

Training physicians to use AI— without surrendering judgment

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My work at UW–Madison informs my expertise, but I do not represent the views of the university. I am providing this testimony as a private citizen and subject matter expert only

THREE ASKS

1. Ask the Medical Examining Board to require AI-specific continuing education.
2. Include competence verification in any human-in-the-loop standard this committee recommends.
3. Require demographic validation and transparency for AI tools in state-funded health programs.

Medical education continues throughout a physician's career



Ai affects how Wisconsin trains and maintains its physician workforce.

AI is already part of medical education

77%

of U.S. and Canadian medical
schools reported AI in the
curriculum (2024)

Association of American Medical Colleges (AAMC)

Future learners will use AI.

The question is how we teach them to use it safely.

AI can improve performance while weakening learning

In clinical practice

We want AI to make work faster, easier, and more accurate.

The goal is better outcomes for patients.

During training

Difficulty is necessary to develop reasoning, memory, judgment, and error recognition.

The goal is a competent physician.

A better AI-assisted answer does not necessarily mean a better-trained physician.

The educational challenge: preserve the cognitive work that creates competence while using AI where it genuinely improves learning.

Three ways AI can undermine physician competence

De-skilling *The physician had the competence and lost it.*

A practicing physician who once could interpret an EKG independently now defers to the AI. When the AI is wrong or unavailable, the skill has eroded.

Never-skilling *The physician never had the competence to begin with.*

A trainee who uses AI throughout training never develops the independent reasoning to evaluate what AI produces. The foundation was never built.

Mis-skilling *The physician has the wrong competence.*

A physician who uses AI regularly develops confidence in AI-assisted performance—but performance is subpar.

Each is a patient safety problem. Each requires a different response. None is visible until something goes wrong.

The goal is trustworthy clinical judgment, not AI proficiency

Can I trust this physician to recognize, reason, decide, and act when AI is unavailable, inappropriate, uncertain, or wrong?



Domain Knowledge

Enough to evaluate AI, not merely accept it



Clinical Judgment

Reasoning that AI supports but cannot replace



AI Literacy

Understanding how AI works and where it fails



Verification

Checking AI output against evidence and context



Professional Responsibility

The physician remains accountable for every decision

Assessment must verify both independent and AI-augmented competence

Independent Competence

Can the physician:

- Reason through a case without AI?
- Transfer knowledge to unfamiliar situations?
- Recognize clinical instability or uncertainty?
- Perform when AI is unavailable?

AI-Augmented Competence

Can the physician:

- Use AI appropriately for the clinical task?
- Recognize an incorrect or biased output?
- Verify important information independently?
- Explain AI use to patients?
- Remain responsible for the final decision?

Future physicians must demonstrate both.

National guidance is emerging.

IN DEVELOPMENT

International Frameworks

The International Advisory Committee for AI framework is in public consultation.

IN DEVELOPMENT

AI Competencies for Medicine

Association of American Medical Colleges (AAMC) developing competencies. Final report targeted for fall 2026.

Key questions the evidence has not yet answered:

1. How much AI use, at what training stage, for which tasks?
2. Does AI-assisted training preserve clinical reasoning and independent performance?
3. How should competence be assessed when AI is part of practice?
4. Are we narrowing or widening educational disparities?

What I am asking this committee to recommend

1 Require AI-specific continuing education for physicians

Ask the Medical Examining Board to designate a portion of the existing 30 biennial CME hours for AI literacy, verification, and bias recognition. Precedent: the opioid prescribing CME mandate, enacted for the same reason—patient safety.

2 Include competence verification in human-in-the-loop standards

If this committee recommends legislation requiring human review of AI clinical outputs, ensure the reviewing human has demonstrated the ability to evaluate those outputs... not simply that a person clicked 'approve.'

3 Require validation and transparency for state-funded AI tools

For AI clinical tools purchased through Medicaid, BadgerCare, or state health programs, require demographic validation against Wisconsin's patient population, disclosure of AI use, and ongoing performance monitoring.

*The goal is not to train physicians who can use AI.
It is to train better physicians in a world where AI exists.*