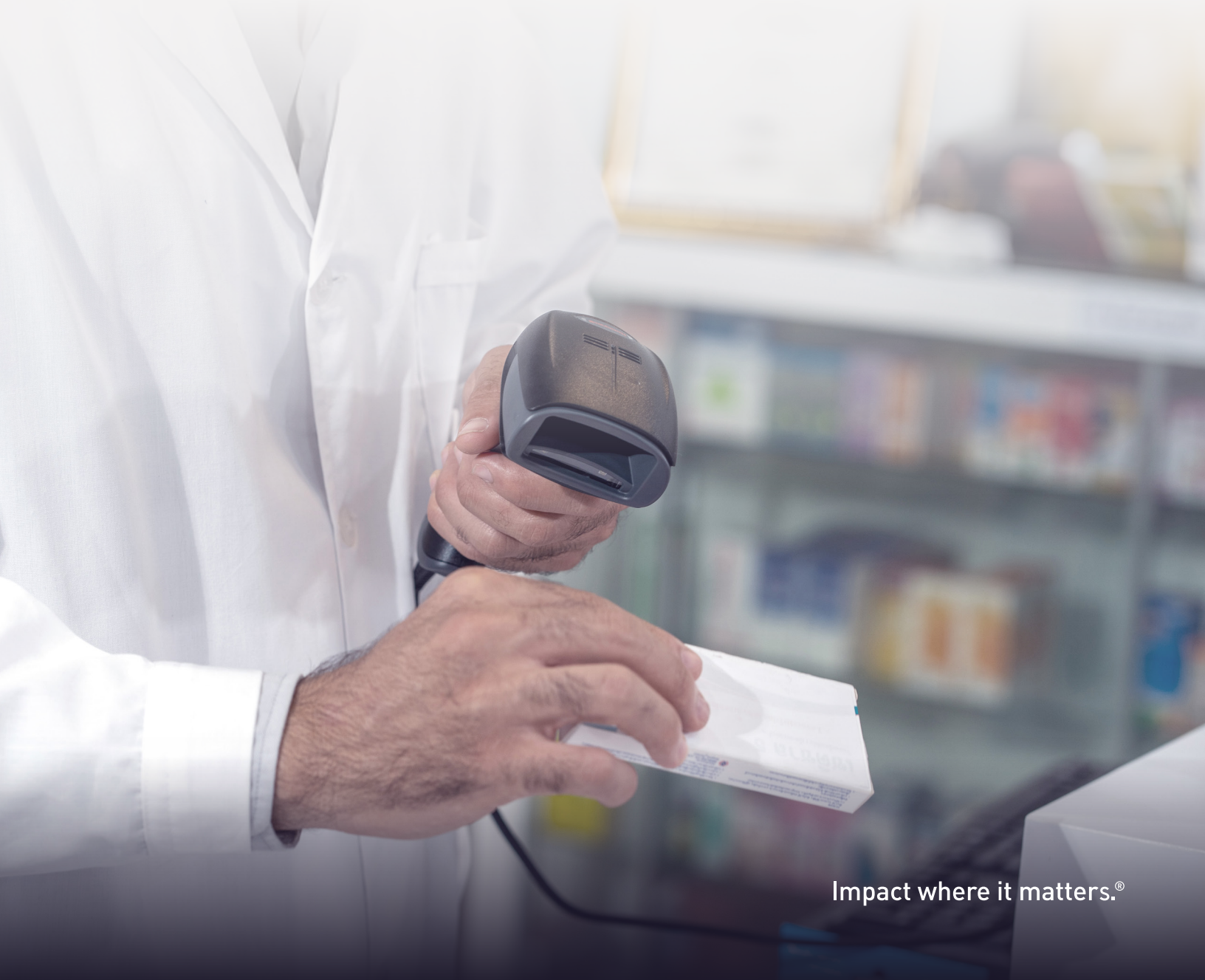
WHITE PAPER

An executive's guide to AI in optimizing GTN execution

Bringing agentic thinking to improve GTN outcomes

By Neelabh Saxena and Ricky Yuen



Impact where it matters.®

Pharmaceutical manufacturers are facing mounting pressures to protect margins and optimize revenue amid an increasingly complex pricing and reimbursement landscape. At the core of this challenge is gross-to-net (GTN) erosion—the difference between a drug's official list price and the net revenue that remains after all rebates, discounts, chargebacks and fees.

The stakes are high: GTN leakage directly affects revenue forecasts, profit margins and a company's ability to reinvest in R&D and growth. Optimizing GTN outcomes has therefore shifted from a back-office operations and accounting exercise to a C-suite strategic imperative. Modern approaches, especially those leveraging AI, are now crucial to identifying and pluggging revenue leaks that traditional methods miss. AI-driven analytics can sift through vast datasets to find patterns and anomalies far beyond human capacity, offering new ways to safeguard revenue. Coupled with automation-driven productivity gains, contract managers can evolve their roles from back-office processors to account managers, spending more time managing disputes with customers and reinforcing contract execution intricacies during the deal life cycle.

Equally important is adopting an "agentic thinking" mindset—a proactive, forward-looking approach where organizations and their AI tools act as agents on the company's behalf to anticipate and address GTN issues before they impact the bottom line. In contrast to reactive analysis, agentic thinking is about continuous, autonomous monitoring and intervention. By combining AI capabilities with agentic thinking, pharmaceutical companies can move from passively reporting GTN outcomes to actively protecting and optimizing revenue.

Optimizing GTN outcomes has shifted from a back-office operations and accounting exercise to a C-suite strategic imperative. Modern approaches, especially those leveraging AI, are now crucial to identify and plug revenue leaks that traditional methods miss.

Why traditional GTN approaches fall short in managing revenue leakage

Fast fact

Traditional GTN methods can't keep up with complexity, leading to inefficiencies and revenue risk.

