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How has the integration of midwives into primary healthcare settings impacted access to care? A qualitative descriptive study from Ontario, Canada

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Abstract

Problem Most primary health care settings in Canada do not offer midwifery care. Midwifery remains poorly understood in Canada by some members of the public and healthcare providers.

Background Most midwives in Canada work in community-based midwifery-led continuity of care models that are not integrated into interprofessional primary healthcare settings.

Aim To investigate perceptions of how integrating midwives into primary health care teams impacts access to care.

Methods We conducted a qualitative descriptive study of expanded midwifery care models in Ontario, Canada. We completed 28 semi-structured interviews with midwives, other healthcare providers, healthcare administrators and policy makers. Interviews were audio recorded, transcribed, and then coded using open coding followed by axial coding in NVivo. We used Levesque et al.'s (Int J Equity Health 12:18, 2013) conceptualization of access to care to inform the interview questions and organize our findings.

Findings We identified themes related to each of Levesque et al.'s supply side dimensions of access to care. Integrating midwives increased visibility and trust of the profession (approachability and acceptability), decreased access barriers such as travel time and cost (affordability), increased collaboration between healthcare providers (appropriateness), and ensured more timely and available care (availability and accommodation).

Discussion Integrating midwives into primary healthcare settings can improve access to care, particularly for groups underserved by midwives. Integrating midwifery-led care within interprofessional teams can also enhance care appropriateness for equity-deserving populations.

Conclusion While stand-alone community-based midwifery care remains effective and efficient, policy makers should consider creating or expanding funding that supports the further integration of midwives into primary healthcare teams.

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Introduction

A recent high-profile report on the global state of midwifery highlighted the potential significant and lifesaving benefits of better integrating midwifery into health systems [1]. To fully leverage these benefits, there has been a call for investments to support midwives to provide the majority of sexual, reproductive, maternal, newborn, and adolescent healthcare (SRMNH) in primary healthcare settings [1]. The International Confederation of Midwives' Midwifery Services Framework, developed in collaboration with the World Health Organization and the United Nations Population Fund, identified that the second service development step in the process of strengthening the midwifery profession in a country includes determining how SRMNH services should be organized and notes that there is considerable variation in service organization globally [2]. Evidence has established the benefits of midwifery-led continuity of care models and the importance of regulatory mechanisms to support the autonomy of midwives, but there remains a need internationally for research to inform other aspects of the organization of midwifery services such as if and how they should be embedded within other primary health care services, and the implications of such arrangements [3–5].

While midwives in Canada attend more than one-tenth of births [6], they are often not integrated with other primary healthcare services [7, 8]. This is particularly true in provinces where midwifery care is most prevalent, i.e., British Columbia (where midwives attend 25% of births) and Ontario (where they attend 20%) [6]. The majority of midwives in Canada work in group practices that only include midwives, midwifery services are publicly funded, and members of the public can access services through self-referral. While midwifery services are in high demand [9], the profession of midwifery remains poorly understood in Canada by some members of the public and healthcare providers [10], and there are inequities in who accesses midwives, with people of low socioeconomic status being least likely to do so [11].

Funding arrangements have been identified as the most important factor restricting the integration of midwives in the Canadian province of Ontario [12]. Historically, midwives in Ontario have worked as independent contractors and have been remunerated through payments for a bundle of services that includes all the care associated with one pregnancy and birth (called a 'course of care') [7]. Course of care funding has established midwifery-led continuity of care as the standard for midwifery care in Ontario but has also limited opportunities for interprofessional collaboration and for midwives to respond to arising community needs if those needs do not constitute a course of care [7]. Midwifery funding is managed separately from both physician funding and hospital funding which contributes to midwives routinely being overlooked as a resource to address service gaps and left out of physician and hospital funding decisions that may affect midwives [7]. Course of care funding also constrains midwives' ability to increase access to care because it does not support episodic care, which is necessary in the context of harm reduction and working with transient populations, and it fails to compensate midwives appropriately for the extra time involved in caring for people with complex needs [13]. Funding arrangements that limit midwives to only working in continuity of care models and that require providing on-call intrapartum care contribute to attrition of midwives and consequently may negatively impact the availability of midwifery care [14].

