VRSiM™

THE PROMISES & PITFALLS

AI & ADVANCED TECHNOLOGIES IN HEALTHCARE EDUCATION

An overview of panelist insights into the evolving roles of simulation and AI in modernizing healthcare education for future practitioners.

HOSTED BY
UNIVERSITY OF SAINT JOSEPH
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VRSiM™ — A MOMENT TO SAY

THANK YOU

VRSim is grateful to the University of Saint Joseph for opening its doors to a conversation that mattered. Hosting this panel on AI and advanced technologies in healthcare education brought together voices that rarely share the same room — and made it possible for us to publish what was said.

We also thank the panelists. They contributed time, candor, and hard-earned perspective from clinical practice, classroom instruction, public policy, and industry. The shape of this report is theirs; any rough edges in summarizing it are ours.

HOST INSTITUTION

UNIVERSITY OF SAINT JOSEPH

For convening the conversation and providing the venue.

THE PANELISTS

ELEVEN VOICES, ONE CONVERSATION

Listed in full on page 02.

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CHAPTER ONE
INTRODUCTION

WHY THIS CONVERSATION, WHY NOW

This report presents a structured summary of a panel discussion held at **The Promises and Pitfalls of AI and Advanced Technologies in Healthcare Education**, an event hosted by the University of Saint Joseph and VRSim, Inc.

The session brought together leaders from healthcare, education, government, and industry to explore the evolving role of artificial intelligence and simulation in training the next generation of healthcare professionals.

Rather than offering a single point of view, this document captures the key themes, insights, and debates that emerged during the conversation — highlighting both the opportunities and the challenges of integrating AI into healthcare education. It is intended to provide readers with a clear, accessible synthesis of the discussion and a practical lens on how these technologies are shaping the future of training and care delivery.

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CHAPTER ONE · CONTINUED

THE PANEL

THE PANEL

Moderator

★ **Brian Shactman**
Broadcast journalist

The panelists

01 **Sen. James Maroney**
State Senator, Connecticut

02 **Melissa Osborne**
BA CCEMT-P CP-C NRP EMS-I
Training/QI Manager
Ambulance Service of Manchester

03 **Ewelina McDade**
MSN, RN, NPD-BC, CEN ; McDade Consulting

04 **Ron Angelo**
President and CEO; Connecticut Center For Advanced Technology

05 **Rep. Patrick Biggins**
State Representative

06 **Divya Malhotra**
CEO/Founder of Purple Pivot

07 **Dayne Laskey**
Pharm.D., DABAT; Associate Professor of Pharmacy Practice and Administration at the University of Saint Joseph

08 **Ben Zura**
Senior Advisor, The Holdsworth Group

09 **Julie Booth**
PT, DPT, PCS Emeritus, FNAP, Director, Center for Interprofessional Healthcare Education, Clinical Associate Professor of Physical Therapy; Quinnipiac University

10 **Matthew Wallace**
President and CEO of VRSim Inc.

11 **Elisa Valenzuela**
PhD; Industrial-Organizational Psychology; Assistant Professor of Management at the University of Saint Joseph

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CHAPTER TWO
SYNOPSIS

FROM EXPERIMENT TO EVERYDAY REALITY

Artificial intelligence has moved beyond experimentation and into everyday reality. Across healthcare, education, and public policy, organizations are no longer asking if AI will matter. They are asking how quickly they can adapt.

The panel discussion revealed a shared urgency: AI is advancing faster than institutions, policies, and training models can keep up. What makes this moment unique is not just the speed of innovation — it is the breadth of its impact. AI is influencing clinical workflows, classroom instruction, workforce development, and ethical governance, all at once.

Healthcare leaders, educators, policymakers, and technologists are now aligned around a critical truth.

- AI offers unprecedented efficiency and scalability.
- It also introduces new risks, responsibilities, and unknowns.

> *We're barely 5% into the AI application... it's in its infancy.*
>
> — RON ANGELO

> *We're already behind.*
>
> — DAYNE LASKEY

The organizations that succeed will not be those that adopt AI blindly. They will be the ones that implement it with intention, responsibility, and a clear focus on human outcomes.

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CHAPTER THREE
THE INFLECTION POINT

EVERY GENERATION HAS A DEFINING SHIFT

For this generation, AI is that shift.

The panel drew a powerful comparison. Just as early automobiles reshaped society in unexpected ways, AI is poised to redefine how people live, learn, and work.

> *If we're that early on, we want to do this correctly... It's more expensive to rebuild.*
>
> — SEN. JAMES MARONEY

History also provides a warning. Previous waves of innovation, especially social media, were adopted quickly with minimal oversight. The consequences are still unfolding.

