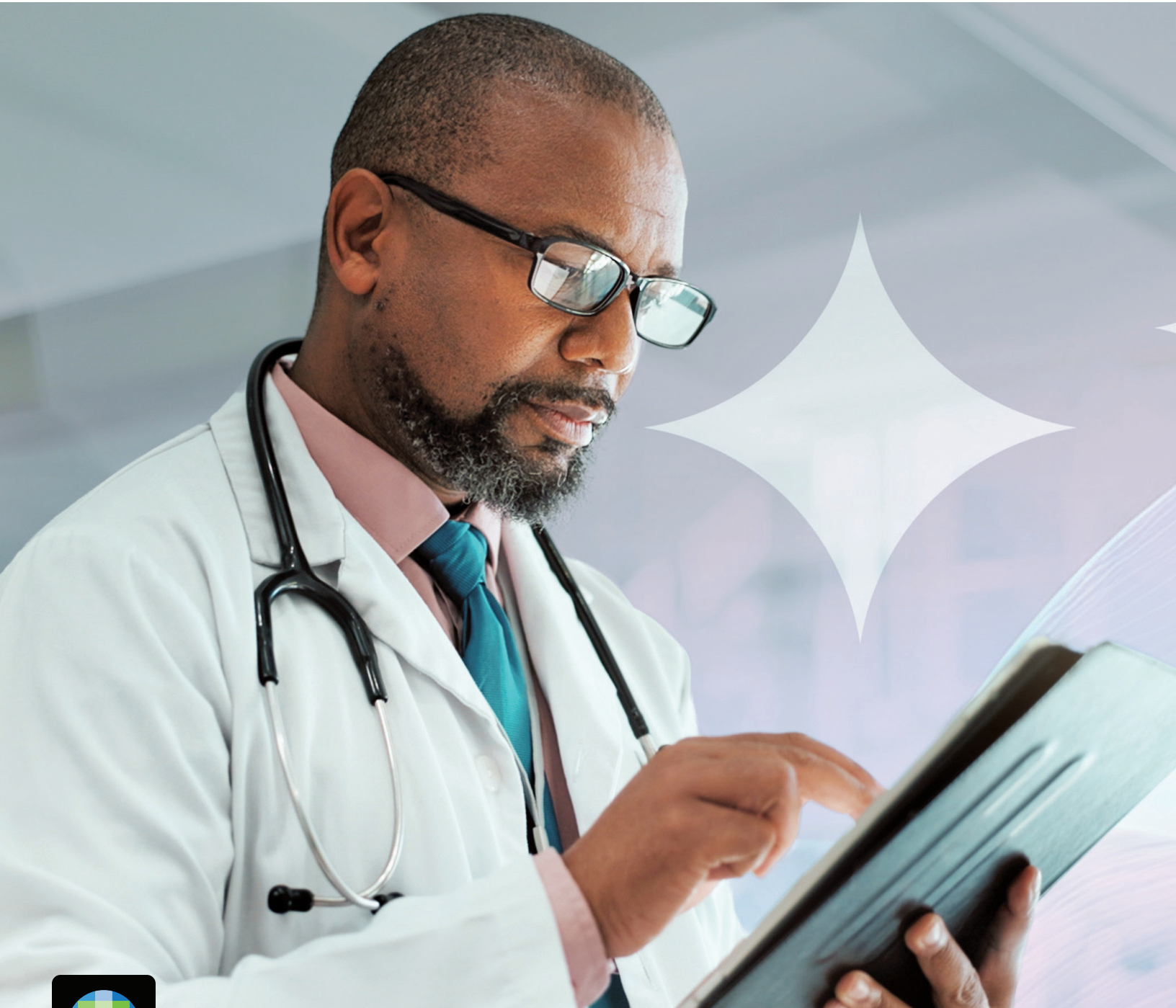

From burden to breakthrough: Elevating clinical inquiry for EBP and QI with responsible AI



Ovid® Synthesis

synthesis.ovid.com

Executive summary

Healthcare systems are facing mounting pressure to find smarter, faster ways to deliver improvement projects with measurable results. To that end, the industry is counting on artificial intelligence tools to boost system efficiency and operating margins, but concerns persist about its responsible use. Moreover, scant documentation exists on how AI can positively affect those bottom lines. Ovid® Synthesis Expert AI, a new set of features within the software, shows promise for streamlining improvement initiatives while increasing systemness and scalability, without sacrificing rigor or transparency.

