HMPI | HEALTH MANAGEMENT, POLICY & INNOVATION
BAHM BUSINESS SCHOOL ALLIANCE FOR HEALTH MANAGEMENT

AI as Administrative Infrastructure: Reducing Waste and Expanding the Feasible Frontier of Cost, Access, and Quality

Bryn M.C. Rediger, Boston University, Questrom School of Business

Contact: brediger@bu.edu

This paper won first place in the inaugural 2025/25 Will Mitchell Student Essay Contest.

Abstract

What is the message? The traditional healthcare "Iron Triangle" holds that improving cost, access, or quality often requires tradeoffs because healthcare resources are finite. At the same time, the Triple Aim framework argues that healthcare systems should pursue better patient experience, improved population health, and lower per capita costs simultaneously through better system design and the elimination of waste. This analysis argues that artificial intelligence (AI) can help advance that goal by functioning as administrative infrastructure that reduces waste, lowers coordination costs, and makes value-based care more operationally feasible. AI does not eliminate scarcity or remove the need for difficult allocation decisions. Rather, by reducing administrative complexity and improving coordination between payers and providers, AI may expand the feasible frontier of cost, access, and quality within existing resource constraints.

What is the evidence? Drawing on published estimates of administrative waste, prior authorization burden, and emerging evidence from AI-enabled claims validation and utilization management tools, this analysis examines how administrative infrastructure influences the relationship between cost, access, and quality. It synthesizes implementation studies, payer-provider applications, regulatory developments, and governance frameworks to explore how AI may reduce administrative friction embedded in

HMPI | HEALTH MANAGEMENT, POLICY & INNOVATION
BAHM BUSINESS SCHOOL ALLIANCE FOR HEALTH MANAGEMENT

healthcare payment and delivery systems. The analysis builds on the insight that if administrative waste, rather than clinical scarcity alone, accounts for part of the traditional tradeoff between cost, access, and quality, then reducing that waste may allow healthcare systems to make progress across multiple dimensions simultaneously. In this context, AI is considered not as a substitute for clinical judgment or resource allocation, but as a potential mechanism for lowering the administrative costs of coordination, measurement, and payment.

Keywords: Artificial Intelligence, Administrative Costs, Administrative Infrastructure

Timeline: Submitted May 11, 2026; accepted after review July 3, 2026.

Cite as: Bryn M.C. Rediger. 2026. AI as Administrative Infrastructure: Reducing Waste and Expanding the Feasible Frontier of Cost, Access, and Quality. Health Management, Policy and Innovation (HMPI.org). Volume 11, Issue 2.

Administrative Fragmentation and the Cost of Paying for Care

The U.S. healthcare system is often described through the “Iron Triangle” of cost, access, and quality, a framework suggesting that meaningful improvement in one domain generally requires tradeoffs in another because healthcare resources are finite.[1] The framework remains valuable because it highlights a fundamental reality of health policy: scarcity cannot be eliminated. Yet many health system scholars have argued that not all observed tradeoffs arise from resource constraints alone.[2,3] Some reflect waste embedded within healthcare delivery and financing systems.[4]

The Triple Aim framework reframed healthcare improvement around the simultaneous pursuit of three objectives: improving the experience of care, improving population health, and reducing

per capita costs.[2] Instead of treating these goals as inherently conflicting, the Triple Aim argues that better system design can create progress across all three domains at once. In a related analysis, scholars identified administrative complexity, failures of care coordination, and other forms of waste as major contributors to excess spending that does not improve patient outcomes.[5] Their central argument was that reducing waste, rather than reducing valuable care, represents one of the largest opportunities to improve system performance while preserving or enhancing quality.[5]

This distinction is important. If a meaningful share of healthcare spending is consumed by administrative friction rather than clinical care, then some apparent tradeoffs between cost, access, and quality may reflect inefficient system design rather than unavoidable scarcity. The question then is whether technology can reduce the administrative burden required to coordinate, monitor, and pay for care. Artificial intelligence may provide one mechanism for doing so.

Administrative activities account for an estimated 15% to 30% of total U.S. health spending—roughly $600 billion to $1 trillion annually—and as much as half of that burden may represent excess costs.[6] Hundreds of commercial insurers, dozens of self-insured employers, and multiple public programs each maintain distinct benefit designs, formularies, network rules, and documentation standards. Even the federal government, the largest purchaser, operates through 50 separate Medicaid programs and hundreds of Medicare Advantage plans, limiting its ability to impose uniform standards. Healthcare systems must therefore navigate thousands of plan-product combinations, driving hospital administrative costs to roughly 17% of total spending.[7] Each additional payer rule or benefit variation adds new workflows for staffing, coding, reconciliation, and dispute resolution.

