

Quality Assurance Methods to Reduce General Anesthesia Rates in Cesarean Delivery

C. Tyler Smith, Adam Dunmore, Joe Derenzo, Ryan Romeo, Grace Lim

Introduction

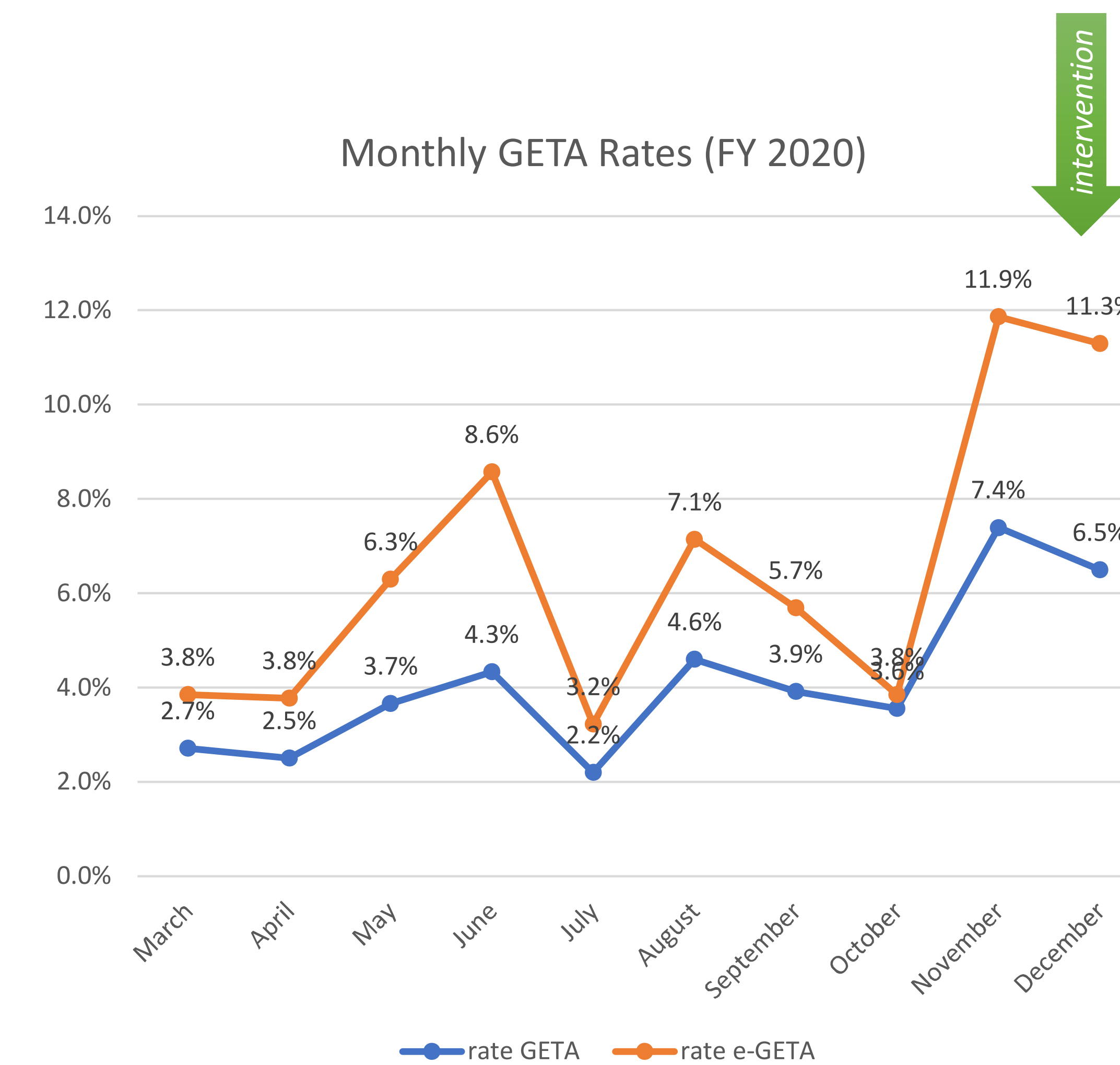
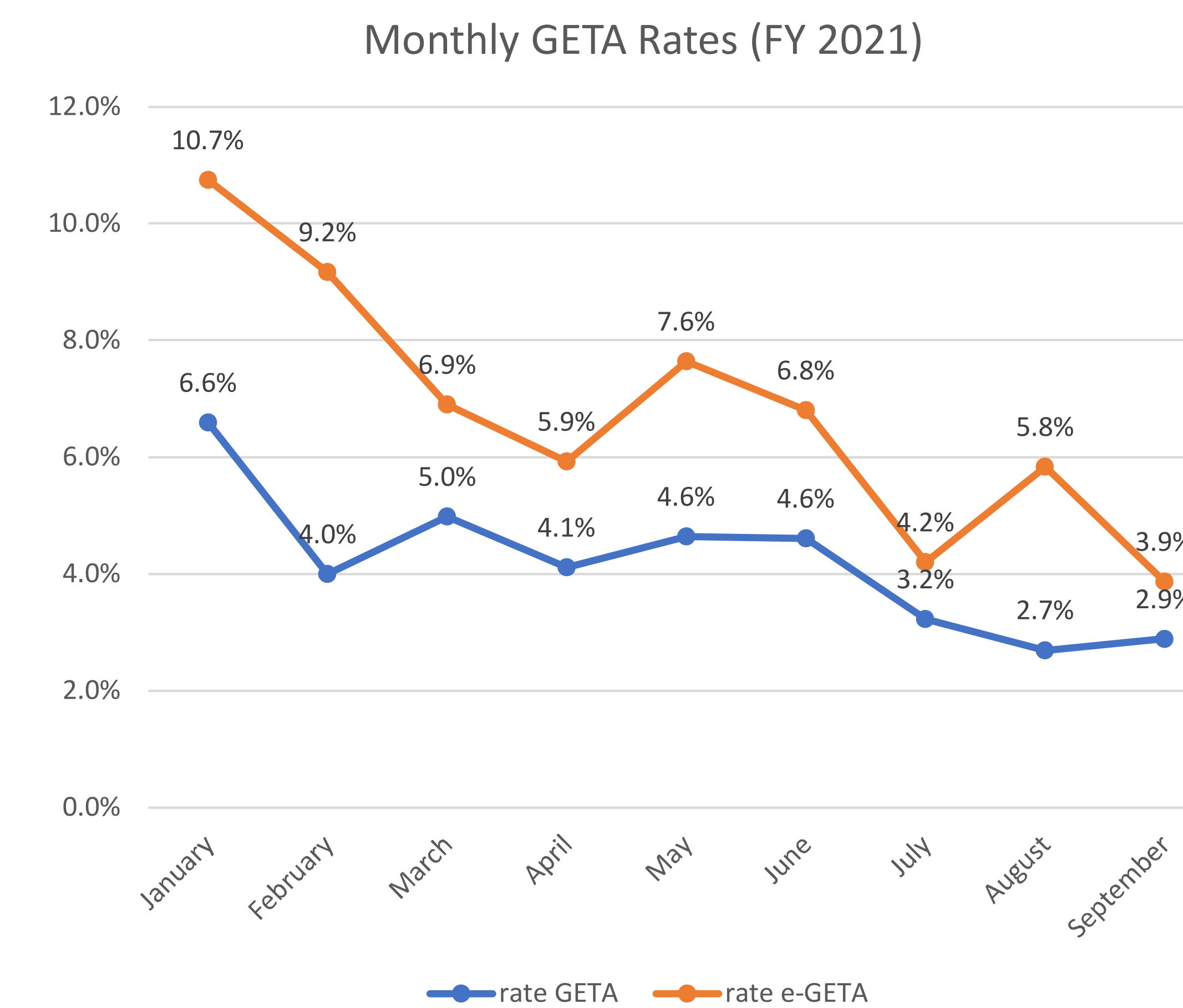
- Anesthesiologists are responsible for providing safe and high-quality care not only to individual patients, but also within group practices.¹
- Quality Assurance (QA) includes adherence to current evidence-based best practices, reducing risks for harm and optimizing outcomes.
- Recommendations are that GA for CD rates should be less than 5% overall, and less than 15% in emergent CD.²
- The purpose of this study was to evaluate the impact of implementing a QA program on rates of GA for CD.

