

From care to claim *to payment*

Why integrated clinical AI, not disjointed solutions,
will define the future of revenue cycle.

Executive *summary*

Every revenue cycle leader is living with the same tension: knowing where the revenue cycle needs to go, but not being able to get there fast enough.

A 2026 SmarterDx survey, in partnership with The Health Management Academy (THMA), uncovered that just **18% of healthcare RCM leaders described their mid-cycle as more proactive than reactive — yet 62% said they expected to shift it significantly upstream within three years.**

Despite recognizing the need for a proactive approach, getting there doesn't feel within reach for many leaders.

And the clock is ticking. Payers have automated their offense faster than legacy mid-cycle infrastructure was ever built to absorb. For every quarter a system stays reactive, that gap widens. And with it, monumental costs grow.

A single, targeted solution alone can make positive strides to help health systems recover the revenue they've earned. **But the gap doesn't close with one disjointed tool at a time. It closes with a connected clinical intelligence platform** that understands the full patient story and applies that intelligence across every revenue cycle workflow, from authorization to appeals.

The key *takeaways*:

1

The threat is concentrated, but the response requires a unified front.

Leaders name payer denials as their biggest revenue threat, most acutely medical necessity denials and level-of-care downgrades. The win is preventing them upstream rather than fighting them after the fact.

2

AI adoption is a given. Deployment order is what matters. Start with a revenue integrity foundation.

85% call AI a top lever; 78% are comfortable or highly comfortable using it. The barrier isn't culture.

3

You can't fix what you can't see.

73% of systems don't systematically quantify their mid-cycle inefficiency costs, which means the true costs are likely higher than they appear. Translating clinical documentation into the codes and data payers require is complex work, and losses in that translation are hard to see.

4

AI augments; it doesn't replace.

The systems pulling ahead build a revenue integrity foundation first, keeping clinical SMEs at the center, then layer AI on top.

5

ROI should be durable, with gains that compound over time rather than fade after the first year.

Denial rate reduction is the headline metric, but it's only part of the return.

The pressure is real, and it's *growing*

Talk to any CFO or revenue cycle leader and you'll hear a version of the same thing: the mid-cycle got harder, and the old playbook was just that — an outdated version never designed to keep up.

As one leader bluntly put it:

“I feel like we’re always at the payer’s mercy. Even if we’re so perfect internally, you still are up against incorrect denials from a payer. It’s trying to stay a step ahead of them when you never really are.”

— VP of Revenue Cycle, Regional IDN

The damage hits hardest at systems still running legacy, reactive mid-cycle processes. And the threat isn't spread evenly. When asked to name their most acute revenue threat, the answer from leaders was clear: payer denials, particularly **medical necessity denials and level-of-care downgrades**.

Although these are technically “billing problems”, there’s a more accurate way to define them. These are problems with representing the clinical truth inside the claim — something that health systems can get a handle on before final billing with the right clinical AI platform.

Everyone wants to move upstream.

Not everyone can.

There is near-consensus on direction but wide divergence on operational readiness.

62%

of leaders said they expected to move their mid-cycle significantly upstream over the next three years.

5%

expect their approach to stay exactly the same. Reactive is out, proactive is in.

73%

of systems don't systematically quantify what their mid-cycle inefficiencies actually cost.

Without that visibility, self-assessment drifts toward where leaders want the system to be, not where it is.

You can't fix what you can't see. And you can't see the whole picture from inside a single workflow.

Where is your health system *on the curve?*

THMA research found systems clustering into three archetypes along an AI-maturity continuum.

Traditional:

The least AI-enabled, leaning on manual, downstream effort. Cross-team alignment is superficial (a shared dashboard, not shared accountability). These systems are the most exposed to payer AI, because they have no real AI strategy of their own.

Developing:

Active pilots or early deployments, pulled by AI's promise but constrained by budget and the need to prove ROI. They sense AI will reshape CDI and outsourcing, but aren't sure how to navigate the transition.

AI-unified:

Systems that layer AI as a performance enhancer on top of an already strong, clinically aligned foundation. They hold tempered, realistic expectations, govern AI formally, and treat it as an augments — not a cure-all.

The pattern that separates each archetype isn't ambition. It's sequencing: Build the revenue integrity foundation first, then deploy targeted AI where human effort alone can't keep up.

Why disjointed solutions *stall*

Most mid-cycle stacks were built one problem at a time and never designed to scale. One tool for documentation, another for coding, another for denials. Each solves its own slice and hands off the result, and clinical context gets lost at every seam.

Health systems need to start seeing the revenue cycle as a unified, longitudinal set of workflows with the same end goal: Accurately reflect patient's treatment and diagnoses on the claim so the organization gets paid correctly for the care provided.