Prior Authorization (PA) is one of the clearest manifestations of this administrative burden. Originally intended to promote evidence-based and cost-effective care, PA has evolved into a major driver of delayed access and clinician burnout. A national survey by the American Medical Association shows 93% of physicians report PA-related care delays, and 29% report serious adverse events linked to those delays.[8] A typical practice completes 39-45 PAs per physician

each week, consuming roughly 13 staff hours.[8] Multiplied across thousands of practices and millions of requests, PA represents recurring coordination cost at scale.

The deeper issue is strategic: both payers and providers have rational incentives to add administrative capacity. Payers invest in denial algorithms to manage cost exposure; providers invest in coding, appeals, and revenue cycle optimization to protect revenue.[4] Reworking a denied claim is stated to cost practices an average of $25, while each upheld denial allows payers to avoid payment for high-cost services.[9] These incentives drive payers to automate cost control and providers to automate countermeasures—fueling an "automation arms race" in which both sides profit from escalation even as total system costs rise.[4] In practice, the U.S. healthcare system relies heavily on costly after-the-fact review and dispute resolution rather than proactive coordination and prevention.[4]

Viewed through the Triple Aim, this dynamic represents more than administrative inconvenience. It reflects resources devoted to managing fragmentation rather than improving patient experience, population health, or affordability. If a meaningful share of spending is absorbed by administrative complexity, then reducing those coordination costs may allow healthcare systems to achieve better outcomes with existing resources. Without infrastructure that lowers this burden, value-based care (VBC) remains conceptually attractive but operationally difficult to execute.[10] The result is a system that is not only expensive, but structurally geared toward administrative conflict rather than clinical collaboration.

AI as Administrative Infrastructure for Expanding the Iron Triangle

AI's potential contribution lies in reducing the administrative burden associated with coordination, measurement, and payment. As administrative infrastructure, it can support more efficient information exchange, performance monitoring, and collaboration across fragmented healthcare organizations.

Many AI discussions in healthcare focus on labor replacement. The more consequential role of AI is institutional: it functions as coordination infrastructure that reduces the administrative burden

embedded in complex payment and delivery systems.[11,12] In fragmented multi-payer markets, the core challenge is the high cost of information exchange, monitoring, and enforcement.[4] In other words, AI can lower the costs of gathering information, negotiating terms, verifying documentation, and resolving disputes. These transaction costs manifest in hours spent reworking denied claims, the weekly staff time devoted to PA, and the resources required to keep pace with frequently changing payer rules.

AI may reduce friction between these fragmented stakeholders by enabling real-time, bidirectional coordination. Machine-learning-based claims editing tools, for example, are increasingly being deployed to review submissions against payer-specific rules before claims are transmitted, helping identify missing documentation or coding inconsistencies earlier in the revenue cycle.[13,14] Commercial platforms such as Waystar and prior authorization platforms such as Cohere Health demonstrate that these capabilities are already being used in practice.[15] More broadly, large insurers and health systems increasingly describe AI as a tool for automating manual, data-intensive processes such as prior authorization, claims administration, customer service, and documentation review.[14] Broader scalability, however, remains dependent on continued implementation of interoperability standards such as HL7 FHIR and CMS-0057-F. Rather than relying on retrospective correction and appeals, these approaches seek to shift administrative effort toward prevention and coordination earlier in the workflow.

AI may also reduce the burden of performance measurement, a longstanding bottleneck in VBC.[16] Effective management requires timely, reliable data on spending and outcomes, yet much of that information is buried in unstructured clinical notes, scanned documents, and inconsistently coded reports.[17] Analyses of Medicare Cost Reports and hospital financial filings show that even basic administrative categories can be hard to compare across institutions because of inconsistent definitions and reporting practices.[7] Specifically, over 30% of subcategories and nearly 50% of the dollars reported are mislabeled.[7] Natural language processing models can extract clinically relevant variables—such as diagnoses, disease severity, comorbidities, and treatment response—from narrative documentation and map them to standardized vocabularies.[17] This converts unstructured clinical notes into measurable data that

can support quality monitoring, authorization validation, and contract performance tracking.[11] Combined with rules engines that encode coverage criteria, these systems can assess whether documentation supports medical necessity and flag gaps before a record reaches a human reviewer.[11] In effect, AI upgrades documentation from passive record-keeping to actionable infrastructure.