In 2018, the Ontario Ministry of Health introduced alternative funding to support 'Expanded Midwifery Care Models' (EMCMs) with the objectives of improving access to midwifery care and enhancing the integration of midwifery care into primary healthcare [15, 16]. EMCM funding enables midwives to be paid for services that either do not constitute a full course of care (i.e., episodic care), or that fall outside a course of care (e.g., extended well newborn care beyond 6 weeks) [15]. When the funding was introduced in 2018 there were ten EMCMs located across Ontario, including three hospital-based programs and seven programs based in primary healthcare settings [15]. As part of a larger project evaluating the impact of this novel funding mechanism, we sought to describe stakeholders' perceptions of EMCMs. The research question we examine in this manuscript is *what are stakeholders' perceptions of how the integration of midwives into primary healthcare settings impacts access to care?* We have examined the perspectives of midwifery clients (i.e., service users) separately to allow their voices to be highlighted and shared with adequate depth, and in this manuscript, we focus on the perspectives of the following stakeholders: midwives, collaborating healthcare providers, healthcare administrators, and policymakers who were involved with EMCMs.

Methods

Research team and reflexivity

Our research team members all had experience conducting qualitive research, and interviews were conducted by team members with PhD or MSc level research training. Two members of the team, including the principal investigator, are midwives. This

perspective was balanced by team members whose expertise encompassed health policy, social work, public health, epidemiology, and primary care. One team member is non-binary, and the rest are women. We used reflexivity to critically consider how our identities shaped our interpretation of the findings and used investigator triangulation to support rigor. Having midwives as part of the research team ensured a nuanced understanding of what participants told us about how EMCMs differ from standard community-based midwifery-led continuity of care models in Ontario while having team members with other backgrounds helped to ensure that our interpretation of the data reflected the perspectives of our participants rather than pre-existing knowledge of the midwife members of the team. Together, the range of perspectives of the team members and our collective contributions to the data analysis supported interpretation that remained close to the data.

Theoretical framework

We used Levesque et al.'s patient-centered access to care framework as the theory underpinning our understanding of access to care (see Fig. 1) [17]. Leveque's conceptual framework was developed based on a comprehensive synthesis of the literature to address a lack of clarity within health services research regarding "concepts of access and utilization, lack of consensus on sub dimensions of access, and ongoing blurring of access as a concept and its determinants" [17]. The framework has been successfully applied to a wide range of research spanning both high- and low-income countries across seven continents and is appreciated by scholars as a comprehensive improvement upon prior frameworks that is easy to operationalize [18]. The framework has previously been applied in midwifery research examining access to care [19, 20].

Levesque et al.'s framework takes a broad approach to conceptualizing access to care, defining it as "the opportunity to identify healthcare needs, to seek healthcare services, to reach, to obtain or use health care services, and to actually have a need for services fulfilled" [17].