Think about what a single missed diagnosis touches. It's not just a coding issue. It can change medical necessity, severity of illness, reimbursement, denial risk, appeal defensibility, and quality reporting all at once. When each workflow sees only its fragment, the system never sees the patient clearly. Opportunities get missed, multiple solutions take credit for the same dollars, and ROI becomes harder to measure.

A platform fixes the broken seams. SmarterDx interprets the full clinical context of every encounter once; analyzing notes, labs, vitals, orders, imaging, and codes across 100% of DRG charts and then applies that intelligence across the revenue cycle. The result is one shared layer of clinical truth, so every workflow gets smarter and every case compounds the value of the next.

That's the difference between buying more tools and building a smarter revenue cycle. Every interaction strengthens the system. What SmarterDx learns upstream across documentation, coding, charging, and status sharpen downstream denials prevention, while insights from denials continuously improve upstream.

The barriers are real. SmarterDx tackles *each one*.

Leaders aren't hesitant about AI because they doubt it — **78% reported being comfortable or highly comfortable using it**. Instead, the barriers are operational. These are the top challenges, and how a connected platform answers each:

EHR integration.

Bolt-on tools each demand their own integration lift. SmarterDx integrates once and powers every workflow from the same foundation — and works with all major EHRs.

Unclear ROI.

The CFOs scaling AI fastest are often less able to prove its value than those just starting out. Only 18% of AI scalers report mature financial attribution capabilities, compared with 31% of AI starters [Deloitte]. SmarterDx ties findings to realized, attributable revenue. Clients see an average of \$4.5M in annualized realized net new revenue per 10K DRG discharges and 5:1 ROI starting Day 1.

Inaccurate suggestions.

Legacy tools prioritize broad detection, leading to more false positives and greater review burden. SmarterDx is built for precision, surfacing clinically supported opportunities your team can actually validate.

Hallucination and opacity.

Every recommendation comes with the patient-specific evidence and rationale behind it, drawn straight from the chart so teams can validate it, defend it to payers, and act with confidence.

As one CRO said, the bar now is proof, not promises:

“This concept of AI for the last 10 years has been a bit of vaporware. Now that’s changed in the last 24 months. But it’s also presented the industry with new challenges. How do you vet these solutions? How do you make sure they’re really adding value?”

— Chief Revenue Officer,
National IDN

AI is the lever. But only 30% have *pulled it*.

The debate over whether to use AI in the mid-cycle is over. 85% of leaders call AI a top lever, and 75% expect to increase their mid-cycle AI investment over the next three years. But adoption is uneven: 44% are piloting, and only 30% have deployed at scale.

The systems already at scale report a more balanced, proactive posture and tighter clinical-revenue alignment than those still planning. The lesson isn't “buy AI”. It's “build the foundation, then point AI at the problems you’ve actually measured”.

The *proof*

SmarterDx wasn't trained on internet blogs. It was built by physician-data scientists, over five-plus years, trained on real clinical data. The scale behind it:

\$1.5B	In value delivered to health systems in 2026
85+	Trusted by 85+ health systems across 300+ hospital sites
5:1	ROI starting Day 1, proven
\$4.5M	Average annual net new revenue per 10K DRG discharges
21M+	Built on 21M+ clinically validated hospitalizations
30K+	Data points analyzed per chart, across 100% of charts
34K	dignoses and procedures identified
8 wks	Typical go-live in 8 weeks
\$241B	In net patient revenue under management, \$485M in client revenue lift in 2025

ROI has to last longer than *the first quarter*

The most common way leaders justify mid-cycle AI is denial rate reduction, cited by 73% of leaders. It's the right place to start. But the leaders furthest ahead have reframed what ROI even means: not the initial lift, but the sustained performance a system couldn't maintain without continued investment.

Here's why that reframe matters. A documentation gap you close in year one keeps preventing leakage in perpetuity, even after it stops showing up as a measurable "lift". New physicians and residents reset the gap. New service lines open new gaps. Payer behavior keeps evolving. Revenue integrity isn't a fix you finish.

A point solution corrects today's leak and stops. A platform keeps learning with every workflow informing the next, and every case sharpens the model. That's the real ROI case: a revenue cycle that gets smarter the longer you run it.