More ambitiously, AI infrastructure could help address several operational barriers that have historically limited the scalability of VBC. Moving from fee-for-service to outcomes-oriented models requires a way to monitor performance and manage risk without drowning organizations in new paperwork.[16] Despite decades of experimentation, fragmentation across payers, providers, benefit designs, and reporting requirements continues to create substantial administrative complexity.[4] If administrative and measurement costs can be substantially reduced, value-based arrangements may become more operationally attractive than traditional fee-for-service reimbursement models.

The collaboration between Regence and MultiCare Health System offers a glimpse of this future. Emerging frameworks that combine AI-enabled workflows with HL7 FHIR standards can support more efficient data exchange between providers and payers and may reduce delays associated with authorization and documentation processes.[18] Instead of functioning solely as a cost-control mechanism, PA can become a “shared clinical safety net” that supports appropriate care paths while minimizing avoidable delays.[16] When AI is treated as managerial infrastructure, it provides real-time data flows, quality dashboards, and predictive models needed to make shared-risk contracts operationally sustainable for both large healthcare systems and smaller practices.[16] Notably, UnitedHealth executives reported that nearly all current AI applications within the organization are administrative rather than clinical, reflecting the scale of opportunity associated with reducing transaction and coordination costs.[14] AI does not eliminate fragmentation, but it can lower the coordination costs that fragmentation imposes.[4] In this sense, AI does more than automate administrative tasks. By reducing administrative waste and improving coordination across fragmented healthcare organizations, it may expand the amount of quality and access that healthcare systems can achieve with existing resources, shifting the practical boundaries of the Iron Triangle itself.

Aligning Incentives to Make Value-Based Care Work

VBC is meant to reward improvements in health outcomes relative to cost, but many organizations find that their value-based contracts underperform or stall.[19] Even as adoption of alternative payment models has grown to about 50%, a substantial share of total payments remains predominantly fee-for-service or only weakly tied to quality.[20] A flood of quality measures, delayed data, and unclear attribution rules creates friction that discourages participation.[21]

AI may help address these operational barriers by reducing the burden of measurement, reporting, and oversight that has historically limited the scalability of complex value-based contracts.[4,16] Rather than layering additional static rules onto legacy workflows, AI-enabled platforms can interpret unstructured data, identify patterns across large datasets, and support routine administrative decisions.[22] By lowering the administrative costs of coordination and performance tracking, AI has the potential to make value-based arrangements more operationally sustainable.

Bundled payments may become more scalable under this model. Traditionally, authorizing an entire episode of care—such as a joint replacement or complex oncology regimen—requires a series of discrete approvals for each imaging study, procedure, or infusion.[16] Emerging frameworks that combine HL7 FHIR data standards, Clinical Quality Language, and AI-driven decision support allow payers and providers to define episode-specific authorization rules that can be applied using standardized clinical data.[13,22] This approach may reduce administrative burden for both parties and align day-to-day workflows with the goals of episode-based payment.

AI may also improve the monitoring of shared-savings contracts. Building on the documentation infrastructure described in Section II, AI-enabled platforms can incorporate extracted clinical variables into quality dashboards that track care patterns against coverage criteria and clinical guidelines.[17] Rather than relying exclusively on retrospective audits, organizations may be able to monitor clean-claim rates, risk-adjusted cost trends, and quality performance more

continuously, allowing earlier identification of operational issues during an episode or contract year.[17]

The same measurement capabilities may also strengthen outcomes-based pharmaceutical contracts, which tie manufacturer payment to real-world performance such as reduced hospitalizations or sustained disease control.[16] These arrangements are increasingly important as specialty drugs account for a growing share of health spending, yet they are difficult to administer at scale because they require tracking outcomes across diverse populations and care settings.[12] Using the data extraction and monitoring infrastructure described above, AI systems can help identify predefined clinical endpoints—such as hospital admissions, treatment discontinuation, or adverse events—and flag cases relevant to contractual payment terms.[17] Human reviewers remain essential for interpretation, dispute resolution, and ethical oversight, but AI could reduce the manual burden by surfacing relevant cases and standardizing performance tracking. By embedding outcome monitoring into routine data flows, AI supports accountability without recreating the administrative friction that has historically limited these contracts.

