

A VISION FOR
AN AI-DRIVEN
PLATFORM:



A New Era of Digital Transformation for Health Plans

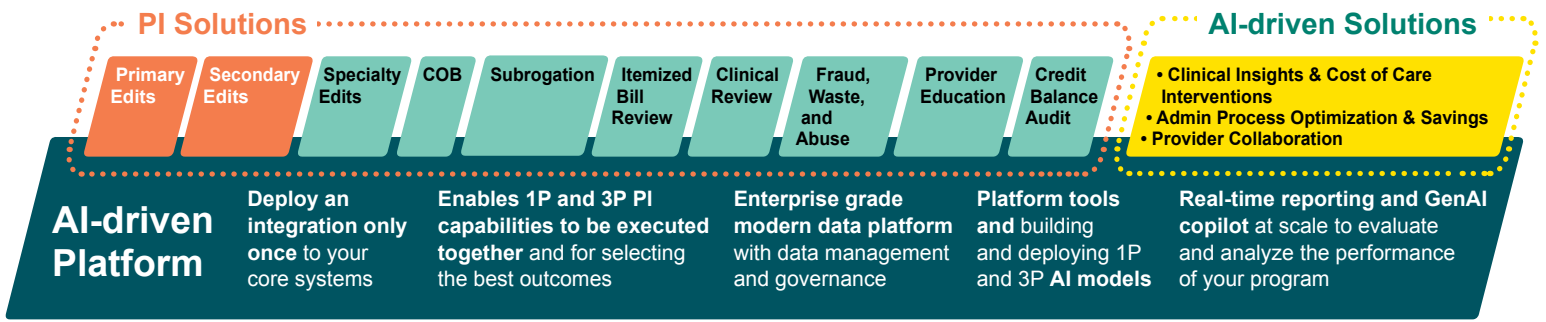
by **Tawfiq Bajjali**, *Chief Platform Officer, Lyric*

Thoughts on a next-generation AI platform to help plans unlock greater value, transform payment integrity, improve key operations, and better navigate the changing landscape in healthcare.

The healthcare industry faces mounting challenges, from soaring costs to complex regulatory requirements and a need for operational efficiency. Health plans are feeling the pressure to adapt to these changes while maintaining a focus on quality care and member satisfaction. Health plan leaders

that recognize these demands have an opportunity to participate in revolutionizing the healthcare landscape through an AI first digital platform delivering a range of capabilities designed to optimize results across critical business functions.





Healthcare spending in the United States has reached \$4.7 trillion (about \$14,000 per person in the US) in 2023, with projections showing an estimated surge to [\\$7.2 trillion by 2031](#). While there are a lot of factors that contribute to the rising healthcare costs like an aging population, and growing populations with chronic illnesses and comorbidities, many rising cost contributors can be controlled with operational and digital transformation initiatives. Leading health plans recognize this opportunity and are seeking innovative solutions that can empower plan members to participate in necessary, cost-effective, and high-quality care while ensuring regulatory compliance.

A Platform to Help Simplify the Business of Care

An AI-driven platform responds to these needs by providing an integrated set of capabilities that unlock a lot of untapped value for health plans. These capabilities can be organized into solution categories all powered by a set of core platform services. This makes the approach unique and provides secure, scalable, and modern data and AI foundational capabilities for future capabilities including those needed for complying with CMS rules and regulations.

The 7 solution categories would include:

- 1. Payment Integrity:** Driving payment accuracy & integrity resulting in savings up to 8% of annual spend
- 2. Claims Adjudication AI:** Improving auto adjudication rates and reducing administrative costs
- 3. Utilization Management AI:** Improving member experience and reducing administrative costs
- 4. Care and Disease Management AI:** Identifying cost of care saving opportunities before medical services are performed
- 5. Clinical Quality AI:** Sharing data and insights to help plans improve clinical quality, care access, health equity, and member experience
- 6. Risk Adjustment AI:** Helping plans secure adequate funding to administer member policies
- 7. Value Based Care AI:** Increasing transparency and collaboration between providers and payers while helping providers succeed in value-based care arrangements

Lyric offers solutions for Payment Integrity on its [42 Platform](#). It is adding more with strategic partnerships and intention integration of those partner solutions onto its platform, and for its customers, over time.

