BYO AI: THE ORGANIZATIONAL URGENCY TO PROVIDE TRAINING IN ARTIFICIAL INTELLIGENCE.

MARGARET LOZOVATSKY, MD, FAMIA – DIGITAL HEALTH PHYSICIAN EXECUTIVE

AMY SITAPATI, MD – INTERIM CHIEF OF THE DIVISION OF BIOMEDICAL SCIENCES AND CMIO FOR POPULATION HEALTH, UNIVERSITY OF CALIFORNIA SAN DIEGO

OBJECTIVES

PARTICIPANTS IN THIS SESSION WILL BE ABLE TO:

- DESCRIBE THE URGENCY FOR INCORPORATING TRAINING ABOUT AI INTO RESIDENCY TRAINING
- DISCUSS THE OPPORTUNITY FOR FACULTY TO CO-PRODUCE AND CO-LEARN WITH RESIDENTS
- SHARE ORGANIZATIONAL STRATEGIES FOR INTEGRATING AI

AI in training | training in AI

Image created with DALL-E

INTRODUCTIONS

DOES YOUR TRAINING PROGRAM CURRENTLY *EXPLICITLY* TEACH ABOUT AI?

- IF YES, HOW?
- IF NO, WHY?

ARE YOUR RESIDENTS USING AI? WHAT FOR?

FRAMING THE CHALLENGE…

AI USE AT WORK IN T

(NOT SPECIFIC TO HEALTH

71%

of knowledge workers in the US use generative AI at work (global = 75%)

77%

of leaders believe their company needs to adopt AI to stay competitive

BUT

60%

of leaders worry their organization's leadership lacks a plan and vision for AI

63%

of AI users are bringing their own AI to work (BYOAI)

65%

of leaders say they would not hire someone without AI skills

Microsoft & LinkedIn 2024 Work Trends Index Annual Report

Physician Use of AI

AI use in clinical practice continues to climb and uncertainty decreases.

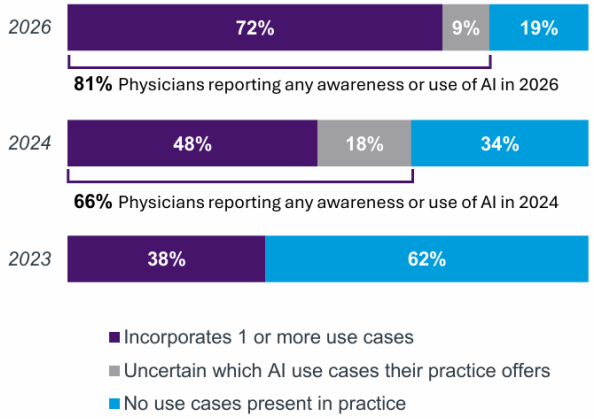
Physicians reporting awareness or use of AI in their practice increased to 81% in 2026, reflecting continued growth. At the same time, uncertainty about available AI tools fell from 18% in 2024 to 9% in 2026, while "no reported AI use" fell from 34% to 19% over the same period.

Physicians also report incorporating a broader range of applications, with the average number of use cases increasing from 1.1 (2023) to 2.3 (2026).

Reported AI use in practice increases

Q: Which, if any, of these AI use cases do you currently incorporate into your practice? (choice of 17 use cases)

n = 1,342 (2026); n=1,183 (2024) n=1,081 (2023)



Question updates:

- The survey instrument now differentiates between physicians who are not using any AI use cases and those who are uncertain about which tools their practice offers.
- The list of evaluated AI use cases expanded from 15 to 17 in 2026 to reflect emerging technologies.

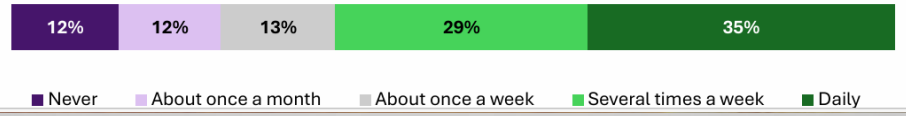
Physicians' professional adoption of AI mirrors their expanded personal use.

