COLLEGE OF
PHYSIOTHERAPISTS
OF ALBERTA

Artificial Intelligence Guide

for Alberta Physiotherapists

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Artificial Intelligence (AI) usage is rapidly expanding across all aspects of life and work, and the health-care landscape is no different. AI should be used to enhance, but not replace, a physiotherapist's expertise and professional judgment. This guide will provide general information about AI uses, discuss regulatory requirements physiotherapists should be aware of, and review risk management and privacy protection basics.

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The College of Physiotherapists of Alberta developed this guide to provide a framework to support the use of artificial intelligence in clinical physiotherapy practice to help ensure the College of Physiotherapists of Alberta's practice standards are met and that Albertans receive competent, ethical, quality physiotherapy care.

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Contents

Introduction

Artificial Intelligence (AI) usage is rapidly expanding across all aspects of life and work, and the health-care landscape is no different.

AI should be used to enhance, but not replace, a physiotherapist's expertise and professional judgment. It may help to think of AI as a digital support worker in your practice; if you aren't competent in a specific area of practice you can't assign that task to an AI or rely on it to make clinical decisions for you.

> Like other aspects of physiotherapy practice, in Alberta the responsibility for AI use in practice falls to the individual physiotherapist. The College of Physiotherapists of Alberta's Standards of Practice make it clear that physiotherapists are accountable for any documentation, action, or decision they make, and this includes any actions that involve the use of AI.

This guide will provide general information about AI uses, discuss regulatory requirements physiotherapists should be aware of, and review risk management and privacy protection basics. Appendix A provides an AI Implementation Road Map that will review basic tips for evaluating AI applications. As you review this document, please be advised that:

1. Before implementing or using an AI application in practice, physiotherapists must possess essential competencies related to AI use and digital practice.
2. The field of AI is one of rapid evolution with new developments arising all the time. What is current and accurate today may be incorrect tomorrow. Physiotherapists who seek to implement AI applications in their practice need to be prepared to maintain ongoing competency in this subject area.
3. There is currently limited evidence related to the use of AI in physiotherapy practice available to guide the development of policies or Standards of Practice. However, like AI itself, legislation, policies, and practices related to AI are rapidly evolving. Physiotherapists need to maintain their awareness of these developments.
4. The College's expertise lies in the regulation of physiotherapy practice, not the regulation of AI. Similarly, physiotherapists are health professionals with expertise in physiotherapy. Physiotherapists are advised to seek guidance from those with expertise in AI to assess available applications, and the related risks and benefits of those applications.

A Note on Terminology

Artificial Intelligence is an umbrella term that refers to the science and engineering of making intelligent machines, through the use of an algorithm or a set of rules. The machine follows the algorithm or rules to mimic human cognitive functions, such as learning and problem solving.[1] Terms like agentic AI, generative AI, and predictive AI refer to different categories or types of AI applications. Many AIs involve human oversight and validation of outputs, referred to as the "human-in-the-loop." Agentic AIs do not include human oversight and validation.

AIs used in physiotherapy practice are expected to include a human-in-the-loop.

See Appendix B for more definitions of common AI terminology.

Current and Future Use

Benefits (Demonstrated and Proposed)

The use of AI in physiotherapy practice has the potential to create an overall positive experience for the client and the physiotherapist if implemented thoughtfully and with attention to the risks and details.

Potential benefits that make the use of AI worthy of consideration include:[5]

- Reduced time spent on documentation and completing repetitive administrative tasks.
- Reduced costs to the organization in the long-term by targeting inefficiencies in administrative workflows or data throughputs and enhancing client flow through screening applications.
- Improved clinical decisions with decision support applications.
- Improved speed and accuracy of diagnosis with diagnostic algorithms.
- Improved client experiences with streamlined registration, intake, and other administrative tasks.
- Improved client outcomes with more focus by the physiotherapist and staff on client care, in turn creating higher quality and more efficient care.

