

A photograph of two scientists, a man and a woman, both wearing white lab coats. They are looking at a tablet computer together in a laboratory setting. The woman is pointing at the screen while the man looks on. In the background, there is a microscope and other lab equipment.

# Architecting the Future of Value-Based Care

✦. Astrana Health

## Executive Summary: A Proven Partner for Intelligent Modernization

Astrana Health operates at the forefront of the value-based care revolution, a position that requires a technology partner capable of bridging the gap between legacy infrastructure and modern, predictive intelligence. 10Pearls stands ready to serve as that partner. We are not merely a vendor, but a global innovation firm with a 20-year track record of helping enterprises like HCSC, Centene, and AmWell transform their digital capabilities. With a global workforce of 1,350+ experts across four continents and a "Right-Shore" delivery model, 10Pearls possesses the scale and agility to modernize Astrana's data landscape. Our capacity to deliver is rooted in deep healthcare domain expertise, from FHIR interoperability to clinical decisioning, ensuring that we can help Astrana shift from reactive administration to proactive care orchestration.

## The Challenge: Navigating Complexity in Value-Based Care

We understand that for innovative payer-provider organizations, data is often the biggest bottleneck. Astrana likely faces the "dual mandate" of scaling care delivery while managing fragmented data streams, including risk scores, ADT feeds, and disparate EHR clinical notes. Our experience in the sector highlights three specific friction points we are equipped to solve:

- **Data Fragmentation:** We recognize that critical member health data is often trapped in siloed "walled gardens" like AthenaHealth or Salesforce, forcing clinicians to act as "human middleware".
- **Administrative Friction:** We see how legacy infrastructure creates friction in pre-authorization workflows, leading to provider burnout and delayed interventions.
- **The Insight Gap:** We understand the difficulty of processing high-volume data in real-time, often forcing organizations to drive decision-making using retrospective reporting rather than live intelligence.

## Our Data Capabilities: The "Unified Data Lakehouse"

10Pearls holds the architectural expertise and certified personnel to re-architect Astrana's data foundation using a Unified Data Lakehouse approach on Microsoft Azure. Our data engineering teams are proficient in implementing the industry-standard "Medallion Architecture" within Databricks to transform chaotic data into a streamlined asset.

### *Expertise in Databricks on Azure*

Our engineers are skilled in utilizing Python and PySpark to construct high-fidelity ingestion pipelines. We have the capacity to manage the "Bronze Layer" for raw ingestion of unstructured clinical notes and HL7 feeds, ensuring zero data loss. Furthermore, our teams are experienced in automating quality checks to build a "Silver Layer" that serves as a Single Source of Truth, and a "Gold Layer" tailored for specific business logic like HEDIS measures or risk adjustment.

### *Delivering Executive Visibility with PowerBI*

Our capabilities extend beyond engineering to actionable visualization. 10Pearls has a dedicated practice for PowerBI implementation, ensuring that data stored in the Gold Layer is democratized across the organization. We can deploy dashboards that allow executives to monitor network-wide KPIs in real-time, while enabling medical directors to drill down into provider performance variation.



## Our Application Engineering Capabilities: "Zero-Latency" Engagement

To improve provider satisfaction, 10Pearls brings a "product mindset" to application modernization, focusing on speed and usability. Our diverse talent pool includes specialized architects and developers ready to elevate Astrana's provider-facing applications to consumer-grade standards.

### Proficiency in Event-Driven Node.js

Our engineering teams are adept at transitioning monolithic legacy applications to nimble microservices architectures powered by Node.js. We recommend this technology for its non-blocking, event-driven I/O model, which our teams have successfully deployed to handle high-concurrency demands in healthcare platforms. This expertise ensures backend stability even during peak utilization periods.

### Advanced API Federation with GraphQL

To optimize mobile and web performance, 10Pearls offers specialized skills in GraphQL implementation. Unlike traditional REST APIs, our developers utilize GraphQL to allow client applications to request exactly the clinical data fields needed. This capability is crucial for creating unified "Data Graphs" that stitch together underlying services—such as demographics and claims history—into a cohesive query, ensuring a snappy experience for providers in variable connectivity environments.

## Our Execution Framework: The AI Launchpad

### Empathize & Discover:

Our product strategists are trained to conduct user research to map provider friction points and identify high-value data opportunities.

### Strategize & Architect:

Our solution architects have the experience to design secure Azure/Databricks environments that meet strict HIPAA and ISO 27001 governance standards.

### Design & Build:

Our high-velocity engineering teams work in agile sprints, utilizing automated CI/CD pipelines to ensure every release is secure and functional.

### ISO 27001

Governance standards and HIPAA compliance

### 90 Days

Concept to production-ready MVP

## Evidence of Success: Proven Impact in Healthcare

Our capacity to deliver results is evidenced by our successful engagements with major healthcare organizations.

- Clinical Decision Engine Modernization:** For a major multi-state healthcare payer, 10Pearls demonstrated its ability to bring a critical oncology decision engine in-house. Our team reduced platform ownership costs by 5x and slashed configuration time for new medication protocols from months to weeks.
- Orchestrating Care Traffic:** We validated our ability to manage complex data by architecting a "Traffic Controller" solution for a large payer. This system ingested stratified member data to automate the "next best action," reducing administrative noise and improving high-risk member engagement.
- Scaling Telehealth Reliability:** For AmWell (formerly Aviza), we proved our DevSecOps capabilities by implementing automation that improved QA coverage by 280%. This enabled a release cadence of three deployments per week, ensuring uninterrupted access to critical telehealth services.

## Conclusion: A Partnership for the Next Era of Care

Astrana Health needs a partner with the resources, skills, and strategic vision to enable its value-based care goals. 10Pearls offers the "product mindset" of a startup backed by the "engineering rigor" and certifications of a global enterprise. We have the personnel and the technical pedigree in Databricks, Azure, and modern application development to support Astrana's evolution. We invite your leadership to a Technical Discovery Workshop to explore how our capabilities align with your strategic roadmap.