Over three-quarters of physicians use an AI system at least once a week for personal activities, with a third using it daily, another indication that routine AI use is deeply embedded in physicians' day-to-day lives.

Reported use of AI for personal use high for physicians

Q: How often do you use any AI system outside of work for your own personal use (including AI-assisted internet search, customer service chatbots, image generators and/or AI chatbots like ChatGPT)?

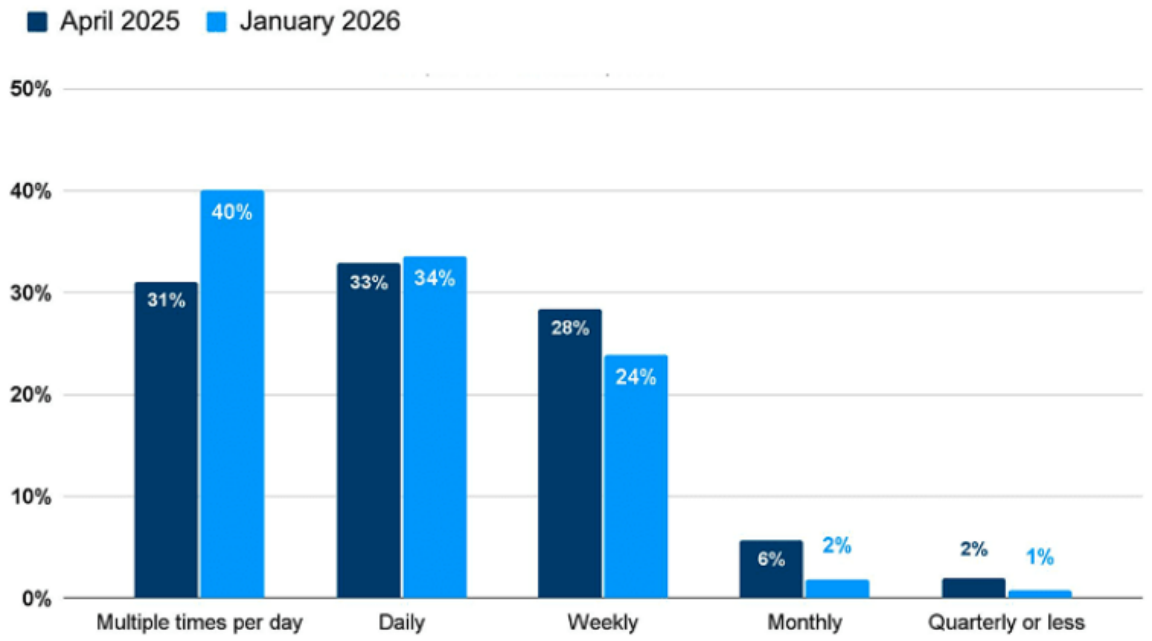
n = 1,685



AMA Augmented Intelligence Research | AMA

How Often Do You Use AI in Your Practice?*†

Percentages Specific to Physician AI Users (Non-Users Excluded)



*Due to rounding, numbers may not sum to 100%.

†Survey dates are March–April 2025 and November 2025–January 2026.

[Doximity 2026 State of AI in Medicine Report]

AUGMENTED INTELLIGENCE

- *But only if the human is trained to use AI properly*

Freidman. A ”fundamental theorem” of biomedical informatics. J Am Med Inform Assoc. 2009 Mar-Apr; 16(2): 169-70

…FEW HAVE HAD TRAINING IN AI (US DATA)

AAMC SCOPE DATA (COLLECTED UP TO FEBRUARY 2024)

