



Australian College of
Midwives

ACM: For midwives. With women. For the future.

*Select Committee on Adopting Artificial
Intelligence*

ACM Submission

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Select Committee on Adopting Artificial Intelligence

The Australian College of Midwives

The Australian College of Midwives (ACM) is the peak professional body for midwives in Australia; and welcomes the opportunity to provide a written submission to the **Select Committee on Adopting Artificial Intelligence**. ACM represents the professional interests of midwives, supports the midwifery profession to enable midwives to work to full scope of practice (SoP), and is focused on ensuring better health outcomes for women, babies, and their families.

Midwives are primary maternity care providers working directly with women and families, in public and private health care settings across all geographical regions. There are 33,594 midwives in Australia and 1,195 endorsed midwives¹. ACM is committed to leadership and growth of the midwifery profession, through strengthening midwifery leadership and enhancing professional opportunities for midwives.

Terms of Reference

This submission will address the following terms of reference:

- recent trends and opportunities in the development and adoption of AI technologies in Australia and overseas, in particular regarding generative AI;
- risks and harms arising from the adoption of AI technologies, including bias, discrimination and error;
- opportunities to adopt AI in ways that benefit citizens, the environment and/or economic growth, for example in health and climate management;

Background

Artificial Intelligence is being used in maternity care, both as clinical tools and decision-making aids. These new tools have enormous potential to improve safety, accuracy and efficiency, but there are risks which need to be carefully considered and mitigated.

Australian and international organisations are developing guidelines and recommendations for the use of AI. For instance:

- The [CSIRO Artificial Intelligence Roadmap](#)
- The Australian Alliance for Artificial Intelligence in Healthcare – [A National Policy Roadmap for Artificial Intelligence in Healthcare](#)
- The World Health Organisation – [The role of artificial intelligence in sexual and reproductive rights – Technical brief](#)

The ACM will not repeat all the recommendations made in these reports, but will highlight certain considerations on the use of AI in maternity care, and their impact on midwives, women and families.

The priority opportunities for ACM include;

1. Enact legislation to ensure that AI cannot replace human care by health professionals in staffing levels, clinical care, or decision-making.

2. Ensure appropriate education about AI is provided to midwives and nurses, both in pre-registration programs and as Continuing Professional Development opportunities, including education on discussing the use of AI tools with women and families. Offer scholarships and free education packages.
3. Ensure midwives are actively involved in and consulted on the development, implementation and refinement of all AI tools for use in midwifery and maternity care.
4. Provide scholarships and grants for midwives to undertake research in the emerging field of AI in midwifery and maternity care, including midwifery leadership.
5. Require that AI-generated answers to questions which include health concerns are flagged as potentially unreliable, and users are directed to contact a health professional for advice.

Recent trends and opportunities in the development and adoption of AI technologies in Australia and overseas, in particular regarding generative AI

Artificial intelligence (AI) is being increasingly used in health and maternity care in Australia and internationally. Some examples include:

- The [MoTher app](#) automatically sends information about glucose levels to health professionals directly from the pregnant woman's glucometer, replacing paper-based entry and allowing clinicians to track glucose levels in real time and follow up urgent readings more promptly.
- A small [AI-assisted camera](#) which allows pregnant women with diabetes to have eye checks during their regular check-ups, rather than requiring multiple separate eye appointments, is being trialled at four Australian hospitals.
- Small [AI-assisted ultrasounds](#) that plug into a smartphone or tablet increase access to ultrasound, especially for rural and remote women.
- AI triaging of messages sent to a help desk that classifies maternity urgency according to high-risk words and phrases more accurately than humans reduced workload for help-desk agents by 12% in [Kenya](#).
- An AI-powered smartbot, named [NeMa](#), is being piloted in India. Integrated with the Safe Delivery App, the smartbot provides immediate evidence-based advice and information to maternity healthcare workers in low-resource settings, and is facilitated by the United Nations Population Fund.
- Artificial intelligence triage tools such as that developed by [Johns Hopkins Medicine](#) improve efficiency and accuracy of triaging.

Risks and harms arising from the adoption of AI technologies, including bias, discrimination and error

AI, including generative AI, has a huge potential to revolutionise healthcare, improve accuracy, and free clinicians up for more time for higher-order midwifery, clinical and supportive care. However, generative AI is currently untested and unregulated for use in clinical settings², which leaves a dangerous gap between research and practice, and therefore increases clinical risk and potential patient harm.

