

Caesarean Delivery Rate Review: OHTAC Recommendation

ONTARIO HEALTH TECHNOLOGY ADVISORY COMMITTEE

MARCH 2015

Suggested Citation

This report should be cited as follows:

Health Quality Ontario. Caesarean delivery rate review: OHTAC recommendation [Internet]. Toronto: Queen's Printer for Ontario; 2015 March. 9 p. Available from: <http://www.hqontario.ca/evidence/publications-and-ohtac-recommendations/ontario-health-technology-assessment-series/caesarean-delivery-rate-review>.

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Conflict of Interest Statement

All authors at Health Quality Ontario are impartial. There are no competing interests or conflicts of interest to declare.

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When sufficient data are available, OHTAC tracks the ongoing use of select interventions it has previously reviewed, compiling data by time period and region. The results are published in the Ontario Health Technology Maps Project Report.

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BACKGROUND

Health Quality Ontario conducted an evidence-based analysis (1) to answer the following research questions:

- What are the factors affecting the likelihood of having a caesarean delivery in a low-risk obstetrical population?
- What is the Ontario provincial caesarean delivery rate for a low-risk obstetrical population, and does this rate vary within the province?
- What are the likely reasons for caesarean delivery rate variation in Ontario, if it exists?

CONCLUSIONS

- Nine factors were significantly associated with either an increased or decreased likelihood of having a caesarean delivery, and 5 factors had no influence. Moderate-quality evidence supported the finding that in a low-risk population, an elective induction policy would significantly reduce the rate of caesarean deliveries compared with a policy of expectant management.
- The provincial caesarean delivery rate for a very-low-risk population was 17.0%. However, rates varied among Ontario hospitals (4.5% to 35.5%) and were independent of PCMCH level-of-care classifications or birth volumes (based on data for 2011/2012).
- An evaluation of an Ontario administrative database suggested that variation in caesarean delivery rates may be due to maternal age and/or obstetrical practice variation. There was no clinically or statistically significant variation in rates associated with neighbourhood income quintile, neighbourhood educational attainment, rural or urban status, or primary language.

OHTAC RECOMMENDATIONS

After considering the evidence and the recommendations from the Expert Advisory Panel on Rate Variation in Caesarean Sections Across Ontario, OHTAC recommended that:

- The Better Outcomes Registry & Network (BORN) Ontario, with the Provincial Council for Maternal Child Health (PCMCH), provide audit and feedback to individual hospitals regarding their low-risk obstetrical population to support quality improvement in maternal-infant care.
- Health Quality Ontario, in collaboration with BORN, track induction rates¹ and caesarean delivery rates² as key performance indicators.

¹Proportion of women who were induced with an indication of post-dates and were less than 41 weeks' gestation at delivery.

²Caesarean delivery rates in low-risk nulliparous women.

REFERENCE

- (1) Degani N, Sikich N. Caesarean delivery rate review: an evidence-based analysis. Ont Health Technol Assess Ser [Internet]. 2015 March;15(9):1–58. Available from: <http://www.hqontario.ca/evidence/publications-and-ohnac-recommendations/ontario-health-technology-assessment-series/caesarean-delivery-rate-review>.

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