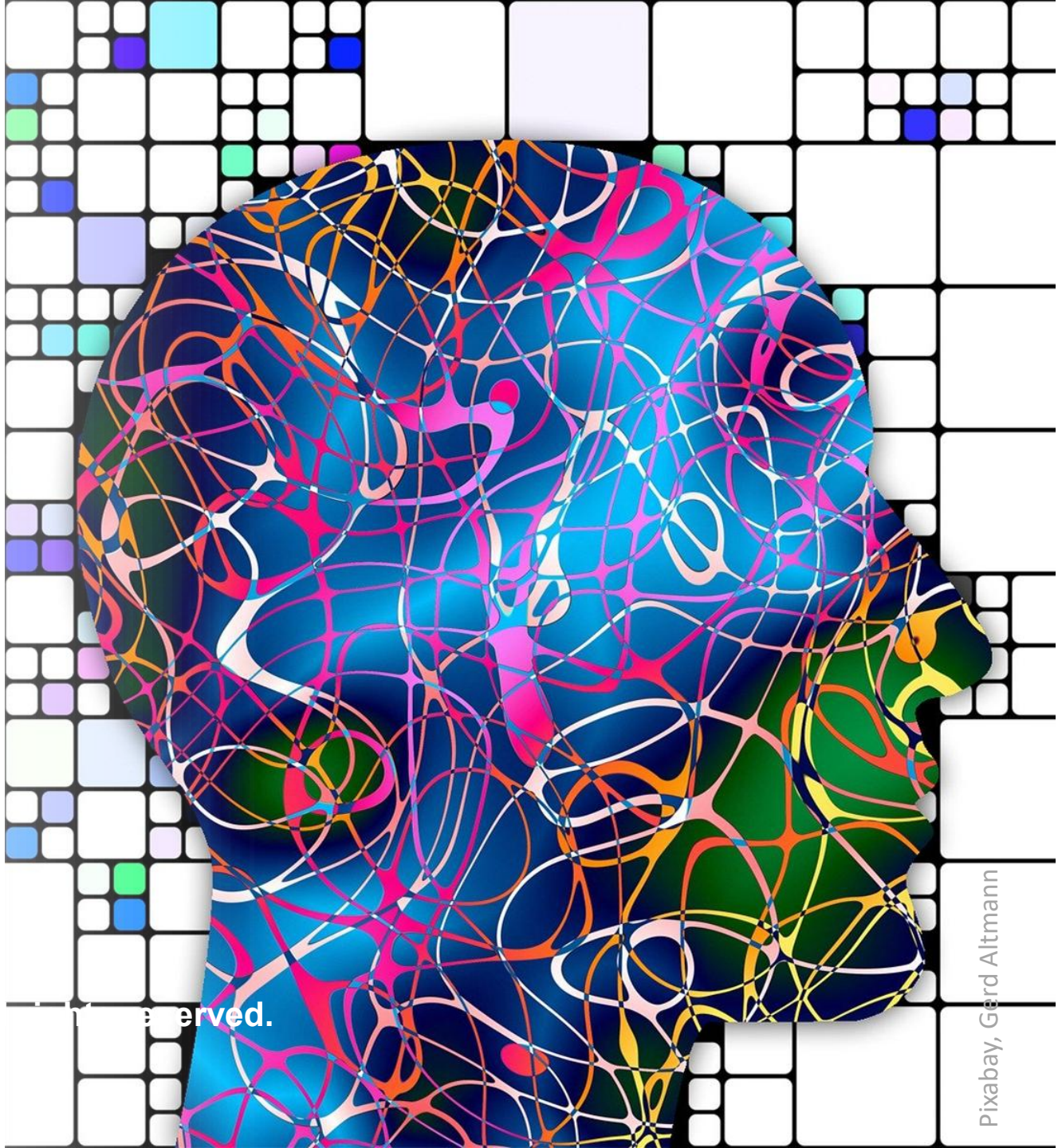
Of 167 MD and DO granting medical schools in the United States and Canada…

- **33%** (55) reported covering artificial intelligence in the required curriculum
- **38%** (63) reported covering artificial intelligence in the elective or optional curriculum

(not mutually exclusive)

PROPOSED AI COMPETENCIES FOR HEALTH PROFESSIONALS

- BASICS OF AI
- AI-ENHANCED CLINICAL ENCOUNTERS
- SOCIAL & ETHICAL ISSUES
- EVIDENCE-BASED EVALUATION OF AI
- WORKFLOW CONSIDERATIONS
- PRACTICE-BASED LEARNING & IMPROVEMENT IN USE OF AI