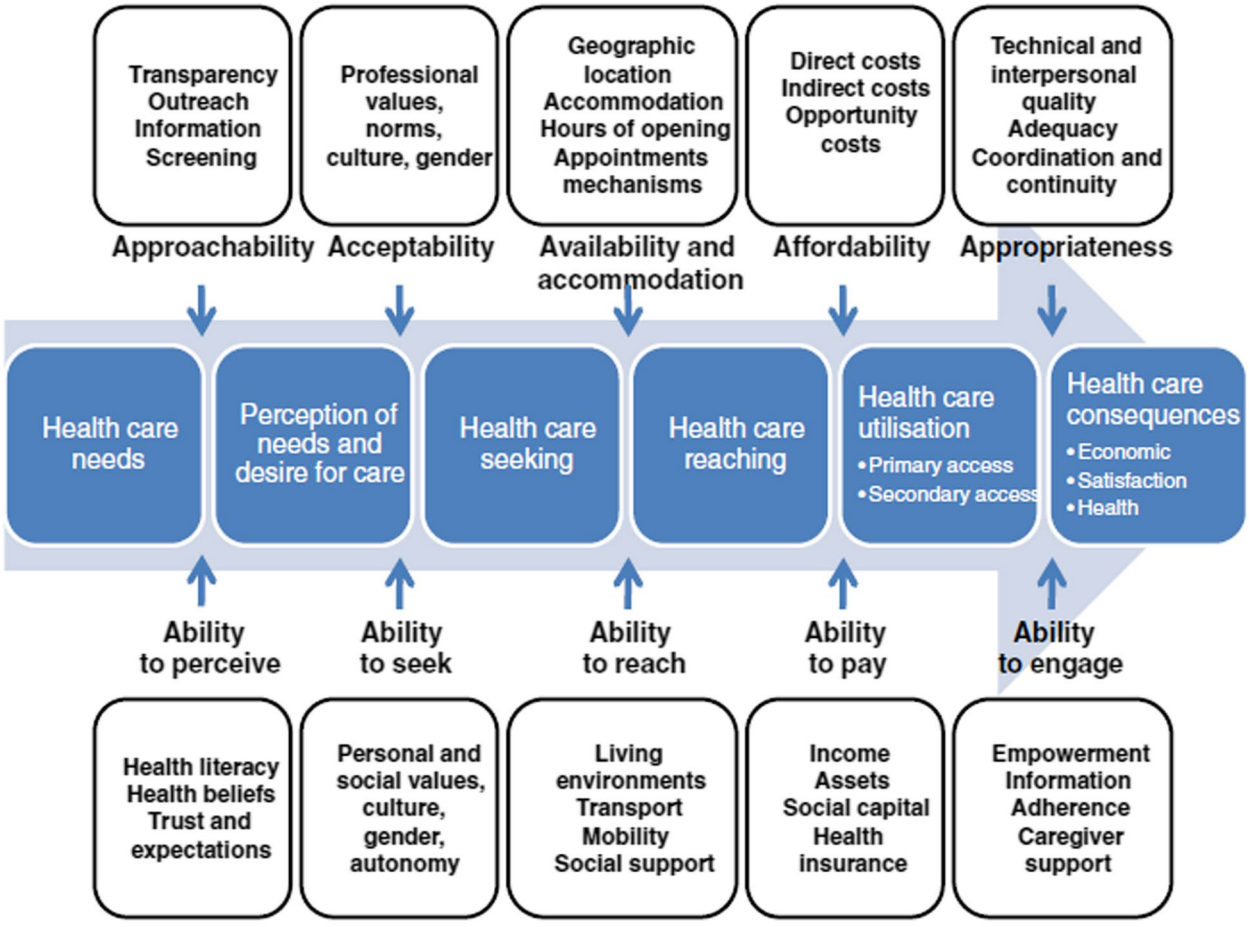

Fig. 1 A conceptual framework of access to health care. From Levesque J, Harris M, Russell G. Patient-centered access to health care: conceptualising access at the interface of health system and populations. International Journal for Equity in Health. 2013;12:18. https://doi.org/10.1186/1475-9276-12-18

The framework includes five key constructs related to the provision of services, i.e., the supply side, (approachability, acceptability, availability and accommodation, affordability, and appropriateness) and five corresponding constructs related to accessing services, i.e., the demand side, (ability to perceive, ability to seek, ability to reach, ability to pay, and ability to engage) [17]. This conceptualization highlights how access to care can be impacted both through changes to how services are provided and through changes in the ability of health service users.

Given that EMCMs are an intervention that changes how services are provided, our analysis focusses on the five constructs related to the provision of services. We used the framework (i.e., our chosen conceptualization of access to care) to develop our interview guides and to organize our data analysis and reporting; however, our interpretation of how participants understood the integration of midwifery to impact access to care was based on the data we collected rather than the application of pre-existing theory. We provide descriptions of the five supply side constructs for the reader in the results section to frame our findings.

In considering access to care, another key concept is that of equity-deserving populations. This term is used to refer to groups who have historically been denied equal access to opportunities such as employment and education due to structures of power and oppression [21]. We chose to use the term 'equity-deserving' because it emphasizes the structural roots of inequitable access to healthcare and avoids labels such as 'vulnerable', 'marginalized', 'at risk', or 'socially disadvantaged', which are deficit-based and carry negative connotations.

A third key concept in our research is primary healthcare settings. We understood primary healthcare settings to be locations where primary care is provided, and we conceptualized primary care in accordance with the World Health Organization's definition as "a model of care that supports first-contact, accessible, continuous, comprehensive and coordinated person-focused care" [22].

Table 1 Expanded midwifery care models included in study

Organizational setting	Geographic location
Black Creek Community Health Centre	Toronto, ON
Crown Point Family Health Team	Hamilton, ON
Delhi Family Health Team	Delhi, ON
South Riverdale Community Health Centre	Toronto, ON
Mount Sinai Family Health Team	Toronto, ON
Norwest Community Health Centre	Thunder Bay, ON
Wellfort Community Health Centre	Brampton, ON

Study design and population

We conducted a qualitative descriptive study using semi-structured interviews to explore how the integration of midwives into primary healthcare settings in Ontario's initial EMCMs impacted access to care [23, 24]. The context was the Ontario health system, a publicly funded system which has funded midwifery-led continuity models since 1994. Participants included midwives, other care healthcare providers (i.e., physicians, nurses, social workers), and healthcare administrators from the seven EMCMs first funded in 2018 which are embedded within primary healthcare teams (see Table 1). We also interviewed policymakers from the provincial government and provincial midwifery organizations.