> *I don't think any of us could even imagine yet where all these things are going.*
>
> — RON ANGELO

AI offers an opportunity to take a different approach. This is not just a technology upgrade — it is a redesign of how systems operate. AI challenges long-standing assumptions about expertise, knowledge, and decision-making.

Organizations must move beyond surface-level adoption and begin thinking about long-term transformation across entire systems.

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CHAPTER FOUR
OPPORTUNITY IN HEALTHCARE

WHERE AI DELIVERS, TODAY

Healthcare is uniquely positioned to benefit from AI because of its complexity and reliance on data.

Clinicians today face growing administrative burdens, workforce shortages, and increasing expectations from patients. AI offers a path to relieve some of that pressure.

- **High-impact applications**
  - Automated documentation and clinical notes
  - Faster prior authorization processes
  - Predictive insights for patient care
  - Workflow and staffing optimization

The panel made it clear that the biggest gains will come from practical improvements rather than headline-grabbing innovations. When routine tasks are streamlined, clinicians can spend more time with patients. That shift alone has the potential to improve outcomes and reduce burnout.

FIELD NOTE

LESS PAPERWORK, MORE BEDSIDE.

The most-cited near-term win across the panel: returning clinician hours to direct patient care by automating the work that doesn't require human judgment.

> *Simulation allows us to do some really interesting things that we couldn't reach otherwise.*
>
> — MATTHEW WALLACE

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CHAPTER FIVE
THE POWER OF SIMULATION & TRAINING

PRACTICE THE RARE, SAFELY

AI-driven simulation is one of the most promising areas in healthcare education. Traditional training cannot expose learners to every possible scenario — time, resources, and risk make that impossible.

Simulation changes that reality.

- **Benefits of AI-enabled simulation**
  - Exposure to rare and critical situations
  - Safe learning environments without patient risk
  - Repetition that strengthens skills and confidence
  - Consistent training across different institutions

RESEARCH NOTE

CONFIDENCE CLIMBS 28%

Medicine published a prospective study on immersive VR emergency-care training, in which healthcare providers demonstrated up to a 28% increase in confidence and self-efficacy after participating in realistic simulation scenarios, highlighting the value of unpredictable, high-fidelity training environments.

Link to study →

> *Having seen it that one time... is going to make you feel much more comfortable when you see that person in real life.*
>
> — EWELINA MCDADE, MCDADE CONSULTING

This approach allows learners to build competence before encountering real patients. It also helps standardize training quality, regardless of location or institutional resources — a quiet but consequential shift in equity for programs that historically had less access to high-acuity placements.

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CHAPTER SIX
THE HUMAN ELEMENT

AI EXTENDS JUDGMENT. IT CAN'T REPLACE IT

AI can enhance performance, but it cannot replace human judgment. Healthcare relies on context, empathy, and experience — qualities that technology cannot fully replicate.

There is also concern that over-reliance on AI could weaken critical thinking, especially among students who are still developing foundational skills.

Standardizing AI literacy is essential, and it must be integrated into both foundational education for students and ongoing professional development for the workforce. We must be able to evaluate AI outputs, question recommendations, and take responsibility for decisions. The goal is not to remove humans from the process — it is to create a partnership where technology supports better thinking rather than replacing it.

WHAT AI DOES WELL

Speed, scale, pattern.

Surface signals in seconds. Process volumes no individual could. Standardize the routine so attention can move elsewhere.

WHAT ONLY HUMANS DO

Context, empathy, judgment.

Read the room. Hold a hand. Weigh a recommendation against everything the data doesn't capture, and own the decision either way.

THE FRAME TO KEEP

PARTNERSHIP, NOT REPLACEMENT.

AI as the second pair of eyes; the clinician as the decision-maker.

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CHAPTER SEVEN
RISKS & ETHICAL CHALLENGES

THE RISKS ARE REAL. ADDRESS THEM DIRECTLY

AI introduces significant risks that must be addressed directly. Systems trained on biased data can produce biased outcomes — and in healthcare, that can lead to unequal treatment and serious consequences.

Key challenges

- Bias in data and decision-making
- Overconfidence in automated recommendations
- Lack of transparency in how systems operate
- Unauthorized or unsupervised use of AI tools

> *The [AI] models are going to continue training in whatever they have access to and not necessarily in quality.*
>
> — ELISA VALENZUELA

EMERGING CONCERN · SHADOW AI

Individuals may use tools outside official systems, creating risks around privacy, accuracy, and compliance — often without leaving an audit trail.

Addressing these issues requires strong governance, continuous monitoring, and clear accountability — at the institutional level, not just at the individual desk.

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CHAPTER EIGHT
THE ROLE OF REGULATION

GUARDRAILS ENABLE SPEED

There is growing agreement that AI needs structured oversight. Regulation should not be viewed as a barrier — it should be seen as a framework that enables safe and effective use.