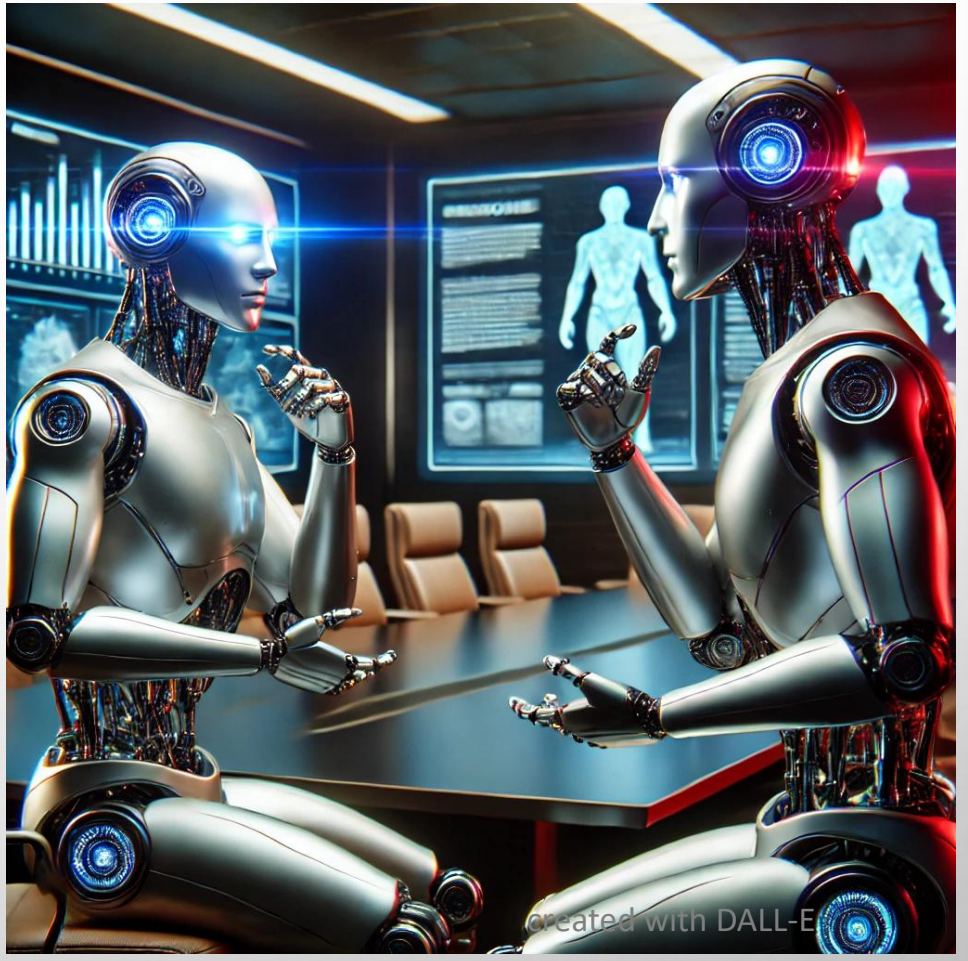
Pixabay, Gerd Altmann

Russell et al. Competencies for the Use of Artificial Intelligence-Based Tools by Health Care Professionals. Acad Med. 2023 Mar 1;98(3):348-356.

FRAMESTORMING…

Table-top discussion:

- *How will your institution accelerate the development of AI competency across your workforce?*
- *What opportunities exist to integrate AI training into your GME programs?*



STRATEGIES FOR UPSKILLING ACROSS CONTINUUM

INSTITUTIONAL EFFORTS

- MULTI-DISCIPLINARY LEADERSHIP
- CO-PRODUCTION WITH LEARNERS

- TRANSPARENT POLICIES AND MONITORING STRUCTURE
- ENTERPRISE INSTANCES OF LLMS FOR ENHANCED SECURITY

- AI PLAYGROUNDS, PROMPT-A-THONS, RED-TEAMING

- INCLUDE LEARNERS & TRAINEES IN LICENSES AND CO-PRODUCTION

- STUDY IMPACTS OF AI

WHY IS GOVERNANCE IMPORTANT?