Risks (Demonstrated and Proposed)

There are many risks with AI usage, but the main ones are highlighted below.[1,5]

- Bias and discrimination can exist both inherently in the AI application and with the end user which can create negative outcomes for the client
- Access and use of private health information outside of what the client consented to. AI requires huge data sets to perform its functions and allowing an AI to access client health information comes with risk that the data can be:
  - Collected and stored in a manner that does not meet legislated privacy requirements related to access, control, security, retention and destruction.
  - Made available to third parties or other AIs without consent
  - Used inappropriately by the AI to generate misleading or untrue results
  - Open to cyber attack
- Lack of transparency in how the AI processes and analyzes data. Lack of understanding of how the AI works can lead users to question the results generated, or conversely to trust the results more than they should.
- AI mistakes or hallucinations are a consistent occurrence in generative AIs. AI documentation applications have also been known to have auditory hallucinations[6] in which background noise is recorded and misattributed to the patient or physiotherapist.
- A rush to get AIs to market can mean they are in use without appropriate testing, validation, or verification of accuracy.
- Alteration of data sets or of algorithms by the developer or other parties can lead to unintended consequences that result in negative client outcomes.

Table 1: AI Applications in Physiotherapy Practice

Table 1 provides tangible examples of AI uses (current and proposed) and highlights proposed benefits and identified risks. Due to the pace of change in the AI landscape, this table is not exhaustive. It is included for illustrative purposes for those new to AI in physiotherapy practice.

Application	Function	Proposed Benefits	Identified Risks
Operational Activities			
Client booking and billing	Clinical applications that allow the client to interact with the AI assistant to set up appointments and process billing.	Clients who are comfortable with AI can find this easy and convenient to navigate. Reduced cost of staff answering phones, taking payments, etc. Staff can focus on other client care tasks.	Clients who are less comfortable with AI may find this challenging or unwanted. The AI may cause booking and billing errors without proper oversight. Applications may encourage unnecessary appointments to fill openings in a physiotherapist's schedule.
Chatbots	Clients can interact with the online chatbot to get answers to questions and can get guidance on frequently asked questions.	Clients can get answers regarding services at any time of day or night. Reduces time spent by staff answering repetitive questions.	Clients can get frustrated with chatbots and may not get the answer they require. The AI may misunderstand questions, providing incorrect answers.
Virtual Front Desk	A higher level chatbot with an AI avatar as the front desk staff. They welcome the client to the clinic, answer questions, assist with completing paperwork, and direct the client to the waiting area.	Reduced staffing needs. Staff can focus on client care and other tasks that an AI cannot fulfill.	AI may fail to provide the services required, lack communication and people skills required to alleviate client anxiety, or fail to understand the client's questions.

Advertising and Marketing	AIs can optimize search engines, target specific populations, and alter advertisements to get the most return on investment.	Streamline advertising and making the most out of the advertising budget. Can process vast amounts of data to create advertising and access target audiences. It can reduce cost and workload to create social media posts and other forms of advertising.	AI may not understand and follow the expectations in the Standards of Practice and may post advertising that is not in alignment with the Standards.
Clinical Care Activities			
Documentation	AI scribe applications will listen in on your interactions with a client and turn those interactions into a chart note.	Improved completeness and accuracy of content.[8] Reduced physiotherapy workload and computer distractions during assessment and treatment.[7,8] Improved client experience.[7,8]	Potential for some AIs to pick up background chatter and include it in the chart note.[2] These auditory hallucinations can create minor and major errors.[2]
Objective measurement applications	AIs designed to track movement, measure force, etc. to provide the clinician with objective measures of their client.	Ease of measurement, improved efficiency in clinic.[8] Expanded ability to get accurate measurements in virtual care.[8]	Current lack of validation of many of the AIs.[8] Video capture may also capture faces and could lead to further privacy considerations.
Biometric tracking	Outside of the clinic, biometric tracking can measure and evaluate a client's adherence to exercise guidelines, heart rate, exertion, etc. to give the physiotherapist a better idea of what is occurring outside the treatment space.	Improved measures of the client outside of the clinic. Improved client care as you can identify potential barriers and address poor adherence to programming and advice.	Privacy infringement. Clients may not wish to disclose activities outside of the clinic or agree to have you monitor their activities and adherence to education and programming.
Robotics and Assisted Devices	AI linked to robotic and mechanical devices to assist clients with function, mobility, and gait retraining.	AI can assist in real-time decision making to assist clients who are currently unable to regain the ability to walk, return to function, and participate in sports or activities.	Potential for physical harm to the client if the AI malfunctions.
Analysis and Decision Making Activities			
Predictive Algorithms	AI can evaluate data points from research, clinicians, clients and work to predict healing timelines as well as identify potential barriers to recovery.	Increased accuracy of healing timelines. Improved tracking can mean early identification of barriers to improvements and risk of negative outcomes.	Potential for poor, incomplete, or irrelevant data sets which would make predictions invalid. Clinician is unable to evaluate how the AI is functioning and whether errors are being made or not as many AIs exist as a black box.
Research Analysis	AI can sift through data and research to produce research summaries on a wide variety of topics.	Increased efficiency for the physiotherapist to get answers to needed research questions.	Potential for using data from poorly done research as well as creating summaries that are inaccurate or that the physiotherapist would interpret differently. Clinicians are unable to evaluate how the AI is functioning and whether errors are being made or not.
Differential Diagnosis applications	AIs can combine objective and subjective portions of the assessment with research and past data to assist with differential diagnosis.	AIs can provide options for a differential diagnosis that matches the client's symptoms and objective findings. In conjunction with the physiotherapist's clinical judgment this may assist in providing more accurate diagnosis.	Reliance on the AI rather than the physiotherapist's clinical judgment can result in missed diagnoses and harm if based on flawed or biased AI algorithms. Clinicians are unable to evaluate how the AI is functioning and whether errors are being made or not.
Development of Treatment Plans	AIs can take the data from the assessment and combine it with research data and best practice guidelines to create a treatment plan.	The application when used properly can identify recent changes and updates in best-practice guidelines providing feedback and comparisons to the physiotherapist's treatment plan.	Poor selection of data sources or reliance on outdated practice guidelines can create inaccurate or inappropriate treatment plans. Recommendations may not match the specific needs of the client. Clinicians are unable to evaluate how the AI is functioning and whether errors are being made or not. Clinicians must be able to spot incorrect analysis/inappropriate plans and adjust accordingly.

