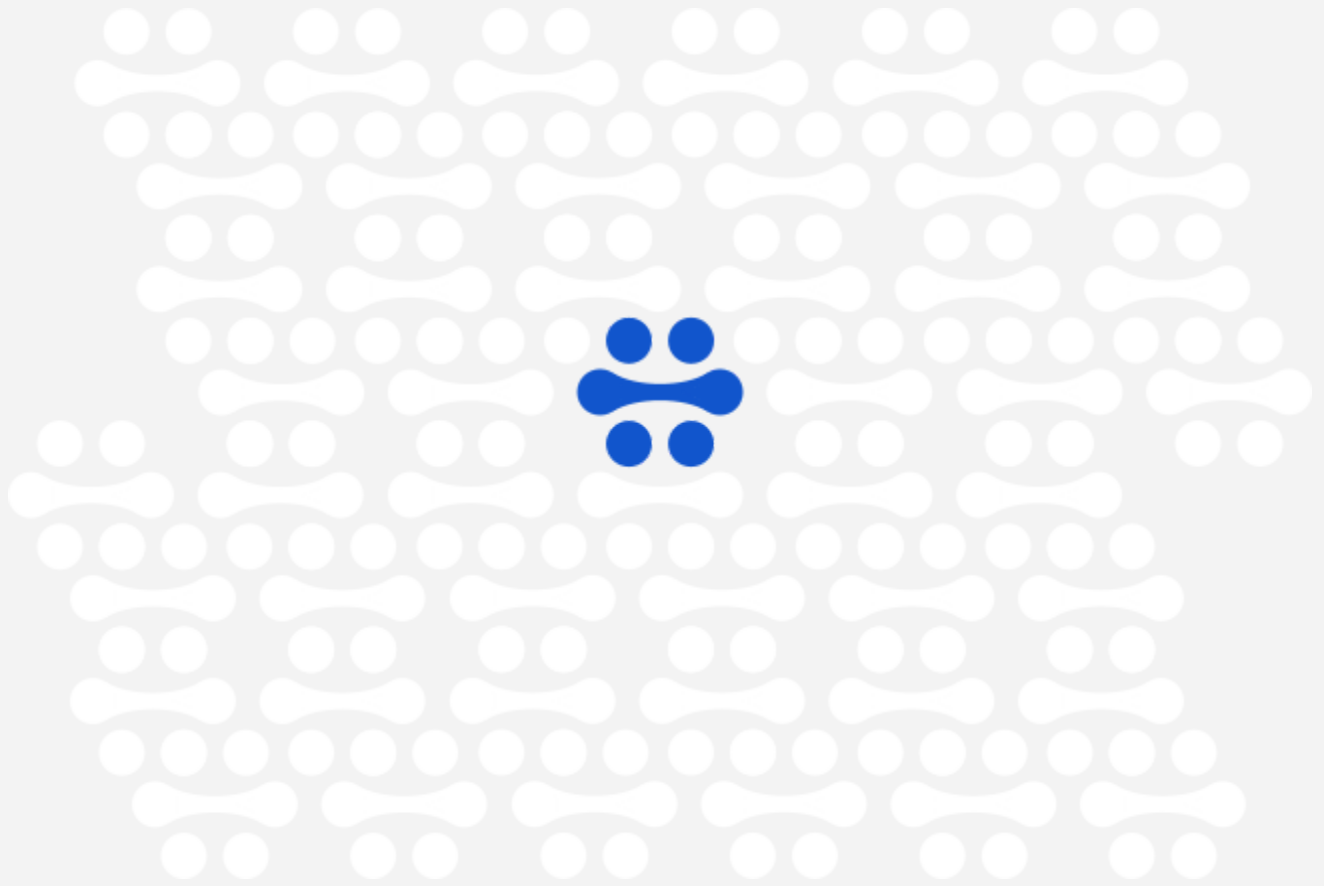




GenHealth.ai Case Study

How Guidehealth Used AI To Reduce Utilization Management Workload by up to 60% Across Multiple Care Settings

Optimizing data intake, escalation automation, and decision-making with GenHealth.ai's AI-Native UM Platform

