

## Optimizing Blood Transfusion Practices Through Bundled Intervention Implementation in Patients With Gynecologic Cancer Undergoing Laparotomy

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*Obstet Gynecol 2018;131:891–8*

1. The authors focused on blood transfusion rates due to data they received regarding their unit from the National Surgery Quality Improvement Project (NSQIP). Visit the NSQIP website (<https://www.facs.org/quality-programs/acs-nsqip>) and discuss the purpose of NSQIP. How are the data regarding whether or not an institution is an outlier for an outcome measured by NSQIP determined?
2. What did the authors choose as the main outcome measure for the study? Discuss whether or not you think this is the appropriate measure. Why or why not?
3. Discuss the mechanism of action for tranexamic acid. What risks are associated with its use?
4. The authors instituted a bundled intervention to decrease the rates of blood transfusion. This included an intraoperative hemostasis checklist, enhanced intraoperative fluid status communication, and use of tranexamic acid. Review the American Association of Blood Banks' (<http://www.aabb.org/programs/clinical/Pages/default.aspx>) and the American Society of Anesthesiologists' (see *Anesthesiology* 2015;122:241–75) guidelines. Do you agree with the interventions that the group decided to implement? Why or why not?
5. The bundle used by the investigators in this study focused on intraoperative management. Discuss possible interventions for reducing blood transfusion rates that could be implemented preoperatively at your site.
6. The authors used propensity score matching to control for differences between the study groups. Discuss similarities and differences to a multivariate analysis to control for differences between groups.
7. The launch of this intervention was deemed not to be research by the Mayo Clinic institutional review board (IRB), but they did review the retrospective comparison of the cohorts and approved this portion of the study. Discuss what types of research have exempt status at your institution, and whether you think your IRB would come to the same conclusions regarding the exempt status of this study.
8. Discuss rates of intraoperative and immediately postoperative blood transfusion at your institution. What standardized approaches to blood transfusion do you have, if any? Design an intervention aimed to decrease blood transfusion rates at your institution.