

Guideline for Physiotherapists on the Implementation of AI in Clinical Practice

Introduction:

Artificial Intelligence (AI) is being rapidly integrated into and changing the delivery of health care.

While the College of Physiotherapists of Manitoba (CPM) acknowledges the potential for AI to impact accessibility and reduce administrative burden, physiotherapists and student physiotherapists must also consider the significant ethical, legal and professional challenges that may come with its use.

AI should be used to enhance, not replace, a physiotherapist's clinical skills, compassion and professional judgment in practice. If a physiotherapist considers AI as a digital support worker in their practice, they would not assign a task to AI if they are not competent in that practice area and they could not rely on the AI to make clinical decisions for them.

Definitions:

Artificial Intelligence (AI) is an umbrella term that refers to the ability of a machine (e.g. computer) to perform tasks associated with intelligent beings, such as reasoning, language comprehension and decision making.

Generative AI (GenAI) refers to advanced AI systems that can be prompted to promote new content including audio, text and videos, in response to prompts from users. Gen AI relies on massive datasets and complex underlying algorithms and computer models.

Purpose:

This guideline does not set out new professional requirements but provides strategies for integrating AI into quality patient care while ensuring compliance with relevant legislation and standards of practice. This guide will provide general information about AI use, however, please be advised that:

1. Before implementing AI into practice, physiotherapists must possess essential competencies related to AI use and digital practice.
2. The field of AI is rapidly evolving with new developments all of the time. What is current and accurate today may be incorrect or irrelevant tomorrow. Physiotherapists who use AI in practice must maintain ongoing competency in this subject area.
3. There is limited evidence related to AI use in physiotherapy practice to guide a policy or standard of practice. However, legislation and policies are constantly being updated and

changed with new information released. Physiotherapists must maintain their awareness of the legislation and policies that guide physiotherapy in Manitoba.

4. The College's role is regulation of physiotherapy practice, not the regulation of AI. Physiotherapists are advised to seek guidance from those with expertise in AI to assess available tools and related risks and benefits of these tools.
5. Workplaces and employers should develop policies and procedures for responsible use of AI.

College position on AI

The College's position is that physiotherapists and student physiotherapists are expected to comply with all their existing professional expectations, including those set out in relevant legislation, the Code of Ethics, and College position statements/practice standards and policies, when engaging in the use of AI.

Physiotherapy Practice Potential

The use of AI has potential to benefit both physiotherapists and their patients by supporting efficiency, accuracy, decision-making and access. Some of the ways AI is being incorporated into physiotherapy practice include:

- Patient record development – automating and enhancing the creation and management of patient records.
- Diagnostic support – improving diagnostic accuracy through analysis of clinical data.
- Treatment planning – assisting in developing personalized treatment strategies tailored to the individual patient.
- Patient monitoring – tracking progress and alerting physiotherapist to important changes.
- Administrative tasks – streamlining scheduling, follow-ups and operational workflows.
- Research analysis – reviewing clinical research datasets to support evidence-based decisions.

Risks Associated with AI

- Bias – this can exist both inherently in the AI system and with the end user which could create negative outcomes for the patient.
- Privacy and Cybersecurity – AI systems process patient health information. There are risks associated with unauthorized individuals accessing the data or data being used for reasons other than health care. The data can be vulnerable to cyberattacks and breaches.
- Patient Trust – Patients access physiotherapists with an understanding they are accessing a trained and qualified health professional. Patients may not understand or trust the use of this

emerging technology. Patients may be deceived if they were not aware AI was used without their consent and perceive AI as substituting the healthcare provider they are seeing.

- AI Hallucinations – AI mistakes or hallucinations are a consistent occurrence in generative AIs. Documentation AI tools have been known to have auditory hallucinations in which background noise is recorded and misattributed to the patient or physiotherapist.
- Overreliance and Training – Overreliance on AI without the use of clinical judgement can pose a safety risk to a patient. The responses AI generates is reliant on the nature and quality of the prompts from the end user. A poor prompt may lead to poor results, necessitating some skill on the part of the user. Alteration of data sets or of algorithms by the developer or other parties can lead to unintended consequences that can result in negative patient outcomes.

It is important to remember that AI, being a fairly novel tool in health care, may lead to a rush for companies to get their AI product to market meaning there may not have been appropriate testing, validation or verification of accuracy.

Relevant professional expectations

Legal and professional expectations that govern physiotherapy practice are set out in the College's Reference Guide, policies, and relevant legislation. A number of these obligations are relevant to the use of AI by registrants and are articulated below. These obligations are not unique to the use of AI, as they apply to physiotherapy practice universally.

Expectations:

1) Training and Competency for Physiotherapists

Physiotherapists must be trained in the use of AI tools to ensure safe and effective integration into practice. Training should include:

- a. Understanding AI: Basic knowledge of AI technologies including machine learning, computer vision and robotics.
- b. AI Tool Selection: Guidelines for choosing AI tools that align with patient needs and therapy goals.
- c. Interpretation of AI Recommendations: Ability to critically evaluate AI-generated insights and integrate them with clinical judgement.
- d. Ethical Use of AI: Training on the ethical implications of using AI in therapy, focusing on patient autonomy, informed consent and confidentiality while understanding the inherent bias AI can have.

