Wolters Kluwer Health *25 for '25* expert predictions report

Driving momentum in healthcare technology amid dramatic change

As 2025 nears, healthcare is undergoing unprecedented transformation, particularly with headlines about artificial intelligence (AI) technologies shifting away from grandiose promises as the dust starts to settle around the potential of Generative AI (GenAI). These innovations and others aim to reshape how healthcare is delivered.

To shed light on anticipated trends, challenges and opportunities in healthcare technology in 2025, leading experts from Wolters Kluwer Health offer their outlook on 2025 across a variety of topics. Diffusing the hype, the predictions offer an eye-opening look at what's ahead and lead us toward a smarter, more resilient future in healthcare technology.

Rational exuberance: where is healthcare AI making a tangible impact?

Top 3 growth areas to watch for healthcare AI in 2025

-Stacey Caywood, CEO of Wolters Kluwer Health

1. AI for healthcare workflows:
In 2024, we saw the healthtech sector really start to focus 2023's AI excitement into tangible solutions that make clinicians' workdays easier and more productive. For example, transformative tech like a GenAI ambient listening scribe dramatically reduces administrative burdens. In 2025, look for more synergies and partnerships emerging between AI and complementary technologies that serve as a force multiplier for the potential of AI to drive efficiency in the clinical workflow, provide relief from burnout, and deliver value for health systems.

2. AI for clinician workforce development:
Amid staffing shortages, 2025 will see AI helping future clinicians get on a fast track to practice-readiness. Nursing education tools are being wholly rethought to leverage the capabilities of AI. For example, AI has the potential to boost nurses' licensure prep so students learn from mistakes with smarter, more personalized reinforcement. Look for AI chatbots to transform virtual reality training by providing lifelike conversations with virtual patients. AI will also accelerate the development and adoption of clinical practice changes as hospital nursing leaders turn to AI to power the often-cumbersome process of updating nursing practice protocols.

3. AI for patient safety:
AI healthtech is largely focused on helping clinicians. I'd expect to see that scope broaden with AI playing a bigger part in patient safety. In 2025, look for AI solutions that go deeper into live health data to identify disconnects in care that are often overlooked and can impact patient safety. Imagine an AI "helper app" that works 24/7 in the background to identify instances where healthcare providers may miss a potential test or therapy for a patient or – worse – illicitly divert medications from patients, potentially doing harm. Stopping drug diversion with AI is just one example of AI scaling system-wide to comprehensively improve patient safety.

Will government shifts in 2025 create headwinds for health AI?

-Peter Bonis, MD, Chief Medical Officer, Wolters Kluwer Health

While the discussion around healthcare was muted leading up to the 2024 election, we've quickly seen multiple themes emerge that will likely lead to important changes in healthcare with the new administration. We saw challenges in the Medicare Advantage market, the retrenchment of retail health and the convergence of change enablers such as voiding of the Chevron Deference, discussion of a Department of Government Efficiency, and new appointees across HHS, CDC, CMS and the FDA.

We concurrently continued to see large investment in AI as the technology advances not only toward the prophesized state of artificial general intelligence (AGI) but the possibility that robotics will permit AGI to be corporeal.

Given all this, 2025 is likely to set the stage for change while actual changes next year will likely be incremental. Implementation of new federal and agency policies will take time. Advancement in AI applications will continue to be constrained by workflow, competing priorities, and economic considerations driving uptake.

The greatest progress on scale will likely continue to be in AI applications that drive revenue optimization, although some technologies like ambient listening will make progress due to their immediate promise to streamline workflow and documentation pain points.

Health GenAI success will take a human touch

-Greg Samios, MBA, CEO for Clinical Effectiveness, Wolters Kluwer Health

GenAI is positioned to play a role in improving patient care in 2025, but more work needs to be done to improve consistency and ensure that patients receive the highest quality care. This starts by defining responsible GenAI so that we can enhance efficiency and reach our destination of superior patient outcomes. When thinking about the year ahead, I believe we can't lose sight of the human touch, or the quality interactions and trusted data that help push us forward. I look forward to collaborating with the healthcare ecosystem to foster a culture of continuous learning, for a safer future.

Will GenAI deliver practical value for healthcare in 2025?

-Holly Urban MD, MBA, Vice President, Business Development-Strategy, Clinical Effectiveness, Wolters Kluwer Health

In 2025, GenAI in healthcare needs to shift from potential to practical value, focusing on delivering tangible benefits for professionals and patients in the system. With this transition from hype cycle to value cycle we will continue to see focus on how GenAI can reduce some of the administrative burden of providers with tools such as ambient scribes. I'm most excited about the application of GenAI in healthcare operations such as automation to support billing and coding or prior authorization workflows. Improved efficiency is always a top priority with healthcare leaders, but the continuing friction between payers and providers, coupled with potential regulatory changes with the new administration, will make this focus even sharper; GenAI can play a critical support role.