Introduction

For four decades, evidence-based medicine has been the cornerstone of modern clinical practice, yet scaling the implementation of evidence-based practices (EBP) remains a challenge for health systems.¹ Faced with mounting pressures to deliver measurable improvements with fewer resources, health systems are looking for smarter, faster ways to complete improvement projects that demonstrate measurable successes.²

Research in implementation science indicates the most common barriers and bottlenecks to achieving EBP's goals are the following:



Practitioners have insufficient time to find relevant studies or guidelines.³



They lack the skills and confidence to assess research quality.³



Inefficiencies in evidence synthesis often delay the dissemination of evidence-based solutions for urgent needs.¹



Leadership stretched thin can struggle to foster and support a learning community, and that can impede the cultivation of a culture of innovation.⁴

Artificial intelligence (AI) promises a paradigm shift toward data-driven healthcare, with expectations of improving care quality while curbing costs.³ This shift could increase efficiencies, free up time for clinicians to address critical and complex health needs, reduce burnout, and improve job satisfaction.⁵ As a result, interest is growing in models that can better contextualize, synthesize, and integrate evidence-based medicine at a whole-system level.¹

Artificial intelligence promises a paradigm shift toward data-driven healthcare.



Ovid® Synthesis

synthesis.ovid.com

Three moving parts

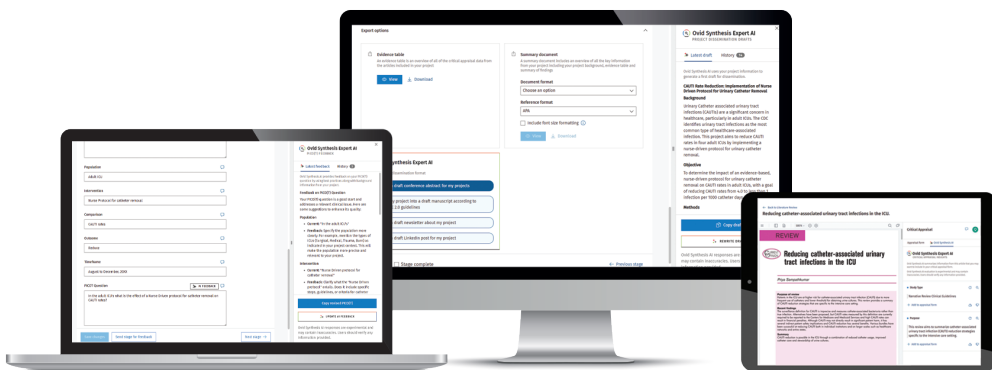
Today's state of AI in improvement workflows hinges on the synergistic functioning of three moving parts.

1. Systemness. The healthcare industry is recognizing its need for systemness—the alignment and integration of all parts of a health system so they function as one cohesive unit.⁶ To achieve that requires breaking down silos, standardizing best practices, and coordinating efforts across the care continuum.⁶ While leadership can facilitate that cultural shift, technology provides the how for achieving it. That's where the future of EBP comes in.

2. The future of EBP. Classically, EBP includes evidence, clinical experience, and patient preferences but relies heavily on randomized controlled trials (RCTs) for its evidence.³ The next generation of EBP varies from that in two ways. First, it casts a wider net for evidence, including RCTs, real-world data, qualitative studies, observational studies, and gray literature. Second, it emphasizes the utilization of technology — particularly AI — to collapse the long lag time between research discovery and clinical implementation. The new EBP suggests that AI will help process data, synthesize evidence, and support clinical decisions faster and more accurately than manual approaches. Its ultimate goal is to turn health systems into scalable, self-improving engines for quality care.³ But adoption of the next generation of EBP with its AI technology requires a balance of speed, rigor, and trust.⁷

3. Staff value versus time. Clinicians are value drivers and essential to generating evidence. Yet they face significant barriers to fulfilling those roles, including time constraints, limited funding and resources, and a tech stack that's not fit for purpose. For example, Wolters Kluwer's 2025 Future Readiness report notes that many organizations lack the infrastructure, governance, and funding to implement AI,⁷ which would support the future of EBP and systemness.