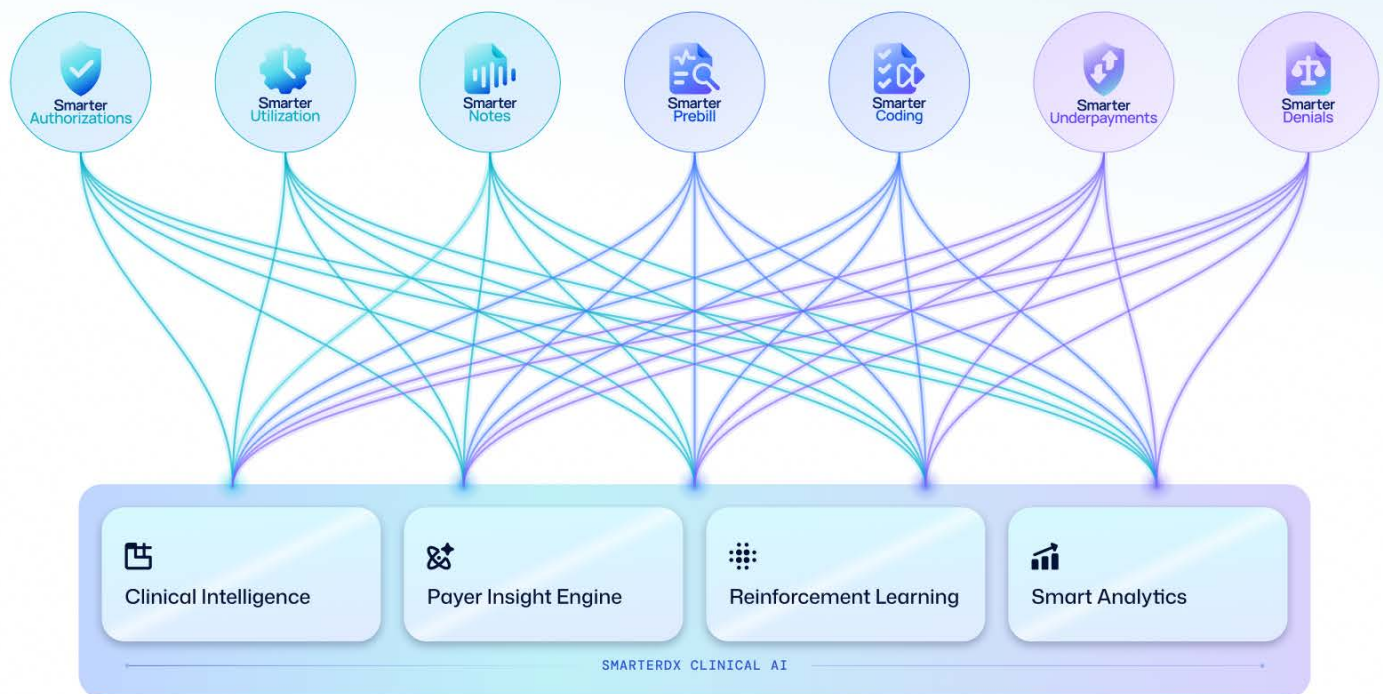
One chief revenue officer said it best:

"[RCM] is an ever-evolving landscape — you don't fix revenue integrity and then go 'it's fixed.' We stop the leak and we go on to the next job, new services, new products. It's an ongoing initiative to make sure you're capturing the right charges on the right patient at the right time."

— Chief Revenue Officer, National IDN

What “connected” looks like: The SmarterDx *platform*

One clinical intelligence foundation, feeding every workflow across the revenue cycle so the patient story stays intact from admission to payment. You start with one workflow and expand, with every solution connected by the same clinical AI.



The same proven AI powers every SmarterDx solution, creating **one connected clinical intelligence layer across the revenue cycle**. Every chart reviewed and opportunity validated creates a **live learning loop that multiplies ROI over time**.

When financial and clinical data connect, three things change. You capture what you earned, you protect what you billed, and you improve what happens next because every case sharpens the platform for the case after it.

Imagine a patient is admitted with pneumonia. Utilization management confirms the appropriate level of care, clinicians receive documentation prompts that capture the full clinical story, and AI reviews the chart before billing to identify supported diagnoses and charge opportunities. Instead of disconnected point solutions, every workflow builds on the one before it, creating a complete, defensible claim that is better positioned to withstand payer review.

Across more than 85 health systems and 300 hospital sites, this connected approach expands on SmarterPrebill’s proven ROI and helps organizations recover millions in earned revenue.

This piece draws on research conducted in collaboration with THMA. Unless otherwise noted, the findings and insights presented throughout reflect that research.

Where to *start*

You don't have to transform the entire revenue cycle at once. The platform is modular and starts with one workflow and can expand over time, with value compounding as you grow. And it moves fast: go live in as few as 8 weeks, with proven ROI from Day 1.

The cost of waiting is easy to miss. The organizations that build an upstream revenue integrity foundation today are the ones that convert market pressure into durable financial performance.

See what your system could be capturing.
Schedule time with our team.

smarterdx.com/contact

Methodology + *sources*

SmarterDx + The Health Management Academy survey (2026). [THMA] findings come from a survey of 81 revenue cycle leaders across U.S. health systems, supplemented by five in-depth C-suite interviews. Conducted by The Health Management Academy in partnership with SmarterDx.

Deloitte Insights Momentum Isn't a Metric (Aug 2026) [Deloitte]

SmarterDx platform data. [SDx] findings reflect SmarterDx proprietary data and platform results.