 **GenHealth.ai**

Ethan Siegel, Ricky Sahu, Mike Maseda, Matteo Althoen, Asim Javed

July 2025

Table of Contents

Executive Summary	3
Background	4
Human-Centered AI	4
Challenge	5
Solution	5
Process	6
Policy Ingest	6
Fine-Tuning	6
Results and Insights	7

Executive Summary

GenHealth partnered with Guidehealth, a Managed Services Organization (MSO) to implement its AI-native UM platform. Our solution called “UM/PA” integrated with their existing medical guidelines, administrative policies, and their provider portal. UM/PA enabled AI-driven automation of data intake, decision escalation and decision recommendations, without disrupting any established workflows. In this engagement, GenHealth processes 700 - 1700 cases per week. The implementation **required minimal changes to existing UM team workflows** and was completed in four months. This will result in a maximum cost savings of \$385,000 per year for the first Independent Physician Association (IPA) and will grow to ~\$1.2M in savings across all IPAs being implemented leading to nearly a 7X+ ROI. Overall, GenHealth improved compliance and oversight, reduced administrative burden, all while maintaining trust and accuracy in the decision-making process.

This case study explores how GenHealth’s AI-driven utilization management and intake solution can streamline operations without disrupting workflows while seamlessly integrating with existing portals and existing medical and administrative rules.

Key Capabilities and Impacts

Capability		Impact
Produce decision recommendations using AI language and predictive models on all incoming auth requests	→	Ensured 90%+ consistency in decision-making so that similar cases are adjudicated the same way every time to reduce provider abrasion.
Automate summarization and extraction of clinical data from PDFs (faxed or uploaded attachments and call center transcripts)	→	Reduced RN manual review time by on average ~1 hour for SNF reviews , accelerating medical policy evaluations to under 10 minutes per case.
Generate reports on every adjudicated case including detailed citations for every step in AI decision making	→	Ensured full traceability for compliance with all current and upcoming regulations.
TOTAL COST SAVING PROJECTIONS*	→	\$735k - \$1.2M maximum savings
* Projected Savings of \$245k - \$385k within pilot population which made up 1/3 of total patient population.		

Background

Utilization Management (UM) is a cornerstone of cost containment strategies and quality assurance in healthcare, ensuring that patients receive medically necessary care while avoiding unnecessary procedures and expenses. However, UM is complex due to its reliance on both medical and administrative policies, and is increasingly shaped by stringent and evolving regulatory requirements.

In June 2025, CMS finalized sweeping reforms to the prior authorization process. Starting in 2026, Medicare Advantage, Medicaid, and ACA plans will be required to implement standardized electronic prior authorization interfaces (including FHIR APIs), shorten response times, and provide specific denial

reasons with clinical justifications. The new rule also mandates public reporting of authorization metrics, significantly raising the bar for transparency, timeliness, and accountability in UM programs.

These changes build on existing federal requirements. Under Medicare Advantage regulations (42 CFR § 422.566(d)), any denial of care based on medical necessity must be reviewed and signed off by a licensed physician. Similarly, California's Physicians Make Decisions Act (SB 1120), enacted in September 2024, mandates that any denial, delay, or modification of healthcare services based on medical necessity must be determined by a licensed physician or qualified healthcare provider competent to evaluate the clinical issue. This reinforces a broader regulatory trend: AI may assist in UM processes but final decisions must remain under human oversight.