Health plans looking to innovate in other solution areas beyond PI should consider [LyricIQ](#), an AI-as-a-Service offering from Lyric's expert consultative team. LyricIQ helps customers maximize ROI and expedite implementation by recommending, deploying, and configuring AI-driven solutions tailored to specific organizational goals. These solutions are continuously monitored and adjusted as needed. LyricIQ also includes the development and fine-tuning of algorithms and custom integration into enterprise systems, ensuring precise optimizations for customers.

I see LyricIQ solutions delivering clinical insights and interventions, and administrative process optimizations including workflow optimizations with AI co-pilots and other powerful assets. These solutions may involve a Lyric partner and would be designed and deployed to unlock greater value through increased efficiencies, reduction of costs, and enhancing healthcare outcomes.

Core Platform Services: Including Data, AI, and Integration Services

The platform's key success would be rooted in its design and ability to generate healthcare specific data-driven insights and facilitate integrating them into existing workflows across several key health plan functions.

Data services will manage, aggregate, and process large volumes of data, including health plan data (such as claims and member coverage), clinical data (such as electronic health records and lab results),

and member data (such as digital preferences, social determinants of health needs, sexual orientation, gender identity, and data from digital health apps, wearables, and remote patient monitoring devices).

The platform will further integrate and standardize these datasets into Fast Healthcare Interoperability Resources (FHIR) to accelerate the delivery of interoperability and meet other CMS compliance requirements.

Platform AI and insights services will offer the latest technology and capabilities for building, training, deploying, validating, governing, and orchestrating the execution of traditional analytics and AI models. This includes reporting and visualization platform services utilizing generative AI to summarize all the recommendations and actions performed. These services will power the hyper-personalized and precise insights that run on the platform.

Adopters of this platform would take advantage of the platform's ROI modeling capability: allowing them to project savings associated with the deployment and configuration of platform solutions like claim edits or AI-based insights, including those they build themselves using platform tools before they deploy them into productive use.

In addition, platform integration services will offer prebuilt integrations into widely adopted claims adjudication systems with additional out of the box integrations. This flexibility for **meeting plans where they are** would serve as an essential differentiator for the platform.

It's not hard to see how these core services would work together to deliver differentiated functionality. For example, prepay stage claims will be sent in near real-time to the platform, running through deterministic rules engine for editing claims, as well as other PI capabilities that are configured or

identified using AI at run-time to be necessary. From there, the platform selects the best of its many outputted recommendations (insights)—thereby providing recommended actions to enhance payment accuracy, as well as unlock significantly greater value for plans.

Moreover, a summary of the platform-based recommendations will be generated using finely tuned small language model (SLM) and made available for integration with other systems like the member and provider contact center to empower agents to deliver easier-to-understand communication around claims adjudication.

The platform would be designed to be extensible, enabling customers and partners to build, reuse, access, and integrate their own components while utilizing next-generation, industry specific, and value-adding capabilities. Also included would be best in class security, performance, and data and AI governance capabilities—reducing time and costs associated with deploying and maintaining different solutions and editing rules and integrating them into existing infrastructure and core systems.

Beyond that, the platform will offer immediate visibility into issues with quick updates to ensure smooth operations and timely resolutions of issues that arise across all platform-built and deployed solutions.

Payment Integrity

The first solution category would entail a comprehensive suite featuring best-in-class capabilities spanning the Payment Integrity (PI) value chain. These include pre-pay edits including, coordination of benefits, subrogation, clinical and contract reviews, claims auditing, provider education, and fraud investigation ensuring a holistic approach to maximizing financial performance and unlocking significant value.

Pre-pay Editing

Lyric offers solutions in this category including [ClaimsXten \(CXT\)](#), a 30-year flagship claims editing product trusted by eight of the top nine payers and over 100 plans. Enhancing payment accuracy and driving significant medical savings, this widely trusted solution catches errors before payments are made.