2) Disclosure and Informed Consent

- a. With rapidly changing technology such as AI, CPM recognizes that it may be challenging to communicate the risks and benefits accurately and comprehensively. Registrants are reminded that the Code of Ethics and all standards of practice apply respecting disclosure and informed consent regarding the use of AI tools in providing care.
- b. Informed consent is not listing AI-generated risks and benefits, but instead a meaningful discussion and shared decision-making with the patient. One of the

primary goals of the informed consent process as a component of good care is to ensure patient autonomy in clinical decision-making. This is accomplished both by informing patients about the care they are receiving, including assessment and management decisions, and safeguarding patient privacy. Use of AI has implications for these issues and must be disclosed.

- c. For informed consent to be valid, a patient must be adequately informed about their diagnosis and treatment options, the risks and benefits involved, and reasonable alternatives. If an AI tool is used in clinical decision support, registrants should:
 - i. disclose how the AI tool was used,
 - ii. discuss capabilities and limitations of the tool,
 - iii. discuss safeguards that have been put in place to manage bias and ensure validity and reliability, and
 - iv. be able to independently explain components of diagnosis and treatment options to fulfill their professional responsibilities relating to the informed consent process.
- d. A lack of transparency regarding the role that AI has played in the delivery of care and the inability of the registrant to communicate with the patient can undermine trust and may serve to highlight the registrant's lack of understanding of how the AI tool works.
- e. Informed consent is also important for privacy reasons. Because data received during a patient encounter may be entered into AI tools, registrants must receive a patient's informed consent in advance of use. This is necessary for tools such as AI Scribes that record patient encounters. The discussion should include the reasons for making the recording, how patient data may be accessed, used, or shared, as well as potential risks involving data integrity and privacy. Patients also need to be informed about their right to refuse, withdraw, or modify consent, and their access and copying rights under PHIA if the recording is maintained as part of the patient record.
- f. Clients have the right to refuse the use of AI in the delivery of their care. They also have the right to change their mind and withdraw previous consent for the use of AI in their care.

3) Complete and Accurate Information

- a. Currently, AI is commonly used as a clinical scribe by automating documentation of care. This may lead to incomplete or inaccurate records and subsequent patient harm if not reviewed.
- b. Registrants must be mindful that the requirements of CPM's Practice Direction for Documentation apply to documentation created with the support of AI. Registrants must ensure that the patient's record accurately and completely reflects their involvement in care. As such, registrants must not rely on content created by an AI system as the sole or final source of information. Rather, they must verify and validate any generated content to ensure it is accurate and complete before it is entered into the patient record.

- c. With regards to recordings captured by an AI tool (audio, video or transcript), registrants should retain the complete recording, or transcript if generated, as part of the patient record.
- d. Registrants are expected to record the context in which documentation is generated. This should include the author's identity, for example the registrant, learner, scribe, or allied healthcare provider. Documentation should include notation of any assistive technology used to generate the note, for example, dictation software or an AI scribe.

4) Bias and Equity

- a. Physiotherapists must ensure that clinical decisions and recommendations are not biased. Potential biases and risks related to the use of AI can arise from the source data. Biased training data incorporated into AI tools may ultimately impact patient care and because of the potential that AI could perpetuate, rather than eliminate, bias in healthcare.
- b. AI systems encumbered by prejudiced, false, or inaccurate information may carry a bias that can be detrimental to providers and harmful to patients. Registrants should therefore make reasonable efforts to identify and address such biases before using AI systems in patient care. Registrants should use caution in interpreting AI generated content, accounting for the demographics and health context of the patient they are assessing.
- c. Registrants are expected to respect the dignity, diversity, cultural values, and rights of patients and colleagues, and avoid using AI to create or disseminate content that is discriminatory, offensive, or harmful.

5) Confidentiality and Data Security

- a. Registrants are expected to ensure compliance with PHIA, as well as employer/facility policies.
- b. Registrants are legally and ethically required to ensure confidential information, including the patient's personal information and personal health information, is adequately protected.
- c. Part of the use of AI in documenting care requires these systems to access and review personal health information. Registrants should be aware of what security measures are in place to ensure the information provided to AI systems remains secure and in compliance with existing provincial and federal laws, as well as the patient's preferences. Registrants should consult with their IT or cybersecurity expert to ensure that any AI system used has appropriate data security, confidentiality, and retention protocols.

6) Data Sovereignty

- a. Principles of ownership, control, access, and possession ("OCAP") assert that First Nations have control over data collection processes and that they own and control how this information can be used. Registrants should consider whether the AI policy within their practice setting is respectful of data sovereignty for Indigenous peoples.

7) Patients Using AI

- a. People are using GenAI in their personal lives, including for health advice. ChatGPT and other Chatbots have the potential to significantly impact how patients acquire medical information online. This includes tracking health statistics and to help understand signs and symptoms. In some cases, they may wish to bring this information to the attention of their physiotherapist. In fact, many GenAI products advise users to review information provided with a qualified practitioner. Registrants should be prepared for this to occur more often in practice and should consider a respectful approach to handling the situation.

Resources:

- 1) Office of the Privacy Commissioner of Canada. Principles for responsible, trustworthy and privacy-protective generative AI technologies. 2023.
https://www.priv.gc.ca/en/privacy-topics/technology/artificial-intelligence/gd_principles_ai/ Accessed July 29, 2025.
- 2) Canada Health Infoway, Toolkit for Implementers of Artificial Intelligence in Health Care. 2023.
<https://www.infoway-inforoute.ca/en/component/edocman/3998-toolkit-for-implementers-of-artificial-intelligence-in-health-care/view-document>

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