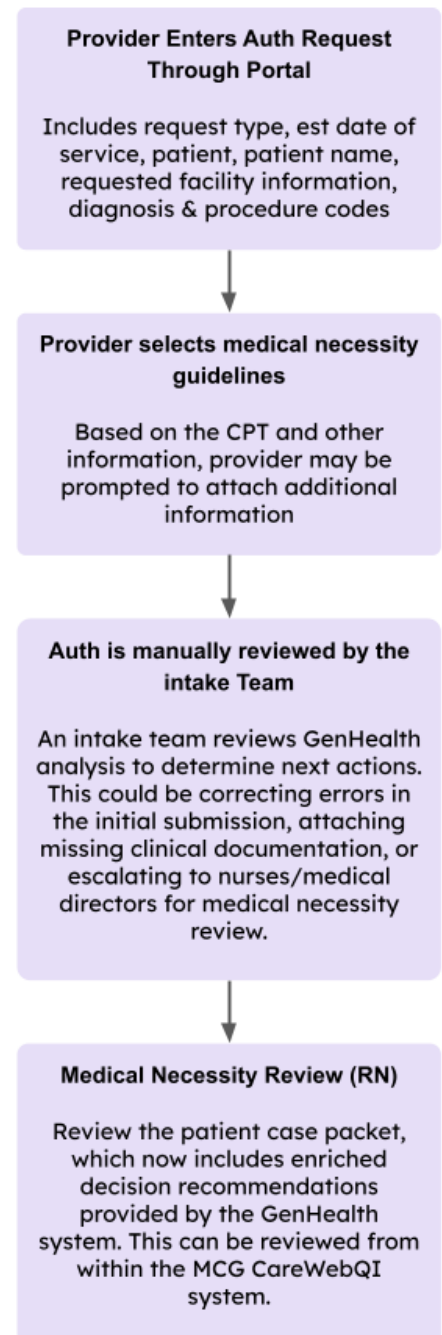
Emerging AI governance policies further emphasize transparency, auditability, and the need for explainable decision support. Healthcare organizations must also maintain compliance with NCQA accreditation standards, which require UM programs to demonstrate fairness, efficiency, and consistent application of evidence-based criteria. These standards pose unique challenges when incorporating AI, demanding that any automation be designed to enhance, not replace, clinical judgment and regulatory trust.

Human-Centered AI

AI has the potential to transform UM by automating data intake, structuring unstructured information, and streamlining decision workflows, all while preserving compliance and clinical oversight.

State-of-the-art Optical Character Recognition (OCR) systems can extract and structure data from faxes, PDFs, and even handwritten notes, significantly reducing manual processing time. Large Language Models (LLMs) further enhance this capability by interpreting complex, multi-modal inputs such as clinical notes, imaging reports, and policy guidelines. They can also manage large, intricate rule sets to ensure accurate and consistent application of both administrative and clinical policies in real time. Together, these technologies help reduce administrative burden, accelerate decision-making, and improve accuracy, all while keeping human experts in control.

To realize this potential, AI solutions must be designed to augment human expertise rather than replace it. Responsible AI should reinforce compliance, transparency, and trust in the decision-making process.



GenHealth's platform was built with these principles in mind. The AI never autonomously denies or delays care. Every recommendation is fully auditable and routed through licensed clinical reviewers, ensuring compliance with CMS regulations, NCQA standards, and state laws such as California's SB 1120. In doing so, GenHealth delivers the power of AI with the safeguards that clinicians, patients, and regulators expect.

Challenge

The client we worked with faced increasing pressure to improve UM efficiency without disrupting existing workflows. Their resource-intensive processes created several operational challenges:

1. **Staffing:** High request volumes required significant staff time for data intake, auth-request-to-policy matching, and review escalation. On the intake team, hiring, training and retention was difficult.
2. **Unnecessary Authorization Submissions:** Providers frequently submitted authorizations to the client for services which did not require preauth. These cases were not being caught by the existing automation systems.
3. **Time-Consuming Medical Reviews:** Providers often failed to indicate which medical necessity guidelines should be used to adjudicate their case submissions when using the provider portal. This required staff to identify and match the appropriate criteria manually. Once located, reviewing all of the patient documentation to verify was a time-consuming process.
4. **AI Capability:** While the MSO recognized AI's potential to drive efficiency and reduce manual workload, they did not have the in-house capability to develop a solution to integrate AI into their existing UM processes.
5. **Large Cases:** The nursing staff was frequently required to sift through portal attachments that contained hundreds of pages of often redundant clinical histories. Our models were able to succinctly summarize the cases with detailed citations to save the nurses time when reviewing.

With growing caseloads the MSO needed a scalable, AI-driven solution that could enhance efficiency, standardize decision-making, and maintain full compliance—without requiring workflow changes or additional staffing.