Traditional GTN management methods are struggling to keep up with managing revenue leakage. The complexity and scale of modern drug pricing outstrips the capabilities of manual processes and legacy systems. GTN management includes activities such as forecasting accruals, net sales, managing contracts and upholding contract compliance across contracted customers. It also includes validating and processing rebates and chargebacks; monitoring leakage, abuse and fraud; and calculating and reporting mandated pricing.

While each of these GTN management categories have different objectives and support different processes, there are many common challenges:

- Different contract terms across customers in the same segment and brands in the portfolio make it challenging to implement the required nuances into out-of-the-box systems
- Complexity and volume of activity is managed by adding headcount (internal, staff-augmentation or business process outsourcing)
- Processes are typically tackled through either rigid business rule-driven systems that are optimized for specific, singular processes or through manual Excel spreadsheets
- Lack of interoperability between data models and data flow across processes and systems
- Due to the volume of activity, QCs and audits are typically based on a sample of that activity

To highlight these challenges, let's take two examples for GTN forecasting and GTN leakage detection:

Forecasting GTN: Challenges in pricing strategy and accrual accuracy

Fast fact

Pharmaceutical companies can spend up to three months finalizing GTN forecasts—by which time, market conditions may have already shifted.

GTN accounting involves huge data volumes from many channels (commercial, Medicare, Medicaid, 340B, etc.), each with its own rules. Historically, companies managed GTN with siloed systems and large spreadsheets, but these approaches lack scalability and agility. Forecasting net sales is extremely difficult when pricing adjustments vary by customer segment and constantly change, yet accuracy is critical for setting reserves and guidance. Traditional spreadsheet-based forecasting cannot easily incorporate the myriad interdependencies between market segments or respond to sudden policy changes. Additionally, many organizations have fragmented data—different teams (contracts and pricing, market access, etc.) each handle pieces of GTN. These silos mean there's no single source of truth, making it hard to see the full picture or react quickly.

Process limitations compound the issue. It's common to see multiple systems that don't interface well, requiring manual data reconciliation. Manual workflows are not only slow (some companies take weeks or months to finalize GTN calculations) but also error-prone, leading to mistakes in accruals or missed discounts. Meanwhile, the external environment is relentlessly changing: new regulations (for instance, recent CMS rules and Medicare rebate caps being removed) and shifting payer tactics introduce moving targets for companies. Traditional methods simply cannot keep pace with such complexity and volatility.

The GTN challenge today is defined by high stakes and high complexity. The financial impact is huge—every percentage point of GTN improvement can mean millions in revenue. Yet legacy approaches struggle with data overload, siloed processes and reactive post hoc analysis. This has created an urgent need for smarter, more proactive solutions as well as a carefully considered change strategy to optimize GTN and protect revenue.

Detecting revenue leakage in pharma

Fast fact

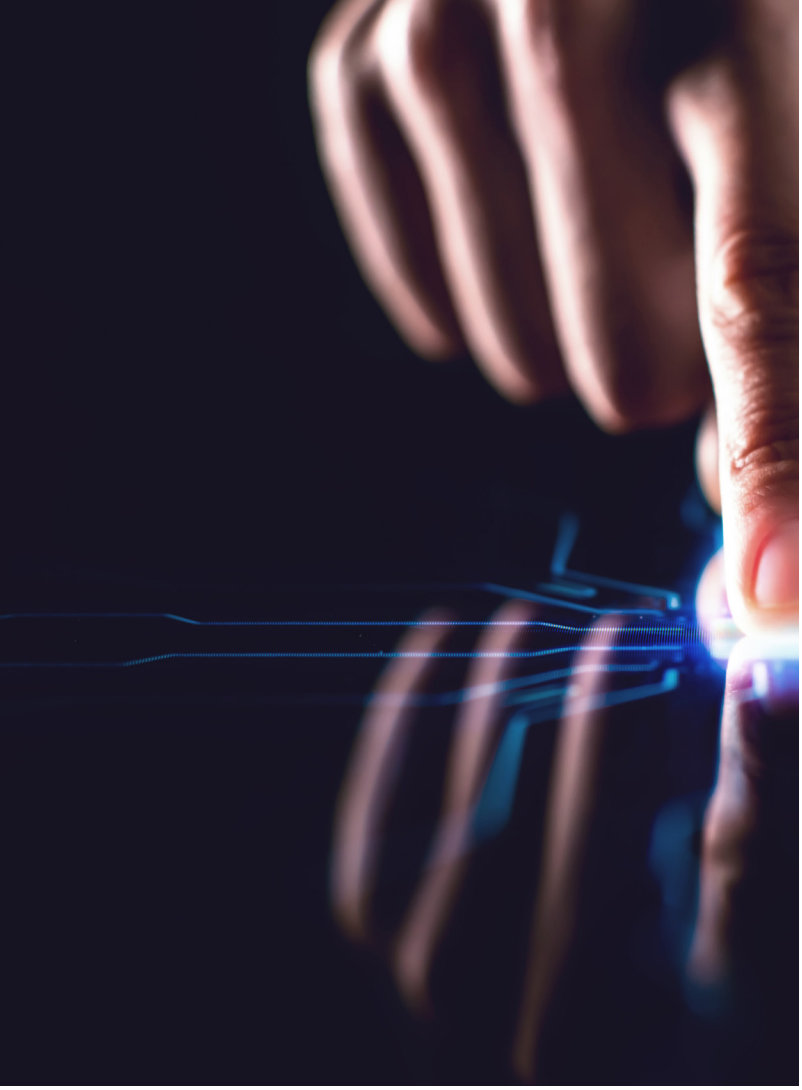
As GTN complexity grows, static rules miss evolving patterns—making AI essential to detect what legacy systems can't.

