

Guidelines for Use of Artificial Intelligence in the MD Program

Office of Accountability:	Associate Dean, MD Program, Faculty of Medicine & Dentistry (FoMD)
Office of Administrative Responsibility:	MD Program, Faculty of Medicine & Dentistry
Approver:	MD Program & Curriculum Committee (MDCPC)
Scope:	This policy applies to all students registered in the Doctor of Medicine (MD) program, as well as faculty and staff, at the University of Alberta, irrespective of the geographically distributed site to which they are currently assigned.

Introduction

This document outlines how the use of [Generative AI](#) should be conceptualized and structured within the MD Program. It utilizes the CARE-AI Framework to guide the ethical application of these tools in health professions education. In alignment with University of Alberta standards, all interactions involving third-party copyrighted material must be conducted within university-recommended platforms to ensure data security and copyright compliance. This approach recognizes that a supervised adoption model is safer than unstructured use. It aims to foster a learning environment where AI supports human-centered decision-making without replacing the essential critical thinking required for clinical practice.

Responsible AI Use in the MD Program

1. Framework and Philosophy

In alignment with the University of Alberta's [U of A's Framework for Responsible AI](#), the MD Program endorses the [CARE-AI Framework](#) (Contextual, Accountable, and Responsible Ethics) to guide the ethical use of AI in health professions education. This

guideline document recognizes that a supervised adoption model is safer and more effective than an unstructured or hidden-use model.

2. Core Principles for Faculty and Students

Drawing from the [U of A's Framework for Responsible AI](#) and [the CARE-AI Health Framework](#), all members of the MD program community should adhere to these principles:

- **Human Oversight:** AI should support, not replace, human-centered decision-making, especially in critical areas affecting patient care or student assessment. Humans should always provide oversight on any AI-augmented activity (see [humans-in-the-loop](#)). In other words, “use AI as a tool, not a crutch!”
- **Accountability:** Individuals are responsible for the outputs they generate using AI, as well as the type of AI tool they choose to use. This includes actively fact-checking and verifying content to maintain integrity.
- **Bias Mitigation and Equity:** Users must be critical of AI outputs, which can be imbalanced, fabricated, and have the potential to exacerbate preexisting biases. Users must move beyond treating AI as a neutral authority and instead develop the [AI literacy](#) skills to identify the specific biases inherent in different tools. Efforts must be made to ensure AI use does not create inequitable learning experiences due to varying levels of access or AI literacy.
- **Transparency:** Open communication regarding when and how AI is used in learning, research, and administration is mandatory. Transparency is defined [here](#), with examples of general AI use disclosures can be found [here](#).

3. Clinical Learning and Evidence-Based Practice

Clinical learning requires traceable evidence. While general-purpose AI can be useful for ideation, the MD Program emphasizes use of evidence-based tools grounded in peer-reviewed, curated medical content, such as UpToDate, Expert AI or OpenEvidence, which provide citation traceability.

- **Workflows:** Users may use [university-recommended AI tools](#) to create educational and study content, provided they remain source-aware and critically appraise the sources the tool provides to ensure the information is being extracted from appropriate sources and is accurately represented.



- **Clinical Appraisal of Literature:** AI-linked citations should be used with caution and their use does not replace the requirement for users to critically appraise primary literature. Users must maintain the foundational skills to evaluate an article's validity, methodology, and clinical relevance. AI-generated citations and summaries should be treated as preliminary; in cases of conflict or high-stakes clinical decision-making, users must prioritize local clinical guidelines and peer-reviewed primary sources over AI-synthesized interpretations.
- **Professionalism, Privacy, and Ethical Stewardship:** Users are responsible for the integrity and security of the data they interact with. Professionalism in the AI era requires an understanding that different tools have varying data-handling protocols.
 - **Data Privacy:** Users must ensure all AI interactions comply with institutional privacy laws and healthcare data regulations. No identifiable personal data about patients, learners, or faculty (e.g. demographic, names, geographic data, images, etc.) or sensitive research information should be uploaded to any AI tool.
 - **Tool-Specific Literacy:** Users are responsible for understanding the ethical framework and "Terms of Use" of each specific tool they employ. This includes being aware of how a tool may store, train on, or distribute user inputs. For example, when using Gemini within the University of Alberta's Google Suite, interactions are not used to train the model. More information can be found at the University of Alberta [Library Guide](#).
 - **Adherence to Institutional Standards:** Users are expected to follow the University of Alberta [Library Guide on Generative AI](#), specifically regarding academic integrity, proper attribution, and the ethical implications of AI-generated content.
 - **Critical Communication:** Users must exercise verbal clarity when AI systems are present (e.g. in meetings, educational or clinical contexts, recognizing that these tools may misinterpret clinical nuances, humor, or sarcasm, potentially leading to output inaccuracies. When AI systems are present (e.g. recording or transcription of meetings, etc.), explicit consent must be obtained from all parties before they are used.
- **AI Scribes in Clinical Contexts:** This guideline incorporates a previously approved MD Program [Statement about the Use of AI in Clinical Environments](#), which states that "the development of case synthesis skills is important to oral and written case summaries, and the MD Program strongly discourages the use of AI

based technologies for the purposes of case summaries, admission, progress, notes, and discharge, documentation and clerkship.”

