



Ambient AI Scribes—What Is the Return on Investment?

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Ambient artificial intelligence (AI) scribes have rapidly become the most widely implemented generative AI solution in health care. These tools draft clinical notes from visit audio recordings and have led to promising reductions in clinician burden and burnout.^{1,2} AI scribes remain costly, with most health systems paying subscription fees of \$200 to \$600 per clinician per month.³ As adoption accelerates and operating margins shrink, health system leaders are increasingly asking a pragmatic question: what is the return on investment (ROI) for ambient AI scribes?

Elsewhere in *JAMA Network Open*, Holmgren et al⁴ offer one of the first quantitative evaluations of this question, examining the impact of ambient AI scribes on physician financial productivity across more than 1.2 million ambulatory encounters at a single academic site. The authors found that access to an ambient AI scribe was associated with a 5.8% increase in weekly relative value units (RVUs) and a 2.8% increase in encounters per week, with no increase in claim denials. The change in RVUs grew over time, suggesting cumulative benefit as physicians became more proficient in using the tool. These results provide important quantitative evidence that ambient AI scribes can enhance financial productivity without compromising billing accuracy.

The findings in Holmgren et al⁴ help quantify one potential source of direct revenue gain from modest increases in RVUs or visit volumes. While a weekly increase of 1.8 RVUs—equivalent to roughly \$3000 annually per physician based on 2025 Medicare rates—may appear small in isolation, scaled across hundreds or thousands of clinicians, these incremental gains could collectively offset subscription fees. The observation that physicians using AI scribes see slightly more patients per week invites a nuanced interpretation. Increased throughput may indeed help offset costs, but if greater visit volumes lead to expanded in-basket workload, shorter visits, or less recovery time, the initial well-being gains could erode. Prior studies of electronic health record (EHR) efficiency show that after-hours documentation and message burden are tightly linked to exhaustion.⁵ Thus, the path to productivity should not reintroduce the very pressures these tools were designed to relieve. Holmgren et al⁴ appropriately call for further research to distinguish whether increased RVUs reflect more services delivered, improved documentation accuracy, or more complete capture of complexity (eg, through Hierarchical Condition Category [HCC] coding).

Ambient AI scribes may lead to financial gain through other pathways as well. If ambient AI scribes replace human scribes or transcription services, there may be a net cost saving. The opportunity to capture more comprehensive and detailed notes may also support higher levels of service (LOS), as could future AI-generated LOS suggestions. However, recent downcoding policies implemented by Aetna and Cigna may signal a coding arms race that could offset these gains. Finally, early data suggest that ambient AI scribes can improve capture of HCC codes and risk adjustment factor scores, which are also tied to improved reimbursement.⁶

Beyond direct financial returns, ambient AI scribes have quickly become a strategic asset for clinician well-being, organizational sustainability, and operational efficiency. Multiple studies across health systems and vendors have demonstrated reductions in clinician burnout and documentation burden of 20% to 40%,^{1,2} benefits that translate into substantial indirect financial ROI through improved workforce retention. Burnout doubles or triples the likelihood of physician turnover, with each departing physician costing an estimated \$500 000 to \$1 million in recruitment, onboarding, and lost productivity.⁷ In addition, access to ambient AI scribes is increasingly perceived as a baseline expectation rather than a luxury. Organizations offering these tools signal a commitment to clinician well-being and innovation as part of their organizational culture. There are also potential operational

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benefits: for example, faster time to medical record closure can accelerate claim submission and improve patient experience by delivering after-visit summaries promptly. The potential for AI-generated documentation to improve completeness and accuracy—by capturing elements that clinicians might omit under time pressure—may enhance longitudinal care and reduce medical errors, although this hypothesis requires rigorous validation.

Organizational sustainability represents another dimension of ROI. Implementing ambient AI tools may create a foundation for broader generative AI integration across the clinical workflow. Institutions that invest in the infrastructure, governance, and training for responsible integration of AI scribes are simultaneously preparing for the next wave of innovation: clinical summarization, automated coding, and real-time clinical decision support. In that sense, ambient AI scribes can serve as a gateway to scaling an AI-enabled care ecosystem. Realizing this will require seamless EHR integration and strong vendor-system collaboration to align AI outputs with coding and billing workflows, ensuring that improved documentation translates into appropriately reimbursed care rather than administrative friction.

In summary, Holmgren et al⁴ provide compelling early evidence that ambient AI scribes can yield financial benefits through increased physician productivity while maintaining billing integrity. However, health systems that view ambient AI scribes solely as revenue enablers may underestimate their strategic value and risk overlooking the human and organizational factors that drive sustained productivity. ROI must be understood across its full value potential—balancing direct financial gains in RVUs with indirect but equally consequential outcomes in clinician well-being, organizational culture, operational efficiency, and organizational sustainability. How value is defined and measured will influence not only how health systems integrate ambient AI across clinical workflows but also how they adapt to the broader AI transformation reshaping health care.

ARTICLE INFORMATION

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