

WEBINAR PRESENTATION

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AI and Digital Health Literacy in Osteopathic Medical Education

Priority Competencies and Faculty Development Strategies

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Disclosures

Speaker Views

The views expressed are my own and do not necessarily reflect those of Michigan State University or any affiliated organizations.

Financial Disclosures

Chris Shaltry, Ph.D.

No relevant financial relationships to disclose.

Educational Purpose

This session is intended for educational purposes only.



Learning Objectives

LEARNING OBJECTIVE #3

Identify **priority AI and digital health literacy competencies** for osteopathic learners and faculty.

LEARNING OBJECTIVE #4

Identify **practical faculty development and assessment strategies** to support responsible AI adoption in osteopathic medical education.



Today's Roadmap

What is OsteopathicAI?

Draft definition, context, and minimum expectations for aligned systems

Connecting to Osteopathic Principles

Using the osteopathic tenets as a practical lens for AI adoption

Curriculum, Assessment, and Institutional Strategy

Approaches for integration, evaluation, and responsible adoption

Possible Competency Domains

Four possible domains of AI and digital health literacy for learners and faculty

Faculty Development

A tiered approach to building faculty capacity



What is OsteopathicAI?

DRAFT FRAMEWORK 3-25-26

*"A profession-level ethical and practice standard describing the design, selection, deployment, and use of artificial intelligence in osteopathic education, research, administration, and patient care such that AI **augments, not replaces**, osteopathic professional judgment and whole-person care across mind, body, and spirit, consistent with the ethical and humanistic ethos of osteopathic medicine."*

AI Supports, Not Substitutes

AI should support clinical and educational judgment, not replace clinician accountability or the therapeutic relationship.

Whole-Person Orientation

AI use should remain consistent with osteopathic commitments to person-centered, contextual, relationship-based care.

Working Draft

This draft minimum practice standard is intended for AOiA finalization and stakeholder governance review.



Minimum Expectations for OsteopathicAI-Aligned Systems:

01 · Augmentation and Accountability

AI supports patients, clinicians, learners, and teams; an appropriately credentialed, accountable human remains responsible for outcomes.

02 · Whole-Person, Relationship-Centered Intent

AI use should protect dignity, autonomy, therapeutic alliance, compassionate care, and contextualized whole-person care.

03 · Safety with Responsible Human Oversight for Consequential Output

Consequential AI output requires responsible human oversight with authority to override, correct, or halt use.

04 · Truthfulness and Transparency

Users should be able to understand limits, uncertainty, source support when relevant, intended use, and how AI may influence decisions or communication.

05 · Privacy and Security by Design

Protected data should be handled lawfully and securely, with access controls and safeguards against misuse.

06 · Fairness and Harm Reduction

AI systems should be assessed and monitored to identify and mitigate bias, unequal performance, and disparate harm.

07 · Evidence and Validation Proportional to Risk

Claims, validation, and monitoring should be proportional to the evidence, setting, impact, and risk of the use case.

08 · Osteopathic Distinctiveness

AI uses involving osteopathic medicine, including OMM, should be reviewed against osteopathic expertise, whole-person care, and relationship-centered principles.

09 · Collaboration and Lawful De-identified Data Sharing for Learning

Lawful de-identified data sharing may support education, quality improvement, research, and professional learning, while respecting governance, privacy, and safeguards against unauthorized data use or re-identification.



Why AI and Digital Health Literacy Matter Now

- AI adoption is moving quickly across educational and clinical environments, while curricula and policies are still adapting.
- Learners and faculty are already encountering AI-enabled tools in educational and clinical environments.
- The risk is not only overreliance on AI, but also insufficient preparation to evaluate AI tools critically.
- Osteopathic medicine offers a strong ethical and relational lens for responsible adoption.



The Current Reality

Learners and faculty are increasingly encountering AI tools for studying, drafting, summarizing, information retrieval, and workflow support - often with uneven guidance.



The Opportunity

Osteopathic medical education can model responsible, human-centered AI adoption grounded in whole-person care.



Possible Competency Domains

Four possible domains for organizing AI and digital health literacy for osteopathic learners and faculty

AI Foundations & Literacy

Understanding what AI can do, how common AI systems work at a basic level, and where they can fail.

Clinical & Educational Application

Using AI appropriately in learning, teaching, simulation, assessment, and patient-care contexts.

Ethical & Responsible Use

Applying professional, relational, ethical, and governance principles to AI-enabled work.

Data Literacy, Privacy & Security

Understanding how data, systems, privacy, and security safeguards shape AI performance and risk.