4. Assessment and Academic Integrity

Instructors should align AI use with Learning Objectives. The MD Program utilizes the [AI Assessment Scale \(AIAS\)](#) to define boundaries for every assessment or task.

Notwithstanding, students must be able to demonstrate competency without the use of AI tools in classroom and clinical settings. The AI Assessment Scale includes the following levels:

- **Level 1 (No AI):** For controlled environments where students must demonstrate independent knowledge/skills (e.g., OSCEs, exams).
- **Level 2 (AI for Planning):** AI used for brainstorming, finding material for literature review, paraphrasing or grammar, and preparation or building an outline, but final submissions remain independent work.
- **Level 3 (AI Support):** AI acts as a supportive tool throughout the process, requiring transparent documentation of its contributions. The student remains responsible for the accuracy of final submissions.

5. Privacy, Data Security, and Copyright

- **Data Protection:** All use of AI tools must comply with Alberta’s [Access to Information Act](#) (ATIA) and the [Protection of Privacy Act](#) (PPA). The use of identifiable personal information (e.g. demographics, names, images, etc.) is strictly prohibited.
- **Indigenous Data Sovereignty:** Particular care must be taken when handling Indigenous data; it may be appropriate to exclude such data from AI systems to respect sovereignty. See section 6 for further details.
- **Copyright:** Current law suggests only humans are recognized as authors. To ensure transparency, users must document specific prompts and edits used to create final works involving AI particularly in cases when AI is used as a supportive tool throughout the creation process (e.g. Level 3 in the Assessment Scale above).
- **Intellectual Property:** Use of curricular materials (including slide decks, vodcasts, readings provided privately within small group settings) within AI tools are only allowed when [university-recommended AI tools](#) are used and when the users can

ensure that the tool will not store or use the uploaded material for AI model training.

- **Ethics:** Users must adhere to the [University of Alberta Library Ethics Guidelines](#). This includes a commitment to academic integrity, being transparent about AI assistance, and understanding the environmental and social costs associated with generative AI models.

6. Indigenous Data Sovereignty (IDS) and GenAI

The inherent right of Indigenous Peoples to govern the collection, ownership, and application of data about their communities, lands, and knowledge is foundational to decolonizing higher education. While UNESCO (2023) provides a global framework for the ethical use of GenAI, emphasizing human-centric oversight and the prevention of cultural bias, these standards must be operationalized through Indigenous-led protocols.

In alignment with the University of Alberta Library Guidelines, all use of AI must respect the CARE Principles (Collective Benefit, Authority to Control, Responsibility, and Ethics) and OCAP® (Ownership, Control, Access, and Possession). Because GenAI models often function as extractive tools that lack mechanisms for informed consent or cultural stewardship, the following boundaries apply:

- **Prohibition on Data Extraction:** Users must not upload traditional knowledge, cultural artifacts, or community-held data into GenAI systems, as this violates sovereignty by transferring control to commercial entities.
- **Protection of Indigenous Health Data:** GenAI should not be used to record Indigenous Health sessions or to generate assignments/reflections that involve sensitive cultural perspectives.
- **Human-Centric Responsibility:** Following UNESCO's guidance, AI outputs concerning Indigenous topics must be critically interrogated for systemic bias and must never replace the authority of Indigenous knowledge-holders.

7. Faculty Member Responsibilities

Faculty are responsible for modeling responsible AI use and fostering an atmosphere of transparency. This includes:

- Developing their own critical [AI literacy](#) (see the [Additional Resources](#) section for additional resources and training modules that are available).

- Including the AI Use Syllabus Statement (see p. 8) in course outlines for all courses and clerkships.
- Redesigning assessments to emphasize higher-order thinking and authentic learning.
- Providing clear rationales when AI use is restricted.
- Reviewing all AI-generated teaching materials for accuracy and bias before sharing them with students.
- Incorporating AI-augmented learning where applicable to ensure the students are prepared for an AI-enabled healthcare system.

