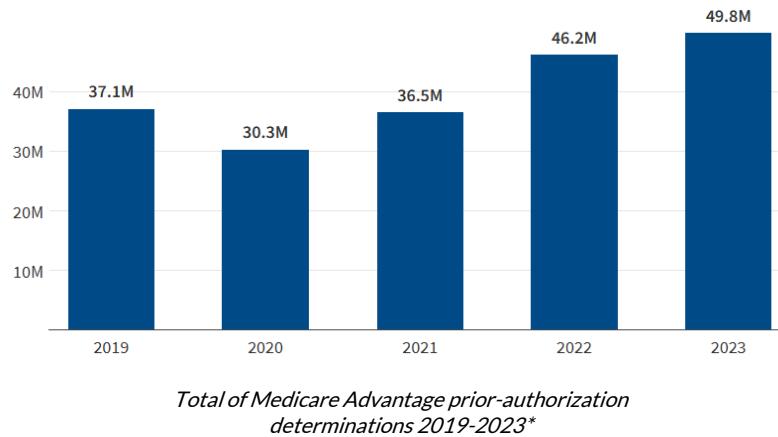


The background of the slide is a dense, overlapping pile of numerous puzzle pieces. The pieces are various colors, including shades of blue, yellow, orange, red, green, and brown. They are all interlocked, creating a complex and textured surface.

Reducing Authorization Friction

Comprehensive Request Volume

In 2023 Medicare Advantage insurers alone made nearly **50 million prior-authorization determinations**.



This is representative of a comprehensive increase in prior-authorizations across all plan types.



Resource Consumption

90% of provider calls to a payer focus on determining whether a course of treatment is covered

Approx. 39 prior-authorization requests per provider per week are submitted

This represents roughly 13 hours per week of staff time spent on authorizations alone

Pulling Focus to the Consumer

- Transparency of ethical processes
- Avoiding unnecessary submissions
- Speed of review and decision
- Clear and concise appeal process

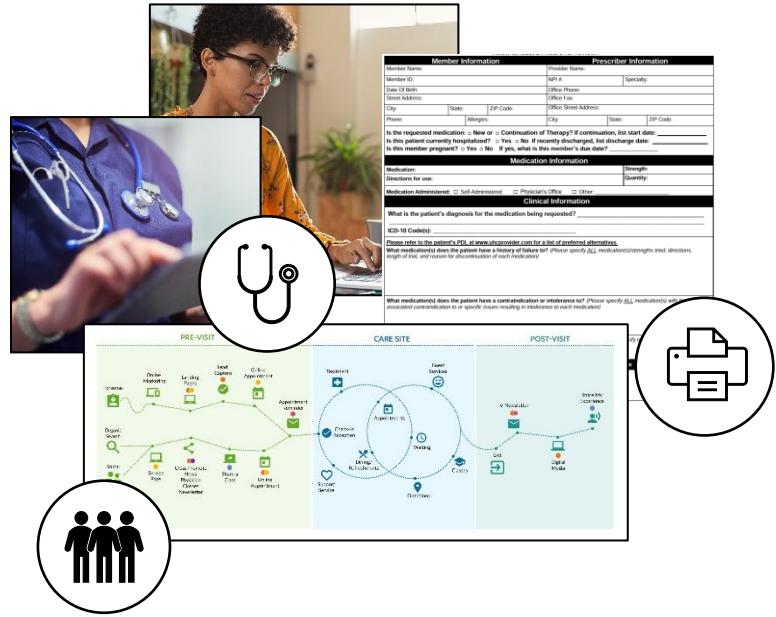


77% of healthcare practitioners report that health insurers create additional hurdles for patients in getting the care they need. - *Forrester*

Delays to Care

Prior-authorizations result in **94%** of patients experiencing delays in care.

78% of those impacted abandon treatment all together.



