US Payer Perspectives on Drug Manufacturer Readiness for Artificial Intelligence

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ISPOR Poster OP4

Objectives

- **Payers are currently piloting AI for their operations and expect increased integration as capabilities mature and use cases are validated.**
- **This research aimed to identify payer expectations and policies regarding pharmaceutical manufacturer use of AI and to capture implications for manufacturers on how to optimize their engagements with payers in an AI-driven environment.**

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).

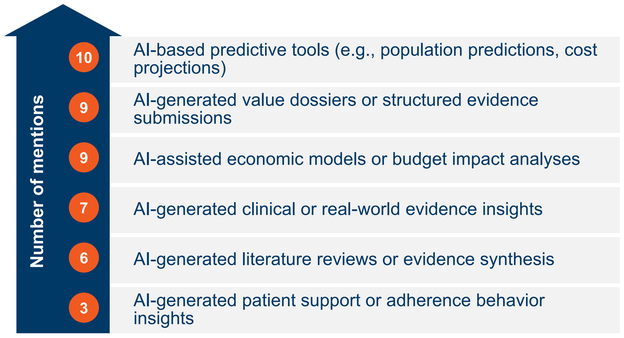
Table 1. Survey respondents

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 use by pharmaceutical manufacturers is primarily focused on evidence synthesis, economic modeling, real-world evidence generation, and predictive analytics, indicating that current applications are centered around data processing/analytical functions (Figure 1).

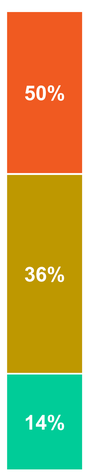
Figure 1: AI-generated and AI-assisted materials and tools used by manufacturers.



Payer policies on manufacturers use of AI remain largely underdeveloped, with half reporting no specific policies, 36% considering or developing them, and only 14% having formal policies in place.

Despite efficiency gains, a subset of respondents note that AI-assisted outputs, including dossiers and predictive tools, offer limited added value compared with traditional approaches due to inconsistent validation and integration into payer workflows (Figure 2).

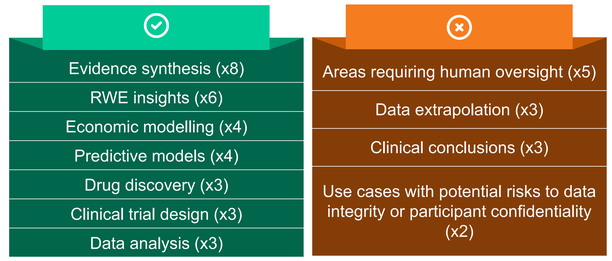
Figure 2. Payer policies on manufacturer use of AI.



- Approximately half of the payers report having no specific policies governing manufacturer use of AI and do not anticipate developing them
  - Decision-making will continue to be driven by the quality, accuracy, and clinical relevance of evidence, rather than the methods or tools used to generate it, reducing the urgency for immediate policy intervention.
- Approximately 36% of payers lack formal policies but are considering or developing them for internal and external AI use recognizing the need for future governance as AI adoption increases in manufacturer interactions.
  - Policy development is being driven by growing concerns around transparency, validation, and potential bias in AI-generated evidence, alongside increasing expectations for outputs to be auditable, reproducible, and aligned with regulatory and ethical standards
- A small subset of payers has already implemented formal policies to ensure transparency in AI use, including clear disclosure of methodologies, data sources, and assumptions underlying AI-generated outputs.

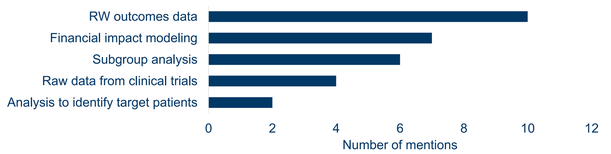
Payers broadly welcome the use of AI in evidence generation, analytics, and operational efficiency. However, AI use is strongly rejected in areas that replace human judgment, lack transparency or pose risks to data integrity, privacy, and objectivity in decision-making (Figure 3).

Figure 3: Manufacturer AI use cases considered acceptable and unacceptable by payers.



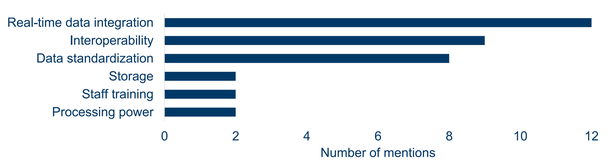
Payers want to see more real-world outcomes data, raw and complete clinical trial datasets, detailed subgroup analyses, and transparent economic inputs in modelling, to better inform AI-driven formulary and value assessment decisions (Figure 4).

Figure 4: Evidence and data needs to support AI-informed payer decision-making.



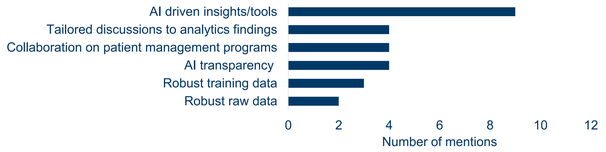
Most surveyed payers believe that AI-ready manufacturer–payer engagement depends on transforming fragmented data ecosystems into standardized, interoperable, and real-time data infrastructures (Figure 5).

Figure 5: Payer data infrastructure needed to support AI initiatives.



Payers consistently expect manufacturers to provide clear disclosure of AI use, including data sources, assumptions, and methodologies, because transparency is critical to build trust and ensure that AI-generated insights are credible to inform decisions (Figure 6).

Figure 6: Key factors supporting effective manufacturer–payer engagement in an AI-enabled environment.



While manufacturers are actively investing in and experimenting with AI to improve efficiency, these efforts remain in an evolving phase and have not yet translated into fully mature, payer-aligned solutions. Broader structural challenges, including steep learning curves, need for validation, limited availability of skilled talent, and ongoing skepticism around AI in healthcare, are constraining readiness on both the manufacturer and payer sides.

Conclusions

- AI is increasingly being adopted across US payer organizations in both administration and analytical functions. However, all current applications remain experimental and are not yet sufficiently mature to provide decision-ready solutions. Most payers have few to no formal policies governing AI development, validation, or use in manufacturer submissions. As a result, payers are concerned about AI applications replacing personal judgment or introducing risks related to bias, data integrity, or patient privacy.
- Recommendations for manufacturers include leveraging AI insights and tools to improve evidence synthesis, economic modeling, and real-world data analysis; stress-testing submission strategies with AI before payer engagement to anticipate questions and test assumptions; and clearly communicating the specific details of where AI was used, particularly in evidence-generation applications.
- As AI technology becomes more widespread, there may be emerging opportunities for deeper collaboration between manufacturers and payers on real-world evidence generation, population health management, and patient adherence or support programs. Progress in these areas will depend on advancements in data interoperability and on access to high-quality data from both real-world and clinical datasets. Manufacturers will need to address these unmet needs and deliver transparent, reliable, and relevant AI technology solutions to support payer decisions.

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Presented at the ISPOR Conference, May 2026, Philadelphia, PA