VR & AI rewrite how future nurses get ready for practice

-Julie Stegman, Vice President, Health Learning & Practice segment, Wolters Kluwer Health

In 2025, the fusion of Artificial Intelligence (AI) and Virtual Reality (VR) will transform how students, residents, researchers and "new to practice" providers, nurses and healthcare professionals develop essential skills. By integrating AI and VR, healthcare educators can create immersive learning environments, personalized learning paths, and real-world simulations that mirror what life will be like when caring for patients. In addition to building clinical skills and developing clinical judgment, learners develop the interpersonal "soft" skills necessary for high-quality care, improving the overall readiness of healthcare professionals entering the workforce. These expert solutions can help decrease the time it takes to onboard and ease the transition growing pains new employees can face.

Can AI improve healthcare, one second at a time?

-Yaw Fellin, Vice President, Product and Solutions, Clinical Effectiveness, Wolters Kluwer Health

We know that, in healthcare, seconds matter. When clinicians and other healthcare team members can save even a small amount of time through reduced administration or faster access to clinical information, it can make a big impact. In 2024, the rapid acceleration of ambient AI throughout the healthcare system proved the importance of time savings and redefined how we value efficiency. In 2025, I anticipate we'll see an increase in innovation and integrations to bring evidence-based recommendations directly into the clinical workflow, reducing the number of clicks needed to improve documentation, provide patient education and receive clinical decision support. Just a few seconds can make all the difference in healthcare, and with each click saved, we can significantly reduce the cognitive burden on our healthcare professionals and foster more meaningful interactions with patients.

Medical publishing embraces AI in 2025

-Rafael Sidi, Senior Vice President & General Manager of Health Research, Wolters Kluwer Health

The role of AI in publishing and medical research is evolving to enhance, not replace, human expertise. Researchers are seeking solutions that meaningfully support their workflows. We anticipate a growing adoption of AI tools designed to screen manuscripts for plagiarism, ensure adherence to journal guidelines, and improve language quality. These tools will emphasize transparency, trust, and authorship integrity, ensuring equitable access for researchers globally—a critical factor in driving impactful and inclusive medical research.

In addition to transforming peer review by streamlining the process of matching manuscripts with suitable reviewers, AI will assist researchers in upholding standards of fairness, minimizing bias, and maintaining a commitment to ethical publishing. AI will also play a crucial role in data analysis, helping identify trends and insights that drive innovation and improve patient outcomes.

In terms of dissemination, AI will optimize research content for diverse platforms and audiences, ensuring valuable findings are delivered to the right people efficiently. Enhanced searchability and accessibility will empower researchers and practitioners to quickly locate relevant information, amplifying the practical impact of medical research.

While challenges remain—such as safeguarding data privacy and addressing ethical concerns—the positive impact of AI will become increasingly evident in 2025. The focus will be on integrating AI in ways that complement human skills, fostering collaboration where technology and expertise converge to advance medical research and publishing. The future of medical publishing lies in embracing these opportunities thoughtfully, ensuring AI becomes a powerful enabler of innovation, accessibility, and ethical excellence.

Navigating change in healthcare: Shortages, booms, and mergers, oh my!

Smarter resources help PCPs fill the burgeoning mental health care gap

-Julie Frey, MBA, Head of Provider Product, Clinical Effectiveness, Wolters Kluwer Health

The demand for mental health services continues to put pressure on primary care providers (PCPs) who, despite not being formally trained mental health specialists, deliver 60% of mental health care and write nearly 80% of prescriptions for antidepressants. A recent survey from Gallop showed that seven out 10 Americans prefer to be asked about their mental health by their primary care provider and are comfortable with them discussing mental health.

Health systems cannot hire enough specialists to support this demand and PCPs will therefore continue to operate on the frontlines of mental health. In 2025, we expect to see new evidence-based tools that will help PCPs make informed medication decisions and assist in prescription tapering and titration of anti-depressants embedded into the care provider's workflow.

Nursing leaders are key to shaping culture after M&A

-Bethany Roberts, DNP, CNM, FNAP, Clinical Executive, Wolters Kluwer Health

During the third quarter of 2024, 27 hospital mergers and acquisitions were announced, marking the highest number in seven years. As healthcare mergers and acquisitions reshape the industry, one critical yet often overlooked factor is *cultural alignment*, especially within care teams. In 2025, this is where nursing leaders will step in—bridging the gap between clinical excellence and strategic integration.

