maternal and neonatal outcomes. It is what rural women want and deserve.

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Reference
1. Lisonkova S, Haslam MD, Dahlgren L, et al. Maternal morbidity and perinatal outcomes among women in rural versus urban areas. CMAJ 2016;188:E456-65.

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The authors respond
We thank Grzybowski1 and Lespérance2 and their colleagues for their comments on our article3 and strongly agree that local maternity services have beneficial effects on maternal and fetal/infant health in rural areas. These groups have been longstanding champions for rural maternity care services in Canada, and we applaud their efforts to provide quality care for low-risk women in rural settings.

However, we stand by the results of our study, which showed elevated rates of severe maternal morbidity in women residing in rural versus urban British Columbia. We found that the average adjusted risk for rural women was two-fold higher for some severe morbidity. Some rural subgroups and regions may have lower risk than this average, but other regions would have a higher risk.

Geographic barriers are notoriously difficult to quantify. Although travel distance may be a good indicator of access to care, it varies considerably with weather and road conditions as well as type of transportation. Our study used the degree of rural isolation developed by Statistics Canada that has been used to approximate access to health care services.5,6 We were conservative in our approach and included rural areas with high metro-politan influence (typically considered rural) within the urban category.

Rates of level 2 admission to a neonatal intensive care unit were 3.7% for infants born to women from rural areas and 8.1% for infants born to women in urban areas; rates of level 3 admission were 0.8% and 2.0%, respectively (some infants were admitted to both). This may indicate potential barriers to care in neonatal intensive care units for infants of rural women — a finding that should prompt further study.

We do not agree that our findings undermine the dedicated work of rural maternity care providers in British Columbia, nor would we wish to do so. Rural obstetric care presents challenges that are unlike those encountered in urban settings. Our study found that some morbidity indicators (e.g., transfusion) were not substantially different, which attests to the quality of rural care.

Our study was not designed to determine the factors that influence the risk of adverse outcomes among rural women, and we did not intend to suggest that rural health care providers are responsible. We strongly support the need for further studies and attention to rural obstetric care.

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References
1. Grzybowski S, Kornelsen J. Maternal morbidity and perinatal outcomes in rural versus urban areas [letter]. CMAJ 2016;188:1261.
2. Lespérance S, Miller K, Dworkin R, et al. Maternal morbidity and perinatal outcomes in rural versus urban areas [letter]. CMAJ 2016;188:E456-65.

3. Lisonkova S, Haslam MD, Dahlgren L, et al. Maternal morbidity and perinatal outcomes among women in rural versus urban areas. CMAJ 2016;188:1256-65.

Hippocrates and Targin
The Oct. 18, 2016, issue of CMAJ contained two ads from Purdue Pharma. The first featured a bust of Hippocrates and was headlined “Treating chronic pain, our shared responsibility” and talked about how Purdue was committed to ensuring that the “right medications get to the right patients” (page 1058). The second was an ad for Targin (controlled-release oxycodone/naloxone), a product used to treat chronic pain (page 1070).

Despite Purdue’s pledge in the first ad, information in the second ad about “addiction, abuse and misuse” of Targin was buried in the fine print and not in the display portion of the ad. The Targin ad prominently featured the statement, “Demonstrated reduced drug liking relative to oxycodone, when administered intranasally or intravenously.” Below this statement, in barely visible print, was the acknowledgement that the “clinical significance of these results has not yet been established.” How much reduction in liking was seen was not stated. Intranasal and intravenous administration were likely tested because those are the routes most commonly used by recreational drug users. Targin is only available in an oral formulation, but there was nothing in the ad about the potential of abuse by people who had been legitimately prescribed this dosage form.

Perhaps the bust of Hippocrates in the first ad should have been labelled “Hypocrisy.”

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