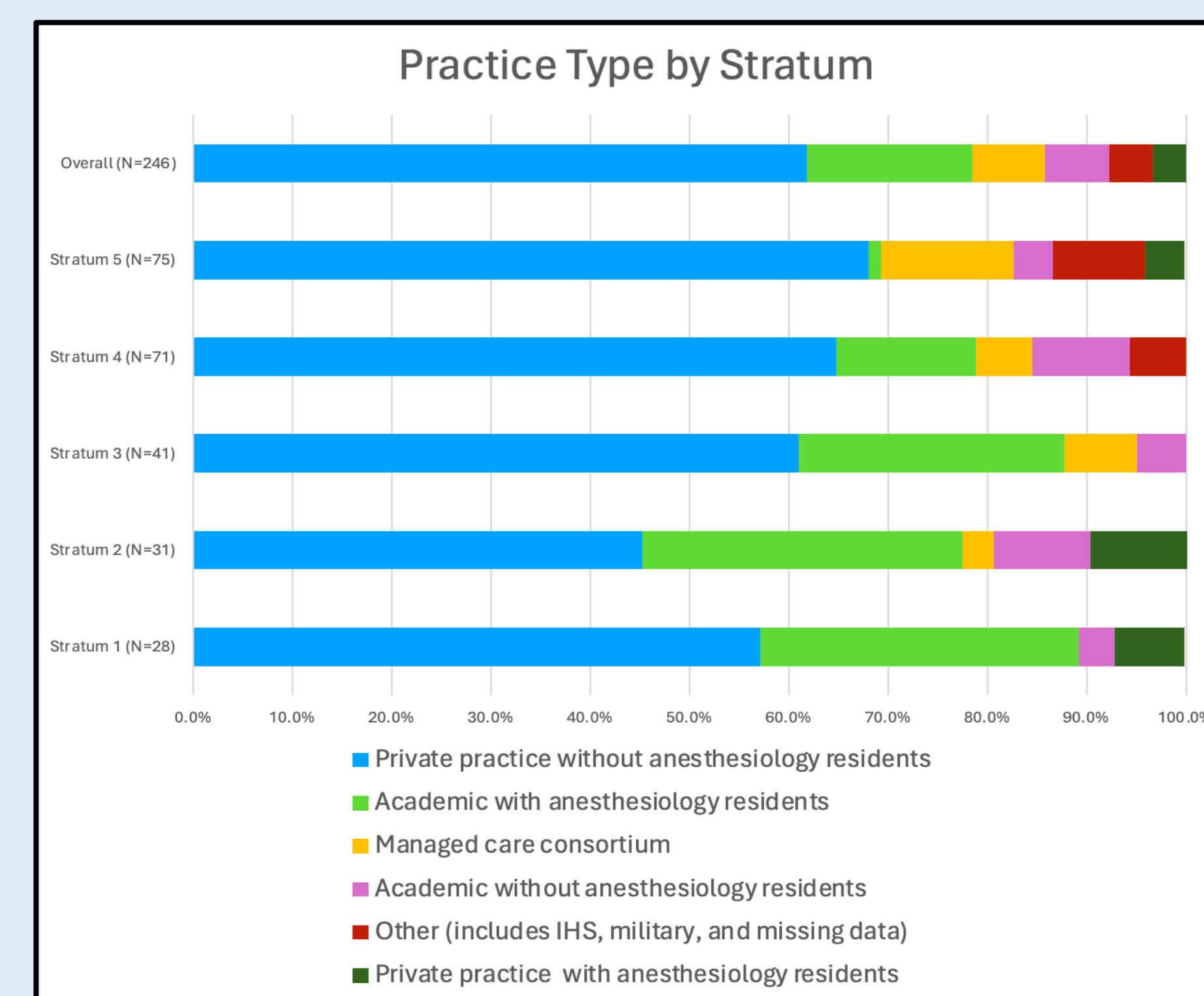


Figure 2

A variety of practice types were surveyed. "Private practice without anesthesiology residents" was the most common practice type among respondents overall.