Recently modernized, Lyric's CXT migrated to its 42 Platform solution. As part of this modernization effort, the same single integration into the payer's core adjudication system is now integrated in Lyric 42 platform, enabling turnkey deployments of strategic partner solutions that deliver various PI capabilities. The partnerships, first established with [specialty editing partners](#), combined with Lyric's proprietary edits, represents [a vast library of powerful rules](#) helping many plans to drive greater results in their payment accuracy.

These rules include industry-standard edits, clinically validated edits, and customizable edits tailored to customer needs and policies. The engine responsible for executing these rules does so with high-speed and allows customers to tailor the rule execution. Lyric also provides tools that allow customers to develop their own rules and calculate the potential savings prior to deploying these rules into the adjudication cycle.

Generative AI models could complement and enhance the capabilities for authoring rules, validating them, and explaining the decisions made on the claims resulting from rule execution. These models would rely on foundational models for generating content that are fine-tuned using a knowledge graph made up of data extracted from CMS publications, AMA CPT guidelines, specialty guidelines, claims, medical encounter data, health plan medical policies, provider contracts, and existing editing rules.

Coordination of Benefits COB Including Subrogation

A new paradigm and expectation for Coordination of Benefits (COB) and Eligibility is long overdue. And it needs to be a solution that ensures accurate determination of primacy—including responsibility beyond medical coverage—reducing the risk of erroneous claim payments, enhancing communication with related stakeholders, as well as helping to lower administrative costs for many plans stuck “paying and chasing.”

To bring this vision to reality, the platform will maintain real-time updates on member coverage based on various life and employment events and additional coverage details as they become available. This will ensure accurate determination of primary and secondary payers responsible for claim payment. These updates include member employment status changes, updated CMS coverage by government-funded programs, reported worker’s compensation, and additional insurance coverage provided by the member to a provider or contact center. This also encompasses scenarios related to causality, such as malpractice, motor vehicle accidents, and personal injury.

When coverage determination cannot be completed in the prepay stage, the platform will enable appropriate pending statuses and support post-payment recovery for claims. Additionally, the platform provides insightful and timely recommendations to adjust claims retrospectively when applicable.

The platform also tracks and links cases, such as identifying a claimant with a previous workers’ compensation case, for accurate determination of liability and payment responsibilities. Furthermore, the platform ensures each case has all necessary documentation to support defending subrogation actions or negotiations.

*Update: Lyric is working on a [Coordination of Benefits solution](#) that leverages the same thinking. It plans to have it on its 42 Platform in the late fall/early winter of 2024.

PI Audits, Reviews, and Investigations

Platform-based solutions powered by AI would pave the way for new levels of efficiency and accuracy for payment integrity audits, reviews, and investigations. These include itemized bill reviews, contract compliance reviews, clinical audit including DRG validation, as well as fraud investigations. Moreover, much of this next-gen functionality would occur in the pre-pay stage of payment integrity—driven by datasets on the platform as well as rule-based and AI algorithms including anomaly detection and generative AI.

Advanced AI algorithms, specific to developing solutions, which are intelligent, integrated, and responsible in design and nature would provide a differentiated experience to the end user through these leading-edge solutions:



Itemized Bill Review (IBR):

To aid reviewers in the identification of extraneous charges, duplicate charges, and pricing anomalies, algorithms will be based on contracts and appropriate provider-based facility chargemaster data.



Contract Compliance Reviews:

Algorithms will focus on identifying correlations between payments and terms specified in contracts, deviations from standard payment amounts, service codes, and frequency of service, discrepancies when comparing current claim to complaint and non-compliant services, and rule-based checks to pricing schedules and service limitations.



Clinical Review:

Here, algorithms will help reviewers assess the appropriateness of care relative to diagnoses by looking at medical conditions, treatments, procedures, and equipment against evidence-based medicine standards, medical policies, and similar diagnoses. Valuable insights clarifying and determining if DRG codes and charges match the level of care detailed in the clinical information; charges for durable medical equipment are clinically justified based on the patient's diagnosis and treatment plan; and if treatments provided require further approvals for continued care.



Fraud, Waste, and Abuse:

Algorithms will identify claims tagged as anomalies that could be indicative of up-coding, incorrect coding, over utilization, repeated procedures, and unnecessary services.