Participant recruitment

We recruited participants directly by email using purposive and respondent driven sampling for maximum variation. We began by inviting policymakers with key organizations and all midwives working in the seven included EMCMs to participate in the study. We then requested midwife participants to ask administrators and other health care providers working at their EMCM if they would consider participating in the study, and then we emailed those who were interested. Recruitment was finished when we observed thematic saturation (i.e., no important new themes arising).

Data collection

Prior to the interviews, participants received written information about the study, had an opportunity to ask questions, provided written informed consent to participate and completed an online demographic questionnaire hosted on REDCap, a secure web platform. We developed the guide for semi-structured interviews based on our theoretical framework (see Supplementary file: Interview Guide). We conducted one-on-one interviews in private settings on Zoom or by telephone based on participant preference. E.D. conducted 22 interviews, C.M. conducted 6, and R.G. conducted 1. To support interviews to be conducted by a researcher with expertise relevant to that of the participant (i.e., clinical or policy), the interviewing researcher was known to some but not all of the midwife participants, and most of the other interviews were conducted by a researcher who was not previously acquainted with the participant. Interviews lasted between 30 and 45 min in duration. During the interviews, we used unstructured questions to probe to explore contrasting views. We digitally audio-recorded the interviews with consent. Half the recordings were professionally transcribed, and the rest were digitally transcribed using Otter.ai and reviewed by R.G. to ensure accurate transcription. We became aware that high quality

transcription using artificial intelligence was an option partway through the project. We initially tested Ottera.ai with review by a team member on a couple of interviews to ensure that we were confident that the transcriptions were of equally high quality as the professionally transcribed interviews and then switched to this approach as it was more affordable and did not compromise the quality of the transcripts.

Data analysis

We managed and analysed anonymized transcripts in NVivo12. We initially organized the data according to Levesque et al.'s [17] five constructs of access to care pertaining to the provision of services, and then used an inductive approach to analyse the data using open coding followed by axial coding. R.G. coded the interviews using an iterative process in which the research team met to discuss emerging themes, review analytical memos summarizing codes and findings, and to revise or reorganize codes as necessary.

Trustworthiness

We used a variety of methods to establish trustworthiness of our findings [25]. To support credibility, we used data triangulation (i.e., including participants who had different work roles) and researcher triangulation, we collected rich data and ensured that we presented it in ways that remained true to the perspectives of our participants, we sought to uncover divergent perspectives among participants, and we continuously paid attention to our own influence as interviewers and analysts. We used purposive sampling to recruit participants from all of the existing EMCMs based in primary care settings to support transferability of our findings within the Ontario context. To establish dependability, we created a chain of evidence that includes a codebook, coded transcripts, tables compiling supporting data for each theme, and analytic memos. To ensure the confirmability of our findings, we used an iterative research design, ongoing reflexivity, and researcher triangulation to ensure that our findings were shaped by our participants, along with the documented chain of evidence.

Ethics approval

The study was approved by the Hamilton Integrated Research Ethics Board (HiREB, protocol #10553) in Hamilton, Canada and meets the ethical standards laid out in Canada's Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2) [26].

Results

Between June 2020 and December 2020, we conducted 28 interviews with 13 midwives, six other healthcare providers and four administrators from the seven included EMCMs, and five policymakers working with the provincial government or provincial midwifery organizations. Most participants identified as women (n = 24; 86%), 4 (14%) as men, and 1 (3%) as non-binary. Most participants were born in Canada (n = 21; 77%) and self-identified as white (n = 20; 71%), and only two (n = 7%) reported having a disability.

Our analysis of the interviews generated themes within each of the five dimensions of Levesque et al.'s conceptualization of system or provider factors that influence access to care, namely, approachability, acceptability, availability and accommodation, affordability, and appropriateness [17]. These themes are summarized in Table 2 and discussed below.

Approachability

Approachability refers to how visible and identifiable services are to people who need health care [17]. Two themes arose related to approachability: co-location of services creates comfort and visibility creates approachability. Many participants noted that midwives being co-located with other healthcare providers resulted in increased uptake of midwifery care among people receiving other primary healthcare in that setting. This was