Value of Governance

Governance can ensure the responsible and effective use of AI at an organization, empowering health systems to:

Manage tool identification, evaluation, and deployment

Standardize risk assessment and risk mitigation strategies

Maintain comprehensive documentation

Ensure safe applications with robust oversight

Decrease clinician burnout

Promote collaboration and alignment across the institution

8 STEPS TO ESTABLISH AI GOVERNANCE

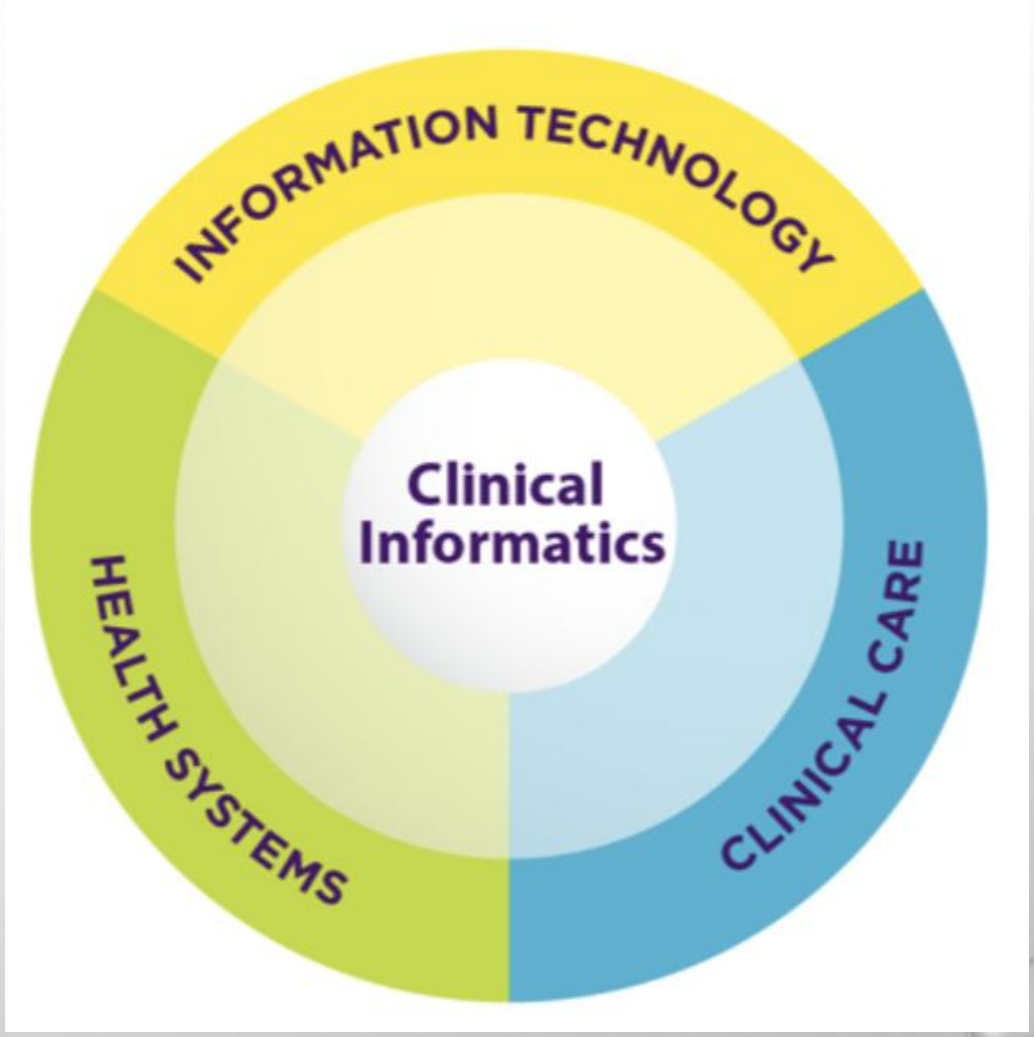
1. ESTABLISH EXECUTIVE ACCOUNTABILITY AND A GOVERNANCE STRUCTURE
2. FORM A WORKING GROUP TO DETAIL PRIORITIES, PROCESSES AND POLICIES
3. ASSESS THE CURRENT STATE AND ESTABLISH PRIORITIES
4. DEVELOP AI POLICIES
5. DEFINE PROJECT INTAKE, VENDOR EVALUATION AND ASSESSMENT PROCESSES
6. UPDATE STANDARD PLANNING AND IMPLEMENTATION PROCESSES
7. ESTABLISH AN OVERSIGHT AND MONITORING PROCESS
8. SUPPORT AI ORGANIZATIONAL READINESS