Solution

To help address these challenges, GenHealth implemented a solution to help the client solve three primary problems:

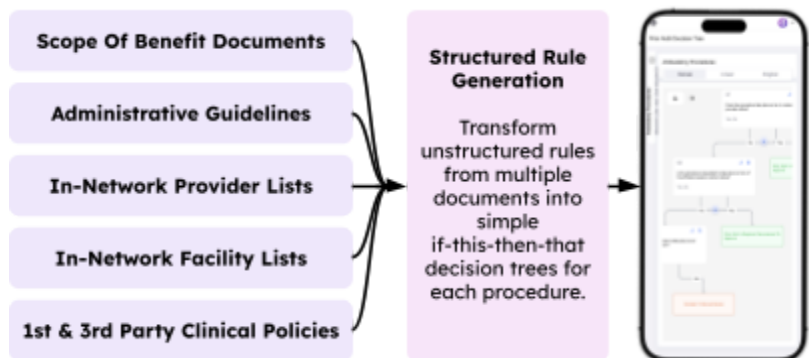
1. **AI Generated Summaries help reduce RN review burden:** GenHealth's system auto-generates clinical summaries for nurse reviewers, reducing time spent reviewing lengthy documentation and enabling faster, more consistent decisions on SNF admissions, including qualifying hospital stays, therapy needs, and skilled nursing criteria.
2. **Identify authorizations submitted in error:** By flagging requests that did not require prior authorization, GenHealth's system reduced time required to determine authorizations submitted in error

3. **Generate escalation tier recommendations:** The client had detailed logic describing which procedures could be approved by a non-clinical intake team vs procedures requiring escalation to RN for review vs procedures requiring medical director review.
4. **Generate decision recommendations:** After identifying the correct policy and appropriate escalation tier, GenHealth's system automatically extracted and analyzed relevant clinical data, applied medical policy criteria, and provided clear, audit-ready adjudications to assist the intake team, RNs and MDs in making faster, more consistent decisions. What made this transformative was the inclusion of **concise, AI-generated clinical summaries** embedded in each auth report. These summaries distilled hundreds of pages of documentation, including faxed PDFs, handwritten notes, and EHR attachments, into 2-3 paragraphs with full source citations. This allowed reviewers to:
 - Instantly understand the clinical context
 - Spend less time searching for key information (e.g., medications tried, treatment failures, comorbidities)
 - Maintain confidence in policy alignment and clinical relevance

Process

Policy Ingest

The first step in deploying GenHealth's AI-driven UM solution was ingesting and structuring the client's administrative and clinical policies. The client's UM administrative policies were stored in multiple systems including both a content management system and legacy UM software. In addition to prior authorization rules and medical necessity criteria, their policy framework included:



- **Nuanced escalation guidelines** for RN and MD review based on facility, network status, patient clinical status, number of previous authorization and other logic
- **Scope of benefit documents** defining which services were covered for different plans
- **In-network provider and supply lists** with different requirements based on plan types
- **Facility, provider, and procedure specific exceptions** that overrode standard rules based on individual contract details
- **First and third policy medical necessity policies** for individual procedures and services

GenHealth translated fragmented policies into a structured AI-ready format while preserving decision logic in use by the UM team. We combined natural language processing, large language models, and human review to transform the rules into executable decision trees accurately and automatically.

Results and Insights

GenHealth's AI-driven UM solution delivered significant and measurable efficiency gains, while maintaining full alignment with the client's existing workflows and clinical oversight standards.

The platform identifies erroneously submitted authorizations and automatically helps expedite approval for low-risk, low-cost procedures, reducing cognitive load across the utilization management team.

Critically, GenHealth's system achieved **90%+ accuracy** in replicating human UM decisions. This consistency gave reviewers confidence in the AI's decision support, ensuring that automation augmented—rather than replaced—clinical judgment.

From this pilot, we've identified areas that show potential for future improvements:

- **Average ~1 hour reduction in SNF review time**, for skilled nursing facility authorization reviews
- Building on early success in inpatient SNF prior auth, the same automation can be extended to **concurrent reviews, Behavioral Health, and Substance Use Disorder (SUD) services**—areas where RN reviewers face similar documentation burdens and variability in guideline interpretation.

Within a single Independent Physician Association (IPA), these results translated to a **projected \$245k – \$385k in annual cost savings**. As the rollout expands to additional IPAs, total anticipated savings are estimated at **~\$1.2m annually**, driven by scalable automation and reduced manual workload across intake and clinical teams.