Factors Influencing the Likelihood of Instrumental Delivery Success

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(Obstet Gynecol 2014;123:796–803)

1. What is the operative vaginal delivery rate at your institution? What proportion of operative vaginal deliveries is accomplished with forceps compared with vacuum? In your practice, what factors or considerations influence a) whether you attempt an operative vaginal delivery or b) whether you use forceps or vacuum?

2. The authors use individual matching (of unsuccessful and successful deliveries by the same operators) to account for inter-obstetrician variability. Describe each of the other methods that can be used in general to adjust for confounding.

3. Identify the main study outcome(s) and discuss whether the outcome(s) are adequately defined. Also, identify the key study exposures and discuss whether they are well defined. If any, describe additional important study exposures (covariates) you would like to examine and why.

4. The authors state that the study database is regularly validated by a rolling program of audits in which the original case notes are checked against the information recorded in the database. Describe the statistical measure(s) that can be used to quantify the validity of the database.

5. Describe the two study designs used in the report. Do you agree with the authors’ reasons for using these two designs? Why or why not? If you had to use only one of the two study designs, which design would you use and why? Would this design allow you to address all the key study questions?

6. Describe the key findings from this study. Which of these findings will you incorporate into your practice? Why or why not?

7. Review the Cochrane Database of Systematic Reviews regarding the meta-analysis comparing forceps and vacuum delivery. Discuss any differences in the risks, benefits, and indications of one operative delivery method over the other. In your opinion, what are the challenges, if any, of offering both methods (vacuum and forceps)?