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AI Adoption in Nursing: Delivering Guidance Nurses Can Trust

A HealthLeaders–Elsevier survey shows most organizations are using AI in nursing workflows, though adoption remains limited to pilots or a handful of tools. As investments grow, particularly in bedside clinical decision support, success will depend on evidence standards, role-aligned guidance, and system integration.

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AI Adoption in Nursing: Delivering Guidance Nurses Can Trust

A new generation of AI tools is emerging with content designed specifically for nurses. Built on trusted research and clinical information sources, the technology enables nurses to trace AI-generated answers directly to their sources and review the underlying evidence, turning what was once a black box into a more transparent clinical resource.

TIM MORRIS

Vice President,
Global Nursing Solutions
Elsevier

In the **HealthLeaders AI in Nursing survey**, supported by Elsevier, nurse leaders report that AI is already being used in nursing environments across their organizations. While adoption remains split between small pilots (49%) and a handful of tools (52%), plans call for upcoming AI investments over the next few years.

The survey engaged 101 senior nursing leaders from large health systems, highlighting how major healthcare providers are approaching AI in nursing. In this brief, Tim Morris, Vice President, Global Nursing Solutions at Elsevier, examines the survey findings and discusses the standards and capabilities healthcare organizations should prioritize as they expand AI use in nursing.

How healthcare organizations are putting nursing AI to work

Healthcare organizations are currently deploying nursing AI through targeted tools that address specific clinical needs rather than sweeping, systemwide deployments. At the same time, survey findings suggest that broader expansion may be on the horizon. A significant share (42%) of respondents say AI investment plans over the next 12–18 months will focus on bedside clinical decision support, followed by documentation and clinical note automation (25%).

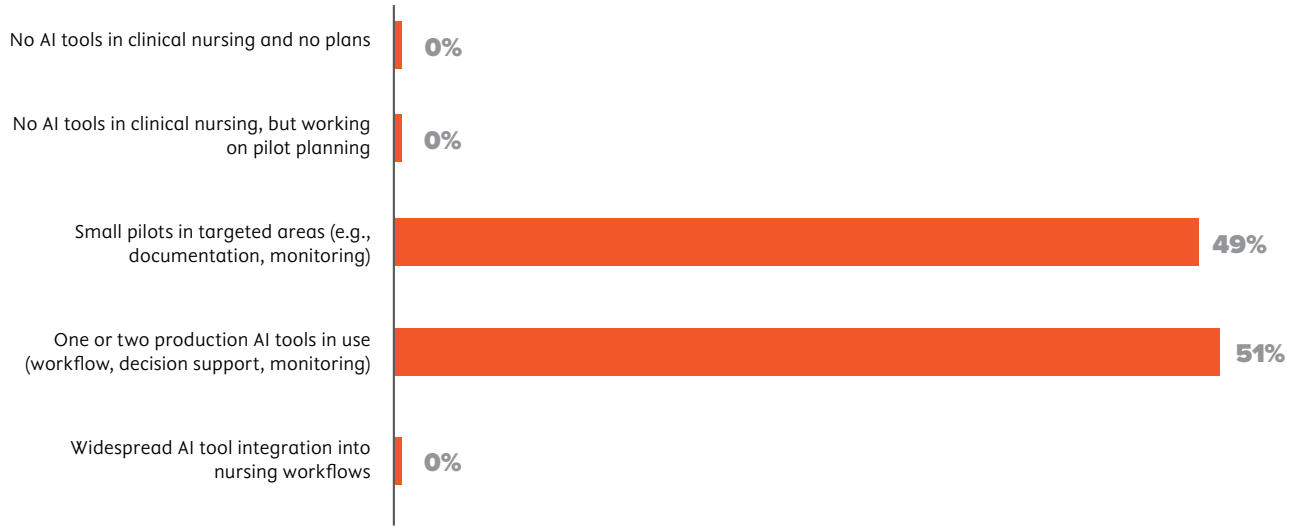
Morris says, “The current pattern reflects how health systems typically evaluate emerging technologies before committing to broader adoption. Many early nursing AI tools have focused on capabilities that integrate directly with the electronic health record (EHR), enabling organizations to experiment without significantly altering existing workflows.”