DEFINITIONS

Any definitions listed in the following table apply to this document only with no implied or intended institution-wide use.	
Prompting (and Prompt Engineering)	The act of giving specific instructions or questions to an AI tool to get a desired result. "Careful prompting" involves providing context and constraints to the AI to reduce the chance of errors or irrelevant answers.
Primary Literature (Primary Sources)	Original research, peer-reviewed journal articles, or clinical guidelines that provide the direct evidence used in medical decision-making.
Supervised Adoption Model	An approach to technology where an institution encourages the use of new tools like AI, but does so within a structured environment with clear rules, rather than allowing unregulated or "hidden" use.
University-Recommended Tools/Platforms	Software and platforms that have been vetted by the University of Alberta for data security, privacy, and copyright compliance. See here for more information.
Validation	The process of confirming that an AI-generated statement is supported by factual, evidence-based data from a reliable source.

APPROVAL HISTORY

APPROVER	STATUS	DATE
MD Curriculum & Program Committee (MDCPC)	Approved	May 21, 2026
Joanne Rodger, Assistant Dean, Program Evaluation	Editorial updates, including updates to the Syllabus Statement and adding an updated link to the document.	June 4, 2026

MD Program Generative Artificial Intelligence AI Use Policy: Syllabus Statement

This statement is expected to be included in course outlines for all courses and clerkships in the MD Program.

Statement of Expectations for Generative AI (GenAI) Use

In the MD Program, [AI literacy](#) is an essential skill for your future medical practice. While GenAI offers powerful tools to enhance learning, it must complement, not replace, human judgment and professional responsibility. The following expectations and guidelines for medical students are based on the MD Program's [Guidelines for the Use of AI](#).

- You may use [university-recommended AI tools](#) to create educational and study content, provided you remain source-aware and critically appraise the sources the tool provides to ensure the information is being extracted from appropriate sources and is accurately represented.
 - The use of curricular materials (including slide decks, vodcasts, readings provided privately within small group settings) within AI tools are only allowed when [university-recommended AI tools](#) are used and when the users can ensure that the tool will not store or use the uploaded material for AI model training.
- Using GenAI to gain an unfair advantage or offload required independent learning violates the [Student Academic Integrity Policy](#). AI use is strictly prohibited in "AI-free zones" which are determined by instructors.
- You are responsible for the accuracy of any AI-supported work. All AI-generated content must be clearly cited and attributed according to the [U of A Library's guidelines](#). Always check AI-generated material in full before you use it in any clinical context (learning, teaching, clinical augmentation, etc.)
- When using a tool that might be trained on the data you input (e.g., free or even paid versions of most AI tools), take extra care not to enter any personal or identifiable information into the tool. Carefully check the privacy policies and settings of the tools you are using before doing this. Never upload patient data, identifiable information, or sensitive clinical information, into any AI system. All use must comply with Alberta's [Access to Information Act](#) (ATIA) and the [Protection of Privacy Act](#) (PPA).

- [AI in Clinical Learning Environments](#): The development of case synthesis skills is important to oral and written case summaries, and the MD Program strongly discourages the use of AI based technologies for the purposes of case summaries and patient care documentation (e.g. admission/progress/discharge notes).

Assessment: The MD Program utilizes the [AI Assessment Scale \(AIAS\)](#) to define boundaries for every task. Course outlines for each course/clerkship will identify one of the following levels for each assignment:

- **Level 1 (No AI):** For controlled environments where students must demonstrate independent knowledge/skills (e.g., OSCEs, in-class exams).
- **Level 2 (AI for Planning):** AI used for brainstorming, finding material for literature review preparation or building an outline, but final submissions remain independent work.
- **Level 3 (AI Support):** AI acts as a supportive tool throughout the process, requiring transparent documentation of its contributions. The student remains responsible for the accuracy of final submissions.

Additional Resources for Faculty, Students, and Staff

The following resources about artificial intelligence and AI literacy may be of interest to faculty, students, and staff.

Glossary of Terms

- Full comprehensive list of terms can be understood as they evolve here: <https://learning.tcairem.ai/terminology/>

AI Literacy

- AI Literacy Course developed by Amii and available through the University of Alberta. [Register here](#).
- Google's [AI Principles](#)
- Contextual, Accountable, and Responsible Ethics for Artificial Intelligence in Healthcare (CARE-AI) [Website](#) and [Framework](#) document.

AI & Medical Education

- University of Toronto's [Temerty Centre for AI Research in Education & Medicine](#) (T-CAIREM) and the [AI Learning Hub](#) (which includes links to policies, resources, podcasts, and other tools to support AI in healthcare and medical education)
- [International AI in Medicine Education Working Group](#) and the [Global Framework for an AI Curriculum in Medicine](#)

University of Alberta Resources

- [Using Artificial Intelligence at the University of Alberta](#)
- University of Alberta [Artificial Intelligence Data Safety Guidelines](#)
- [Centre for Teaching & Learning: CTL Instructional Resources](#) (including Engagement with Generative AI)
- UofA Libraries - [Using Generative AI](#) Guide

AI Use Disclosure Statement (Sample)

- Students and faculty may be required to submit a GenAI Use Acknowledgement and Reflection Form or a Responsibility Statement detailing how an AI tool was used and how outputs were validated for accuracy, bias, and hallucinations. An example of a general AI use disclosure is: “[AI tool name: ChatGPT 5.2/Gemini 3/NotebookLM/Claude Opus 4.6/etc.] was used for [task: brainstorming/outlining/drafting/editing/summarizing/code/etc.]. [I/we] verify [components: facts/citations/calculations/clinical guidance/etc.] and take responsibility for the final content. No sensitive data was entered into the AI tool.”