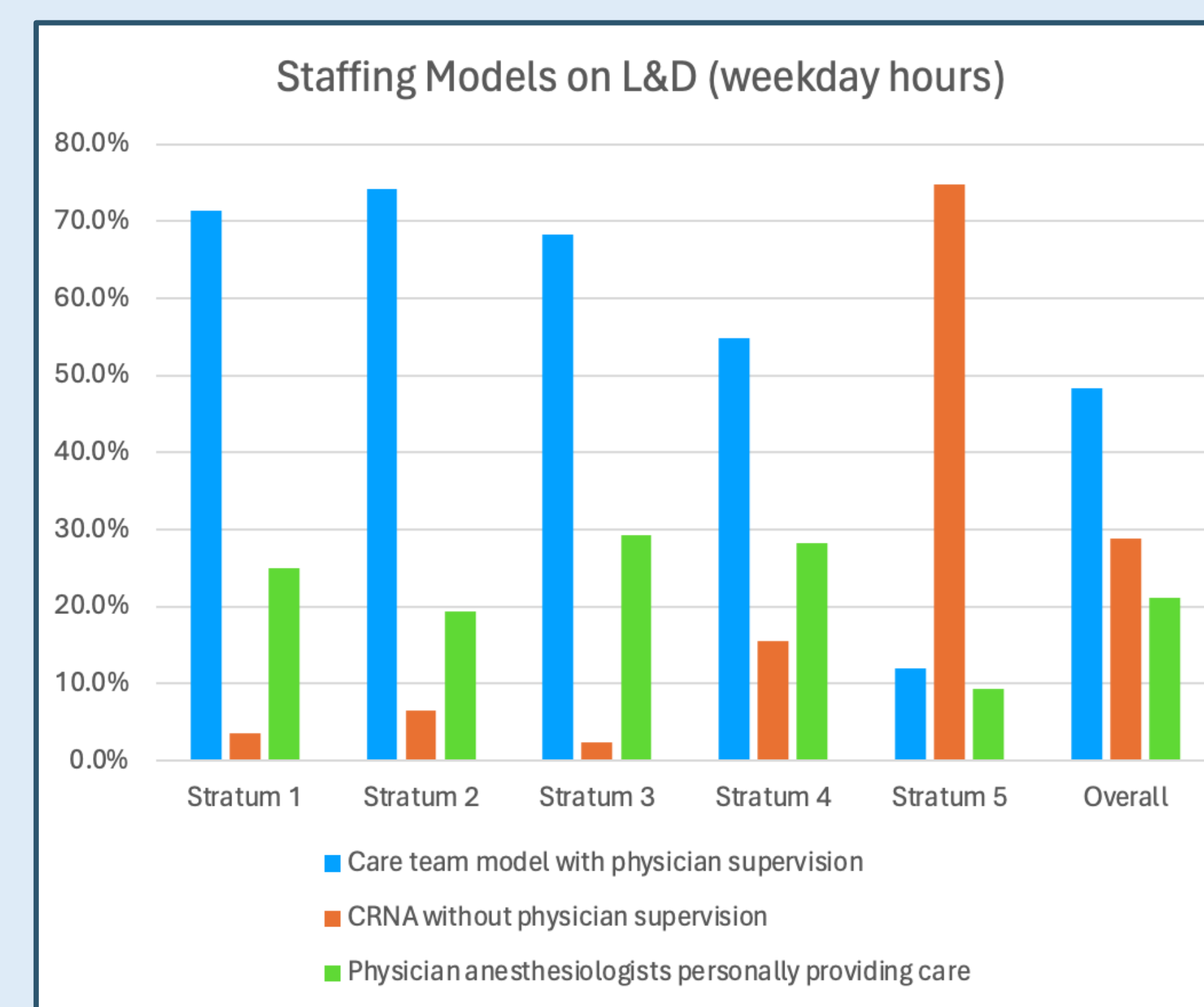


Figure 3

70% of respondents have a physician anesthesiologist present in their L&D units; independently practicing CRNAs are mainly concentrated in the smaller stratum 5 hospitals.