This solution would utilize a user interface that integrates claims, either processed by an algorithm or pended for review, as well as an AI-based co-pilot and generative AI to drive greater efficiency and timing in performing reviews. And if the review doesn't occur in a timely manner, the claim is flagged for post-pay review and potential recovery.

With humans in the loop, investigations performed on the claim pre-and post-pay would optimize the AI models used in performing the PI function.

Provider Education

Today, more health plans are recognizing the importance of effective bridge-building with provider organizations. This starts with improving transparency of payment accuracy rules, edits, and policies—delivered at the point of pre-billing. Such information sharing reduces abrasion, lowers audits and medical reviews, as well as improves the likelihood claims will be paid faster, and at a higher rate of success.

As claims editing and other PI recommendations are being generated from configured rules on the platform, billing inaccuracies over a configured period are attributed to appropriately linked providers. These insights would fuel positive provider education campaigns, integrated into end user tools. Health plan professionals would have the proper means to engage and empower providers to correct billing behavior. Generative AI would be a must-have in creating summaries to streamline these processes.

Additionally, future claims are analyzed automatically to validate a positive change in billing behavior and improved payment accuracy. These insights are also available for reporting and used for updating a provider profile, serving as one of many inputs into other algorithms that calculate insights on the platform, such as dynamically calculated provider attributes that can be used to determine if the provider can bypass prior authorization.

AI Assisted Claims Adjudication Solutions

To improve auto adjudication rates, avoid administrative costs, and increase efficiency, a series of algorithms would be introduced into claims processing to augment manual examinations, reviews, and audits. These algorithms would also provide recommendations to agents to aid in a manual review when necessary.

The focus of these algorithms would be: identifying additional duplicate claims beyond standard parameters; matching claims requiring authorizations with their corresponding prior authorization cases; identifying claims likely to require additional payment integrity checks or reviews; flagging claims at risk of payment delays and recommends actions; analyzing claims tagged for high dollar audits and assessing their likelihood of approval to optimize audit resource allocation; detecting claims likely overpaid based on supporting evidence; as well as identifying claims likely needing rework and suggests corrections.

AI Assisted Utilization Management Solutions

Another much-needed opportunity would be for the platform to transform prior authorization with cutting-edge AI and data integration, optimizing workflow and improving service delivery at scale.

On the intake side, platform services convert faxed prior authorization requests into structured data formats to seamlessly integrate with case management systems. Connectors into electronic health records (EHR) systems would allow for the receipt of digital prior authorization requests that are compliant with the CMS mandated API specifications.

In its data layer, the platform will receive and process clinical attachments that have been faxed in, uploaded, or ingested in various healthcare standard formats. From there, the platform utilizes AI to identify then aggregate supporting evidence from all valid sources to support case decisioning—such as from claims, and care and disease management systems—thereafter, from the source information it aggregated, creating a summary for review. Advanced insights will evaluate each request to check eligibility against established clinical guidelines, ensuring compliance and appropriateness of the requested procedures or medications. Using AI

algorithms to assess the likelihood that a request requires manual review aids in prioritization and optimizes staff allocation.

The platform will also allow for configuring the automatic approval of cases identified as not requiring manual review, speeding up the authorization process and enhancing the patient experience. Additionally, this solution will host APIs for collecting attestations from providers and accessing authorization decisions, integrated with EHR systems, operational reporting, contact centers, and member-facing applications.

During claims adjudication, if a claim published to the platform requires post-service authorization review, the automation capabilities described above can be triggered to potentially avoid payment delays. Finally, the solution can be configured to dynamically bypass prior authorization altogether for providers based on attributes in their provider profile, which is maintained on the platform and reusable across solutions.

AI Assisted Proactive Care and Disease Management Solutions

The skyrocketing rate of [chronic disease](#) coupled with today's surging consumerism and need for more coordination of care, present a great opportunity for the development of this next generation AI-driven platform. Apart from the innovation and improvements, its advanced analytics and actionable insights would help to improve care for plan members, fuel stronger results in population health management (PHM) and make a significant impact on reducing cost of care.