Table 2 Overview of themes and participants who contributed supporting data

Levesque's Access to Care Framework Dimension	Theme	Participant Group			
		Midwives	Other healthcare providers	Health administrators	Policymakers
Approachability	*Co-location creates comfort*	X	X	X	X
	Visibility creates approachability	X	X	X	-
Acceptability	*Recognition and legitimization of midwifery*	X	X	X	-
Availability & Accommodation	*Taking services to clients*	X	X	X	-
	Always available	X	X	-	-
	Easily accessed	X	X	-	X
Affordability	*Cost-savings– reduced travel*	X	X	X	-
Appropriateness	*System navigation and care coordination*	X	X	X	-
	Midwives' specialized knowledge	X	X	X	-

attributed both to the convenience of being able to access midwifery care where one was already receiving other services and to the comfort of being able to receive midwifery care in a familiar setting:

> *…we do have a lot of [patients]… that might have limited mobility and for various reasons get sort of anxious about seeing new providers and going to new places. So, to be able to have the service right here in the office was great. (Physician 1)*

> *I think that being in a community [centre] makes it more accessible and more attractive to community members. (Administrator 3)*

Participants also spoke to how the presence of midwives in primary healthcare facilities makes midwives visible to individuals who were previously unaware of midwifery:

> *I think [a strength of EMCMs is] just improving the visibility of midwifery in the province… Because there's a lot of people who come to my program that may that probably wouldn't have sought out midwifery care otherwise. And so being able to give them an idea and give other care providers a better idea of what midwifery offers… (Midwife 10)*

Additionally, midwives' participation in programming not focused on pregnancy, for example a drop-in for people who use substances, supported trust-building among service users which enhanced approachability.

Acceptability

Acceptability refers to the fit between professional values and other characteristics of services, and the values and norms of service users [17]. The recognition and legitimization of midwifery arose as the main theme related to acceptability. Participants described how the integration of midwives into primary healthcare settings has increased opportunities for midwives and other healthcare providers to interact and collaborate, which has led to improved understanding of the role of midwives and generated greater respect for their knowledge and skills. Respect from other healthcare providers then positively impacts the acceptability of midwifery for clients:

> *I think that the relationship that I've built with the staff…is apparent to the client, then creates that level of acceptability. Because they can see we all trust each other. We all work together frequently, and that has certainly gone really far in terms of creating that acceptability of care. (Midwife 7)*

Participants spoke to how simply being located in a facility with other healthcare providers whose legitimacy is not questioned increased the credibility of midwifery care. Some described how the integration of midwives led to other healthcare providers becoming champions for midwifery care. One participant described a shift from midwifery being perceived as an optional service to an ideal model for primary pregnancy, birth, and postpartum care:

> *I think there is this opportunity for midwifery to be seen as an equal part of the health system in a different way, as opposed to something that's nice to have for some people. […] There really is, I think, a value - a potential value for the average person to understand, not just that midwifery is an option, but is a best practice for care. (Administrator 2)*

Availability and accommodation

Availability and accommodation pertain to capacity of the physical resources that produce health services, and include the modes of service provision (e.g., in-person, virtual, etc.), the delivery model (e.g., duration and flexibility of working hours), and geographic location [17]. We identified three themes related to this dimension: taking services to clients, always available, and easily accessed. These themes highlight how midwifery services increased access to care through mobile care in clients' homes or other locations outside healthcare institutions such as community-based drop-in centres, virtual appointments, appointments outside of regular 9 – 5 working hours, 24-hour/7-day on-call services for urgent concerns, and flexibility to accommodate drop-in appointments. Participants noted that these features were particularly beneficial for clients who have difficulty accessing healthcare. For example, midwives explained how offering same-day appointments allowed users of a co-located safe consumption site to easily access prenatal care:

> *…the CHC has a harm reduction program where they do have a safe injection site. And they also have a [rapid access to addiction medicine] clinic… and there's some referrals that come through there, just coincidentally, that are pregnant, and then the midwife's on site, so they say hey, do you want to see the midwife and those people can just walk up the hall and receive prenatal care. (Midwife 13)*

Many participants described how midwifery provided round-the-clock access to urgent care and spoke to the value of this within the primary healthcare setting:

> *… this 9 – 5 thing, you have going on, I know it's nice for [providers] but it's not nice for patients. To truly create a health care system that's functional requires that 24/7 accessibility at some level for the most*

urgent things. Otherwise, you just have acute emergency care. (Midwife 6)

Affordability

Affordability refers to the direct costs and time required to use services. The main theme related to this dimension was the cost savings of reduced travel [17]. Travel and associated costs for clients were reduced through mobile care, co-location of services which allowed people to access multiple appointments at the same location on one day, and the creation of services that were closer to their home. As one participant explained,

... part of the draw of this program is to try to prevent patients from having to travel outside the county to access care... now you're paying babysitters for your other kids, now you're driving you know, an hour and a half away and paying the gas, you're paying parking at the larger hospitals and those kind of things, so I think trying to keep care as locally as possible is a benefit... (Physician 3)