Governance for Augmented Intelligence: Establish a Governance Framework to Implement, Manage, and Scale AI Solutions | Digital Health | AMA STEPS Forward | AMA Ed Hub

Role of Clinical Informatics

Governance of any clinical technology, including AI, relies on a deep understanding of what both technology and people can and should do – this is where clinical informatics excels.

- Let *technology* do what it does best
- Let *physicians* do what they do best

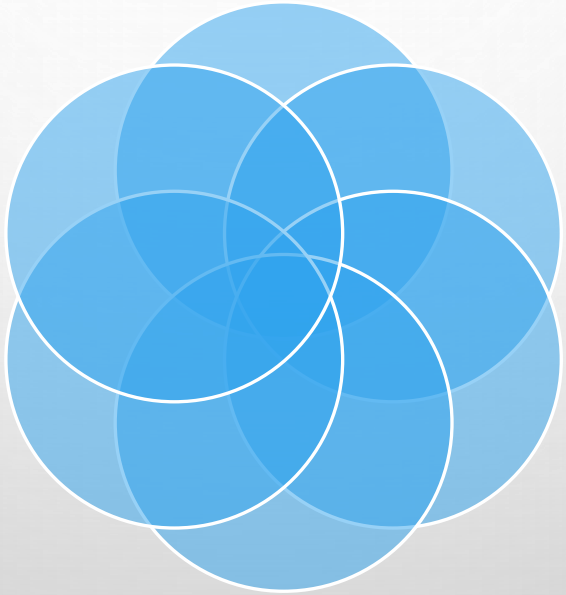


Form a Working Group to Detail Priorities, Processes and Policies

Key questions to explore:

What are the highest priority use cases for our organization?

How will the organization address the use of free, publicly available AI tools?



What are the primary risks we aim to mitigate?

Can the organization use certain AI tools without a standard governance review? If so, what are the thresholds?

What does success look like in our AI efforts 5 years from now? How will AI generate value for the organization?

Are we going to pursue internal development, co-development and/or off-the-shelf AI tools? What is our approach to integration and workflow design?

ASSESS THE CURRENT STATE AND ESTABLISH PRIORITIES:

QUANTIFYING VALUE

- 3

UPDATE STANDARD PLANNING AND IMPLEMENTATION PROCESS

1 • 6

1	2	3	4	5	6	7
						
Project plan, budget and timeline	Testing and evaluation	Review and final approval of full-scale implementation	Team member engagement and training	Change management	Implementation and go-live planning	Performance monitoring

Typically, once a tool is approved, responsibility is transferred from the governance committee to the project management team.