Regulatory Requirements

Legislative Considerations

Currently physiotherapy practice is governed by several pieces of legislation. For the current discussion of AI, it is important to consider the following:

- *Personal Information Protection Act* – Provincial legislation that protects the privacy of those treated in private practice.
- *Health Information Act* - Provincial legislation that protects the privacy of those treated in public practice or those treated by custodians identified under the *Health Information Act* or their affiliates within the private sector (e.g., a physiotherapist working as an affiliate of a physician who is a custodian under the Act).
- *Personal Information Protection and Electronic Documents Act* – Federal legislation that establishes the rules for the collection, use, disclosure of, and access to personal information during the course of "commercial activities". Its application to Alberta physiotherapists is limited to circumstances where personal information is being transferred across provincial boundaries.

Unfortunately, the Government of Canada not yet passed legislation to regulate AI. AI's rapid growth coupled with limited government regulation makes its appropriate implementation into practice challenging. It is important to be aware of federal legislative developments regarding AI regulation as this is likely to change in the future.

The current lack of legislation and limited regulation of the development and use of AI in the Canadian context, (combined with limited evidence related to its effective and safe use in physiotherapy) results in many unknowns when developing guidance and policy related to AI use.

Roles and Responsibilities

In recognition of the potential uses and risks related to AI, it is important to review the responsibilities of physiotherapists.

Like other digital practice tools, such as virtual care platforms and EMRs, all physiotherapists have a responsibility to do their due diligence to ensure that key issues related to safety, accuracy, and privacy have been evaluated and addressed before they use any AI application.

Depending on the setting in which they work, the physiotherapist's responsibilities also include AI application selection, development of policies and procedures around AI use, and educating supervisees (including administrative staff) prior to using AI in practice. Privacy and AI impact assessments are two tools available to assist physiotherapists to work through the process of selecting and implementing AI applications.[14,15]

Disclosure and Consent to AI Use

Disclosure

There are covert and overt AI uses in practice. Some clients may not realize covert AIs exist like the chatbots they interact with or the claims portal that integrates AI in its functions. Physiotherapists must provide information about how AI is being used in their practice. The client should understand that the physiotherapist is ultimately responsible for the care they provide, and that the AI is used as an assistant only.

Disclosure of AI use is part of gaining client consent. Failure to disclose AI use can cause issues, such as:

1. Potential for client complaints or concerns regarding the use of AI without disclosure and consent of the client.
2. Reputational damage if clients find out you were using an AI to carry out certain clinical tasks without client consent.

Risks related to AI use and disclosure requirements are likely to evolve over time, as AI use and legislative requirements evolve.