GTN leakage has historically meant ensuring the right payment is made to the right customer at the right time. With the increase in stacked rebates and discounts on the same script, GTN leakage evolved to detect where double and triple dipping is occurring, as well as identifying potential fraud. Historically, pharmaceutical manufacturers have relied on rules-based systems to identify revenue leakage in GTN calculations. These systems apply predefined conditions—such as "flag rebate claim where days of supply is below a threshold" and "flag all rebate claims exceeding 50% of list price"—to detect potential errors. While such approaches may catch basic discrepancies, they fall short for several reasons:

- **Rules cannot adapt to market complexity.** GTN erosion is not static—it evolves as payer contracts, formulary placements, discount structures and drug-usage and indications shift over time. A rigid rule that flags transactions exceeding a threshold might miss more nuanced patterns of leakage, such as gradual rebate accumulations across multiple payers.
- **High false positives and false negatives.** Rules-based systems often overflag legitimate transactions and miss sophisticated fraud that falls just below predefined thresholds. These rules also do not prioritize transactions based on highest risk or likelihood to achieve savings and recoupment. AI, by contrast, can identify subtle, multifactor anomalies, such as a specific pharmacy consistently submitting rebate claims 5% below the threshold to avoid detection.
- **The ability to detect emerging patterns is limited.** Static rules only catch known issues and typically evaluate at the individual claim level or within an invoice period; they do not look at patterns over time across datasets and do not adapt to evolving fraud tactics or contract loopholes. AI, powered by machine learning, continuously refines its detection criteria based on new data and evolving market behaviors.
- **Rules-based approaches are manual and reactive.** Many GTN teams rely on manual quarterly audits to analyze past transactions, making leakage detection retroactive (and based on a sample) rather than real-time and comprehensive. AI, embedded with agentic capabilities, enables instant alerts and automated interventions across all transactions, preventing revenue leakage before payments are processed.

- **Incorporating customer feedback and improving dispute management over time isn't possible.** An inability to capture and act on customer feedback effectively can lead to recurring errors in GTN processes, undermining trust and credibility. Without systematic feedback loops, lessons learned from previous disputes are not integrated into processes, causing repetitive leakage issues or inaccuracies. Over time, these unresolved disputes can escalate, resulting in both lost productivity and heightened financial impact.
- **Tighter timelines often limit holistic coverage.** Tighter timelines often restrict the ability to gather comprehensive data and perform thorough analysis in GTN management. This limited window frequently forces teams to focus on immediate tasks at the expense of a more holistic, end-to-end review. As a result, critical elements such as cross-functional alignment, data reconciliation or compliance checks may be overlooked.

As the GTN environment grows increasingly complex, pharmaceutical companies must move beyond static business rules and adopt adaptive AI-driven solutions that offer real-time insights, self-learning capabilities and proactive decision-making.



AI's role in GTN optimization

Fast fact

AI helps shift GTN compliance from reactive cleanup to proactive prevention, catching issues before the money goes out the door.

AI provides advanced analytical capabilities that can help pharmaceutical companies overcome the hurdles of modern GTN management. Rather than serving merely as a reporting tool, AI—especially when integrated into core business processes—can be a powerful engine for automation, forecasting and real-time anomaly detection. Key areas where AI proves indispensable include:

1. Predictive forecasting and scenario planning

AI-driven forecasting models can significantly improve the accuracy of net revenue predictions by processing extensive historical and real-time data—covering sales, payer mix, past rebate behavior, competitor launches, formulary changes and even external macroeconomic indicators. By correlating these variables, machine learning models generate more precise net revenue forecasts than traditional manual approaches. Moreover, AI tools enable scenario planning, allowing finance and market access teams to ask "what if" questions (e.g., "What if a major insurer changes formulary placement?") and receive dynamic projections of the net impact.

Such enhanced visibility significantly improves budget accuracy and frees executives from repetitive number crunching. Organizations can also better tailor their contracting strategies—fine-tuning rebate levels, discount depths and terms—by measuring how different scenarios impact net outcomes. The result is more agile decision-making on pricing and contracting strategies.

2. Anomaly detection and revenue leakage prevention

One of AI's most powerful contributions is the ability to automatically detect anomalies or patterns of potential error or fraud across huge datasets. By building an ecosystem of models and agents ranging from statistical models (e.g. outlier detection, IQR) and time series models (e.g., auto ARIMA) to unsupervised learning and graph networks, an anomaly detection engine can comb through integrated data (claims, sales, chargebacks, etc.) to flag suspicious discrepancies and new patterns in real time. For example, AI can conduct a deeper analysis that identifies cumulative anomalies to ensure adherence to dosage limits, which business rules may typically miss, or if a particular pharmacy's claims for co-pay assistance are out of pattern compared to peers. These could indicate duplicate rebate requests, data entry errors or even fraud.

Industry analyses have found that despite all of the systems and processes in place today, a considerable number of erroneous rebates (translating to billions) still slip through the cracks. AI "early warning systems" can catch such issues by recognizing patterns humans might miss, allowing companies to intervene before revenue is lost.

By automating the detection process and seamlessly introducing this into the current workflow and business process, pharmaceutical manufacturers can intervene quickly to investigate potential issues before they escalate and before payments are made. For example, if a chargeback submission suddenly doubles in volume from a particular wholesaler or if a spike in rebates occurs on a less frequently prescribed drug, the AI can immediately raise an alert, prompting further scrutiny. This proactive stance not only prevents major losses but also reduces the need for labor-intensive retroactive audits.

3. Contract analytics and rebate validation

Managing contracts (with payers, PBMs, providers, etc.) and ensuring rebates and discounts are paid correctly is enormously complex. AI can streamline contract management by digitizing and analyzing contract terms using natural language processing. Key clauses affecting pricing (rebate percentage tiers, price protection terms, performance incentives) can be extracted from contracts automatically, ensuring that these terms are correctly reflected in billing systems. This reduces reliance on memory or manual interpretation.