 These domains can apply to **both learners and faculty**, with expected depth varying by role, context, and career stage.



Domain 1:

AI Foundations and Literacy

1

AI Foundations and Literacy

The conceptual groundwork learners and faculty need before using AI in educational or clinical contexts.

- Explain, at a basic level, how common AI systems, including large language models, generate outputs and why those outputs require verification.
- Distinguish between decision support and autonomous decision-making.
- Evaluate the credibility of an AI tool by considering intended use, evidence, developer transparency, and limitations.
- Recognize common failure modes, including hallucination, bias, overconfidence, and performance drift across settings.
- Apply appropriate verification strategies for AI-generated content, especially when outputs may affect learning, assessment, clinical reasoning, or patient communication.



Domain 2:

Clinical and Educational Application

2

Clinical and Educational AI Application

Applying AI literacy in real educational and clinical contexts.

- Match AI tools to appropriate educational or clinical use cases and vet them before use.
- Critically appraise AI-generated recommendations rather than accepting them passively.
- Integrate digital tools into patient communication and education in ways that support understanding and trust.
- Use AI in simulation, feedback, and assessment only when the educational purpose is clear and the limitations are understood.
- Recognize situations where AI use may be inappropriate, inadequate, or require heightened human oversight, including complex psychosocial scenarios, end-of-life conversations, and culturally nuanced care.

Knowing when not to use AI is a teachable and assessable clinical skill.



Domain 3:

Ethical and Responsible AI Use

3

Ethical and Responsible AI Use

The domain where professional identity, judgment, and technology intersect most directly.

- Maintain human accountability for consequential AI-assisted decisions.
- Use transparency practices for patient-facing AI interactions; when AI provides individualized guidance or recommendations, use disclosure and informed consent consistent with applicable law and institutional policy.
- Recognize, question, and work to mitigate algorithmic bias and unequal performance.
- Preserve osteopathic commitments to relationship-centered, whole-person care even when efficiency tools are present.
- Exercise professional judgment in deciding when to adopt, limit, or reject an AI tool.

📄 Aligned with draft OsteopathicAI themes of accountability, relationship-centered care, oversight, and fairness.



Domain 4:

Data Literacy, Privacy and Security

4

Data Literacy, Privacy and Security

Often less visible to learners, yet foundational to safe and effective AI use.

- Describe how health data are collected, structured, and used in digital systems and AI development.
- Apply HIPAA, institutional policy, and data-governance expectations to AI-enabled workflows.
- Recognize how missing data, biased samples, poor labeling, and outdated data can affect model performance.
- Advocate for representative data and equitable evaluation practices in health AI.
- Protect privacy and confidentiality in documentation, communication, and clinical workflows that involve AI-enabled tools.



Aligned with draft OsteopathicAI themes of privacy, security, and fairness.



Connecting AI Competencies to Osteopathic Principles

01

The body is a unit; the person is a unit of body, mind, and spirit.

AI should support whole-person understanding and should not reduce the patient to isolated data points, predictions, or documentation artifacts.

03

Structure and function are reciprocally interrelated.

AI tools should be designed and implemented so their structure fits the function of care, teaching, workflow, and communication.

02

The body is capable of self-regulation, self-healing, and health maintenance.

AI should support patient agency, health maintenance, education, and therapeutic relationships - not displace clinical judgment or human care.

04

Rational treatment is based upon an understanding of the basic principles of body unity, self-regulation, and the interrelationship of structure and function.

AI should be used with evidence, transparency, human oversight, and caution proportional to the clinical or educational stakes.



Faculty Development: A Possible Tiered Framework

Tier 1 · Awareness & Literacy

Audience: All Faculty

What AI is, what it is not, and how to discuss responsible use with learners. No technical expertise required.

Tier 2 · Application & Integration

Audience: Course Directors and Clinical Faculty

Integrating competencies into teaching, case discussion, simulation, and assessment.

Tier 3 · Innovation & Leadership

Audience: Champions and Early Adopters

Designing new curricular approaches, contributing to policy, mentoring colleagues, and leading local innovation.

 Not every faculty member needs advanced AI expertise, but every institution benefits from baseline literacy, applied practice, and local leadership capacity.



Possible Curriculum Integration Approaches

Embed, don't bolt on: Integrate AI literacy into clinical reasoning, ethics, documentation, communication, and simulation rather than isolating it in a stand-alone elective.

Case-based learning: Present scenarios in which AI produces plausible but flawed output and ask learners how they would verify, respond, and communicate.