Morris says many of these early tools have centered on identifying clinical risks with mixed results. One example of this is sepsis detection within the EHR. “Some of the evidence actually indicates nurses were as fast as, or faster than, AI at spotting sepsis,” he says. Other solutions that aim to improve outcomes in specific areas, such as bedside fall risk detection, have also attracted attention, he adds. While these tools can deliver value, expanding them across a complex healthcare environment is often difficult, Morris explains, given broad nursing priorities across many different care settings.

As organizations look ahead to the next few years, he says the emphasis on bedside guidance also makes sense because generative AI tools are particularly strong at retrieving and synthesizing information. At the same time, this alone is not enough. “It’s critical to ensure that AI works safely and comes from a trusted source,” Morris adds, noting that generative models can produce inaccurate information when they process large volumes of data without a clear foundation for where that information originates.

For AI to support nursing practice safely, Morris says the technology must be built on credible clinical knowledge rather than relying solely on model outputs. Systems that combine generative AI with established clinical references can surface guidance that nurses can act on quickly at the point of care. Morris believes the ability to bring reliable clinical knowledge into everyday workflows will become one of the most valuable contributions AI can make to nursing practice.

Which best describes AI use for clinical nursing in your organization today?



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What matters most when evaluating AI solutions?

The real impetus for nursing AI is no longer burnout relief or staffing shortages, but use of the technology to improve adherence to clinical policies and care protocols, Morris says. When nurses have convenient access to clear, evidence-based guidance about best practices, they are more likely to follow procedures consistently. "This consistency is likely to lead to lower length of stay, improved outcomes, and a better experience for patients," he says.

Documentation remains one of the most immediate opportunities for nursing AI. According to the survey, reducing documentation burden ranked as the top priority outcome for nursing AI investments, selected by 33% of respondents. Tools such as ambient technologies that capture clinical conversations and automatically generate documentation are gaining attention because they can significantly reduce the time nurses spend entering information into the patient record.

However, Morris says the larger opportunity lies in connecting documentation tools with clinical guidance. While ambient technologies effectively capture what happens during patient care, they do not always provide nurses with the knowledge they need for the next steps. "It will be helpful when these tools not only document information but also support nurses on deciding what they should be considering in certain situations," he says.

AI that advances professional development is another important factor for optimal benefit. When nurses regularly consult trusted sources while delivering care, organizations can begin to track how those resources are used and identify patterns that reflect growing clinical expertise. These insights could help leaders better understand workforce competencies and target training more effectively.

Ensuring AI tools are grounded in reliable, current information

When evaluating AI adoption, trust ultimately comes down to how the information behind the system is sourced and maintained. Morris says AI systems, including generative AI and agentic AI, should not operate as standalone engines that generate answers without a clinical knowledge base. "We don't believe organizations should be using generative AI for nursing or physician care,"

he says. "By using RAG architecture, as Elsevier does, we are able to base that information on a trusted source, presenting and summarizing it in a way nurses can use most effectively. This type of AI system ensures that the guidance is credible and allows clinicians to link directly to the source."

In practice, that means AI systems should retrieve information from established nursing research and clinical references rather than relying solely on the model's training data. The AI can then summarize that information, so clinicians can quickly understand the key guidance while still having the option to review the underlying source material. "These tools allow nurses to ask the next question, dig deeper into the subject, and get more context to support their decisions on what they are doing and why," Morris says.

Ease of access also plays an important role in adoption. If trusted information is difficult to reach within clinical workflows, clinicians may default to faster but less reliable sources. Survey responses underscore why reliability matters: patient safety (47%) and workflow disruption (40%) were the leading concerns about AI adoption. Those findings reinforce the importance of systems that deliver dependable guidance while remaining accessible within everyday clinical practice.