Manual literature reviews, overburdened mentors, and fragmented dissemination processes slow the translation of evidence into practice.³ AI tools could overcome those persistent barriers, but nurses have mixed optimism and concern about their use.⁷



By the numbers

From a Wolters Kluwer Health 2025 national survey of 312 U.S. nurses, polling their views on generative AI (GenAI):

53%

worry that GenAI could undermine decision-making skills or lead to overreliance on algorithmic outputs.

77%

see GenAI as important to their organizations' productivity.

54%

say it can enhance innovation.

54%

say it can improve collaboration and communication.

56%

believe it can optimize workflows.

46%

feel prepared to implement it.



Ovid® Synthesis

synthesis.ovid.com

AI's opportunities versus risks

As the industry explores how AI can streamline workflows, a variety of concerns remain barriers to adoption. Key arguments against AI include:^{1,5,7,8-11}

- Lack of transparency or explainability in AI outputs, particularly predictive statements
- Biases, mistakes, and hallucinations that aren't readily discernible
- Potential for misuse
- Concerns that AI will undermine clinical expertise and erode human judgment
- Lack of hard evidence of AI's measurable benefits in healthcare EBP/QI.

Conversely, many arguments for AI exist. AI presents a promising solution to streamlining time-intensive work that often bottleneck key steps of all improvement projects, particularly:³

- Conducting literature reviews
- Synthesizing the findings through critical appraisal
- Generating an evidence table from that appraisal
- Disseminating results to clinicians and scaling implementation.

Thus, AI may save time and costs by:³

- Screening literature search results / evaluating articles' relevance
- Accelerating the synthesis of evidence
- Analyzing unstructured data
- Reducing mentorship burden

However, studies to date lack proof points of AI's effectiveness in aiding improvement efforts — or demonstrating how its use improves outcomes.¹² A 2025 scoping review of AI use in healthcare quality improvement found that studies were dominated by “sensemaking” activities — defining challenges, mapping opportunities, and consolidating existing knowledge — rather than reporting on mature, scaled implementation.⁸ For balance, a later section of this position paper cites case studies with quantifiable results from using AI to support EBP/QI initiatives.

The solution: Responsible, white-box AI for improvement initiatives

Ovid® Synthesis Expert AI is a solution that optimizes clinicians' time to further the goals of the next generation of EBP and systemness. Powered by Wolters Kluwer's proprietary Expert AI, it's backed by the clinical and academic expertise that healthcare systems worldwide have trusted for four decades.

The AI features are built on three pillars:¹³

- **Curated content:** This ensures that only accurate, trusted, proprietary data are used (no open web content).
- **Transparency:** “White box” AI provides verifiable citations and sources, ensuring users can audit the AI's reasoning.
- **Privacy & responsibility:** The privacy-by-design architecture ensures that organizational data are never fed into a public model for training purposes. Updates are based on customers' and industry experts' feedback from active clinical use.

Collectively, the curated content and responsible design act as a force multiplier for clinical scholarship,² with the potential to impact health outcomes at speed and scale.¹



Pro tip

Identify high-impact problems that lend themselves to assistance from AI. Then, gather outcomes and cost-effectiveness data to objectively assess the impact of using AI-enabled research technology.



Ovid® Synthesis

synthesis.ovid.com

How Ovid Synthesis Expert AI works

The goal of Ovid Synthesis Expert AI is to streamline manual tasks while retaining clinical rigor. To that end, it offers three core capabilities:



Real-time feedback of PICO(T) questions

This offers more than alternatives; it provides the rationale for its suggestions. In that way, it acts as a coach — not an autocorrect tool. This feedback helps users identify conceptual gaps, enabling them to refine and strengthen their research questions and craft clear, precise project aims. Secondly, the feedback eliminates delays in mentor feedback, reducing their workload while moving teams forward.

