the largely consistent higher mortality rates in private for-profit hospitals.

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Reference

1. Devereaux PJ, Choi PT, Lacchetti C, Weaver B, Schunemann HJ, Haines T, et al. A systematic review and meta-analysis of studies comparing mortality rates of private for-profit and private not-for-profit hospitals. *CMAJ* 2002;166(11):1399-406.

Delivery volume debated

CMAJ is to be congratulated for publishing Michael Klein and colleagues' article.[1] For many family physicians, like myself, who are committed to practising obstetrics (low-risk, dare I say), it was a breath of much-needed fresh air. The Society of Obstetricians and Gynaecologists of Canada (SOGC) policy statement 24 never did make much sense in the absence of evidence when subjected to critical review by individual family physicians practising low-risk, low-volume obstetrics. Any policies or clinical practice guidelines that affect a broad section of practising physicians such as family doctors ought to be subjected to due diligence and mandatory endorsement or rejection by the body that represents us, the College of Family Physicians of Canada (CFPC) I am not really surprised by the conclusions of the study and was indeed very pleased to read the bottom line, the postscript.

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Reference

1. Klein MC, Spence A, Kaczorowski K, Kelly A, Grzybowski S. Does delivery volume of family physicians predict maternal and newborn outcomes? *CMAJ* 2002;166(10):1257-63.

Klein and colleagues[1] overstate the case when they conclude that "the conventional wisdom related to volume and outcome is based primarily on surgical practices and should not be applied to other types of practice" (such as delivering babies). The authors studied this problem in a teaching hospital with residents, readily available obstetricians as consultants, teaching rounds, quality assurance programs and established maternal-care policies and procedures. This setting surely has an effect on the quality of obstetric care practised by family physicians. The problem of volume (experience) influencing practice outcomes should not be an issue in today's teaching hospitals, but it may be in rural areas. The findings of this study, therefore, should not be used as the basis for altering obstetric experience criteria set by the SOGC.

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Reference

1. Klein MC, Spence A, Kaczorowski K, Kelly A, Grzybowski S. Does delivery volume of family physicians predict maternal and newborn outcomes? *CMAJ* 2002;166(10):1257-63.

Although Michael Klein and colleagues[1] have not established a relation between delivery volume and outcome in obstetrics, we cannot say that no relation exists. Their sample size does not allow enough precision to exclude a clinically meaningful association.

The adjusted odds ratios of 0.908 and 0.849 (high volume v. low volume) for low Apgar score and neonatal intensive care unit/special care unit (NICU/SCU) admissions were not statistically significant, but some might consider such odds ratios *clinically* significant if they are true. More important, the confidence intervals for these odds ratios were wide and include effects that would certainly be clinically meaningful. In multivariate analysis, there were trends (again not statistically significant) of more episiotomies, cesarean sections and instrument deliveries in the low-volume group.

This study (which included 549 births attended by low-volume physicians) adds to reassuring literature that suggests no association between delivery volume and outcomes. However, the trends favouring higher delivery volume and the relatively rarity of poor neonatal outcomes necessitate a larger sample size to demonstrate that no clinically significant association exists between adverse outcomes and delivery volume.

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Reference

1. Klein MC, Spence A, Kaczorowski K, Kelly A, Grzybowski S. Does delivery volume of family physicians predict maternal and newborn outcomes? *CMAJ* 2002;166(10):1257-63.

[One of the authors responds:]

Dan Dattani makes an important point regarding who scrutinizes the establishment of clinical practice guidelines. We are therefore pleased that the SOGC has joined the CFPC and the Society of Rural Physicians of Canada (SRPC) in developing a new policy statement on the number of births required to maintain competence. Since more than half of family physicians in both rural and urban settings attend fewer than 25 births per year, the previous