AI may also make risk-sharing contracts more feasible for a broader set of providers, not only large integrated systems.[7,17] Effective population health management depends on identifying patients at highest risk who would benefit from proactive outreach and coordinated care.[23] Predictive models that integrate clinical, claims, and social determinants data have demonstrated improved risk stratification compared with approaches based primarily on demographics and diagnosis codes, enabling more targeted interventions such as care management, telehealth follow-up, or home-based services.[4,17] When combined with administrative tools that support claims review, documentation management, and authorization workflows, these capabilities may reduce the operational burden of managing risk and allow providers to focus greater attention on prevention and care coordination.

Reducing administrative burden, however, does not automatically create value. Waste elimination requires organizations to invest in new systems, redesign workflows, and change established patterns of care delivery. Yet the financial benefits of those improvements do not

always accrue to the organizations making the investment. As Brent James has argued, many forms of healthcare waste persist because payment mechanisms create misaligned incentives, allowing savings generated through quality improvement and waste reduction to flow elsewhere in the system.[3] Administrative complexity is both an information problem and an incentive problem. The central barrier is therefore not only the speed or sophistication of technology. Many of the tools needed to reduce administrative burden already exist, but their impact depends on whether payment models, governance structures, and organizational incentives reward waste reduction rather than the preservation of existing revenue streams.[3] AI may lower the transaction costs associated with coordination, measurement, and oversight, but its impact will depend on whether payment models reward organizations for converting those efficiencies into better outcomes and lower total costs. The greatest opportunity arises when waste reduction is paired with value-based arrangements that allow providers, payers, and patients to share in the benefits of improved performance. Under those conditions, administrative savings can be reinvested into care redesign, prevention, and innovation rather than absorbed by the existing structure of the system.[24]

AI's strategic contribution lies in supporting coordination, measurement, and transparency across fragmented healthcare organizations.[25] By lowering the operational cost of coordination, AI may help make incentive alignment more feasible across a range of value-based payment models, allowing organizations to translate administrative efficiencies into improvements in cost, access, and quality.

Expanding the Iron Triangle

The Iron Triangle has long been used to describe the tradeoffs between cost, access, and quality.[1] At any given level of spending, healthcare systems face limits on how much access and quality they can deliver. Expanding coverage or increasing service intensity has traditionally required additional resources.[3] If a meaningful share of healthcare spending is absorbed by administrative complexity rather than patient care, reducing that waste may create opportunities to improve cost, access, and quality within existing resource constraints.

Reducing administrative waste may improve cost, access, and quality through several

mechanisms:

Cost: Administrative activities such as prior authorization, claim correction, documentation review, and payment disputes consume substantial resources without directly improving patient outcomes.[4] To the extent that savings are captured and reinvested, they create opportunities to improve value without reducing access or quality.[24]

Access: Access is often constrained by both clinical capacity and administrative processes that delay care.[16,26] Prior authorization requirements frequently postpone treatment, create additional work for clinical staff, and discourage participation in some insurance networks.[8] Technologies that reduce administrative friction may improve the timeliness of care and allow clinicians to devote more time to direct patient services.[27] By reducing delays associated with approvals, documentation, and care coordination, AI may help patients receive appropriate care more efficiently.

Quality: High-quality care depends on timely information, consistent measurement, and effective coordination across care settings.[2] AI may support these functions by organizing clinical information, identifying documentation gaps, and facilitating performance monitoring.[12] These capabilities do not replace clinical judgment, but they may strengthen the infrastructure required to deliver evidence-based care and identify opportunities for intervention earlier in the course of treatment.

In this framework, gains in cost, access, and quality arise not from overcoming scarcity, but from reducing the waste and administrative complexity that consume resources without adding value. AI does not eliminate tradeoffs: resources remain finite, and ethical allocation still requires human judgement.[27] Its potential contribution lies in lowering the cost of managing those tradeoffs. By reducing the share of spending absorbed by administrative waste and improving coordination across fragmented healthcare organizations, AI may expand the feasible frontier of cost, access, and quality. In that sense, AI helps free capacity for care rather than allowing administrative friction to consume a disproportionate share of the system's value.[12]