At its core, this solution utilizes a comprehensive member profile curated from all the data sets available on the platform. From this profile powerful insights can be generated including: confirmed diagnoses and disease states; condition severity;

current & future risk scores; the probability of select members with the likelihood of potentially undiagnosed conditions and needs investigation; as well as recommendations for the most effective interventions tailored to the individual's health profile, including avoidable care and cost savings.

These cost-saving and potentially life-saving insights will then be incorporated into measures used for provider payment models, integrated into administrative services only (ASO) reports, care & disease management systems, member-facing digital applications, population health management (PHM) tools, and into autonomous patient engagement systems. Certain integrations are bidirectional and contribute to the data layer to support insights generation on the platform.

In addition, the power of such platform predictions would be tied into informing future utilization management and corresponding activities to improve plan member experience and further reduce administrative burden on providers.

AI Assisted Clinical Quality, Risk Adjustment, and Value Based Care Solutions

AI-based solutions, on this next-era platform will enhance clinical quality and optimize risk adjustment processes for healthcare providers and payers. And with America's health system shifting from volume to value, it couldn't come at a better for all types of stakeholders—and patients.

Solutions in this category will leverage advanced algorithms to extract actionable insights including clinical care gaps and suspected health conditions using the member data available on the platform. The seamless integration of these insights into existing provider workflows, including home health providers, using a variety of provider adopted

methods and integrations will help ensure relevant member recommendations are accessible and actionable. These insights will also help providers document verified conditions accurately and comprehensively, ensuring that all relevant health information is captured and communicated effectively back to the health plan.

And by providing thoroughly validated clinical records, this solution will support payers in the claim submission process, optimizing risk adjustment strategies and compliance, and improving member care quality and plan financial performance.

The insights generated by this solution can inform both utilization management and claims management solutions for added optimization in functionality. The same foundational data and AI capabilities can be used to identify the optimal set of provider contract measures, calculate them in a timely manner, and integrate them into their workflow to help provider maximize their reimbursement accurately for valuable care they provide to health plan members.

The Cost of Falling Behind

In today's healthcare landscape, health plans can no longer afford to rely on outdated systems and fragmented solutions. Rising healthcare costs coupled with administrative waste and inefficiencies are a recipe for lost opportunities. Health plans that fail to embrace innovative solutions and necessary forward-thinking risk falling behind and losing ground in an increasingly competitive market.

A recent national [plan member survey](#)—of over 32,000 members in 142 plans—by the widely-respected J.D. Power & Associates organization, showed year-over-year decreases in overall plan member satisfaction, lower new member Net Promoter Score, as well as sicker patients receiving poorer care.

By streamlining operations and leveraging advanced algorithms, health plans can unlock greater value, improve efficiency, and reduce administrative costs. Those who fail to adopt such solutions may find themselves at a distinct disadvantage, unable to keep pace with the demands of a rapidly changing industry.

A Vision for the Future of Healthcare

At Lyric, we are committed to leading the way in transformation and helping to simplify the business of care. Lyric's platform represents a visionary approach to payor digital transformation including bold, new thinking within payment integrity and key operational solutions, providing health plans with capabilities they need to thrive in an ever-changing landscape. By focusing as true allies to our valued plan customers, Lyric's 42 Platform solution is designed to deliver tangible value while supporting a sustainable and patient-centric healthcare ecosystem.

As we all continue in a time where better solutions and fresh thinking empower genuine transformation in healthcare, we invite health plan leaders and payment professionals to explore the possibilities of Lyric's 42 Platform. Together, we will create a healthcare landscape that is more efficient, accurate, and responsive to the evolving needs of plans and their members.



Tawfiq Bajjali, *Lyric's Chief Platform Officer*, is at the forefront of digital transformation in healthcare with over two decades of leadership across diverse sectors, including Fortune 500

companies and startups. His pioneering work in developing digital platforms and solutions, combined with an exceptional track record of managing very large technology portfolios, underscores his profound impact on the industry.

His visionary approach and dedication to digital excellence continue to catalyze Lyric's mission in revolutionizing healthcare solutions, making healthcare experiences more intuitive, efficient, and accessible for all stakeholders.



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