Critical appraisal Insights

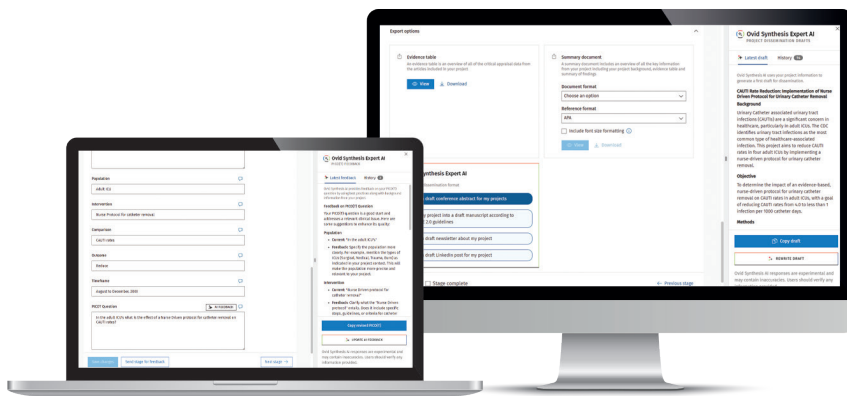
AI-generated summaries are extracted only from texts that the user provides. This ensures that the AI does not invent facts. The sources used in the summaries are secure, transparent, and verifiable, allowing users to verify their quality. Collectively, this streamlines the evaluation of literature search results.

Dissemination drafts.

AI assistance transforms project results into multiple ready-to-share formats, including drafts of SQUIRE 2.0-aligned manuscripts, abstracts, PowerPoint presentations, and newsletters. This democratizes scholarly publishing for clinicians of all skill levels.

A partnership, not a replacement

Ovid Synthesis Expert AI does not attempt to replace critical thinking. In contrast, it encourages it. The system requires users to evaluate all AI feedback, including the rationale for PICO(T) revisions and the source locations for critical appraisals. Accepting or rejecting the AI's logic is a prerequisite for moving a project to its next stage. Additionally, parts of the dissemination feature can be selectively disabled to conform to organizational requirements. In this manner, Ovid Synthesis Expert AI serves as an additional coach or “substitute teacher” as needed — while acknowledging the irreplaceable need for a human in the loop.



Ovid® Synthesis

synthesis.ovid.com

Adoption and its impact: real-world examples

Every health system has unique needs. The beauty of Ovid Synthesis Expert AI is its depth, which meets wide-ranging needs. Two case studies follow that describe the diverse advantages of using Ovid Synthesis Expert AI.



“Tools like Ovid Synthesis Expert AI accelerate EBP, QI, and research by streamlining the search, critiquing the evidence, and translating hours of work into minutes of insight — giving nurses more time where it matters most: at the bedside.”

— Una T. Hopkins, DNP, RN, FNP-BC, NE-BC, FACCC, Director of Nursing Research at Montefiore Einstein Medical Center and President of the Association of Cancer Care Centers

1 An 11-hospital health system in New York



Challenge:

- Lack of systemness



Results:

- Radiology cancellations and no-shows were reduced from 20% to 2%, with a 153% ROI.
- This project was disseminated and scaled across multiple hospitals within the system (along with other projects).
- The number of Ovid users rose from 200 in 2024 to 800 in 2025.
- Active projects increased by 300% in that year.
- Now, 25% less time is spent on project execution.

2 A 13-hospital health system in the northeastern U.S.



Challenge:

- Standardizing rigor across a system where rural and suburban hospitals were conducting small-scale, budget-neutral improvement initiatives.



Results:

- Ovid Synthesis Expert AI built capacity with mentors.
- It also enhanced research and writing quality and efficiency across all levels of practitioners (novice nurses to DPNs) — enabling those who'd never published before to submit abstracts.

Adoption of Ovid Synthesis Expert AI is growing among other leading institutions, including Mayo Clinic, Children's Hospital of Philadelphia (CHOP), Parkview Health, Arkansas Children's, and OU Health University (Oklahoma Medical Center).