Appropriateness

Appropriateness entails the degree to which services align with clients' needs and ensure timely access to care that is of high quality technically and interpersonally [17]. We identified two themes related to appropriateness: system navigation and coordination of care, and midwives' specialised knowledge. These themes were emphasized particularly in settings with a mandate to care for equity-deserving populations. Participants described how midwives helped to improve care by coordinating both clinical care and supports to address the social determinants of health. As one administrator said,

So, they're [midwives] sort of our navigators of the health care system and team so that these people can get appropriate care and timely care. (Administrator 1)

In addition to helping clients to navigate the system, the co-location of midwives with other providers improved access to needed care:

... oftentimes when we refer offsite, or we have to set up appointments for people, especially within certain populations, those appointments are missed, or they don't make them, or going into a new building or place that might not feel comfortable, there's fall off along all of those places. Being able to have that immediate introduction and to have that care kind of embedded within places where people are already accessing care, certainly ends up making it much easier and more engaged throughout the entire process. (Nurse 1)

Participants reported that quick access to other team members supported valuable collaboration and ensured an ideal mix of expertise to support high quality care. The continuity of care that midwives build with their clients supports them to share valuable information about their clients' medical history, needs and priorities with other team members to ensure the appropriateness of care. Opportunities for midwives to collaborate with other team members also exposed those providers to the unique expertise related to pregnancy, birth, and postpartum that midwives have. As a result, other providers began to consult with midwives about the care of patients not receiving direct care from midwives (e.g., for issues related to breastfeeding), further supporting excellence in care within their primary health care setting. One administrator described an example of how exposure to midwives' expertise can help other providers to appreciate how midwives' specialized knowledge makes them the most appropriate care provider for many aspects of sexual and reproductive health care:

[We have a family physician] who may have really not understood the potential scope of midwifery care, and in working with the midwives as part of an integrated team has come to see, oh my gosh, these guys are really good at this. They're better at it than I am, and not only will I use the medical directives to support them to work the full scope, this person becomes a champion for midwifery. (Administrator 2)

Discussion

Our research is the first to investigate how the integration of midwifery care into primary healthcare settings in Canada impacts access to care. The perspectives of our participants provide two important insights into how the integration of midwifery care into primary healthcare settings in Canada impacts access to care. The first of these is that integration into primary care can improve access to midwifery-led care, particularly for equity-deserving populations, through mechanisms that improve the approachability, acceptability, and availability of midwifery. Our findings show that this happens for four key reasons: (1) integration into primary healthcare settings increases visibility to people not previously aware of midwifery care; (2) access barriers are removed by locating midwifery services where people access other healthcare; (3) co-location with familiar professions (e.g., medicine, nursing, etc.) creates legitimacy for midwifery; and (4) interprofessional collaboration builds trust and

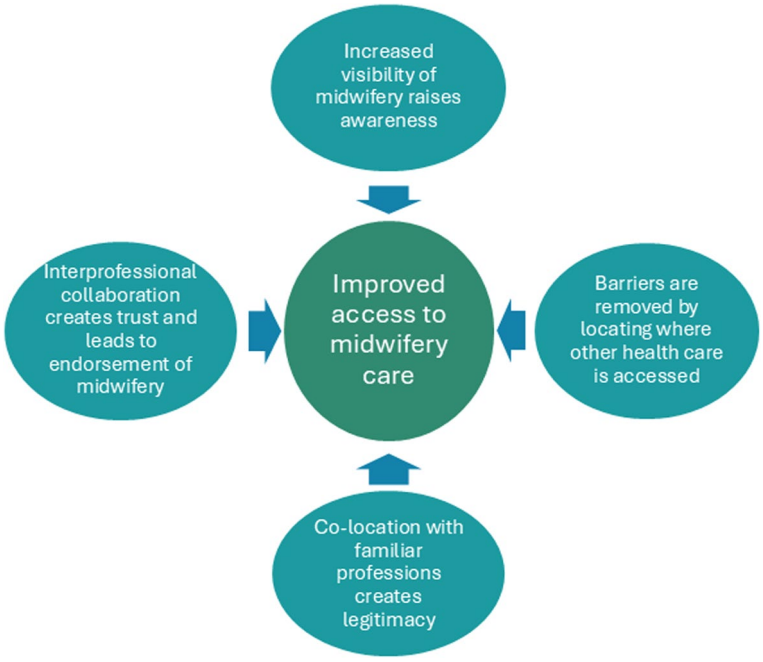

Fig. 2 How the integration of midwives into primary healthcare settings increases access to midwifery care