Nurse leaders, such as Chief Nursing Officers/Chief Nurse Executives, are uniquely positioned to ensure seamless integrations across healthcare facilities, promoting patient-centered care and clinical excellence while building trust and cohesion across diverse teams. These cultural and competency alignments are vital for effective collaboration in newly merged organizations, supporting a stable, unified approach to patient care and organizational success.

Plug-and-play tech is key for nursing schools scaling and onboarding new educators

-Kelly Dries PhD, RN, Director of Nursing Program Success, Wolters Kluwer Health

In 2025, the use of technology in onboarding new nurse educators will evolve to offer tailored training pathways through simulations, interactive modules, and AI-enhanced learning platforms.

The industry is facing a massive influx of new nurse faculty that is rapidly growing to meet the demands of nursing students. Onboarding both educators and students with plug and play technology will be key for finding efficiencies and continuing to graduate nursing students who are ready for real world practice.

Rehabilitative care roles are booming—can tech help educators scale up?

-Kelly Villella, Segment Leader & Director of Product Management, Medical Education & Practice, Wolters Kluwer Health

As healthcare shifts from reactive to proactive approaches, the demand for specialized care in physical therapy, occupational therapy, and exercise physiology is projected to grow significantly. The number of jobs in these three professions alone are projected to increase by 12-15% over the next decade.

Health professionals will play a crucial role in maintaining a healthy and active lifestyle and in treating both chronic and acute conditions globally. In response to these changing demands, the degree requirements for several areas of the health professions have been raised in recent years, reflecting a need for advanced knowledge and skills.

As educational institutions grow these programs to meet demand and evolve to educate the influx of students, they will increasingly integrate technology into their curricula to enhance the learning experience, and to help students better understand complex concepts and practice applying foundational knowledge earlier in the curriculum. We expect educator's use of technology—from virtual simulation and AI to video libraries and digital courseware—to accelerate as it better prepares prospective health professionals to achieve positive patient outcomes and excel in their future careers.

Expect innovation in retail pharmacy, medication surveillance & pharmacy compliance

Care team turnover and change impede effective drug diversion monitoring – can AI help?

-Karen Kobelski, MBA, Vice President and General Manager of Clinical Surveillance Compliance & Data Solutions, Wolters Kluwer Health

In 2025, expect to see continued staffing shortages, a reliance on per diem or traveling staff, and high turnover rates. This will require more vigilance on behalf of hospitals and health systems in monitoring controlled substances as new clinical teams may not be familiar with policies and procedures. Further, those who divert can more easily switch locations given today's staffing models.

For facilities with more consistent staff, employee wellness remains a priority, and identifying substance use disorder early can ensure employees receive the help they need as quickly as possible. AI-driven surveillance tools will become indispensable, identifying risks more proactively and streamlining investigations with precision and efficiency.

For compounding pharmacies, compliance and readiness take center stage in 2025

-Annie Lambert, PharmD, BCSCP, Clinical Program Manager for Compliance Solutions for Clinical Surveillance & Compliance Wolters Kluwer Health

With recent updates to USP standards, compounding pharmacies have braced for a heightened regulatory environment, while balancing staffing and drug shortages. In 2025, enforcement of the regulations becomes clearer, and pharmacies will need to maintain compliance with the new standards. To navigate these shifts, healthcare leaders must prioritize readiness, invest in adaptable systems, and leverage technology to enhance limited resources. Early action will be crucial for continual readiness and operational resilience.

Pharmacies seek a balancing act of human connection and digital experiences

-Chris Sullivan, Vice President, Commercial Segment, Wolters Kluwer Health

Retail pharmacy will continue to see a retraction of the traditional store model as brick-and-mortar pharmacies grapple with financial headwinds and scale back their footprint. We're starting to see retailers and retail pharmacies accelerate their shift toward e-commerce to align with patient expectations and meet them where they are. At the same time, our recent research shows Americans still value the personal touch and accessibility of their community pharmacies and have genuine concern about closures threatening to disrupt access to care and medication.

However, the digitization of the pharmacy uniquely positions pharmacists to guide patients through their care journey. When it comes to healthcare, we all want that human connection for guidance and empathy. Pharmacies have the potential to emerge stronger in 2025 and grab market share by engaging with a hybrid of digital patient education and experiences to maximize time spent with patients and help them find answers to their questions.

