



# Quadruple Aim and **Midwifery Care** **CONNECTED CARE**

## AIM 1: **BETTER PATIENT AND POPULATION HEALTH OUTCOMES**

### **Effective and appropriate care is provided to patients**

- Caesarean section is the most common surgery in Ontario, accounting for 38,000 surgeries per year<sup>1</sup>, and that number is rising: from 24% in 2002 to 28% in 2013.<sup>2</sup> The caesarean section rate for midwifery clients is significantly lower than the provincial average.<sup>3</sup> Midwives have higher rates of successful vaginal birth after caesarean (VBAC) which shortens hospital stays, reduces costly interventions, and contributes to exemplary client experience. In 2017, 52% of midwifery clients that were eligible for VBAC had a successful VBAC, compared to 19% of non-midwifery clients.<sup>4</sup>
- Midwives have lower intervention rates, fewer re-admissions to hospital and shorter hospital stays. This midwifery approach translates into a cost savings for hospital birth and even higher savings home births.

### **Health-related quality of life is improved**

- Midwifery clients had a 12% lower caesarean section rate and a 38% lower epidural rate than the provincial average in 2017.<sup>5</sup> The average length of stay for hospital births attended by midwives is approximately 1.8 days,<sup>6</sup> while the provincial average is 2.3 days.<sup>7</sup>
- 78% of babies with midwives were exclusively nursing at 6 weeks. Breast/chest feeding improves the health of the population. Not breast/chest feeding increases health care costs and contributes to poorer child health outcomes.<sup>8</sup>

<sup>1</sup> Canadian Institute for Health Information. C-section rates continue to increase while birth rates decline. [Internet]. April 2018. Available from <https://www.cihi.ca/en/c-section-rates-continue-to-increase-while-birth-rates-decline> - please replace with a FN.

<sup>2</sup> Canadian Institute for Health Information. DAD Childbirth Indicators by Place of Residence [Internet]. Available from: <http://www.cihi.ca/CIHI-ext-portal/internet/EN/ApplicationFull/types+of+care/hospital+care/CIHI021681>

<sup>3</sup> BORN (Better Outcomes Registry Network) April 1, 2016 - March 31, 2017 data.

<sup>4</sup> BORN Ontario. Midwifery Care Profile - Utilization of Services 2016-2017. Accessed 2019 May.

<sup>5</sup> BORN Ontario. 2014-2016 Biennial Report. Research and Evaluation. 2016. Retrieved from: <https://www.bornontario.ca/en/about-born/governance/annual-reports/2014-2016-annual-report/researchevaluation/>

<sup>6</sup> Idem.

<sup>7</sup> Hospital Morbidity Database and Ontario Mental Health Reporting System, 2016-2017, Canadian Institute for Health Information. Retrieved from: [https://secure.cihi.ca/free\\_products/hos-pch-hosp-2016-2017-snapshot\\_en.pdf](https://secure.cihi.ca/free_products/hos-pch-hosp-2016-2017-snapshot_en.pdf)

<sup>8</sup> Provincial Council for Maternal and Child Health. Exclusive Breastfeeding Provides the Best Possible Beginnings for Lifelong Health. 2013. [https://www.pcmch.on.ca/wp-content/uploads/2015/07/PCMCH\\_BreastFeeding\\_Placemat\\_2012.pdf](https://www.pcmch.on.ca/wp-content/uploads/2015/07/PCMCH_BreastFeeding_Placemat_2012.pdf)



## AIM 2. BETTER PATIENT, FAMILY AND CAREGIVER EXPERIENCE

People can get access to the care they need, when and where they need it

- Midwives not only reduce and divert emergency department and triage admissions, but also provide follow-up care or transition care in community. For example, midwives provide post-caesarean-section wound care and breast abscess monitoring in the community or at home, which would otherwise require return visits to hospitals.
- Midwifery care provides clients with 24/7 on call availability – at home, clinic, birth centre and hospital.
- This year, over 29,000 families will have the care of a midwife. Over 240,000 families have received midwifery care in the past 15 years. With a proven safety record, midwives are experts at providing high quality, evidence-based primary care to clients and their newborns in hospital, home, and birth centres. They provide care that Ontario families deeply value. For example, a study showed very high rates of exemplary client experience with midwifery.<sup>9</sup> Moreover, midwifery clients have lower rates of interventions and shorter hospital stays. By offering birth at home or at birth centres, as well as supporting successful vaginal birth after caesarean-sections, **Ontario midwives effectively reduce hospital stays and free up beds and hospital resources for those who need it most.** The provision of high-quality care at lower costs by midwives aligns strongly with accountability care principles.
- Midwives have a particularly important role to play in keeping birth in community. The practice of transporting people to give birth in hospitals is being challenged, with recommendations to shift care into the community with midwives.<sup>10</sup>

<sup>9</sup> Public Health Agency of Canada. What Mothers Say: The Canadian Maternity Experiences Survey. Ottawa: 2009, p. 3

<sup>10</sup> National Institute for Health and Care Excellence. NICE Guidelines: Intrapartum care for healthy women and babies. February 2017.