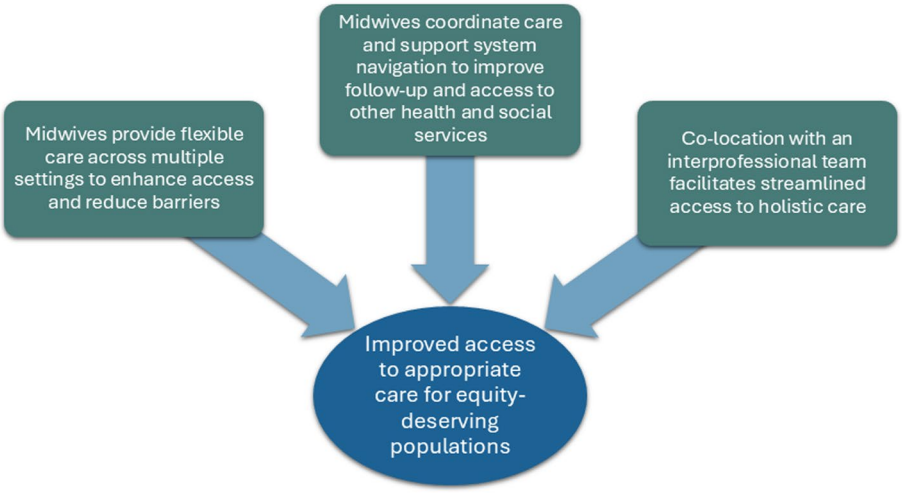

Fig. 3 How the integration of midwives within primary healthcare settings can improve access to appropriate care for equity-deserving populations

recognition of midwives' skills and expertise amongst other providers, who then endorse midwifery care to their patients (See Fig. 2).

The second important insight is that when midwifery-led care is integrated within an interprofessional setting, it can improve access to appropriate care for equity-deserving populations. This occurs for three reasons: (1) midwives bring expertise in a service delivery model that bridges the provision of care across multiple settings (home, community, hospital), incorporates 24/7 coverage, and responds flexibly to clients needs (including the timing and location of visits), all of which enhance the availability of care and help to reduce the barriers experienced by equity-deserving groups; (2) as primary healthcare providers, midwives take on a role of care coordination and system navigation which includes supporting clients to access other health and social services that they need and following up when they do not attend care; and (3) co-location with an interprofessional team ensures an ideal mix of expertise to address clients' needs holistically, and facilitates streamlined, timely access to other providers when needed (See Fig. 3).

Previous research examining barriers and facilitators of maternal healthcare utilization using Levesque et al.'s [17] access to care framework has noted that access to care can be improved through provider-side characteristics

that mitigate user-side barriers [27]. With this understanding, our findings make sense given previous Canadian research on access to prenatal care and to midwifery care [10, 28, 29]. Our participants described how integration of midwifery care into primary healthcare settings addresses known barriers to prenatal care for people who are less likely to access care (e.g., long waits, short visits, lack of provider time) and provides known facilitators that increase access to care (e.g., non-judgemental care, trust, respect) [28, 29]. Low awareness of midwifery services has been a significant barrier to people of low socioeconomic status (SES) accessing midwifery care and occurs because of social networks that are less likely to include people who are familiar with midwifery care and because primary healthcare providers are unlikely to refer to midwifery care [10]. As our participants revealed, the integration of midwives into primary healthcare addresses these barriers by increasing the visibility of midwifery, enhancing its legitimacy, and fostering endorsement of midwifery services by the first point of contact with the system when pregnant.

The international literature exploring the integration and scale-up of midwifery services suggests that our findings can contribute to global strategizing about how to improve access to midwifery. Improving the integration of midwives and scaling up midwifery-led care remains a challenge around the globe [4]. In high income countries, lack of appropriate funding arrangements pose a barrier to scaling up midwifery-led care and limit the integration of midwives [3, 30]. Our findings provide evidence that tailor made funding arrangements that address known integration challenges can be a successful tool to improve access to midwifery services. In low-and-middle-income countries (LMICs), inadequate knowledge about midwifery and lack of confidence in midwifery are common user-side barriers to implementing midwifery-led care, while having non-midwife stakeholders who are positive about the benefits of midwifery-led care is key to successful implementation [31]. Our findings suggest that in contexts where midwives typically work in isolation (e.g., are the sole care providers staffing clinics or birthing centres in rural and remote settings), or have limited interactions with other health professionals, it may be worth exploring opportunities to co-locate well skilled midwives with other health professions to improve the integration of the profession through building trust and recognition of midwives' skills and expertise among other providers who can then become champions for midwifery-led care. Locating midwives in publicly accepted community health centres might also enhance the legitimacy of the profession and improve respect among potential service users [32]. It is important to note that contextual differences between Canada and LMICs may limit the transferability of this strategy, as the potential to improve integration by deploying midwives to community health centres might be undermined for a plethora of reasons, including inadequate training or orientation, competition from other professions who seek to do the same work, and lack of adequate, publicly funded compensation [33].