Consistent pressure on process friction and reducing the time to decision to prevent impact to relevant care is highlighted by the **CMS Interoperability and Prior Authorization Final Rule**

Current Process

- Lengthy
- Manual
- Detached



Provider orders treatment, test or prescription.



Provider staff initiates prior-authorization.



Prior-authorization requirements are reviewed in accordance with plan documentation and contract negotiations



Health plan representative reviews if prior-authorization required



If required, a prior-authorization, forms and documentation are identified collected and submitted.



Prior-authorization is reviewed for medical necessity, and initial determination is issued.



Communication is provided back to the care team and patient regarding decision.



Patient is issued or scheduled for approved treatment, test, or prescription

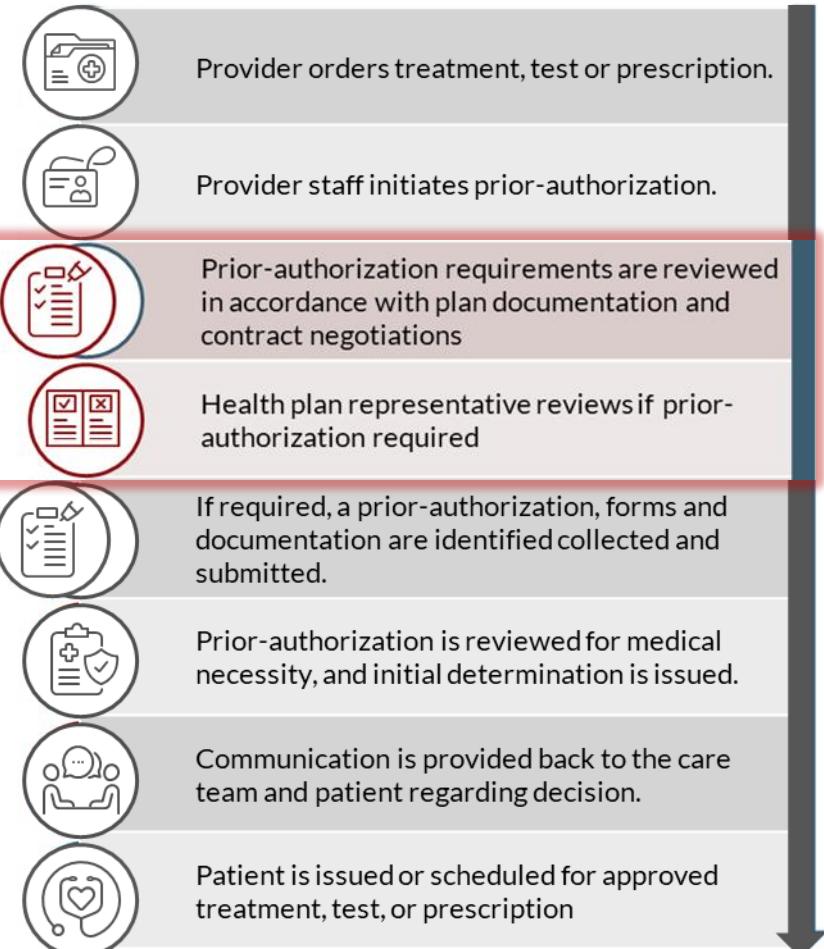
Moving from Legacy Process to Alternative Approach

Organizations have ventured into AI to solve for this highly manual process, with varying degrees of success.

To successfully move to this model, we must factor decisions and provide a model that grows and learns as humans engage with it.

1. Consider delivered value to provider and consumer
2. Focus on accuracy, especially in high-impact use cases
3. Gather feedback, measure impact, iterate and scale

For this demo, we are focusing on the **entry point** to the prior-authorization process.



Demo Recap

➤ Prior-Authorization Required

Provider and patient can be made aware that authorization is required. What information is required to submit that authorization, and estimated timeline.

➤ Authorization Not Required

Provider can communicate to patient that authorization is not required and proceed directly to scheduling.

➤ More Information Required

More information is required to proceed with the authorization determination.