## People know how to navigate the system to meet their care needs

- The midwifery model already supports care coordination through midwives being on-call 24/7 and providing home visits. Midwives are often the first point of contact for their clients when they experience distress or have questions about their care. The completion of successful antenatal care and the provision of choice for access to various services, including cost-saving services such as home births, can continue to facilitate significant improvements in the delivery of clinical care valued by patients and caregivers.
- As the only province-wide primary health care professionals who provide continuity across both the hospital and community sector on a 24/7 basis, midwives possess unique expertise in coordinating care for effective and excellent delivery of health services. This expertise is of particular benefit to helping clients navigate the health care system.

## AIM 3. BETTER PROVIDER EXPERIENCE

### Providers have high levels of confidence in the system and provider health is supported

- OHTs can best utilize midwives by valuing them for their skill, scope, and expertise. Utilizing OBs for high-risk pregnancies and diverting low-risk pregnancies to midwives uses resources effectively.
- In Australia, midwife navigators facilitate the smooth transition across models of care and service providers for pregnant people with chronic or complex problems.<sup>11</sup> In interprofessional care models, research has shown that ensuring team members are working to full or expanded scope can both improve the provision of services to clients and increased health care provider satisfaction.<sup>12</sup>
- Liability is reduced when primary care professionals work to full scope, contributing to increased confidence in the system by both practitioners and clients.<sup>13</sup>

<sup>11</sup> Transitioning across professional boundaries in midwifery models of care: A literature review [HYPERLINK "http://www.womenandbirth.org/article/S1871-5192\(18\)30264-6/abstract"](http://www.womenandbirth.org/article/S1871-5192(18)30264-6/abstract) www.womenand-birth.org/article/S1871-5192(18)30264-6/abstract

<sup>12</sup> "Models of Organization of Maternity Care by Midwives in Canada: A Descriptive Review" J Obstet Gynaecol Can 2012;34(10):961-970. [https://www.jogc.com/article/S1701-2163\(16\)35411-1/pdf](https://www.jogc.com/article/S1701-2163(16)35411-1/pdf)

<sup>13</sup> HIROC Connection, Issue #32, Winter 2014, Pages 14 - 15 <https://www.hiroc.com/getmedia/e2757eeb-e2d8-4dd1-9f34-33502f585115/The-HIROC-Connection-Issue-32-Winter-2014.pdf.aspx?ext=.pdf>



## AIM 4. BETTER VALUE AND EFFICIENCY

### Use of system resources is optimized

- Midwifery-managed births have been shown to be cost-effective.<sup>14, 15</sup>
- Between 2003 and 2018, over 41,000 midwifery clients gave birth at home in Ontario. To put this into perspective, midwives attend about a fifth of all Ontario births (17%),<sup>16</sup> and roughly 20% of these births take place outside of hospital.<sup>17</sup> Thus, the potential for growth in home and birth centre births is great and the resulting cost savings, even greater. A 2015 study that analyzed the costs of midwifery-attended home births and hospital births in British Columbia found that cost savings from one home birth was approximately \$2,338.<sup>18</sup> Assuming 25,000 midwifery deliveries with a conservative 20% home birth rate, midwives could save the health care system an estimated \$11.7 million in a single year.<sup>19</sup>
- Given the quality care, patient experience and cost-effectiveness midwifery provides, the UK is engaged in a campaign to promote home birth. A similar campaign could support the fourth aim here in Ontario.

<sup>14</sup> Janssen PA, Mitton C, Aghajanian J (2015) Costs of Planned Home vs. Hospital Birth in British Columbia Attended by Registered Midwives and Physicians. PLoS ONE 10(7): e0133524. doi:10.1371/journal.pone.0133524

<sup>15</sup> O'Brien B, Harvey S, Sommerfeldt S, Beischel S, Newburn-Cook C, Schoopflocher D. Comparison of Costs and Associated Outcomes Between Women Choosing Newly Integrated Autonomous Midwifery Care and Matched Controls: A Pilot Study. JOGC July 2010 p. 650-656

<sup>16</sup> BORN Ontario. Midwifery Care Profile – Utilization of Services 2016-2017. 2019 May.

<sup>17</sup> Idem.

<sup>18</sup> Janssen PA, Mitton C, Aghajanian J. Costs of planned home vs. Hospital birth in British Columbia attended by registered midwives and physicians. PLoS One. 2015. Retrieved from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0133524>

<sup>19</sup> Idem.