Simulation integration: Design AI-enabled OSCEs or simulated encounters that require learners to evaluate both the tool and their own judgment.

Osteopathic-relevant contexts: Documentation, communication, pattern recognition, and procedural learning support in simulation or supervised educational contexts may all create relevant teaching opportunities in osteopathic settings.

Interprofessional opportunities: AI and digital health literacy are shared needs across medicine, nursing, pharmacy, and other health professions.



Design Principle

Embedding signals that AI literacy is core curriculum, not optional enrichment.



Start Here

Audit existing courses for natural integration points before creating new stand-alone content.



Sample Approaches for Assessing AI Competencies

Domain 1

Foundations

- Case-based MCQs that evaluate claims about AI tools
- Critique of an AI-generated summary or recommendation

Domain 2

Application

- Simulated AI-assisted clinical encounter or OSCE
- Standardized patient case with an AI decision-support overlay

Domain 3

Ethics and Professional Judgment

- Reflective portfolio entry on AI use in a clinical or educational setting
- Structured ethics case discussion with faculty debrief

Domain 4

Data Literacy, Privacy, and Security

- Written analysis of an AI product's data sources, limitations, and risks
- Privacy or governance scenario assessment

Faculty Assessment

- Peer observation of AI-integrated teaching
- Self-assessment and development planning
- Curriculum mapping review

Assessment Principle

Assessment signals institutional commitment. What we assess is what learners and faculty take seriously.



Institutional Strategies for Risk-Aware AI Adoption

1 Establish AI Governance

Include faculty, students, IT, legal/compliance, and operational stakeholders.

2 Create Clear Use Policies

Define expectations for educational, administrative, and clinical contexts, and review them regularly.

3 Standardize Transparency Practices

Clarify when and how AI use should be communicated in educational and patient-facing settings.

4 Align With Data Governance

Tools that handle protected or sensitive data should undergo institutional privacy and security review.

5 Include Students in Policy Design

Student input can surface real-world use patterns, questions, and risks that may not yet be visible in formal policy.

6 Build Continuous Review and Safety Loops

Collect feedback, monitor outcomes, review incidents or concerns, and revise policy as technologies and use cases change.



The Core Principle

AI adoption is already underway across education and healthcare.
Proactive, risk-aware governance is safer than reactive governance.



Start Lean

Begin with a workable policy and a defined review cycle rather than waiting for a perfect framework.



Key Takeaways

OsteopathicAI is currently a draft profession-level minimum practice standard, not a finalized technical implementation standard.

The four possible competency domains can help organize AI and digital health literacy for both learners and faculty.

Faculty development can be tiered: not everyone needs the same depth, but everyone needs baseline capability.

AI competencies can be assessed through case-based, performance-based, and reflective approaches.

Institutional strategy should be proactive, iterative, and governance-informed.

Osteopathic medical education is well positioned to model responsible, human-centered AI adoption.



References & Citations

American Osteopathic Information Association (AOiA). OsteopathicAI Definition and Minimum Standard. AOiA working draft, Draft v1.1. March 25, 2026.

https://www.aoiassn.org/s/OsteopathicAI-Definition_V11.pdf | <https://www.aoiassn.org/digital-health-innovation-resources>

AOiA. Digital Health Innovation Resources

<https://www.aoiassn.org/digital-health-innovation-resources/>

AOiA. DHI FAQ

<https://www.aoiassn.org/dhi/faq>

AAMC. Artificial Intelligence Competencies Across the Learning Continuum

<https://www.aamc.org/about-us/medical-education/ai-competencies/>

AAMC. Principles for the Responsible Use of Artificial Intelligence in and for Medical Education

<https://www.aamc.org/about-us/mission-areas/medical-education/principles-ai-use>

AAMC. CGEA Artificial Intelligence Framework for Educators

<https://www.aamc.org/about-us/mission-areas/medical-education/advancing-ai-resource-collection/cgea-artificial-intelligence-framework-educators>

Liebovitz DM. Navigating Uncertainty in Digital Health Education. JAMA Network Open. 2025;8(1):e2453095. doi:10.1001/jamanetworkopen.2024.53095.

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2829787>

AMA. Principles for Augmented Intelligence Development, Deployment, and Use

<https://www.ama-assn.org/system/files/ama-ai-principles.pdf>

American Osteopathic Association. Tenets of Osteopathic Medicine.

<https://osteopathic.org/about/leadership/aoa-governance-documents/tenets-of-osteopathic-medicine>

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