Governance: Preventing AI-Enabled Abuse

The same AI infrastructure that can shrink administrative waste can also be weaponized to deepen it if incentives and oversight are misaligned. Recent lawsuits illustrate how quickly AI can become a denial engine rather than a coordination tool.[11] One class action alleges that a major insurer used a proprietary algorithm to deny 300,000 claims in a matter of weeks, with an average review time of 1.2 seconds—raising concerns about whether meaningful clinical judgement was ever applied.[11] Similar cases accuse other large insurers of using AI tools to terminate coverage for post-acute care and skilled nursing facilities at scale with minimal human review.[27] These episodes illustrate AI-enabled abuse: the use of opaque algorithms to maximize short-term financial margins.[11,28]

The same capabilities that allow AI to reduce administrative waste can also make opportunistic behavior cheaper and easier if oversight is weak.[11] To ensure AI functions as a shared clinical safety net rather than an adversarial tool, governance must be treated as a strategic design problem built on five pillars.

1. **Algorithmic transparency and labeling**. The FDA's framework for AI/ML-based Software as a Medical Device emphasizes a "Predetermined Change Control Plan" specifying which aspects of an algorithm may change over time and how those changes will be controlled.[28] By analogy, AI systems used for claims and PA should be required to document their objective functions and key inputs: are they optimizing predicted cost, adherence to coverage criteria, or patient outcomes?[28] Choosing the wrong target—such as short-term cost instead of health need—risks baking structural bias into the system.[23]
2. **Public reporting of authorization and denial patterns**. Beginning in 2026, CMS's Interoperability and Prior Authorization Final Rule (CMS-0057-F) will require many payers to publicly report PA metrics including total requests, approval and denial rates, and average decision times, with the first reports due by March 31, 2026.[29] These metrics create a baseline for external oversight: stakeholders can compare payers on how often and how quickly they authorize care, and regulators can investigate outliers that may signal inappropriate use of automation.[26,27]
3. **Rigorous audits across the AI lifecycle**. Best practice for AI governance emphasizes

continuous real-world performance monitoring, post-market surveillance, and bias assessment.[28] For administrative AI, this should include sampling automated decisions, comparing AI-driven denials to clinician judgements, and analyzing impacts across patient groups.[27] Without consistent and transparent reporting, it is nearly impossible to tell whether AI reduces administrative waste or simply moves it elsewhere in the system.[7]

4. **Alignment with medical loss ratio (MLR) and related regulation**. The Affordable Care Act's MLR rules require most insurers to spend 80-85% of premiums on clinical services and quality improvement.[4] However, when premiums rise, administrative spending can still increase in absolute terms even if the percentage remains constant.[4] Regulators could refine MLR frameworks to distinguish between investments that durably reduce per-member administrative costs and strategies that merely sustain complex, revenue-preserving billing structures.[7] One option would be to require that any documented savings from reduced billing- and insurance-related expenses be directly returned to the system—through lower premiums, enhanced benefits, or reinvestment in value-enabling infrastructure.[7]
5. **Reinvestment of savings in VBC**. If even a fraction of the estimated 15-30% administrative share reflects excess cost, then reducing that burden through AI could unlock a substantial system dividend.[4] Without explicit policy, those savings are likely to be captured by intermediaries.[11,27] Large purchasers and regulators can require documented reinvestment of administrative savings into lower cost-sharing, expanded benefits, care management, primary care, or social supports for patients. CMS-0057-F's transparency provisions are an important first step; future value-based contracts can go further by tying participation to demonstrable reductions in administrative waste and clear reinvestment plans.[21,26]

Ultimately, governance determines whether AI becomes a tool for systemwide efficiency or a mechanism for automated abuse. Aligning AI deployment with transparent objectives, rigorous auditing, and regulatory incentives that reward true waste reduction is what transforms AI from a denial accelerator into the infrastructure that enables VBC.[7,16] Governance therefore determines whether AI expands the healthcare frontier or accelerates existing inefficiencies.

Global Implications

The Iron Triangle framework applies globally: all healthcare systems must balance cost, access, and quality under finite resources.[1] What differs across countries is how much of the health budget is absorbed by administering that balance.[21] In the U.S., fragmented payer structures and complex billing rules have transformed administrative oversight into a major cost center, consuming an estimated 15-30% of total spending.[6,30] Over time, these structures have become path dependent: once a system builds layered prior authorization, multi-payer adjudication, and adversarial claims review processes, they generate constituencies, workflows, and technologies that are costly to unwind.[4] AI in the U.S. context therefore functions largely as a tool to reduce coordination costs within an already complex institutional architecture.