On the rebate validation front, an AI formulary agent can break down the complex and manual steps to validate rebate claims and invoices against the formulary positions that need to be extracted from PDL documents, and the terms and conditions in the contracts. For instance, if a contract stipulates that a higher rebate applies only when a drug is covered on a preferred position with one other manufacturer, AI can confirm formulary data and triangulate against claims volumes and market share to verify compliance. It can also detect if an entity continues to receive a high rebate even after losing preferred formulary status. This "intelligent contract" approach provides a scalable, accurate and efficient solution for formulary verification and compliance.

In another example, machine learning models can learn to spot if a rebate aggregator is submitting the same claim under multiple plans to maximize payout (a form of rebate overshadowing)—a practice that has been observed to improperly retain multiple rebates for one transaction. By scoring each rebate claim or chargeback request on a risk scale, AI can prioritize which claims to audit or validate, drastically improving the efficiency of revenue assurance teams.

In each case, AI-based oversight helps ensure that manufacturers pay only the discounts actually owed, preserving revenue. In essence, AI serves as a tireless auditor, checking every transaction for accuracy and compliance.

4. Fraud detection and risk scoring

Unfortunately, some portion of GTN erosion is due to malicious actors—pharmacies, distributors or even prescribers who game the system. In this case, AI techniques borrowed from financial fraud detection can be applied (using a combination of rules and machine learning) to implement real-time fraud detection on transactions. For example, graph analysis can link entities (pharmacies, physicians, patients) and flag networks that collaborate on suspicious behaviors (as in the case of the four pharmacies across Ohio and Michigan that billed $13 million in fake claims). AI can also continuously analyze data to generate a risk score for each customer or claim: if a certain pharmacy's pattern of 340B purchases and Medicaid claims suggests possible diversion or duplicate discounts, the system raises its risk score and alerts compliance teams. By catching these red flags early, manufacturers can initiate audits or block transactions before too much revenue leaks. This proactive stance not only saves money but also deters fraudulent behavior when partners know sophisticated monitoring is in place.

It's worth noting that AI doesn't operate in isolation; it augments human expertise. The insights AI provides on GTN can empower pricing strategists, contract managers and finance executives to take action with confidence. Instead of manually sifting through thousands of rows of data for explanations, teams can focus on strategic decision-making and exception handling. In short, AI serves as a force-multiplier for GTN management, bringing foresight and rigor to an area that has historically been murky and painfully reactive.

Integrate AI into pricing workflows and GTN execution

Fast fact

AI that operates in isolation offers insights. AI that's embedded in workflows drives outcomes.

Even the most sophisticated AI tools will yield only marginal benefits if they remain isolated from routine operations. The goal is for AI insights to surface at the right time and place for decision-makers, not on a separate island. Realizing the full value of AI in GTN optimization requires more than just tools—it demands embedding these tools into the daily workflows and decision processes of the organization. AI tools should be woven into the fabric of how pricing, contracting and finance teams work day-to-day. This could mean integrating anomaly alerts into the contract management workflow (so that when an out-of-bounds claim is flagged, the analyst sees it in their normal system dashboard) or having forecasting AI directly feed into the finance department's planning software. Over time, as confidence in the AI grows, certain routine approvals or rejections can be automated.

In practice, this means moving beyond static dashboards and periodic reports toward real-time, AI-driven decision-making. The concept of agentic thinking is especially relevant here: Companies should empower their systems and teams to act as agents that proactively address issues as they arise, rather than passively reporting metrics. With agentic thinking, AI continuously monitors transactions as they occur, activating workflows whenever a discrepancy is detected.

For example, instead of waiting for a quarterly GTN report to reveal a spike in discounts or a budget variance, an AI-driven system continually monitors transactions and triggers immediate alerts or even automated actions. If an unusual surge in rebate claims is detected for a particular payer, the system might automatically alert the market access team to investigate, or even put those claims in a temporary hold queue for review. This kind of autonomous, event-driven response is the hallmark of an agentic approach—the technology isn't just a background tool; it's an active participant in the GTN management process.

As one industry expert put it: "Avoidable revenue leakage is a pervasive problem, and a pervasive problem requires a comprehensive response." That comprehensive response is exactly what an AI-empowered, agentic approach delivers—it addresses the internal data and process issues while keeping an eye on external threats, in an ongoing, dynamic way. The organization, in effect, gains a digital ally that watches over revenue 24/7. This integration of technology, process and mindset turns GTN optimization from a static report into a living, breathing practice within the company.

The need for a united data infrastructure

Fast fact

A centralized, clean data foundation is essential for AI to deliver accurate, actionable GTN insights.

AI is only as effective as the data it can leverage. A critical step is connecting previously siloed data sources into a central, trusted repository. GTN data often resides in multiple silos—finance systems, contract management platforms, chargeback portals and external 340B data sources. Merging these into a consolidated data repository, with consistent standards and formats, is a foundational requirement for AI to operate effectively. This might involve consolidating data from ERP systems, rebate management software, chargeback systems and third-party sources (like syndicated Rx, outlet purchase data or CMS databases) into a cloud-based data lake. By establishing a "single source of truth," everyone from analysts up to executives works off the same numbers and AI models have the complete dataset to analyze. As a starting point, integrating various managed markets and commercial datasets (rebates, chargebacks, etc.) is foundational for uncovering revenue. Data unification is the enabler that turns AI from a theoretical exercise into practical insights across the organization.

The data foundation should be designed with compliance in mind. GTN optimization AI will be ingesting sensitive data (pricing contracts, sales data, patient assistance records). Companies must ensure that this data is handled in compliance with confidentiality agreements, HIPAA (if patient data is involved) and other privacy laws. Robust data governance—controlling who can access the AI's data and outputs—is essential to prevent leaks or misuse of sensitive information (like contract pricing terms that could be market-sensitive).