Trends in Analgesia Techniques

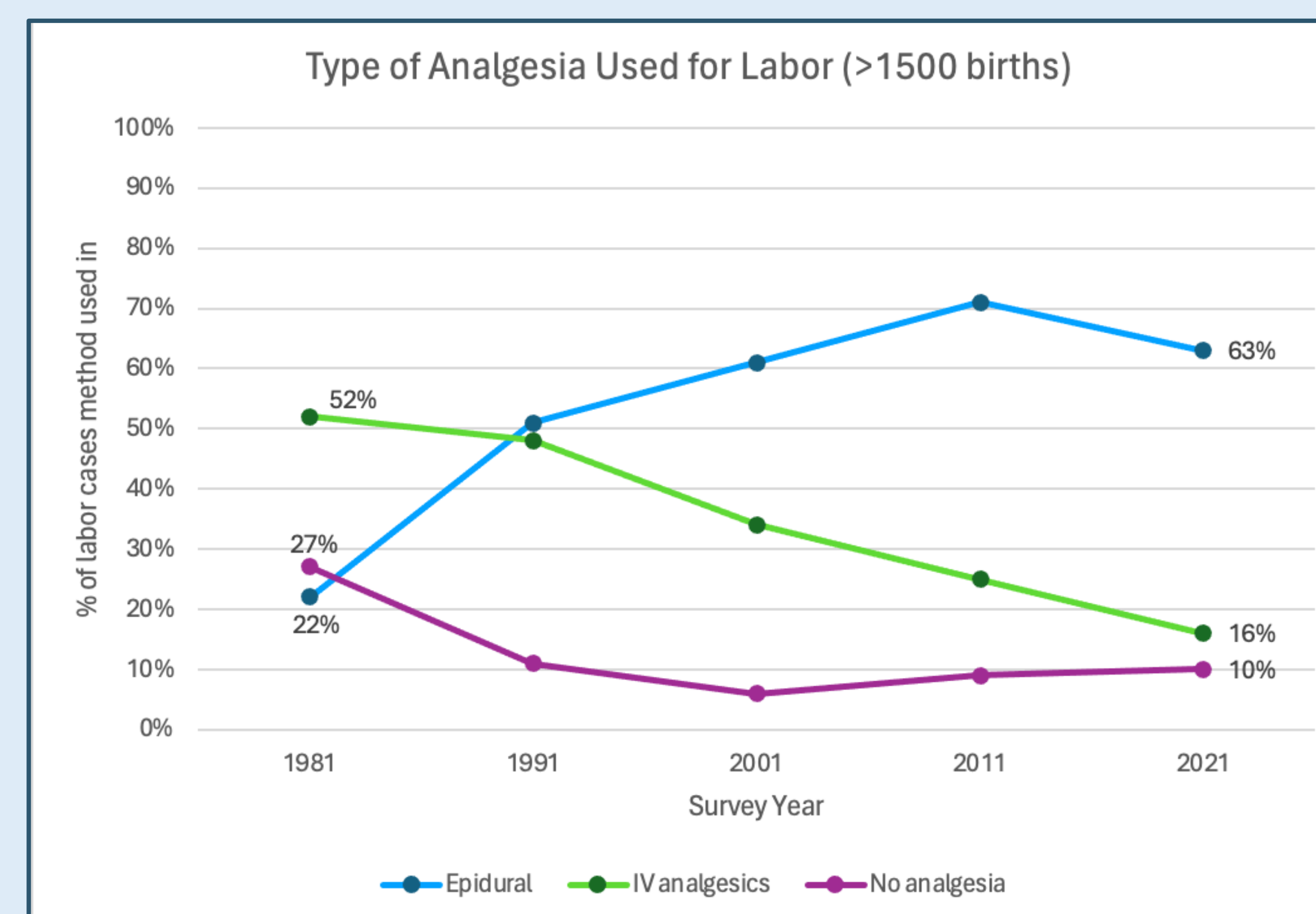


Figure 4

The epidural continues to be the most popular form of analgesia for labor among respondents, with the use of IV/parenteral analgesics declining for vaginal deliveries decade over decade.^{2,3}