For many low- and middle-income countries (LMICs), the opportunity is different—and potentially more transformative. As nations expand insurance coverage and digitize health records, they are still shaping the administrative backbone of their systems.[31] Where AI in the U.S. reduces coordination costs within an already fragmented architecture, LMICs can apply the same principles earlier—embedding interoperability before fragmentation becomes institutionalized. AI-enabled infrastructure therefore offers a “design-stage” advantage: interoperable data standards, automated eligibility verification, and real-time authorization protocols can be embedded before fragmented billing ecosystems become entrenched.[31] Rather than digitizing paper-heavy bureaucracies, countries can implement digital-first coordination models that minimize retrospective dispute resolution and reduce incentives for adversarial billing behavior.[31] In effect, AI provides a chance to avoid importing the administrative arms race that characterizes high-cost systems.

In centrally financed or single-payer environments, AI further strengthens procurement and integrity functions by reducing information asymmetry between purchasers and suppliers. Real-time analytics can benchmark prices, detect anomalous billing patterns, and monitor contractual outcomes, preserving limited public budgets for frontline care.[15,17]

However, adoption remains uneven: the U.S. alone accounts for 75% of total investments in

generative AI, raising the risk that administrative efficiency gains—and the fiscal space they create—will accrue disproportionately to already well-resourced systems.[17]

Globally, AI's greatest strategic value lies not in replacing clinicians, but in re-engineering the administrative state. Countries that deploy AI to reduce coordination costs and embed transparency early may expand the feasible frontier of cost, access, and quality simultaneously. Those that deploy it primarily to automate cost denial risk entrenching inefficiency at digital speed. VBC is therefore not the endpoint of AI-enabled administrative redesign, but an early demonstration of a broader principle: when coordination becomes cheaper than conflict, healthcare payment itself can be reorganized around value rather than volume. In that sense, AI expands the economic frontier of how care can be financed, measured, and delivered.

References

1. Kissick W. *Medicine's Dilemmas: Infinite Needs Versus Finite Resources*. 1994.
2. Berwick DM, Nolan TW, Whittington J. The Triple Aim: Care, Health, And Cost. *Health Affairs*. 2008;27(3):759-769. doi:10.1377/hlthaff.27.3.759
3. Hearing on Reducing Health Care Costs: Eliminating Excess Health Care Spending and Improving Quality and Value for Patients. Published online July 17, 2018. https://www.help.senate.gov/imo/media/doc/James3.pdf
4. Kocher RP. Reducing Administrative Waste in the US Health Care System. *JAMA*. 2021;325(5):427-428. doi:10.1001/jama.2020.24767
5. Berwick DM, Hackbarth AD. Eliminating Waste in US Health Care. *JAMA*. 2012;307(14):1513-1516. doi:10.1001/jama.2012.362
6. Health Affairs Research Brief. The Role Of Administrative Waste In Excess US Health Spending. Published online October 6, 2022. doi:10.1377/hpb20220909.830296
7. Sahni NR, Istvan B, Bello Thornhill H, Joynt-Maddox KE, Cutler D, Emanuel EJ. Availability of consistent, reliable, and actionable public data on US hospital administrative expenses. *Health Aff Sch*. 2025;3(5). doi:10.1093/haschl/qxaf069
8. American Medical Association. *2024 AMA Prior Authorization Physician Survey*. AMA; 2024. https://www.ama-assn.org/system/files/prior-authorization-survey.pdf