References

- Canadian Commission for UNESCO. (2024). *Toward a better world for all: Decoding, deconstructing and decolonizing higher education in Canada and beyond*.
<https://en.ccunesco.ca/-/media/Files/Unesco/Resources/2024/02/DecolonizingHigherEducationInCanada.pdf>
- Centre for Teaching and Learning. (2025). *Academic integrity and AI use*. University of Alberta.
<https://www.ualberta.ca/en/centre-for-teaching-and-learning/resources/generati>
- University of Alberta Copyright Office. (2026, March 5). *Copyright considerations related to generative AI*. University of Alberta.
<https://www.ualberta.ca/en/centre-for-teaching-and-learning/resources/generative-ai/academic-integrity-ai-use/index.html>
- Equity in Health Systems Lab. (2025, July). *HEALTH CARE-AI: A framework for contextual, accountable & responsible ethics for artificial intelligence in health professions education, research, and care*. Bruyère Health Research Institute. <https://eqhs.ca/care-ai/>
- UNESCO. (2023). *Guidance for generative AI in education and research*.
<https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research>
- University of Alberta. *Indigenous research: Indigenous data sovereignty*. Library Guide.
<https://guides.library.ualberta.ca/indigenous-research>
- University of Alberta Copyright Office. (2026, March 5). *Copyright considerations related to generative AI*. University of Alberta.
<https://www.ualberta.ca/en/centre-for-teaching-and-learning/resources/generative-ai/academic-integrity-ai-use/index.html>
- University of Alberta. (2025, May 7). *Access to information and protection of privacy policy*.
<https://www.ualberta.ca/en/alfresco/uappol/informationmanagementinformationtechnology/access-to-information-and-protection-of-privacy/policy/access-to-information-and-protection-of-privacy-policy.pdf>
- University of Alberta. (2024, December 19). *Framework for responsible and ethical use of AI at the University of Alberta*.
<https://www.ualberta.ca/en/artificial-intelligence/artificial-intelligence-framework.html>

How NotebookLM Was Used to Create This Document

NotebookLM served as the primary synthesis and grounding engine for this guideline. Rather than generating generic AI guidelines, the tool was used to:

1. **Ingest Local Context:** The tool processed specific University of Alberta documents, including the Student Academic Integrity Policy and the Framework for Responsible AI Use, to ensure the MD policy remained compliant with institutional mandates.
2. **Integrate Disciplinary Frameworks:** By ingesting the CARE-AI Health Framework, the tool aligned general university principles with the specific ethical requirements of health professions education and clinical practice.
3. **Apply Source-Grounded Workflow:** The tool functioned by "anchoring" its responses to the uploaded sources to prevent hallucinations and provide citation traceability for every policy statement.
4. **Operationalize Educational Tools:** It utilized the AI Assessment Scale (AIAS) and the Bloom's Taxonomy Revisited framework found in the CTL sources to define clear, scaffolded levels of permissible AI use for medical faculty and students.
5. **Maintain Professional Standards:** The tool ensured the inclusion of critical medical education considerations, such as treating AI literacy as a core clinical competency and strictly prohibiting the uploading of patient and personal data under the Alberta FOIP Act.



Navigating AI in Medicine: The MD Program Policy



THE CARE-AI FRAMEWORK

Contextual, Accountable, and
Responsible Ethics (CARE-AI)

USAGE GUIDELINES & BOUNDARIES



Permissible Learning Tools

Use AI for summarizing materials, clarifying topics, or study drills using source-grounded tools.



Respect AI-Free Zones

AI is strictly prohibited during OSCEs and designated assessments to ensure independent skill demonstration.



Clinical Privacy First

Never upload patient data; all use must comply with the Alberta FOIP Act.



Human-Centered Oversight

AI tools must complement, not replace, human judgment and professional clinical responsibility.



Personal Accountability

You are responsible for fact-checking AI outputs for accuracy, bias, and hallucinations.



Transparency & Citation

All AI-supported work must be clearly cited and attributed according to university guidelines.

AI ASSESSMENT SCALE (AIAS)

AIAS Level	Usage Description	
Level 1: No AI	Controlled environments for independent clinical skills.	
Level 2: Planning	AI used for brainstorming or prep; final work is independent.	
Level 3: Collaboration	AI acts as a supportive tool with transparent documentation.	