

## Executive Certificate Program

# Artificial Intelligence in Healthcare Management

Artificial Intelligence (AI) is transforming the global healthcare landscape, from clinical diagnostics and operations to workforce management and medical education. Yet, realizing its full potential requires strategic leadership that balances innovation with responsibility. This executive-level program equips academic and healthcare leaders to understand, evaluate, and implement AI solutions that advance institutional missions while upholding ethical, regulatory, and patient-care standards. Over six interactive, expert-led sessions, participants will explore how to use AI effectively, understand healthcare trends, identify opportunities, mitigate risks, establish governance, and, most importantly, lead in their institutions, driving positive change with AI.

**Location:** 100% Online, Synchronous (Live interactive sessions with a variety of leading experts)

**Dates:** April 18, 2026 – June 27, 2026

**Audience:** Physicians, Nurses, Administrative Leadership of medical schools, hospitals, and healthcare systems

**Tuition:** \$2,000

**Frequency:** Offered quarterly

**Contact:** Jonathan Southgate, Director of Executive Education  
[jsouthga@umd.edu](mailto:jsouthga@umd.edu) or +1 (240) 712-9407

### Who is this for:

This quarterly program is for anyone asking any of the following questions:

- *How can I use AI tools in my everyday life as a provider?*
- *How can I make my organization AI-literate to help prepare for a new world in healthcare?*
- *How can we build more structure around the various AI initiatives currently underway at my hospital/institution?*
- *How can I be a leader who helps manage the change AI is bringing to healthcare practice?*

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### Program Goals:

Participants will leave equipped with the knowledge and tools to:

1. Understand core AI capabilities, use cases, and technological foundations relevant to healthcare.
2. Responsibly use state-of-the-art AI tools
3. Evaluate potential risks, including bias, data integrity, and regulatory compliance, and design strategies to mitigate them.
4. Develop governance models and implementation strategies for ethical and responsible AI adoption.
5. Lead institutional change by aligning AI initiatives with mission, culture, and workforce readiness.

*Saturday, April 18, 2026 | 10:00 AM - 11:30 AM EST*

## Capabilities and Use Cases of AI in Healthcare

This session provides a comprehensive foundation for understanding AI's transformative impact on healthcare delivery, education, and administration. Participants will explore how AI enhances clinical decision-making, diagnostics, imaging, patient flow, and predictive analytics, as well as how it supports institutional research and operations.

### Topics:

- Overview of machine learning, natural language processing, and GenAI in healthcare contexts
- Case studies from hospitals, medical schools, and public health systems
- Identifying high-impact areas for AI integration in academic medicine
- Leadership roles in aligning AI strategy with institutional priorities



### Balaji Padmanabhan, PhD

Dr. Padmanabhan serves as Associate Dean of Strategic Initiatives and Dean's Professor of Decisions, Operations & Information Technologies. With over 25 years in data science, AI/machine learning, and business analytics, he deeply understands how complex systems and modelling can bring measurable impact to healthcare organisations.

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*Saturday, May 2, 2026 and Saturday, May 16, 2026 | 10:00 AM - 11:30 AM EST*

## AI Tools in Healthcare (2 Parts)

A practical exploration of the technology ecosystem supporting AI in healthcare. Participants will gain hands-on experience with key AI platforms and understand the AI vendor ecosystem in healthcare.

### Topics:

- Overview of general-purpose AI tools (ChatGPT, Gemini, Claude) and specialized tools (ChatGPT for Health, OpenEvidence, etc.)
- Hands-on demonstration of using general-purpose AI tools
- Demo capabilities of more recent specialized AI tools, such as ChatGPT for Health and OpenEvidence
- Evaluating vendors and open-source tools



### Kunpeng Zhang ("KZ"), PhD

KZ is an Associate Professor in information & decision science, whose research applies scalable machine learning, natural language processing and social network analytics to business and healthcare "big-data" problems. Having taught and built analytics systems in healthcare settings, he brings strong technical and operational insight into the deployment of AI projects.



### **Balaji Padmanabhan, PhD**

Dr. Padmanabhan serves as Associate Dean of Strategic Initiatives and Dean's Professor of Decisions, Operations & Information Technologies. With over 25 years in data science, AI/machine learning, and business analytics, he deeply understands how complex systems and modelling can bring measurable impact to healthcare organisations.

*Saturday, May 30, 2026 | 10:00 AM - 11:30 AM EST*

### **Risks, Ethics, and Trust**

AI adoption in healthcare introduces new ethical and governance challenges. This session explores data privacy, algorithmic bias, transparency, and patient safety, while highlighting global and regional regulatory frameworks that shape responsible AI deployment.

#### **Topics:**

- Ethical frameworks and accountability in AI
- HIPAA, FDA, and emerging EU AI Act implications
- Managing bias and ensuring fairness in healthcare algorithms
- Building institutional trust through transparency and explainability



### **Margrét Bjarnadóttir, PhD**

Dr. Bjarnadóttir is an Associate Professor of Management Science & Statistics. Her research centers on large-scale healthcare datasets, optimisation modelling, and decision support in clinical settings.

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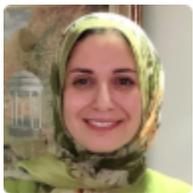
*Saturday, June 13, 2026 | 10:00 AM - 11:30 AM EST*

### **Governance and Policy**

This session focuses on establishing institutional frameworks for AI governance that uphold ethics, compliance, and long-term oversight. Participants learn how to define decision rights, data stewardship, and performance monitoring structures.

#### **Topics:**

- Building a governance model aligned with institutional mission and values
- Defining accountability and reporting structures
- Integrating AI oversight into existing compliance and ethics processes
- Developing transparent communication policies for AI adoption



### **Hala Jassim AlMossawi, BDS, MSc, MSHCA**

Hala is a global health executive with over 24 years' experience leading programme strategy, systems strengthening, and implementation in health-care contexts worldwide. Her leadership in health-systems governance, policy, and large-scale implementation makes her well-suited to guide institutional frameworks for AI oversight.

*Saturday, June 27, 2026 | 10:00 AM - 11:30 AM EST*

## Emerging Issues in Healthcare

This session examines frontier trends in healthcare management, regulatory frameworks, and the commercialization of healthcare products and their implications for medical education and patient engagement.

### Topics:

- Business of Life Sciences
- Regulatory frameworks and approval processes
- Commercialization of biologics, medical devices, and pharmaceuticals
- Future policy and societal considerations for AI in medicine



### Wendy Sanhai, PhD

Dr. Sanhai is a Visiting Professor of Practice at the Smith School and a recognised leader in healthcare and global health, having held senior roles across academia, federal agencies, industry, and consulting. With deep experience in life sciences strategy, regulatory affairs, and public-private partnerships, she is particularly well placed to navigate the frontier of healthcare innovation.

## Certificate

(with the option to earn Continuing Education Credits):