Consent

Consent regarding AI use differs from consent for physiotherapy services; however, consent for AI use must still adhere to core consent principles.

1. Autonomous

Clients have the right to make informed choices on whether they wish to have AI used in the delivery of their care. Physiotherapists are ethically and legally bound to communicate with clients about AI use to enable this informed decision-making.

2. Informed

Consent is not valid if it is based on incomplete or inaccurate information. Consent must be based on careful discussion of the relevant information and considerations regarding the use of AI. Specific attention should be given to the positives, negatives, and risks involved.

3. Right to Refuse

Clients have the right to refuse the use of AI in the delivery of their care. Clients also have the right to change their mind and withdraw previous consent for AI use in their physiotherapy care at any time. Physiotherapists should be prepared to close the AIs being used if a client refuses to consent to its use.

Informed consent in relation to the use of AI can be challenging as clients might not fully understand what they are consenting to. AI is going through an exponential growth phase and people have different perceptions around its appropriateness for use in health care. Clients may have many questions when it comes to how a physiotherapist would implement AI in their practice and how it might affect them as a client.

The physiotherapist must be competent to have these conversations with clients and be able to answer the questions the client may have about the AIs they are using, specific risks, and benefits of that AI.

Privacy

Disclosure and consent related directly to privacy is required, due to the nature of AI and how a patient's private health and other information can be used by AI applications. Physiotherapists must be aware of the Privacy Standard of Practice and how it relates to the use of AI.

The protection of client health information is often linked to limiting the collection and use of that information, using and sharing information with the highest degree of anonymity. However, many AIs require large amounts of data to perform their tasks, and a lack of high-quality data can result in poor outputs and potential consequences for both the client and the physiotherapist.

Knowing that AI will require large data sets to do its job, you must consider how you would fulfill the basic requirements of privacy legislation but still provide data for the AI to work effectively.

What do we know?

1. AI is increasingly part of digital infrastructure and is being utilized more within health-care systems.
2. Client health information is a key part of clinical practice and is used in many different ways to assist clients to achieve their goals.
3. Client information is collected and stored in digital formats which are now being accessed and used by various AIs.
4. Safeguarding that information is a high priority for any organization.
5. Safeguards only work if properly employed by the users.

What are the Privacy Concerns?

1. AIs may store and process data in servers outside of Canada. You must disclose to clients when their data is being stored outside of Canada.
2. You must also be aware that some AIs can re-identify deidentified data. Physiotherapists must ensure that there are safeguards in place to prevent this from occurring.
3. AI contracts may include terms that would permit AIs to use the data it has access to for means other than what you are using it for. You must ensure that the data provided to the company is only used for the purposes the client consented to.
4. AI contracts may also allow other AIs and third parties to access the data it stores. Physiotherapists must understand data use by the AIs they employ and ensure that these applications do not access, share, or use private patient information inappropriately.

Physiotherapists must do their due diligence in reviewing privacy requirements and information use of the AI being considered. You must read the contract and privacy agreements with these companies to ensure that you understand the basic principles of how the AI works, what it does with your client's information, and how private information is accessed, used, stored, secured and destroyed, and that the terms of the agreement enable you to fulfill your professional and legislated responsibilities.

Bias

There are two key concerns of note when considering bias in the health-care applications of AI:

- Faults in the AI outputs arising due to bias in AI algorithms and inadequate data sets used to inform the AI models.
- Lack of effective human oversight and critique of AI outputs.

Bias in the development and use of AI can occur in multiple different ways and is one of the primary concerns related to AI use, necessitating special consideration.

- During the development stage bias can be introduced from the design and engineering team's unconscious biases, leading to biased AI algorithms.
- Poor diversification of training populations or data sets (populations or socio-economic groups included or excluded) can lead to flawed outputs.

Social determinants of health are an important consideration in client care. Physiotherapists should be aware of how incomplete or biased data sets and AI algorithms could fail to account for variations in the individual client's living conditions and provide inappropriate recommendations. Equally, if a physiotherapist works with a homogenous client population, the data they add to an AI dataset may skew the AI outputs over time.