Always-on clinical surveillance reduces risk from pharmacy staffing gaps

-Steve Mok, PharmD, BCPS, BCIDP, Manager of Pharmacy Services and Fellowship Director for Clinical Surveillance and Compliance, Wolters Kluwer Health

In 2025, worsening workforce shortages of pharmacists and pharmacy technicians will push healthcare organizations to be more creative in their patient care staffing and service models. While standardizing clinical practices will help ensure efficiency, technology that surveils clinical data in the background will help improve patient and medication safety by helping direct clinical attention and intervention. Virtual care, combined with these always-on platforms, will mitigate the consequences of an alarming rise in "pharmacy deserts" and clinician shortages.

Keys to achieving infection prevention & control goals in 2025

Reducing the infection prevention burden in 2025

-Karyn Wentz, MSN, RN, CPN, Nurse Informaticist for Clinical Surveillance & Compliance, Wolters Kluwer Health

Amid broader staffing shortages, healthcare organizations struggle to fill infection preventionist (IP) roles, placing increased demands on current IPs. An October 2024 study found lower than expected staffing ratios are associated with higher rates of infection. The pressure is on to decrease healthcare-associated infections (HAI) while juggling increasing reporting requirements, and IPs may find themselves overwhelmed and struggling to keep up with unsustainable workflows. In 2025, hospitals facing IP shortages will increasingly turn to technology to bridge the gap. Platforms that provide continuous surveillance with more automated tools for reporting will give IPs more time to focus on HAI reduction while helping to prevent burnout.

Whole-genome sequencing boosts infection prevention programs

-Karen Jones, MPH, RN, CIC, LTC-CIP, FAPIC, Infection Prevention Clinical Program Manager, Wolters Kluwer Health

Whole genome sequencing (WGS) is being used to precisely identify the genetic makeup of a pathogen, allowing faster and targeted responses to disease transmission, outbreaks, or unexpected antimicrobial resistance. While WGS has been used for infection prevention and control for just over a decade, expect it to become more common in 2025 as cost and processing time to perform WGS continue decreasing. Infection prevention leaders will look to add WGS as a vital part of their programs. For time- and resource-intensive outbreak investigations, WGS will help direct infection prevention and control (IPC) teams to raise alerts and step-up more targeted prevention strategies.

Can smarter, better data help MAOs get back on track in 2025?

Scrutiny on Medicare Advantage compliance remains unrelenting

-Melissa James, CPC, CPMA, CRC, Senior Consultant, Health Language, Wolters Kluwer Health

The 2024 Medicare Advantage reports from the OIG revealed significant overpayments tied to unsupported diagnosis codes, underscoring the urgent need for Medicare Advantage Organizations (MAO) to bolster their compliance efforts. With Risk Adjustment Data Validation (RADV) audits resuming and introducing extrapolated repayment penalties for the first time, the financial stakes are higher than ever, potentially resulting in substantial repayment demands. In 2025, MAOs must prepare for heightened regulatory scrutiny. To succeed, it will take implementing robust compliance frameworks, increasing retrospective chart reviews, and enhancing coding accuracy. Organizations that effectively integrate and analyze siloed clinical data while prioritizing internal audits will be better equipped to adapt to the shifting regulatory landscape in 2025 and beyond.

Smarter data analytics: the key to relieving built-up pressures on payers?

-Allison Combs, Head of Product – Payer for Clinical Effectiveness, Wolters Kluwer Health

Modern payers are evolving to meet the challenges of the increasingly complex healthcare landscape. Health plans need to examine their drug and clinical data strategies and look for opportunities to improve both external and internal alignment that center around evidence, remove data silos, and prioritize innovation, while keeping the member's needs at the center.

The biggest problem in healthcare tech? It's still data quality!

-Shobha Phansalkar, PhD, FAMIA, Vice President of Client Solutions and Innovation, Health Language, Wolters Kluwer Health

When it comes to AI, 2024 may have been one of the biggest years of transformation in healthcare. Yet, the same thing that held us back when EHRs were first mandated nearly 20 years ago still hinders the progress of healthcare today: bad data. In 2025, organizations seeking rapid transformation will focus on this fundamental currency to power future discovery and insights. It will take systems in place to help assess, clean, maintain and organize data. Health systems will be able to leverage AI effectively, make informed decisions, and unlock the full potential of technology to improve patient outcomes, operational efficiency, and innovation in care delivery.

Capturing intentionality behind the data capture

-Anne Donovan, MBA, Vice President and General Manager of Health Language, Wolters Kluwer Health

We've seen a notable uptick in the use of artificial intelligence at the point of care to improve the patient-provider interaction, increase efficiency and streamline workflows, but we can't just capture more data – through AI or otherwise – for the sake of documentation. We need to be purpose-driven in thinking about how the data will be used within the healthcare system to facilitate care and financial-related considerations between providers and payers. To ensure the meaningful exchange of health information in 2025, organizations need to proactively design strategies that share data while maintaining the intentionality behind the data capture.