

The Digital Stethoscope Newsletter March 2025

"Amplifying innovation, one heartbeat at a time."



As we step into March, the conversation around artificial intelligence in nursing education and practice continues to evolve at a rapid pace. The question is no longer *if* AI will impact nursing—it's *how* we, as educators and healthcare professionals, will shape its role in the profession. This month, we focus on **the urgency of AI adoption in nursing** and the critical role educators play in ensuring students are prepared for an AI-enhanced healthcare landscape. From curriculum innovations to AI-

powered simulations, we'll explore how nursing programs can integrate AI competencies to empower future nurses. We'll also discuss the ethical and practical challenges of AI implementation, ensuring technology enhances—not replaces—the human touch in nursing. Whether you're taking your first steps into AI or taking charge of nursing education, this issue provides valuable insights to keep you at the forefront of innovation. Let's shape the future of nursing—together.

Dr. Susan Deane Online Education Consultant

Spotlight Feature: Shaping the Future of AI in Nursing—The Time is Now



"If we're in denial or if we're simply not paying attention, we could lose the chance to shape this technology when it matters the most." — The New York Times

Artificial intelligence (AI) is rapidly transforming healthcare, from predictive analytics to clinical decision support, reshaping how we educate, practice, and deliver care. Yet, as this quote reminds us, the future of AI is not something to be passively observed—it's something to be actively shaped.

For nurse educators, clinicians, and researchers, this moment presents both a challenge and an opportunity. If we embrace AI thoughtfully, ensuring it aligns with nursing's core values of patient-centered care, ethical decision-making, and equity, we can guide its implementation in ways that enhance—not replace—the human touch in healthcare. But if we hesitate, if we ignore its potential or the ethical dilemmas it brings, we risk losing our influence over its direction.

Now is the time for nursing professionals to lead the conversation on AI's role in healthcare. How can we ensure AI remains a tool for better patient care rather than a barrier? How can nursing education evolve to prepare students for an AI-integrated future? We must engage with these questions—before decisions are made for us.

Let's not stand on the sidelines. Let's shape the future of AI in nursing—together.

Trending Topics: Ethical and Practical Implications of AI: What Nursing Faculty Must Teach Students (Part 2)



As artificial intelligence (AI) becomes an integral part of healthcare, nursing faculty must ensure that students are not only **competent users** of AI but also **critical thinkers** who understand its ethical and practical implications. The role of AI in nursing extends beyond automation and efficiency—it intersects with patient safety, decision-making, equity, and professional accountability. Without proper education, AI has the potential to introduce biases, erode patient trust, and disrupt the human-centered nature of nursing care.. To address this, developers must prioritize diverse and representative datasets, conduct rigorous testing for bias, and implement mechanisms to ensure fairness in AI-driven decisions. Continuous monitoring and updates are critical to avoid unintended harm and ensure equitable care for all populations.

1. Ethical AI Decision-Making in Clinical Practice

- Nurses will increasingly use AI-powered clinical decision support systems (CDSS) that suggest diagnoses, medication adjustments, and care plans.
- o Faculty must teach students how to integrate AI insights with holistic, patient-centered care rather than solely relying on algorithmic outputs.
- Ethical dilemmas should be incorporated into case-based discussions where students must balance AI recommendations with patient preferences and nursing judgment.

2. Transparency and Explainability in AI

- Many AI models operate as "black boxes," meaning their decision-making processes are not easily understood.
- o Nurses must be equipped to demand transparency from AI systems, ensuring they can explain recommendations to patients and other healthcare professionals.
- o Faculty should encourage critical thinking by having students analyze how AI tools generate predictions and what factors influence outcomes.

Practical Strategies for Faculty to Integrate Ethical AI Education

- Incorporate AI Ethics Modules in Nursing Courses: Embed AI-related ethics discussions in health informatics, research, and clinical decision-making courses.
- Use AI-Driven Clinical Scenarios: Create simulations where students interact with AI-powered decision tools and practice ethical reasoning.
- Invite Interdisciplinary Collaboration: Partner with computer science and bioethics faculty to develop joint learning experiences on responsible AI use.
- Encourage Active Engagement in AI Policy Development: Assign students to analyze real-world AI policies from hospitals and healthcare organizations and encourage them to propose improvements.
- Foster Debate and Reflection: Assign ethical dilemmas related to AI (e.g., should AI predict which patients receive ICU beds during a resource shortage?) and have students present arguments for and against AI-driven decisions.