GTN data often resides in multiple silos—finance systems, contract management platforms, chargeback portals and external 340B data sources. Merging these into a consolidated data repository, with consistent standards and formats, is a foundational requirement for AI to operate effectively.

Automating contract management and routine tasks with AI

Fast fact

Automating data pulls can cut analysis turnaround time from days to hours—boosting both speed and accuracy in GTN reviews.

Many GTN processes involve high-volume, repetitive tasks that are ripe for automation. By using intelligent process automation combined with AI, companies can handle these tasks faster and with fewer errors. For instance, manufacturers often need to pull Medicaid claims data and invoices from various state systems and portals to support invoice processing and double-dipping analysis, a tedious and error-prone job if done manually. We've seen one company automate this data extraction and standardization process, running it around the clock and drastically reducing turnaround time for analysis.

Automation combined with AI can also do things like gather external information on customers to determine class of trade (COT) or eligibility for 340B discounts. We've seen one company automate the customer research and COT classification process by autofetching both internal and additional data from web sources, such as HRSA, HIBCC and hospital websites, for a holistic view of the customer. They were then able to improve operational processes and audit readiness significantly. By automating the "grunt work," organizations free up human experts to focus on interpreting results and making judgments—the areas where human insight is irreplaceable. The key is to incorporate a layer of "intelligence" in automation: rather than blindly processing everything, the system should know when to route an exception to a person (agentic action) versus handle it autonomously.

Organizational change management for GTN optimization

Fast fact

GTN "control towers" help companies act on AI insights faster by connecting pricing, finance and compliance teams in real time.

Embedding AI requires a cultural shift as much as a technical one. Simply having AI analytics and agents is not enough; ensuring that the organization is ready is critical. AI adoption might trigger concerns about job security or mistrust in "black box" algorithms. Communication and training are essential. Teams must be trained not only to use new tools in their day-to-day but also to trust and act on AI outputs. For complex or high-value transactions, maintain a "human-in-the-loop" review, emphasizing that AI augments human expertise rather than replacing it. This involves educating staff on how the AI arrives at its recommendations (to build confidence and understanding) and establishing clear protocols for action.

For example, if the AI flags an anomaly, who is responsible for investigating and what steps should they take? By defining these in advance, the organization ensures AI-driven insights lead to timely interventions. It's also important to give teams the authority to act on AI findings. Agentic thinking implies that people closest to the issue (e.g., a contracts analyst who sees an AI alert about a duplicate discount) have the mandate to initiate corrective measures or convene a cross-functional task force immediately, rather than waiting for multiple layers of approval.

Some companies create a dedicated GTN "control tower," a cross-functional team equipped with AI analytics that monitors all GTN-related metrics in real time and coordinates response. This breaks down silos. For instance, if a potential revenue leakage issue is found in Medicaid rebates, the pricing, finance and compliance units can jointly address it immediately. This shift from "finding out later" to "acting now" dramatically reduces both financial losses and the time needed to correct issues.