Methods

- This was a single center impact study.
- Monthly QA intervention consisted of detailed, independent reviews of all GA for CD cases by 2 anesthesiologists.
- Reviews identified:
 - if GA was “potentially preventable” defined by previously published criteria;⁴
 - any potential opportunities for improvement.
- Cases of GA for CD were brought for confidential discussion at monthly anesthesiology staff meetings, to discuss potential areas for improvement and themes associated with potentially preventable GA.

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Results

- During the 6-month QA implementation period, there were 1,502 CDs (734 emergent); 83 / 1502 (5.5%) were GA, with 68 / 734 (9.3%) emergent GA.
- Ten of 83 (12.1%) GA cases were potentially avoidable.
- Factors contributing to avoidable GA included lack of early recognition and coordination with multidisciplinary teams for early epidural catheter placements or replacements in complex cases (7 of 10 cases, 70%).
- After QA implementation, the rate of GA for scheduled CD went from a peak of 7.4% to 2.9% and the rate of GA for emergent CD went from 11.9% to 3.9%.

Conclusion

- Implementing a QA process around GA for CD at our institution was associated with a 50% reduction in GA for scheduled and emergent CD.
- QA programs to reduce GA in CD are feasible, sustainable, and important to maintain high quality care in obstetric anesthesia practices.

- 1 Agarwala, A.V. Anesthesiology, 2014.120:253
- 2 Ring, L. Curr Anesthesiol Rep, 2021:1
- 3 Carvalho, B. Anes Analg, 2019.128:844
- 4 Guglielminotti, J. Anesthesiology, 2019.130:912