Practical Insights: Integration of AI in Curriculum Development: Preparing Future Nurses for an AI-Enhanced Healthcare Landscape

As artificial intelligence (AI) reshapes healthcare, nursing faculty play a pivotal role in preparing students for an AI-enhanced clinical environment. The



integration of AI-related competencies into nursing curricula is no longer optional—it is essential. Nursing graduates must be equipped with the knowledge and skills to work effectively with AI-driven technologies that influence patient care, clinical decision-making, and healthcare system efficiency.

The Imperative for AI Education in Nursing

AI applications in healthcare—from predictive analytics and clinical decision support systems to virtual simulations—are transforming the way nurses deliver care. Faculty must ensure that nursing students are not only familiar with these technologies but also capable of critically evaluating and applying AI-driven insights. The shift toward AI-integrated healthcare demands digital literacy, data-informed decision-making, and an understanding of AI's ethical implications as core competencies in nursing education.

The European Union's Susa Project: A Model for AI Integration in Nursing Curriculum

A leading initiative, the Sustainable Healthcare with Digital Health Data Competence (Susa) project, provides a blueprint for nursing education in the digital era. The project's goal is to graduate nurses who are proficient in digital health data management, AI-driven analytics, and ethical AI applications. It underscores the need for faculty to:

- Develop AI-Infused Course Content: Courses must include AI's role in healthcare, its benefits, and limitations.
- Foster Data Competency Among Students: Nursing students should be trained to interpret AI-generated patient data and apply it to clinical decision-making.
- Teach Ethical AI Use: Faculty must emphasize ethical concerns, including AI bias, patient privacy, and legal responsibilities in AI-assisted care.
- Encourage Interdisciplinary Collaboration: Working with informatics specialists, computer scientists, and healthcare administrators can help create a robust AI-integrated curriculum.

Strategies for Faculty to Integrate AI into Nursing Education

As faculty, it is crucial to adapt teaching methodologies to incorporate AI-related learning experiences. Here are some actionable strategies:

- 1. Incorporate AI Modules into Existing Courses: Add AI-focused discussions and case studies to courses on nursing informatics, clinical decision-making, and healthcare ethics.
- 2. Use AI-Powered Clinical Simulations: Leverage AI-driven virtual patients to enhance students' critical thinking and diagnostic reasoning skills.
- 3. Develop Interdisciplinary AI Electives: Offer elective courses that explore AI applications in healthcare in collaboration with data science or computer science departments.
- 4. Encourage Faculty Development in AI: Engage in AI education workshops, research initiatives, and collaborative projects to stay ahead of trends.
- 5. Advocate for Institutional Support: Push for investments in AI resources, such as simulation labs, data analysis software, and professional development opportunities.

The Future of Nursing Faculty in AI-Integrated Education

Nursing faculty are at the forefront of shaping the next generation of AI-ready nurses. The challenge is not only to prepare students for AI-enhanced clinical environments but also to guide ethical AI adoption

in healthcare. By integrating AI competencies into nursing education, faculty empower students to engage with technology critically, advocate for responsible AI use, and ultimately improve patient care.

The time for action is now. As educators, we have a responsibility to lead this transformation—not simply respond to it. Let's ensure that AI becomes a tool for nursing excellence, not a barrier to compassionate care.

Research/News Corner



Each month, I will share research, news, and other links that address AI in nursing, nursing education, and healthcare.

This month of March, I share the following:

EU Project Launched to Prepare Health Workers for a Digital Future March

2025

Glauberman, G., Ito-Fujita, A., Katz, S., & Callahan, J. (2023). <u>Artificial Intelligence in Nursing Education: Opportunities and Challenges</u>. *Hawai'i journal of health & social welfare*, 82(12), 302–305. Artificial Intelligence in Nursing Education: Opportunities and Challenges

Educator's Toolbox



ResearchRabbit (researchrabbit.ai) is an AI-powered research assistant designed to streamline the literature review process and enhance academic research efficiency.

Key Features:

- **1. Personalized Recommendations:** ResearchRabbit learns from your selected articles to suggest additional relevant papers, helping you discover pertinent literature that might not surface through traditional search methods.
- **2. Interactive Visualizations:** The platform offers interactive graphs that display networks of papers and co-authorships, allowing you to visualize relationships between studies and identify influential works and researchers in nursing education.

3. Collaborative Collections: You can create and share collections of articles with colleagues or students, facilitating collaborative research and ensuring all team members have access to the same resources.

Closing Note



"Every breakthrough in nursing and healthcare education begins with a bold idea and the courage to embrace change. Let's innovate today for the caregivers of tomorrow."

See you next month!

Feedback: Please share your feedback, experiences, questions, and ideas or articles for upcoming issues. Send email to: thedigitalstethoscope@gmail.com