Regulatory and compliance considerations for AI-powered strategies

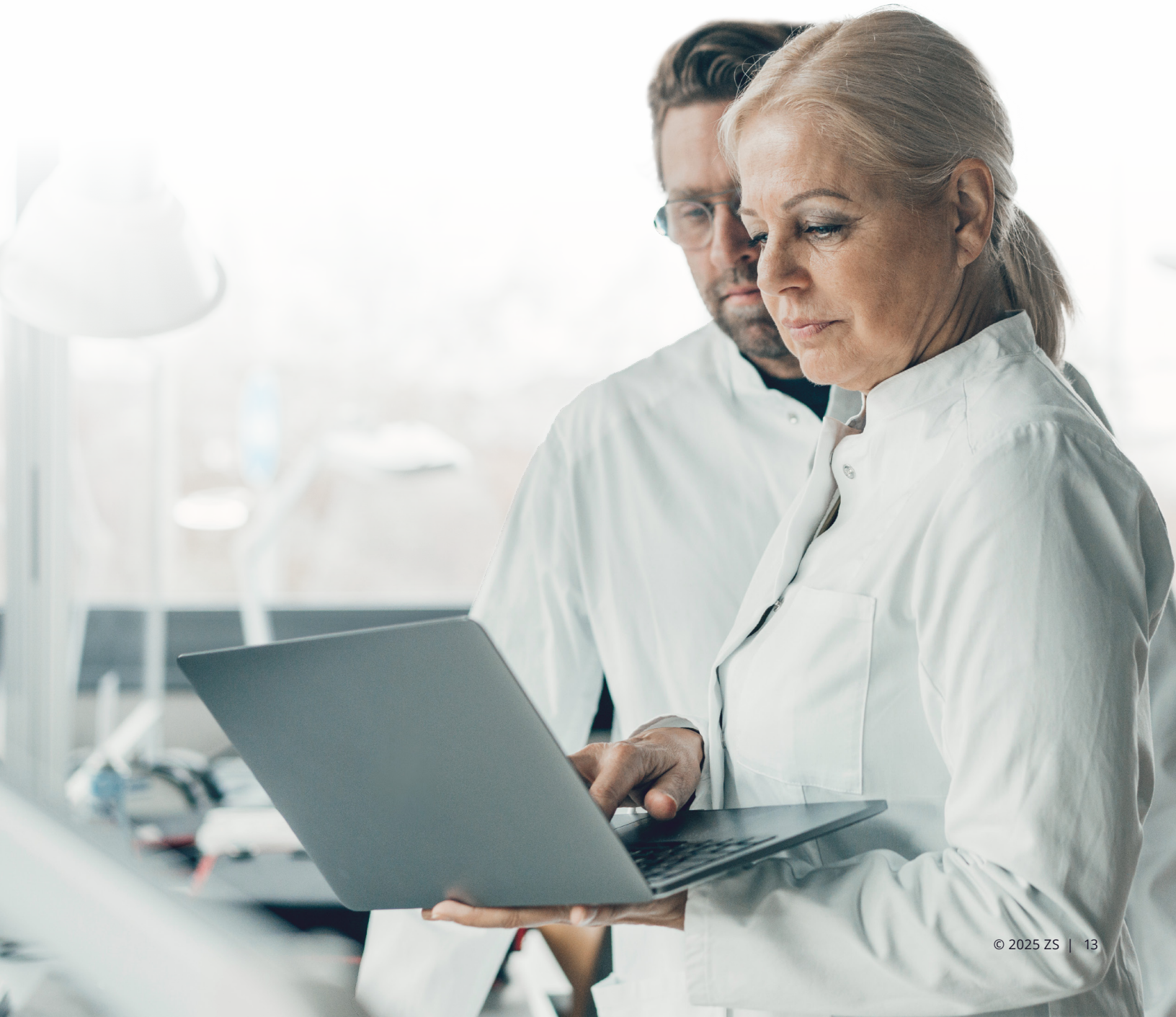
Fast fact

If AI can't explain its decisions, it can't survive an audit.

Any discussion of pharmaceutical GTN management must account for the heavy regulatory framework governing drug pricing. Manufacturers operate under numerous laws and regulations—from the Medicaid Drug Rebate Program and Medicare rules to 340B program requirements—all of which influence pricing and rebates. Implementing AI in GTN optimization does not exempt companies from these rules; in fact, it introduces new responsibilities to ensure compliance, transparency and control in an AI-augmented process.

Any AI-driven process for rebates, chargebacks or pricing adjustments must be accompanied by a clear audit trail. Regulatory bodies have not yet issued explicit rules on AI in pharma pricing, but the ethos of regulations like those from the FDA on AI in healthcare is that companies must retain ultimate responsibility. Pharmaceutical companies should ensure that for every recommendation or action the AI makes, there is a logged record of the input data, the logic or model output and the outcome. This is analogous to having detailed documentation for an internal control or an accounting judgment. In the event of an audit, whether by internal compliance, external auditors or government agencies, the company needs to demonstrate how it arrived at the figures in its financial statements and rebate filings. If an AI identified and reversed a duplicate rebate claim, for instance, the evidence of that duplicate and the rationale for reversal should be readily available and understandable. Black box algorithms that cannot be explained are risky; executives should favor AI tools that offer explainability features or at least have the ability to output supporting details for their conclusions.

One approach is to use AI for what it's good at (finding anomalies and patterns) but route the final decision through a rules-based engine or human review that can be documented. In practice, this might mean the AI flags 100 suspicious transactions and provides a likelihood score for each, then a compliance analyst reviews those and formally concludes which to adjust, documenting each decision. This hybrid approach maintains a chain of accountability. For instance, if an AI model systematically underestimates rebates for a certain government program, human oversight would catch the discrepancy and prompt a model correction before it causes a reporting error. Agentic thinking does not mean unchecked autonomy; it means autonomy with accountability. The "agent" (AI) should report to its human supervisors and be subject to review, much like an employee.



Progress over perfection: Learn and iterate continuously

Fast fact

If your AI isn't learning from mistakes or regulatory changes, it's falling behind.

The journey to AI-enabled GTN optimization is iterative. Companies that excel in this area establish feedback loops between the AI systems and human experts. When an AI model flags false positives or misses an issue that a human later catches, those cases should be fed back as training data to improve the model's accuracy over time. Similarly, periodic reviews of AI recommendations versus outcomes can highlight where the model needs adjustment or where process changes are required. Agentic thinking means the organization is continuously learning and adapting. Just as a person gains experience and adjusts their actions, the AI models (guided by human input) should get smarter with each cycle. Over time, this creates a self-reinforcing system: better data and oversight leads to better AI detection, which leads to more recovered revenue and refined processes.

It's also important to keep pace with regulatory changes and update AI systems accordingly. New rules like the 2024 Inflation Reduction Act provisions (e.g., the removal of the Medicaid rebate cap, which can lead to rebate amounts exceeding the drug's price) can drastically change GTN dynamics. If an AI model was trained on historical data that didn't include such scenarios, it may need to retrain or adjust to handle the new reality. Continuous collaboration between the business teams and the AI development team will ensure that the models remain current with the law.

In essence, the AI needs to be as agile as the policies it is trying to navigate. Companies might establish an AI governance committee that meets to review how the GTN optimization AI is performing, including any compliance issues that arose and how they were resolved. These experts should regularly review the models for bias or error.

Strategic recommendations for pharmaceutical executives

Fast fact

GTN AI success doesn't start with code. It starts with clean data, clear ownership and cross-functional alignment.

For pharmaceutical executives seeking to harness AI and agentic thinking to improve GTN outcomes, here are strategic steps and considerations to guide the transformation:

1. **Invest in establishing a single source of truth for all market access and GTN data.** Build a centralized data infrastructure that consolidates all relevant GTN data (including sales, invoices, rebates, chargebacks, claims and contractual terms). Clean, harmonize and link these datasets so that everyone from market access to finance is drawing insights from the same well of information.

   This data foundation is critical; it eliminates conflicting numbers and enables advanced analytics to have complete visibility. Consider creating data pipelines that update continuously (or at least in near real time) to support up-to-date analysis. Executives should sponsor data governance initiatives to improve data quality (e.g., standardizing customer identifiers across systems and cleaning up outdated contract entries) as a first step. Without trustworthy data, even the best AI will yield poor results.

2. **Deploy AI for analytics, forecasting and detection.** With the data foundation in place, implement AI capabilities focused on key GTN pain points. Start with areas that have clear ROI potential, such as GTN forecasting accuracy and revenue leakage detection. Pilot machine learning models to forecast net revenue more accurately than current methods. For instance, use historical patterns to predict rebate accruals within a smaller margin of error, which directly improves profit forecasting and reserve setting. Simultaneously, introduce anomaly detection algorithms on transactional data to serve as an early warning system for errors or fraud (duplicate claims, out-of-range discount requests, etc.). It can be wise to begin with a pilot in one business unit or one type of deduction (say, Medicaid rebates or 340B sales) to validate the approach and demonstrate quick wins.