9. Poland L, Harihara S. Claims Denials: A Step-by-Step Approach to Resolution. Journal of AHIMA. April 25, 2022. Accessed February 2, 2026. https://journal.ahima.org/page/claims-denials-a-step-by-step-approach-to-resolution
10. Tong N. Why insurers still see value-based care as the answer to high costs. June 1, 2026. http://www.modernhealthcare.com/insurance/mh-insurers-value-based-care-unitedhealth-cvs/
11. Bichey B. A Novel, AI-Based Method of Mitigating Prior Authorization Denials. AAO-HNS Bulletin. July 15, 2024. Accessed February 15, 2026. https://bulletin.entnet.org/business-of-medicine-practice-management/article/22914205/a-novel-aibased-method-of-mitigating-prior-authorization-denials
12. McKinsey. *Economic Potential of Generative AI: The next Productivity Frontier*. McKinsey & Company; 2023. Accessed February 9, 2026. https://www.mckinsey.com/capabilities/tech-and-ai/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier
13. Schlossberg. Availity Launches AI Claims Denial Prediction Tool. *Availity*. April 2, 2024. https://www.availity.com/news/availity-launches-ai-claims-denial-prediction-tool/
14. Tozzi J. UnitedHealth's $3B AI push has bots calling doctors. June 19, 2026. http://www.modernhealthcare.com/insurance/mh-unitedhealth-ai-optum-sandeep-dadlani/
15. Waystar. Waystar Authorization Platform. Published online 2026. https://www.waystar.com/our-platform/financial-clearance/authorizations/
16. ACMA. Value-Based Care and Its Impact on Prior Authoriza… Prior Authorization Training. August 18, 2025. Accessed February 10, 2026. https://www.priorauthtraining.org/understanding-value-based-care-and-its-impact-on-prior-authorization/
17. Somajohassula DK. AI-Driven Decision Support Systems in Healthcare Claim Adjudication. *EJCSIT*. 2025;13(42):54-63. doi:10.37745/ejcsit.2013/vol13n425463
18. Anderson H. Using FHIR APIs Significantly Improved Prior Authorization Process. November 29, 2024. https://hl7news.hl7.org/2024/11/29/using-fhir-apis-significantly-improved-prior-authorization-process/
19. HCPLAN. *2022 APM Measurement Infographic*. Health Care Payment Learning & Action Network; 2022. Accessed February 24, 2026. https://hcp-lan.org/2022-infographic/

20. Leao DLL, Cremers HP, van Veghel D, Pavlova M, Groot W. The Impact of Value-Based Payment Models for Networks of Care and Transmural Care: A Systematic Literature Review. *Appl Health Econ Health Policy*. 2023;21(3):441-466. doi:10.1007/s40258-023-00790-z
21. KFF. *Health Care Costs and Affordability*. Kaiser Family Foundation; 2025. Accessed February 10, 2026. https://www.kff.org/health-costs/health-policy-101-health-care-costs-and-affordability/
22. Lenert LA, Lane S, Wehbe R. Could an artificial intelligence approach to prior authorization be more human? *JAMIA*. 2023;30(5):989-994. doi:10.1093/jamia/ocad016
23. Obermeyer Z, Powers B, Vogeli C, Mullainathan S. Dissecting racial bias in an algorithm used to manage the health of populations. *Science*. 2019;366(6464):447-453. doi:10.1126/science.aax2342
24. Smith GL, Hannah S, Mountford J, Bisognano M. Model to reduce waste in healthcare and add value. *BMJ Open Qual*. 2022;11(1):e001655. doi:10.1136/bmjoq-2021-001655
25. Health Care Transformation Task Force. The Task Force Releases Principles for Prior Authorization Policies in Value-Based Care Arrangements. Health Care Transformation Task Force. September 6, 2023. https://hcttf.org/the-task-force-releases-principles-for-prior-authorization-policies-in-value-based-care-arrangements/
26. ACP. Toolkit: Addressing the Administrative Burden of Prior Authorization. February 5, 2024. Accessed February 8, 2026. https://www.acponline.org/advocacy/state-health-policy/toolkit-addressing-the-administrative-burden-of-prior-authorization
27. Karwar A. How to Responsibly Implement AI in Healthcare: Enhancing Prior Authorization Claims Assessments | CMSA. Case Management Society of America. June 7, 2024. https://cmsa.org/how-to-responsibly-implement-ai-in-healthcare-enhancing-prior-authorization-claims-assessments/
28. FDA. *Artificial Intelligence/Machine Learning (AI/ML)-Based Software as a Medical Device (SaMD) Action Plan*. U.S. Food & Drug Administration; 2021:1-8. https://www.fda.gov/media/145022/download
29. CMS. *CMS Interoperability and Prior Authorization Final Rule CMS-0057-F*. Centers for Medicare & Medicaid Services; 2024. Accessed February 14, 2026.

https://www.cms.gov/newsroom/fact-sheets/cms-interoperability-and-prior-authorization-final-rule-cms-0057-f

30. Turner A, Miller G, Lowry E. High U.S. Health Care Spending: Where Is It All Going? *The Commonwealth Fund*. Published online October 4, 2023. doi:10.26099/r6j5-6e66
31. Zuhair V, Babar A, Ali R, et al. Exploring the Impact of Artificial Intelligence on Global Health and Enhancing Healthcare in Developing Nations. *J Prim Care Community Health*. 2024;15. doi:10.1177/21501319241245847