Ovid® Synthesis

synthesis.ovid.com

Meeting future needs today

In the pursuit of clinical improvement, “data to knowledge to practice” is a skill set clinicians must learn on their own. But AI can serve as a supportive tool in that process. While Ovid Synthesis Expert AI is a tool for streamlining workflows, its broader value lies in catalyzing a culture of high-impact clinical scholarship. Standardizing quality and inquiry across campuses helps realize the goals of next-generation EBP and systemness while ensuring nurses and other clinicians optimize their time spent on patient care and EBP/QI projects.

Join the community of improvement leaders who are transforming research and practice with responsible AI. For more information or a demonstration of Ovid Expert AI, contact your Ovid representative or email sales@ovid.com

Acknowledgments

Many thanks to the following people who contributed insights to this article:

- **Una T. Hopkins**, DNP, RN, FNP-BC, NE-BC, FACCC, Director of Nursing Research at Montefiore Einstein Medical Center and President of the Association of Cancer Care Centers
- **Rafael Sidi**, Senior Vice President & General Manager of Health Research, Wolters Kluwer Health



“Ovid Expert AI is designed to eliminate the friction points that slow down improvement initiatives...enabling teams to accelerate progress, scale their impact, and uphold the highest standards of clinical and academic excellence.”

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



Wolters
Kluwer

Ovid® Synthesis

synthesis.ovid.com

References

1. Rajit D, Johnson A, Callander E, Teede H, Enticott J. Learning health systems and evidence ecosystems: a perspective on the future of evidence-based medicine and evidence-based guideline development. *Health Res Policy Syst.* 2024;22(1):4. doi: 10.1186/s12961-023-01095-2
2. Wolters Kluwer introduces Ovid Synthesis Expert AI, with breakthrough capabilities that accelerate mission critical healthcare improvement initiatives. News release. Publisher: Wolters Kluwer Health. Published October 28, 2025. Accessed January 14, 2026. <https://www.wolterskluwer.com/en/news/ovid-synthesis-expert-ai-breakthrough-capabilities>
3. Nilsen P, Sundemo D, Heintz F, et al. Towards evidence-based practice 2.0: Leveraging artificial intelligence in healthcare. *Front Health Serv.* 2024;4:1368030. doi: 10.3389/frhs.2024.1368030
4. McDonald PL, Foley TJ, Verheij R, et al. Data to knowledge to improvement: Creating the learning health system. *BMJ.* 2024;384:e076175. doi: 10.1136/bmj-2023-076175
5. Sahoo RK, Sahoo KC, Negi S, et al. Health professionals' perspectives on the use of Artificial Intelligence in healthcare: A systematic review. *Patient Educ Couns.* 2025;134:108680. doi: 10.1016/j.pec.2025.108680
6. Angus DC, Khera R, Lieu T, et al.; JAMA Summit on AI. AI, health, and health care today and tomorrow: The JAMA Summit Report on artificial intelligence. *JAMA.* 2025;334(18):1650-1664. doi: 10.1001/jama.2025.18490
7. Abdallah R, Mangain S. From silos to systemness: Leading quality improvement at scale. American College of Healthcare Executives. Published September 2025. Accessed January 28, 2026. <https://www.ache.org/blog/2025/from-silos-to-systemness>
8. Wolters Kluwer Health. Nursing Insights: Redefining nursing practice for an AI-driven future. 2025 Future Ready Healthcare Survey Report.
9. Aiwerioghene EM, Osuchukwu VC. The role of artificial intelligence in healthcare quality improvement: A scoping review and critical appraisal of operational efficiency, patient outcomes, and implementation challenges. *Hospitals.* 2025;2(4):27. Accessed January 27, 2026. <https://doi.org/10.3390/hospitals2040027>
10. Xu H, Shutleworth KMJ. Medical artificial intelligence and the black box problem: a view based on the ethical principle of "do no harm." *Intelligent Med.* 2024;4:52-57.
11. Carriero A, de Hond A, Cappers B, et al. Explainable AI in healthcare: To explain, to predict, or to describe? *Diagn Progn Res.* 2025;9(1):29. doi: 10.1186/s41512-025-00213-8
12. Chustecki M. Benefits and risks of AI in health care: Narrative review. *Interact J Med Res.* 2024;13:e53616. doi: 10.2196/53616
13. Wolters Kluwer Health. Ovid Synthesis Expert AI fact sheet. October 2025.