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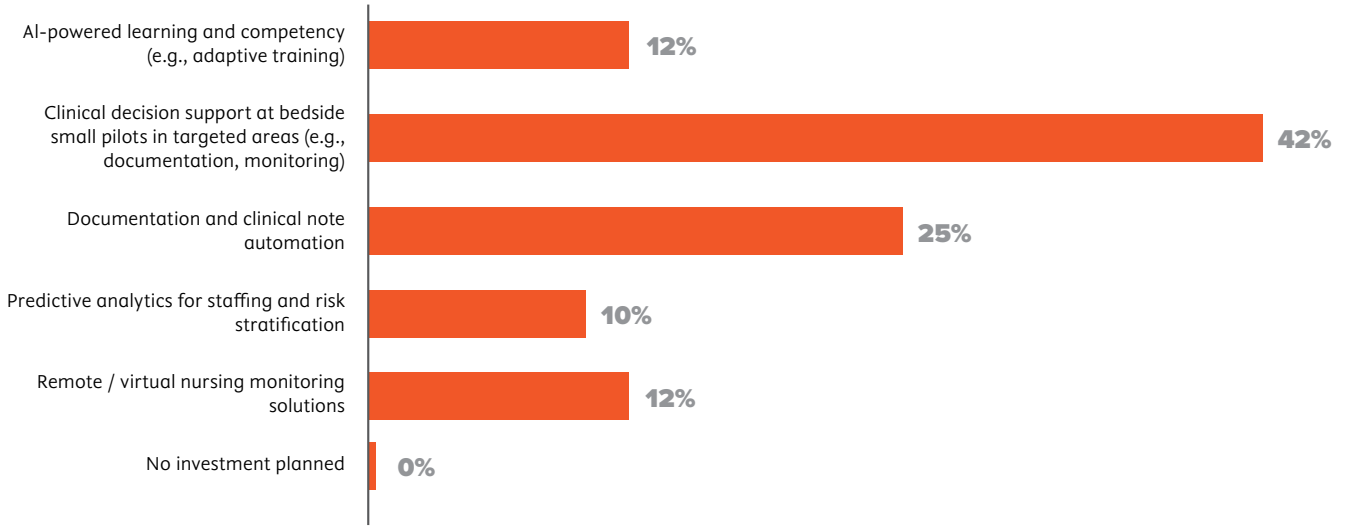
Another factor in reliable AI guidance is ensuring that recommendations reflect the realities of nursing practice. Nursing care often includes clearly defined escalation points that signal when additional clinical input is required. Morris says nursing AI guidance should emphasize assessments, interventions, monitoring, and procedural clarity while filtering out non-nursing content. It should not drift into physician-oriented decision-making.

It also needs to reflect the full range of nursing roles, from nurse practitioners working at the top of their license to licensed and non-licensed practitioners across specialties. "We shouldn't just be providing a physician's product to nurses," he adds.

Which nursing area will receive the most AI investment at your organization in the next 12-18 months?



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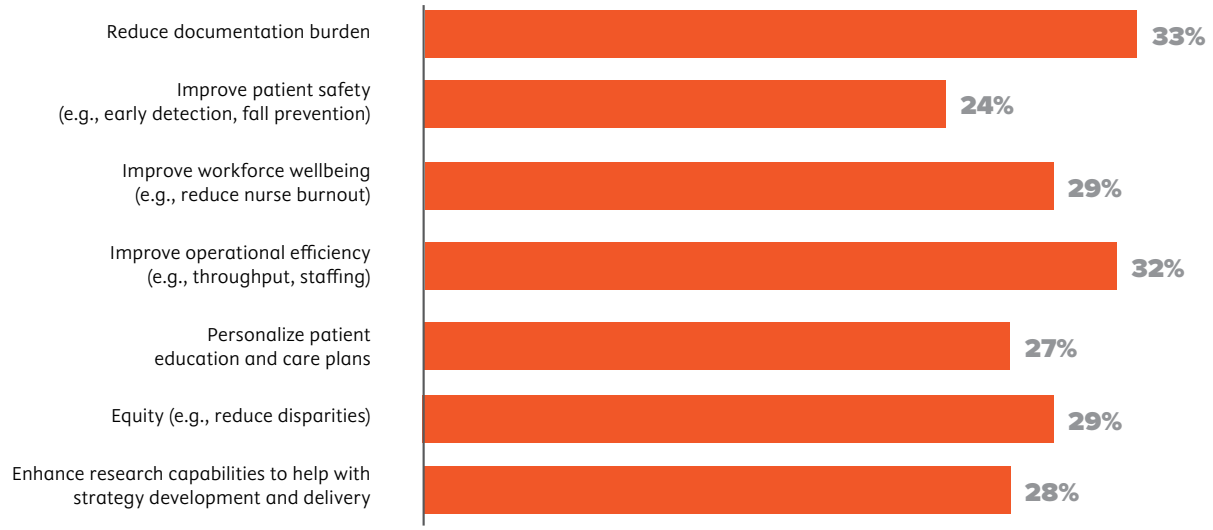
Which two outcomes are the highest priority for AI investments in nursing at your organization?