Provider orders treatment, test or prescription.



Provider staff initiates prior-authorization.



Prior-authorization requirements are reviewed in accordance with plan documentation and contract negotiations



Health plan representative reviews if prior-authorization required



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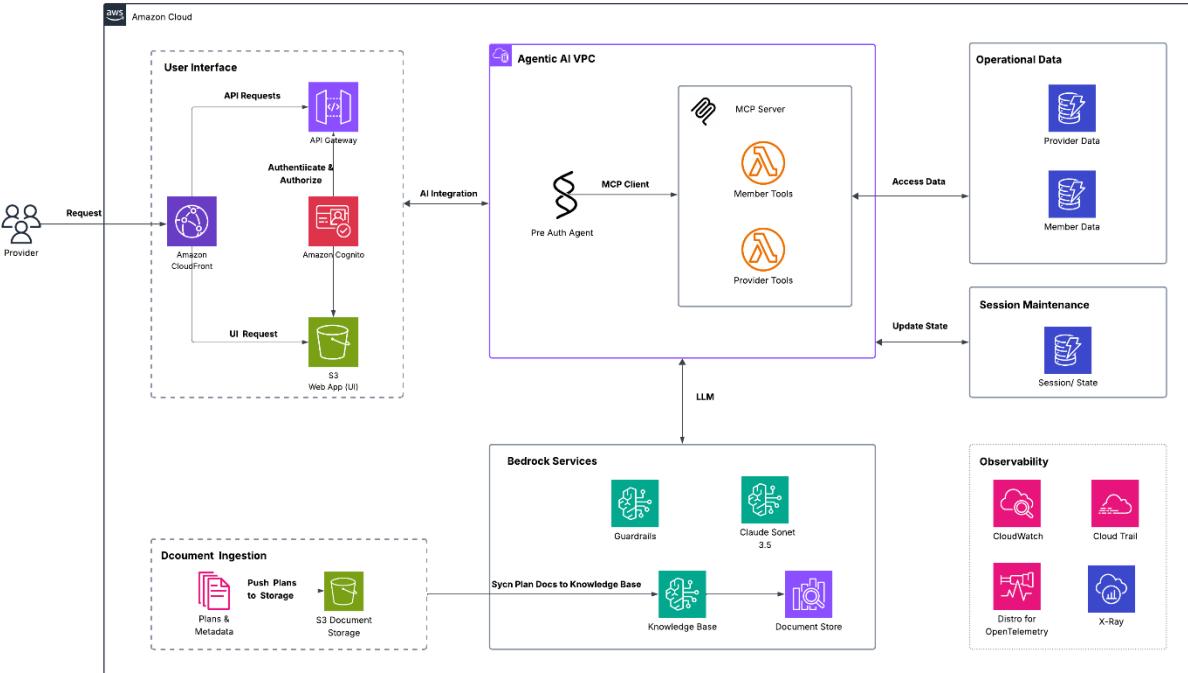


Communication is provided back to the care team and patient regarding decision.



Patient is issued or scheduled for approved treatment, test, or prescription

Prior Authorization Architecture



Overview

Core Technology (Focus on Swarm, MCP, Open Telemetry, Bedrock knowledge base, Guardrails)

- **Agent:** Context aware orchestration of Bedrock LLM + Guardrails + Knowledge Base and MCP Client to access real time data.
- **Data Enrichment:** Member & Provider Tools to extract real-time operational data.
- **Knowledge Base:** Ingest and Extract contextual content.

Benefits

- **Responsible AI:** Enforce “safe prompts” via built-in guardrails
- **Observability:** End-to-end tracing (X-Ray), metrics, and structured logs for rapid debugging
- **Extendable:** Plug in new MCP tool services or data sources with minimal code changes

What you get.

Resource Reduction

By automating what can be automated, we reduce the total number of time and effort resources. Creating more bandwidth and opportunities for economies of scale.

