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## **Letter – Response to Commentary MJA-2013-11200**

### **Unexplained variation in hospital caesarean section rates**

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We thank Fielke for his interest in our article.<sup>1</sup> Our study used the 20<sup>th</sup> centile method of the Australasian Clinical Indicator Report – Obstetrics, conducted by the Australian Council on Healthcare Standards (ACHS).<sup>2</sup> The ACHS defines the 20<sup>th</sup> centile as a “best practice rate” that is potentially achievable and uses it to identify and prioritise clinical areas in which research and quality improvement activity would have the greatest benefits. Using the 20<sup>th</sup> centile rate for quantifying the potential impact on the overall caesarean rate of reducing practice variation is appealing, as it does not rely on an arbitrary target value but instead is data-driven, being influenced by the rates currently achieved by 20% of hospitals. Importantly, appropriately *risk-adjusted* caesarean rates, rather than the observed caesarean rates, should be compared with the 20<sup>th</sup> centile.

However, we urge caution in immediate use of the 20<sup>th</sup> centile, as lower caesarean rates should not be achieved at the possible expense of increased adverse outcomes. Our initial study<sup>1</sup> aimed to identify clinically relevant groups with the greatest (and potentially most modifiable) variation in hospital caesarean rates, adjusted for casemix. A detailed analysis of outcomes was beyond the scope of that paper. We are currently exploring the Robson Groups with the greatest variation in hospital caesarean rates using more comprehensive data obtained through record linkage. Our aim is to identify further factors contributing to variation in each group, if any, and to examine the relationship between caesarean rates and maternal and neonatal outcomes.

1. Lee YY, Roberts CL, Patterson JA, et al. Unexplained variation in hospital caesarean section rates. *Med J Aust*. 2013;199(5):348-353. Epub 2013/09/03.
2. Australian Council on Healthcare Standards (ACHS). Obstetric version 7. Retrospective data in full. Australasian Clinical Indicator Report 2004–2011. Sydney, NSW; ACHS; 2012.