RESULTS

Safety Initiatives

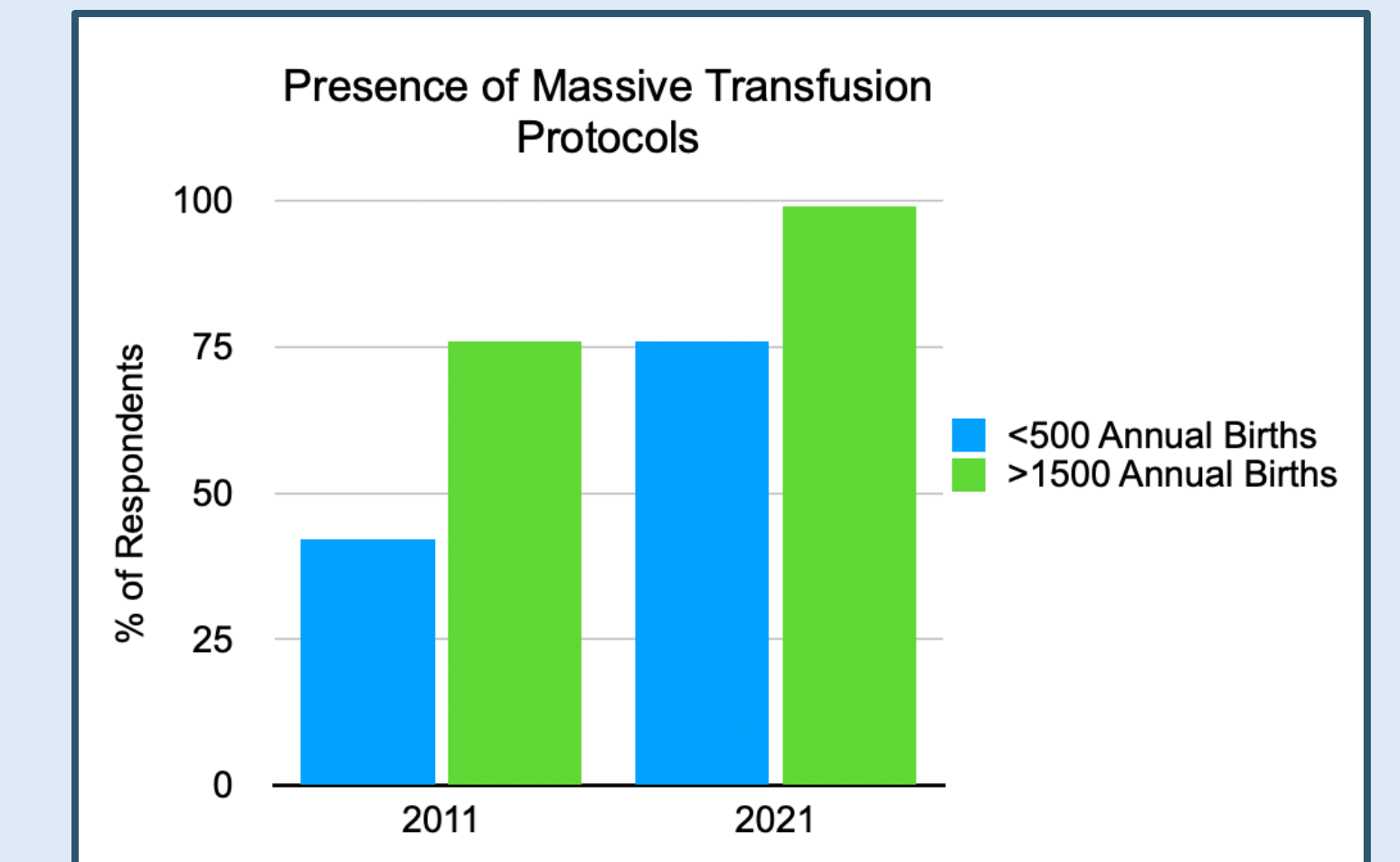


Figure 5

The presence of safety protocols, such as MTPs, have increased substantially over the past 10 years among respondents. Hospitals with lower delivery volumes are more likely to be lacking important safety measures like MTPs, and have markedly higher rates of maternal morbidity and mortality.⁴