Employee Satisfaction

Employees derive a sense of accomplishment and pride when they can apply their expertise and talents effectively. By allowing them to spend more time on the cases that matter, you reduce their overall workload and give them more opportunity to create impact. Metrics move from volume to value.

Better Care Team Communications

By creating alignment between payers and providers, we bridge the gap in and create more effective mechanisms for value-based care.

Reduced Consumer Friction

Consumers often only experience their health plan in times of great need. By reducing friction in this experience, you drive brand affinity.

Expanding the Use Case

Expand to the Full Authorization Process

Established by laying this foundation and supporting data

Consumer Self-Service

Provide increased transparency to patients and members by providing self-service solutions

Member Communications

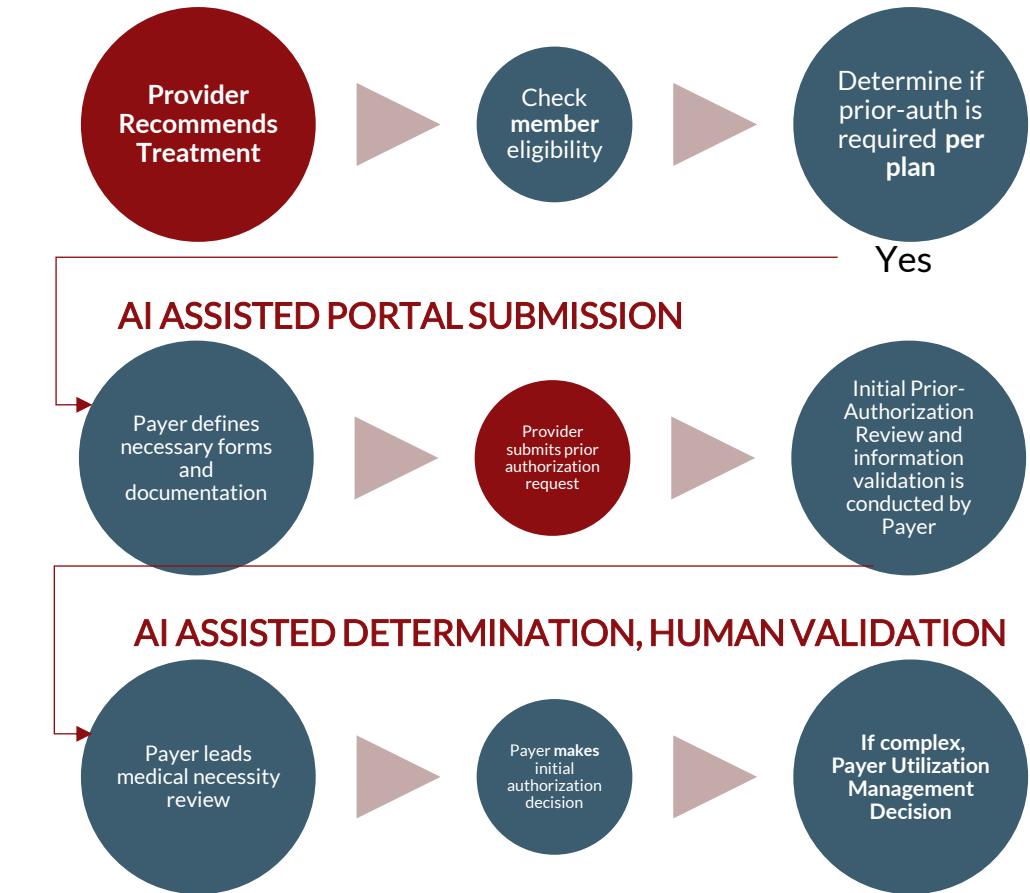
Edge Case

There are many ways AI can assist in the cumbersome prior-authorization process.

In the future, care teams can work together to provide more real-time interaction and reduce wait times and unnecessary vacillation.

Speed and accuracy

CHAT-STYLE – IS PRIOR-AUTH NEEDED?



Blue = Payer,
Red is Provider