US Payer Current and Future Adoption of Artificial Intelligence

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Objectives

- **Artificial intelligence (AI) is reshaping US payer decision making and has been increasingly used in population health analytics and formulary/utilization management.**
- **This research aims to assess how payers currently leverage AI in their decision making and explore how they anticipate using AI in the future.**

Methods

A qualitative, web-based survey was fielded via the Rapid Payer Response™ online portal (RPR®) between November and December 2025. The sample included 14 current US payers, comprising pharmacy directors (PDs) and medical directors (MDs) from commercial managed care organizations, Medicaid managed care and Medicare Advantage plans, as well as pharmacy benefit managers (PBMs) and integrated delivery network payers (IDNs) (Table 1).

Table 1. Survey respondents

Payers	
Commercial MCO medical directors (2)	27,000,000 total covered lives
Commercial MCO pharmacy directors (2)	49,500,000 total covered lives
Medicaid managed care plan PDs and MDs (one of each)	22,000,000 total covered lives
Medicare Advantage plan PDs and MDs (one of each)	20,950,000 total covered lives
IDNs (2)	12,743,000 total covered lives
PBMs (4)	233,000,000 total covered lives

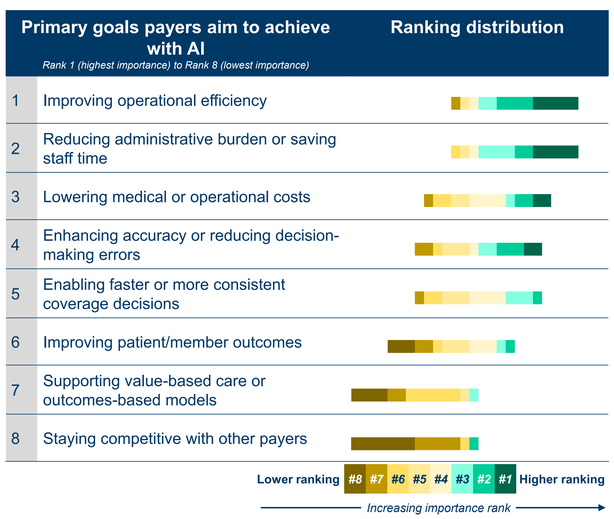
Results

AI adoption in payer workflows is expected to be driven by four key stakeholder types:

	Payers: who retain data ownership and control alongside strong economic incentives in an increasingly cost-pressured environment.
	Manufacturers: who will contribute primarily through data sharing and evidence generation.
	Integrated delivery networks (IDNs) and healthcare providers/physicians: who stand to benefit from improved workflow integration and enhanced system reliability.

All 14/14 payers (100%) believe that AI can be used effectively to enhance payer decision making. Payers consistently identify improving operational efficiency and reducing administrative burden or saving staff time as their top AI priorities, followed by lowering medical or operational costs and enhancing accuracy or reducing decision-making errors. Enabling faster or more consistent coverage decisions is also considered important, while improving patient/member outcomes, supporting value-based care or outcomes-based models, and staying competitive with other payers are currently ranked as lower priorities (Figure 1).

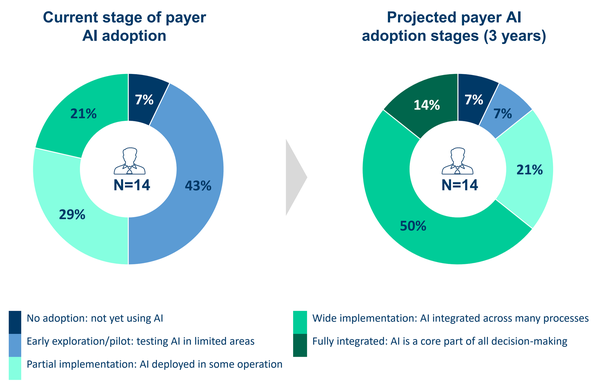
Figure 1. The most important goals payers aim to achieve by implementing AI in their organizations.



Key challenges associated with payer AI adoption include regulatory/compliance hurdles, potential bias, quality control issues, need for training to improve workforce readiness, technological inertia, and unclear cost-to-ROI. Further, payers emphasize that AI must not drive final determinations in coverage decisions, medical necessity assessments, or appeals, as these processes carry significant liability implications and require human judgment and accountability.

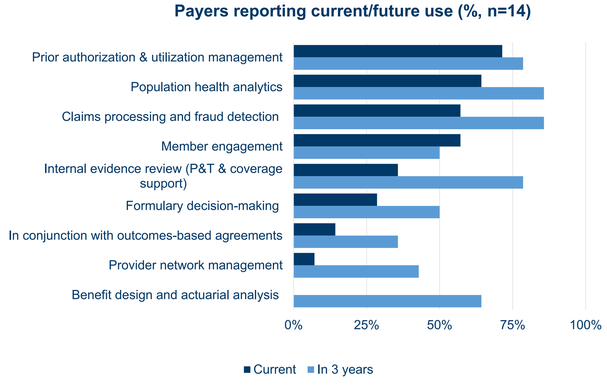
Most surveyed payers (72%) report that their organization is currently in an exploration or partial implementation stage of AI adoption, and 64% anticipate wide implementation/full integration within the next 3 years (Figure 2). Payers perceive that AI capabilities are rapidly improving, making wider implementation feasible.

Figure 2. AI adoption in payer operations: current state versus a 3-year outlook.



Current payer AI use cases primarily focus on streamlining or automating prior authorization and utilization management approvals, population health analytics (e.g., risk stratification), claims processing and fraud protection (e.g., identifying billing anomalies), and member engagement (Figure 3).

Figure 3. Most common payer AI use cases today versus 3 years from now, based on selections from predefined categories.



Over the next 3 years, payer AI capabilities are expected to expand, particularly in internal evidence reviews (e.g., P&T and coverage support), benefit design and actuarial analysis (predictive modelling for plan design), formulary decision-making, outcomes-based agreements, and provider network management.

Conclusions

- Payers are already piloting AI capabilities and anticipate increased integration as technologies mature and high value use cases are demonstrated. Current adoption mainly focuses on improving operational efficiency, reducing administrative burden, and enhancing consistency in decision-making, particularly in areas such as prior authorization, utilization management, and data analytics. While payers are optimistic about the potential of AI to deliver meaningful efficiency gains and support better-informed decisions, they remain cautious due to existing limitations related to data quality, potential bias, and the need for robust quality control measures.
- Additionally, the upfront investment in time, resources, and organizational change required for implementation continues to act as a barrier to large-scale adoption. Importantly, payers highlight that AI is expected to enhance, not replace, human judgment, especially in critical decisions about coverage and medical necessity. Looking ahead, wider adoption is likely to speed up as evidence supporting real-world value emerges, along with improvements in bias reduction, clearer regulatory guidance, and the development of robust governance frameworks.

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