Another challenge with bias within an AI application is that physiotherapists are an end user and are not typically involved in the development stage. As an end user, bias in an AI algorithm or data set can be present from the development stage, without the physiotherapist realizing it. Bias can also be introduced with how physiotherapists interact with the AI and how transparent or opaque the AI's processes are to the user groups.[9,10,11] AIs are often "black boxes" where users can identify the data that goes in and the results that come out, but have no understanding of how the AI analyzes data and develops its outputs. This lack of transparency and clarity of those inner workings leads to susceptibility to bias and other vulnerabilities which can result in direct negative outcomes for users. Biases in AI applications can also produce documentation errors or errors in clinical decision making.

Physiotherapists need to review AI outputs critically and ensure that they identify and address flawed or incorrect outputs.

Physiotherapists must actively work to ensure that AIs used in practice do not create barriers to care or produce results that exacerbate or reinforce existing inequities in physiotherapy care provision.

Risk Management and Privacy Protection

The Risk Management and Safety Standard of Practice requires physiotherapists to identify potential concerns relevant to the practice setting, method of service delivery, and client population served.

Direct security risks from cyberattacks can be dedicated to extracting patient health information stored within an AI, tricking AI applications into misinterpreting results, or introducing malicious or incorrect data and skewing outputs. The rapid pace of development and utilization of AI may increase the scope of cybersecurity risk but the principles of safeguarding private information remain the same. Risks can be addressed with implementation of appropriate safeguards as well as completion of Privacy and AI impact assessments.

The Risk Management and Safety Standard of Practice requires that physiotherapists verify that there are policies and procedures in place related to these risks and that the physiotherapist is knowledgeable about and implements them.

Physiotherapists are ultimately held responsible for their care and must educate themselves regarding the use of any AI in their practice and the risks inherent in any AI application they employ. Physiotherapists are not computer scientists, but they do need to have a basic understanding of how the application works, the data it employs, and the risks and flaws inherent in the application. The physiotherapist must provide oversight to monitor and address the AI application's output and related risks.

Physiotherapists must take the protection of their client's privacy seriously and ensure that private information is properly safeguarded. A Privacy Impact Assessment is created to evaluate proposed administrative practices or information systems such as AI and how they may affect the privacy of the clients. The College of Physiotherapist of Alberta recommends that a Privacy Impact Assessment be completed prior to the implementation of an AI.

It is also recommended that physiotherapists complete an AI or Algorithmic Impact Assessment to more specifically identify risks directly related to the use of AI. You can learn more about AI or Algorithmic Impact Assessments here and access AI or Algorithmic Impact Assessments from the Government of Canada or the International Organization for Standardization (ISO) online.

Privacy Safeguards

As physiotherapists implement more technology into practice that gathers, stores, and uses client information the security risk to client information increases.

Things to consider:

- Hiring a cybersecurity professional to evaluate AI for potential issues.
- Verifying vendor responsibilities, accountabilities, actions, and transparency related to the design and development of the AI.
- Educating staff and users in AI literacy, awareness of AI limitations, the importance of human oversight, and protecting against cyber attacks.
- Employing muti-factor authentication for all systems, including Ais.
- Ensuring you have recent upgrades for firewalls and sufficient barriers to protect against cyber criminals.
- Limiting users to those that require access to carry out their job duties
- Reviewing and implementing data encryption policies specific to the AI when data is stored or in transit.

As mentioned previously in this guide it is important that your privacy and AI impact assessments evaluate your cybersecurity needs as an organization. For additional resources regarding cybersecurity and AI, visit the Canada Health Infoway.

Appendix A: AI Implementation Road Map

Principles for the Development, Provision, and Use of Generative AI Applications

The Office of the Privacy Commissioner of Canada (OPCC) has produced a guide in which they discuss the overarching principles for the use of AI applications. This is not specific to health care but in a landscape where there is minimal legislation and regulation this resource provides additional, high-level guidance for physiotherapists considering implementing AI applications.

Key elements of the OPCC's guidance:

1. Legal Authority and Consent

Ensure legal authority for collecting and using personal information; when consent is the legal authority, it should be valid and meaningful.

2. Appropriate Purposes

Collection, use and disclosure of personal information should only be for appropriate purposes.

3. Necessity and proportionality

Establish the necessity and proportionality of using generative AI, and personal information within generative AI applications, to achieve intended purposes.

4. Openness

Be open and transparent about the collection, use, and disclosure of personal information and the potential risks to individuals' privacy.

5. Accountability

Establish accountability for compliance with privacy legislation and principles and make AI applications explainable.