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Maintaining that balance requires oversight, such as human-in-the-loop feedback systems that allow clinicians to review responses and flag potential issues. "It's an important guardrail," he says. "If you ask LLMs such as ChatGPT a question, there's nobody to inform when something doesn't work other than a thumbs down." At Elsevier, he notes, "every single one of our queries has a thumbs up or down that goes to an auditing team." That feedback allows AI content providers to refine the knowledge base and ensure their system continues drawing on content that is both relevant to nursing practice and clinically reliable.

What makes the biggest difference in an AI rollout?

Moving from early pilots to broader adoption requires more than proving that an AI tool works. Healthcare organizations must evaluate whether the technology can integrate smoothly into clinical systems and whether there is a clear strategy for expanding its use across nursing teams. Without both elements in place, promising pilots can struggle to scale.

The survey suggests many organizations recognize this challenge. Half of respondents (51%) report

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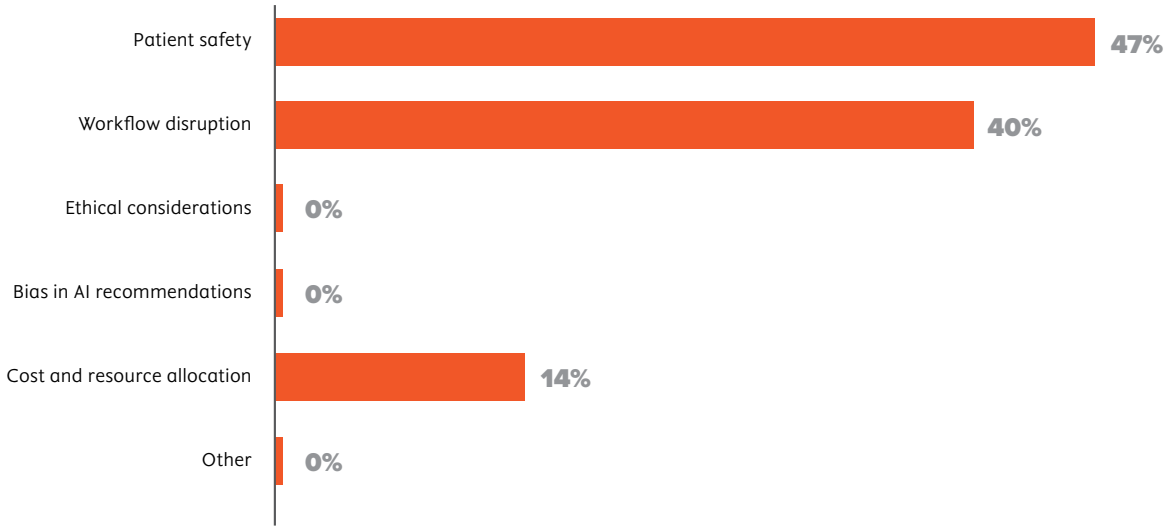
governance policies limiting AI use to vendor or partner solutions validated through clinical trials, while another 26% say they are cautiously piloting approved tools under clinical oversight.

From Morris's perspective, selecting technology that fits naturally into existing clinical systems is one of the most important factors in a successful rollout. "Nurses spend most of their time in the electronic health record, so the most important way to reduce friction is to work directly within those systems," he advises.

Technologies such as SMART on FHIR integration make this type of workflow possible by embedding AI functionality directly into EHR platforms. When guidance is built into the systems nurses already

What is your primary concern about AI adoption in nursing?



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use, access to trusted information becomes faster and more intuitive. Morris notes that this type of integration is critical if AI tools are to become part of everyday clinical practice. Features such as single sign-on reduce friction by eliminating repeated logins, while maintaining the history of previous queries allows clinicians to revisit earlier questions and continue exploring clinical topics as patient situations evolve.

Finally, planning the rollout itself is equally important. Morris says organizations need clear expectations for what the technology should deliver, along with a deliberate approach for expanding deployment. Teams should monitor performance as adoption grows, identify problems quickly, and address negative experiences early to prevent them from stalling broader adoption.

Ultimately, Morris believes healthcare organizations will further embrace AI as clinicians continue to see its value in everyday practice. “Nurses must understand the value AI brings to remove doubt and enable them to make decisions with more confidence,” he says. ■