While AI has the capacity to improve outcomes for women and babies through early and accurate detection of deterioration, and through improved access to services in low-resource settings, adoption of AI technology must be approached cautiously, for many reasons. The way women experience

interactions with caregivers during the perinatal period has a life-long profound impact on her, her baby and her family, and it is imperative that the woman-midwife relationship is safeguarded. A few important considerations are outline below, although this is not an exhaustive list:

- ACM does not agree with the replacement of human interaction for clinical care unless there are extenuating circumstances which preclude human interaction. Relying on AI tools to an extent that limits care by qualified midwives and other health professionals would be dangerous, as human caregivers can pick up subtle signs that AI tools will miss³.
- AI should not replace human interaction for psychosocial support. No matter how advanced AI tools become, they will never be an acceptable replacement for relationship-based care with a midwife or other health professional.
- AI tools should not be used to increase staffing ratios for midwives. With rapid advancements in the development of AI tools, it is reasonable to expect that these tools may reduce task-based workload for midwives and increase efficiency. It is important that this is not used as a rationale for reduced midwifery staffing. Midwives across Australia are understaffed and burnt out, and often do not have the time to provide the quality of care they wish to^{4,5}. Outsourcing some task-based work to AI tools would free up time for quality woman-centred care.
- It is important that AI-assisted decision-making aids and monitoring tools do not lead to a loss of clinical decision making or clinical skills for midwives.
- AI tools should never be used instead of employing appropriately qualified and experienced midwives.
- The mother should always be the final decision-maker in her and her babies care, supported by human caregivers. AI-assisted recommendations should never be given more weight than the mother's choice or the expertise of midwives and other health professionals.

With the recent wide-scale uptake of the use of generative AI platforms such as ChatGPT, pregnant and postnatal women increasingly choose to rely on these tools for quick answers to questions and concerns. Studies show that ChatGPT answers to pregnancy concern questions are only moderately reliable^{6,7}, and that readability is at a University level⁶. Care must be taken to ensure women and families are aware of the limitations and dangers of relying on AI-generated answers.

Similarly, midwives may turn to unofficial AI tools such as ChatGPT for advice, and education is required to ensure midwives are aware of the limitations of using these tools. Appropriate support and mentoring need to be available so that midwives do not feel the need to turn to these tools. Support may be in the form of both human and official, tested AI decision-making aids.

Recommendations

- Require that AI-generated answers to questions which include health concerns to be flagged as potentially unreliable, and users directed to contact a health professional for advice.
- Enact legislation to ensure that AI cannot replace human care by health professionals in staffing levels, clinical care, or decision-making.

Opportunities to adopt AI in ways that benefit citizens, the environment and/or economic growth, for example in health and climate management

It is essential that midwives and nurses have a solid understanding of AI in healthcare⁸. This field is rapidly emerging, and midwifery students, midwives, and endorsed midwives need to be provided with

ongoing education and upskilling opportunities. It is also essential that high-quality research is undertaken in this field, with a midwifery lens.

Midwives and nurses should be actively consulted in the development, implementation, refinement and review of all AI tools for use in healthcare⁸. Midwives and nurses are ideally placed to understand the impact these tools can have on maternity care (both positive and negative), and to advocate for the most appropriate, effective, and woman-centred use of these tools.

Recommendations

- Ensure appropriate education about AI is provided to midwives and nurses, both in pre-registration programs and as Continuing Professional Development opportunities, including education on discussing the use of AI tools with women and families. Offer scholarships and free education packages.
- Provide scholarships and grants for midwives to undertake research in the emerging field of AI in midwifery and maternity care, including midwifery leadership.
- Ensure midwives are actively involved in and consulted on the development, implementation and refinement of all AI tools for use in midwifery and maternity care.

Conclusion

AI clinical tools and decision-making aids have the potential to positively impact maternity care, especially in low-resource settings. Safeguarding human care by midwives and other healthcare professionals should be a priority when considering the introduction or expansion of any AI tool. Midwives should be educated on the use of AI, and should be integral to the design, implementation and review of all AI tools used in maternity care.

The Australian College of Midwives looks forward to ongoing consultation in the digital health and AI space in Australia and seeks to be included in further conversation and innovation opportunities.



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Consent to publish

ACM consents to this submission being published in its entirety, including names.

Consent to provide further information

ACM is available to provide further expert opinion and advice if required.

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