- **Effective governance should**
  - Establish clear guidelines and guardrails
  - Require testing for bias and accuracy
  - Define accountability for outcomes
  - Encourage transparency in system design

> *We were too late on social media. We can't repeat that mistake.*
>
> — MATTHEW WALLACE

WITHOUT GUARDRAILS

Speed without trust.

Adoption races ahead of evidence. Errors compound silently. The cost of correction grows the longer it goes uncaught.

WITH GUARDRAILS

Speed you can scale.

Clear rules, tested systems, and named accountability. Confidence to move fast because everyone knows what "safe to ship" actually looks like.

When done correctly, regulation can build trust and accelerate adoption. It helps ensure that innovation benefits everyone rather than creating unintended harm.

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CHAPTER NINE
WORKFORCE TRANSFORMATION

CAREERS ARE BEING REWRITTEN

Artificial intelligence is not just changing what work looks like. It is reshaping how careers are built, how skills are developed, and how professionals remain relevant over time.

In healthcare and related fields, the pace of change is accelerating. Skills once considered foundational can become outdated within a few years. At the same time, new tools and technologies are emerging faster than traditional education and training models can adapt. This creates both urgency and opportunity.

At the center of this shift is a simple reality: **learning is no longer a one-time milestone. It is an ongoing process that must evolve alongside technology.**

Key workforce trends

- Shorter lifespan of technical skills
- Increased need for adaptability
- Greater emphasis on communication and critical thinking

> *It's not AI that takes your job. It's someone who knows AI. Those are the ones who are keeping their jobs — and that's an actual skill.*
>
> — BRIAN SHACTMAN

As AI takes on more administrative and technical responsibilities, human capabilities become even more valuable. The future workforce will not be divided between those who use AI and those who do not. It will be divided between those who understand how to work alongside AI and those who do not.

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CHAPTER TEN
ACCESS & EQUITY

ACCESS IS NOT EVENLY DISTRIBUTED

AI has the potential to expand access to knowledge and training. However, access is not evenly distributed.

Barriers such as cost, infrastructure, and digital literacy limit who can benefit. In education, paid tools can create unequal learning environments. In healthcare, limited access to advanced systems can affect the quality of care that patients receive.

> *If the university is not paying the full license... right there you have [inequality].*
>
> — ELISA VALENZUELA

WHERE ACCESS STALLS

Cost, infrastructure, fluency.

Paid licenses, patchy infrastructure, and uneven digital literacy quietly decide who gets to learn, and who gets left behind.

WHERE ACCESS OPENS

Equity as a design choice.

Procurement that funds the full license. Faculty trained on the tool. Infrastructure planned for the program with the least, not the most.

Addressing these challenges requires intentional strategies that prioritize inclusion and equal opportunity — including procurement decisions, faculty training, and infrastructure investments that recognize equity as a design constraint, not an afterthought.

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CHAPTER ELEVEN
BUILDING AN AI-SKILLED WORKFORCE

INVEST IN PEOPLE, NOT JUST TOOLS

Preparing the workforce for this shift requires more than access to tools. It requires intentional investment in people.

In healthcare, where decisions directly impact outcomes, professionals should be training with simulation and AI in a thoughtful and responsible way. Don't just buy the tools and let them sit in a closet or on a desk. Use them. Grow your people.

- **What effective workforce development looks like**
  - Micro-learning opportunities
  - Hands-on, scenario-based training
  - Ongoing upskilling and reskilling programs
  - Cross-disciplinary collaboration

Supplementing curricula with simulation and experiential learning is especially important. They allow professionals to build confidence in using new technologies without risk to patients or systems.

> *Health care programs don't have the capacity to teach every single specialty before that nurse graduates.*
>
> — EWELINA MCDADE, MCDADE CONSULTING

Programs and employers who fail to actively utilize simulation and AI will find themselves falling further behind as the divide grows. Simply having access to these resources is only the first step; reaching the goal requires both a commitment to your students and/or workforce and the practical application of the technology.

12 | CHAPTER TWELVE · CLOSING
THE PATH FORWARD

INNOVATION, WITH RESPONSIBILITY

AI is already shaping how healthcare and education operate. The question is how organizations respond.

The path forward requires balance between innovation and responsibility.

- **Successful organizations will**
- Focus on meaningful, real-world applications
- Build trust through transparency
- Invest in both technology and people
- Continuously adapt to change

AI will not replace professionals. It will change how they work, and what skills matter most. The organizations that act with clarity and purpose today will define the future.

CLOSING THOUGHT

ADOPT WITH INTENTION. LEAD WITH PEOPLE

The technology will keep moving. Our discipline in deploying it will define the next decade.

CONTINUE THE CONVERSATION

See how leading programs put simulation to work

Explore case studies and training modules putting these ideas to work.

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