6. Individual Access

Facilitate individuals' right to access their personal information by developing procedures that enable it to be meaningfully exercised.

7. Limiting Collection, Use, and Disclosure

Limit the collection, use, and disclosure of personal information to only what is needed to fulfill the explicitly specified, appropriate identified purpose.

8. Accuracy

Personal information must be as accurate, complete, and up-to-date as is necessary for purposes for which it is to be used.

9. Safeguards

Establish safeguards to protect personal information and mitigate potential privacy risks.

Decision Making Framework for AI Selection

Using AI in your practice requires that you have the knowledge, skills, and competency to understand how an AI works and to evaluate its appropriateness for use in your practice. The following four factors should be considered when selecting an AI.

- Technically Feasible
- Socially Acceptable
- Ethically Justifiable
- Legally Compliant

The factors will influence and affect each other and should exist together for an AI to be successfully integrated into physiotherapy practice. Failure to evaluate and consider these four basic factors can lead to adoption and use of AIs that do not serve their purpose and expose the physiotherapist and their patients to increased risk.

Key Questions

1. Understanding your goals
    - What are the goals you are trying to achieve with an AI?
    - Are there AIs that can help you achieve your goals?
    - Are you or your organization ready for AI implementation?
2. Understanding the AI
    - Does it meet privacy legislation?
    - How does it use your client's data?
    - What safeguards are in place to protect your client's data?
    - Does it use data ethically?
    - Is it transparent in how it operates?
    - Where does it store the data and for how long?
    - Did you fully read the AI vendor's privacy statement?
3. Understanding the risks
    - What are the potential risks to your client?
        - Data breach
        - Unintended consequences/outcomes
        - Poor quality AI outputs (results are incorrect, misinterpreted or biased)
4. Understanding consent and disclosure
    - Are you able to fulfill the principles of informed consent?
    - What must you disclose to the client?
    - Do you know enough about the AI to inform your client prior to its use?
5. Understanding bias
    - Are you actively evaluating the AI to screen for inherent bias?
    - What biases have been built into the AI and what it is producing?
    - Are you introducing your own bias into the AI during its use?

For general information about the implementation of AI in health-care settings, access this resource from Canada Health Infoway.

To assess your readiness to implement an AI Scribe, check out this resource from Canada Health Infoway.

Using the resources included in this document should help physiotherapists to evaluate the goals of AI use, identifying the risks associated with AI use, mitigating those risks, and allowing the physiotherapist to adhere to their legal and regulatory requirements.

Definitions

Artificial Intelligence: AI refers to the science and engineering of making intelligent machines, through algorithms or a set of rules, which the machine follows to mimic human cognitive functions, such as learning and problem solving.[1]

Agentic AI: These AI applications make decisions and carryout tasks without human intervention or oversight.

Generative AI: Generative AI (gen AI) is artificial intelligence that responds to a user's prompt or request by generating original content, such as audio, images, software code, text or video.[2] Generative AIs create new content, based on prompts and reference materials supplied by the user. This may include a research article or document, or the entire body of information found on the internet. When employing an AI application or its outputs the most important question to ask when validating the quality of the output is what data source did the AI application have access to and how did it use that source. In physiotherapy practice, Generative AIs may produce research overviews, be part of clinical decision-making applications, or be a virtual receptionist to handle client questions.

Predictive AI: Predictive AI blends statistical analysis with machine learning algorithms to find data patterns and forecast future outcomes. It extracts insights from historical data to make accurate predictions about the most likely upcoming event, result or trend.[3] In physiotherapy practice this could be assisting with establishing timelines for recovery or creating treatment plans based on organizational data as well as research data, depending on the application and data used.

Machine Learning: Machine learning is a pathway to AI. This subcategory of AI uses algorithms to automatically learn insights and recognize patterns from data, applying that learning to make increasingly better decisions.[1]

Deep Learning: Deep learning, an advanced method of machine learning, goes a step further by using larger and more complex neural networks – networks that function like a human brain to logically analyze data – to learn complex patterns and make predictions independent of human input.[4]

Human-in-the-loop: AI in which a person has final decision-making responsibilities.

In physiotherapy practice the expectation is that all AIs used should include a human-in-the-loop.

Human-out-of-the-loop: Agentic AI in which applications or actions are completed without interference or oversight from a person. These AIs do not operate with oversight from a physiotherapist or staff member and can carry much more risk.

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