Implications for policy

Funding arrangements that support the integration of midwives into primary healthcare settings can be an effective policy to increase access to midwifery services and to improve the appropriateness of care for equity-deserving groups. In Canada, many midwives work in stand-alone midwifery practices that support excellent clinical outcomes and high levels of client satisfaction [33–36], and this model can appropriately serve a significant portion of the pregnant population [1]. Midwives' preferences regarding working arrangements are varied and it is important to offer a variety of work arrangements to enhance retention in the profession [37]. Our findings do not suggest that all midwives in Canada should be integrated into interprofessional primary health care teams but support integrating midwifery services into primary healthcare settings where integration may improve access to optimal sexual and reproductive healthcare services, particularly for equity-deserving populations.

Strengths and limitations

Use of Levesque et al.'s [17] conceptualization of access to care was a strength of our study, as it facilitated examination of this topic using a broad and comprehensive understanding of access to care. Both midwife and other health professional participants shared consistent examples and explanations of how and why integrating midwives into primary care settings can improve access to care across all five dimensions of access to care. It is not surprising that administrators and policy makers, who have less opportunity to observe how care is delivered on the front line, provided data that informed fewer themes, as illustrated in Table 2. Our confidence in our interpretation of the data was strengthened by the consistency of observations and values across the included stakeholders and their shared high level of enthusiasm about the potential benefits of integrating midwives in primary care settings.

This study has some limitations. In this manuscript we have not included the perspectives of service users, which would have allowed for data triangulation. We did interview service users as part of the larger research project and their perspectives aligned with those of providers; however, we decided to report their perspectives separately to allow a more in-depth description of their experiences. While we recruited a range of participants

and achieved data saturation, it is possible that we did not uncover all divergent points of view. However, themes reported in this manuscript were consistent across the data we collected. Additionally, as a qualitative investigation, our findings are not intended to be generalizable. Although our research focused on midwifery in Ontario, our findings about how integrating midwives into primary healthcare teams improves access to care may be transferable to other Canadian settings and to settings where community-based midwives tend to work independently outside of interprofessional primary care settings. Finally, the identities of the interviewing researchers primarily appeared to create comfort and trust with the participants, but it is possible that some participants felt inhibited from fully sharing criticisms of EMCMs with a midwife-led research team. We did not observe any notable differences in responses between participants who knew the interviewer prior to participation and those who did not.

Conclusion

Integrating midwives into primary healthcare settings can improve access to appropriate sexual and reproductive health services. Use of Levesque et al.'s [17] conceptualization of access to care revealed that this occurs primarily through mechanisms that improve the approachability, acceptability, and availability of midwifery care. Furthermore, integrating midwifery-led care within an interprofessional setting can improve the appropriateness of care for equity-deserving populations. While stand-alone community-based midwifery care remains effective and efficient [33–35], the addition of service delivery models of midwifery-led care integrated in primary healthcare settings should be considered to maximize the potential health benefits of midwifery care. In settings where stand-alone midwifery practice groups are predominant, policy makers should consider new or increased availability of funding arrangements to support the integration of some midwives into primary healthcare settings.

Supplementary Information

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Supplementary Material 1.

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Authors' contributions
EKD conceptualized the research. EKD, SB, and CAM contributed to the study design. EKD, RG, and CAM collected interview data. RG and BJ conducted data analysis. EKD, RG, AD, SKC, and SB contributed to data interpretation. EKD wrote the main manuscript text and prepared the tables and figures. All authors reviewed the manuscript.

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Data availability
The data for this study is in the form of interview transcripts which are not publicly available because the research participants did not provide their consent to share the data.

Declarations

Ethics approval and consent to participate
The study was approved by the Hamilton Integrated Research Ethics Board (HiREB, protocol #10553) in Hamilton, Canada, meets the ethical standards laid out in Canada's Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2 (2022)), and adheres to the Declaration of Helsinki. All participants in the study provided written informed consent to participate.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

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