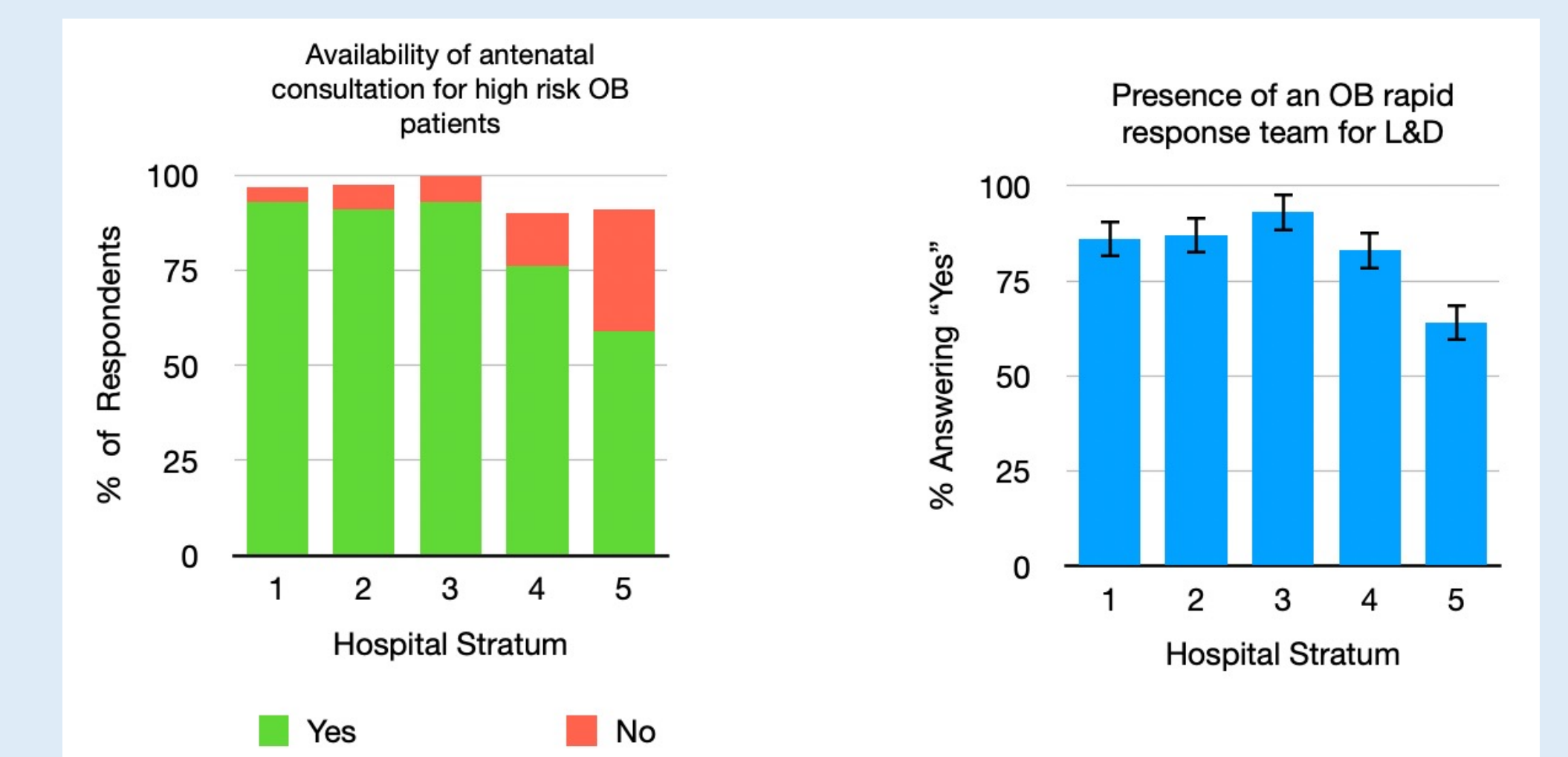


Figure 6

Hospitals in the sample implement various safety protocols at high rate; however, the smallest hospitals (stratum 5) lag behind.

POTENTIAL LIMITATIONS

- Response bias: hospitals/providers with particular interests in OB anesthesiology may be more inclined to respond to and complete the survey
- Selection bias: providers on services that are less busy may be more likely to respond to the survey, which could cause differences in the groups of responders vs non-responders.

CONCLUSIONS

- Obstetric anesthesia workforce surveys continue to provide information about changes in OB anesthesia practice and differences between large and small delivery services.
- The disparities in the implementation of safety measures in small hospitals show there are still ongoing challenges in achieving uniform standards of patient safety and care.
- It is imperative that the field of obstetric anesthesiology respond to these challenges through quality improvement efforts and work to ensure that all parturients receive the highest standards of care.

NOTES

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- Conflicts of interest: none
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*For the full list of references, please consult the authors