   Ensure that the AI solutions you choose (or develop) have explainability features and can integrate with your existing tools (for example, an AI platform that plugs into your revenue management software). Make AI insights actionable. For instance, configure the system to not just detect an anomaly but also notify the right person or trigger a workflow. As these models prove their value, scale them across the enterprise's product portfolio and channels. Throughout this process, keep data science and business teams in close collaboration to fine-tune the models to the realities of your products and contracts.

3. **Integrate AI into decision-making workflows.** Avoid treating AI analytics as a parallel system; instead, embed the outputs into the daily routines of your teams. This might mean integrating AI dashboards or alerts into the tools your pricing and contracting teams already use. For example, if a contract manager is in a portal reviewing quarterly rebate claims, an integrated AI could highlight "these five claims look anomalous" right in that interface. Design automated triggers for common scenarios. If forecasted accrual versus actual starts to diverge beyond a threshold, for example, an automatic alert can go to finance and a root-cause analysis is initiated. The objective is to operationalize agentic thinking.

   Empower your systems to take initiative in flagging and even handling routine issues. At the same time, establish clear procedures for human oversight of these AI-driven actions. Invest in training programs so staff understand how to interpret AI outputs and feel confident incorporating them into decisions. The cultural adoption is just as important as the technology. Encourage a mindset where the teams treat the AI like a knowledgeable colleague—one that offers insights and suggestions that they can evaluate and act upon.

4. **Leverage intelligent automation for efficiency.** Identify high-volume, rule-based processes in your GTN cycle that can be streamlined with automation. This could include data gathering (as in the Medicaid data consolidation example, rebate claim processing, reconciliation tasks or routine report generation). By adding AI on top of automation, you create intelligent workflows that handle the heavy lifting and surface exceptions. This can dramatically reduce processing time. From an executive perspective, these efficiency gains translate to faster closes, more timely insights and the ability to reallocate staff to higher-value work like strategy and analysis.

   Make sure to measure and communicate the improvements (e.g., "We reduced rebate processing effort by 40% and identified 5% more ineligible claims to deny.") to build momentum and support for further automation projects. Prioritize areas where errors have been frequent or manpower is heavily utilized.

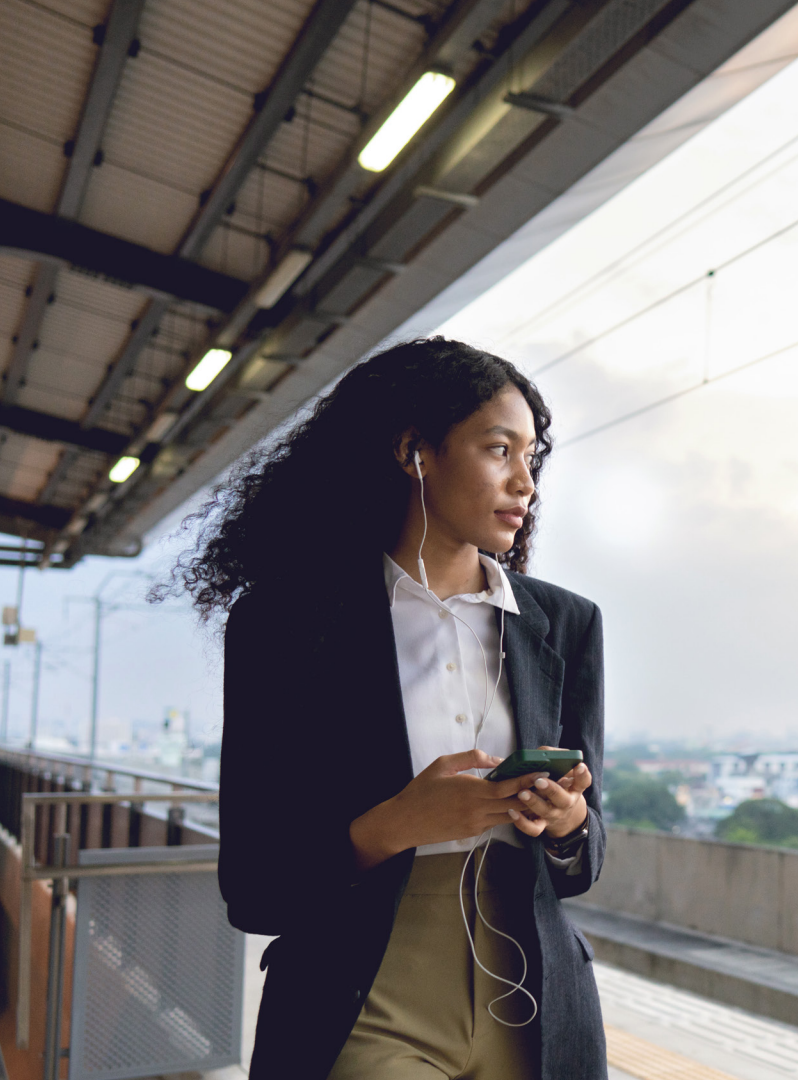
5. **Strengthen cross-functional governance and skills.** GTN optimization touches multiple departments—sales, marketing, market access, finance, compliance, legal and IT. To drive the adoption of AI solutions, establish a cross-functional GTN governance committee or task force. This group can set targets (like reducing GTN leakage by X% or improving forecast accuracy by Y%), monitor progress and ensure cooperation across silos.

