

AI Appeal Strategies:

Leading Western health system leveraged evidence-driven appeal generator to help drive 91% overturn rates for complex inpatient clinical denials

Challenge

A leading U.S. academic health system serving patients across a large Western state faced a massive, administratively burdensome backlog of post-payment audits and clinical validation denials. With some of these post-payment audit denials aging years, leadership felt pressure to resolve inventory quickly without redirecting in-house teams to address. With margins tightening, leadership was challenged to justify the incremental spend required to hire costly clinical staff for manual appeal writing.

While the health system's existing EHR offered baseline appeal-writing capabilities, significant outcome gaps remained — creating an urgent need for a scalable solution that could generate appeal letters more efficiently and accelerate throughput to deliver consistently growing overturn rates.

HEALTH SYSTEM RESULT

\$7.4M+

annualized incremental revenue recovered using SmarterDenials

Solution

The system decided to strategically partner with SmarterDx and extend clinical intelligence beyond SmarterPrebill to address challenges surrounding their growing denial volume. Since partnering with SmarterDx in fall 2024, the system has already realized **more than \$50M in net new revenue with SmarterPrebill™** and now, the same clinical AI that helped uncover missing and incorrect diagnoses before billing is being leveraged to identify defensible clinical evidence to appeal complex denials.

Department leadership conducted a rigorous head-to-head assessment comparing SmarterDenials against both their EHR and manual program baseline — **measuring overturn rate and value, time to appeal submission, appeal letter writing effort, quality of unedited appeals, payer-specific trends, and speed to overturn**. Prioritizing an objective, data-driven approach to decision-making, health system leaders regularly shared insights with finance and executives demonstrating the highly analytic approach to determining the value and return on their investments.

Results

Within the first 6 months, SmarterDenials emerged as the clear choice for inpatient workflows. The SmarterDx solution **outperformed competitors on speed to overturn, appeal quality, product responsiveness, and clinician preference.**

While competitor solutions only allow one level of appeal and can't regenerate a new letter if the first appeal is denied, SmarterDenials supports generation of high-quality second-level appeals with defensible clinical evidence required for complex cases. Further, the health system reported that as the AI continuously improved, letter quality also improved.

The health system was also intrigued by SmarterDenials' ability to cover DRG downgrade appeals, which requires complex clinical reasoning and is not currently a function of other vendors they explored.

"SmarterDx writes the best clinical validation DRG downgrade appeals ever," the health system's denials director said. "This allowed our in-house physician and nurse teams to focus on complex inpatient medical necessity denials. We do not need to expand our costly, expert clinical team to write manual clinical validation appeals when we can achieve a similarly high success rate with SmarterDenials."

These two capabilities allowed SmarterDenials to become the preferred solution for clinician users.

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In recent years, the health system has more than doubled financial recoveries. They credit this to good inventory management, strong operational strategy and oversight, and now, in part, to super-charging their lean team's efficiency with SmarterDenials by increasing their volume of appeal submissions and their overturn rate. The team is on pace to eliminate their denials backlog and has impressed their finance and executive teams and eased the workload of their in-house team without requiring additional headcount. By supplementing their teams' work with AI-generated appeals, the health system achieved substantial financial and operational ROI.

WIN RATES

91%

SmarterDenials achieved a 91% win rate, a major improvement over the 74% win rate from existing manual processes.

SUBMISSION VOLUME

61%

increase in appeal submissions. Expanded total dollars in dispute from \$914K to \$1.6M per month.

SUPERIOR APPEAL QUALITY

Clinicians rated SmarterDx's letters as exceptionally high quality, particularly for clinical validation appeals.

ZERO ADDITIONAL HEADCOUNT NEEDED

AI-generated letters were strong out-of-the-box, allowing the health system's lean team to absorb a surge in audit volume without hiring additional clinical staff.