SUPPORT AI ORGANIZATIONAL READINESS

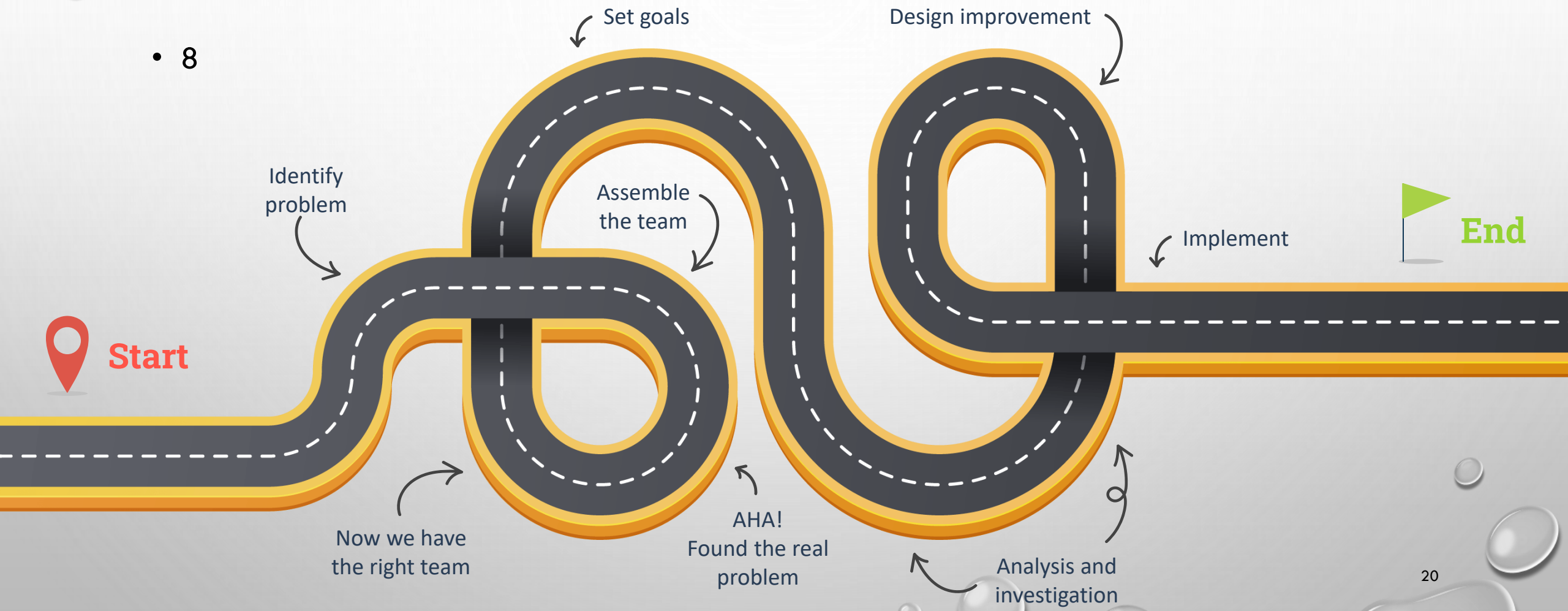
WHAT PROCESS IMPROVEMENT IS SUPPOSED TO LOOK LIKE…

Involve stakeholders across the organization and set expectations around what it looks like to integrate new tools, especially tools that use AI