   To ensure solutions meet all requirements, it's also wise to involve the compliance and regulatory teams in model development and review. In terms of skills, consider upskilling or hiring for roles such as data analysts, data engineers and data scientists who specialize in commercial pharma data. Embedding a few such experts within the market access or finance team can help bridge the gap between technical AI development and business application. Additionally, train your existing staff on data literacy and the basics of AI, so they feel comfortable with the new tools. The more your team understands the "why" behind AI outputs, the more they'll trust and use them. Create a culture of continuous improvement. Encourage teams to suggest areas where analytics could further help and, perhaps, institute a feedback mechanism (like a quarterly workshop) to update your AI roadmap based on user input and changing business needs.

6. **Plan for change management and executive sponsorship.** Implementing AI-driven processes is as much about change management as it is about technology. Senior leadership should visibly champion the initiative, communicating to the entire organization why these changes are necessary and beneficial. It's important to set the tone that AI is meant to augment human expertise, not replace it, positioning it as giving teams "superpowers" to manage complexity, which will ultimately make the company more successful and everyone's job more impactful.

   Address potential resistance by involving end-users early (get their input in tool design, let them pilot features) and by providing adequate support (training sessions, user-friendly documentation, helpdesk support during rollout). Change can be unsettling, especially in areas like finance that are accustomed to traditional ways. So celebrate early wins and recognize team members who embrace and champion the new approach. Also, update policies and job descriptions if needed to reflect new workflows (for example, if certain approvals that used to be manual are now automated, make sure accountability is reassigned appropriately). Executives should ensure that incentives (KPIs, bonuses) are aligned with the desired outcomes. For instance, if a market access team is partly measured on GTN performance, they will be motivated to collaborate with the AI insights aimed at improving that performance.

By following these steps, pharmaceutical companies can create a robust framework for AI-enabled GTN optimization. The journey should be phased—data first, then insight, then automation, all under strong governance—rather than trying to do everything at once. Each step builds on the previous one, and value should be demonstrated at each phase to maintain organizational buy-in. The end state is a virtuous cycle: A well-oiled data and AI engine that continuously monitors and optimizes revenue flows and an organization that is agile, informed and proactive in its pricing and contracting decisions.



The industry is already moving, and so should you

The pharmaceutical industry's GTN challenge will likely intensify in the coming years, as pricing pressures mount and the market access landscape grows more complex. In this environment, companies that leverage AI and embrace agentic thinking will have a distinct advantage. They will be the ones who can dynamically adjust to changes—whether it's a new contracting trend, a regulatory shift or an emerging fraud scheme—with speed and precision. Instead of playing catch-up with their revenue leakage, these organizations will have systems in place that anticipate and neutralize threats to their profitability in real time.

The future of GTN management in an AI-powered landscape is one of heightened visibility and control. We can envision a near future where a pharmaceutical executive starts the day not with a static report of last quarter's net sales variance, but with an AI-curated briefing: a dashboard highlighting today's key GTN risk areas, opportunities for additional savings and predictions for how current initiatives will impact the year-end financials. Many manual reconciliations and detective work will be things of the past. In their place will be strategic discussions about how to further optimize contracts or tailor patient support in ways that maximize both access and profitability, with AI providing the analytical backbone for those discussions.

Crucially, this AI-driven future does not sideline compliance or patient access. It enhances them. With proper oversight, AI can ensure every rebate paid and every discount given is justified and in line with regulations, protecting the company from costly compliance

missteps. Agentic thinking, when instilled in the corporate culture, means teams are always a step ahead, proactively managing GTN as a continuous life cycle, not as an afterthought. In practical terms, that could mean fewer earnings surprises related to GTN adjustments, more predictable financial performance and the confidence to take calculated risks in pricing negotiations knowing you have a safety net of analytics monitoring outcomes.

AI and agentic thinking represent a transformative approach to GTN optimization. Early movers in this space are already reaping benefits in recovered revenue and improved operational efficiency. Pharmaceutical executives who lead this change will not only safeguard their companies' financial health but also contribute to a more sustainable model for delivering therapies to patients. The tools are ready and the need is pressing, and now is the time to act, strategically and decisively, to master the GTN equation in the age of AI.

The authors would like to thank Nishi Chauhan, Shobhit Narula and Barry Farrimond for their contributions to this white paper.

About the authors

Neelabh Saxena has over 15 years of consulting experience with a focus on driving digital transformation within value and access. He serves as a leader of ZS Revenue Management Center of Excellence, which brings together a cross functional team to serve clients in addressing their pressing revenue management challenges. He has delivered multiple successful assessments and implementations across major pharmaceutical and medical device clients.

Prior to joining ZS, he was a practice lead at IQVIA, where he led the global pricing and contracting team focused on revenue management and gross to net advisory and implementations. Neelabh holds a masters in pharmaceutical economics from Barcelona School of Management, an MBA from NYU Stern, an MS in MIS from Texas A&M and bachelor's in computer engineering from University of Delhi.

Ricky Yuen has over 15 years of consulting experience and leads ZS's value and access analytics practice. His focus is on helping clients navigate the complex U.S. market access landscape across a range of issues, spanning strategy to execution and operations. Ricky is an industry thought leader across numerous topics, including the Inflation Reduction Act, 340B, revenue leakage, contract and gross-to-net optimization, digital transformation in market access and end-to-end contracting capabilities.

Specific to digital transformation in market access, Ricky has led several large programs and advised many more pharma clients on various points in their journey. He brings a holistic view and integrates a comprehensive suite of capabilities, including data management, advanced analytics, AI and machine learning, and other innovative technologies, like ZS's Contract Decision Support and data foundation accelerators, which help market access and contracting teams advance their decision-making to drive top and bottom-line results.

About ZS

ZS is a management consulting and technology firm that partners with companies to improve life and how we live it. We transform ideas into impact by bringing together data, science, technology and human ingenuity to deliver better outcomes for all. Founded in 1983, ZS has more than 13,000 employees in over 35 offices worldwide.

Learn more: https://www.zs.com/solutions/value-and-access