SUPPORT AI ORGANIZATIONAL READINESS

THE REALITY OF CONTINUOUS IMPROVEMENT

- 8

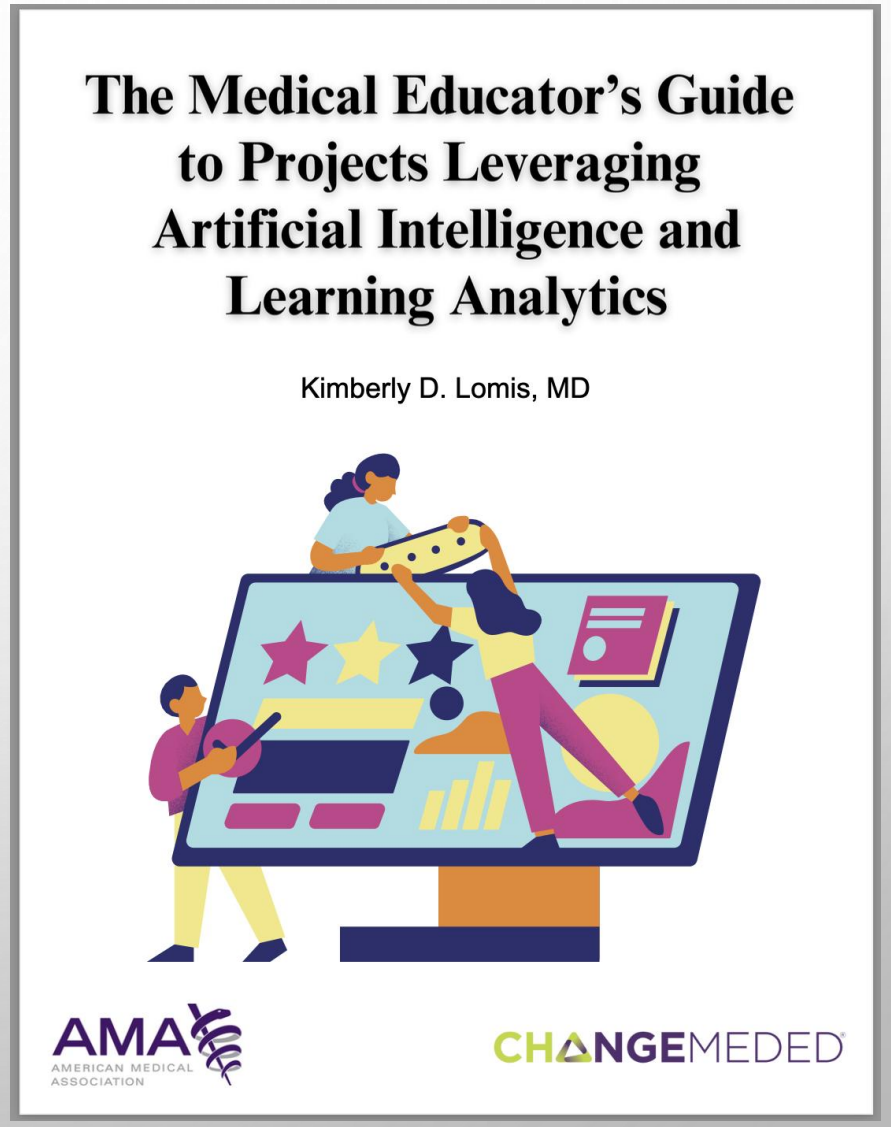


CONSIDERATIONS WHEN DEVELOPING AI MODELS

FOR HEALTH CARE OR HEALTH PROFESSIONS EDUCATION

Key Considerations for Projects Leveraging Artificial Intelligence and Learning Analytics

1. Problem definition
2. Affordances of technology
3. Data considerations
4. Limitations of technologies
5. Costs
6. Implementation science
7. Responsible deployment



LIMITATIONS & RESPONSIBLE DEPLOYMENT

Pitfalls…

- Bias in data sets and data prep
- Inequities in access & outcomes
- Technical issues
- User error
- Sycophantic nature of AI
- Lack of attention to implementation science

Organizational structure is needed to support responsible deployment

Responsibility	Innovation project team	Educational administration (deans, curric cmte.)	Educator
PLANNING AND DEVELOPMENT			
Ensure the AI system addresses a meaningful educational goal	○		○
Ensure the AI system works as intended	○		○
Explore and resolve legal implications of the AI system[1] prior to implementation and agree upon appropriate safe, effective and equitable use of and access to education AI	○	○	○
Develop a clear protocol to identify and correct for potential bias	○	○	○
Ensure appropriate learner safeguards are in place for direct-to-consumer tools that lack educator oversight	○		
IMPLEMENTATION AND MONITORING			
Make educational decisions such as advancement and remediation		○	○
Have the authority and ability to override the AI system			○
Ensure meaningful oversight is in place for ongoing monitoring		○	○
Ensure the AI system continues to perform as intended through performance monitoring and maintenance	○	○	
Ensure ethical issues identified at the time of purchase and during use have been addressed[2]		○	
Ensure clear protocols exist for enforcement and accountability, including a clear protocol to ensure equitable implementation	○	○	

TABLE-TOP DISCUSSION

- *WHAT ORGANIZATIONAL RESOURCES CAN YOU COORDINATE TO SUPPORT THE RESPONSIBLE INTEGRATION OF AI TOOLS AT YOUR INSTITUTION?*
- *WHAT ELEMENTS OF ORGANIZATIONAL CULTURE ARE MOST IMPORTANT TO ADDRESS?*