



## Impacting Healthcare through




# Software Product Engineering & Development

In the midst of digital reform and the shift to value-based care, the healthcare industry is poised for disruptive innovation. The challenges are multi-fold: demands for faster time to market, keeping up with increasing digital adoption, fostering patient engagement, denials management & cost of care, securing sensitive data, stringent & constantly evolving regulations - to name a few!

In this dynamic healthcare climate and at a time when digital technologies have become a lifeline, traditional software engineering approaches are fast losing relevance since they are not flexible enough to quickly adapt and scale.

At GS Lab | GAVS, we take great pride in being frontline agents of change, driving excellence across the healthcare continuum. GS Lab | GAVS' software product engineering services & solutions are pivoted on a **'Digital First' strategy led by AI/ML, Automation, Cloud, Big Data, Analytics, and DevSecOps**. We empower healthcare and healthcare IT companies to accelerate patient outcomes by innovation in and rapid development of mission critical healthcare applications through **Product Engineering, Re-Engineering, Development, Sustenance & Evolution, Platform Migration & Modernization**.

# End-to-End Software Product Engineering & Development Services

 <b>Ideation &amp; Innovation</b>	 <b>Requirements Gathering &amp; Prototype Development</b>	 <b>Use Case Development</b>
 <b>Product Architecture, Technology &amp; Design</b>	 <b>Automated DevSecOps-driven Development</b>	 <b>Security 360</b>
 <b>Integration with Enterprise Applications</b>	 <b>Automated SQA &amp; Release Management</b>	 <b>Product Support, Maintenance &amp; Value Engineering</b>

## The Differentiators

- AI-led Automation with **GS Lab | GAVS' AIOps Platform ZIF™**, to tend towards zero clinical interruptions
- Enablement of Secure Health Cloud with **GS Lab | GAVS' Cloud Orchestration Platform zIrrus**
- Data Trust & Transparency with data-centric architecture built on **GS Lab | GAVS' Blockchain Based Data Fabric Framework Rhodium** for data transparency & trust
- Global Product Engineering Team of 100+ cross-functional engineers with extensive healthcare experience
- Dedicated Product Engineering CoE team to drive customer vision
- Robust Partner Ecosystem with academia, hospitals, research institutions, innovation hubs, & network of qualified suppliers

## Capability Highlights

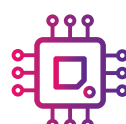
- State-of-the-art, ready-to-use technology platforms & solution accelerators
- Technical expertise in emerging technologies - Java & .NET, Xamarin, Ab Initio, Docker, MicroStrategy, Tableau, Power BI, SQL Server, Teradata, Oracle, AWS/Azure/GCP stacks
- Rapid innovation & time to market using Agile methodologies & DevSecOps (CI/CT/CD)
- End-to-end fully automated DevSecOps & container orchestration with ZIF™
- Low-Code/No-Code development platform for quick, iterative releases
- Adaptive UI/UX for inclusive, human-centric design
- AI-led SQA with Level 5 Automation, integrated into the DevSecOps pipeline
- 360° data security - data in transit & at rest
- Integration of security best practices across development lifecycle
- Proactive incident & security threat management using ZIF™
- Cloud migration, cloud-enabled DevSecOps, and Environment as a Service (EaaS) with zIrrus
- Fully scalable and clustered environment to deliver high uptime & performance
- HIPAA, PCI-DSS & ISO compliant and certified
- Regulatory & operational compliance, data ownership management with Rhodium

## Design for Purpose - GS Lab | GAVS' Software Product Engineering & Development Services for Healthcare



**Operational Excellence**

Budgeting & Financial Reporting, ERP & CRM, Operations Advisor



**Integrated Technology Platforms**

Purchasing, Billing, Claims, Clinical, Financial, Data Analytics



## Data Management & Analytics

**Data Management:** Healthcare Data Integration (EMR) and Interoperability

**Performance Management:** Dashboards for Financial, Operational & Clinical Insights

**Advanced Analytics:** AI/ML-led Predictive & Prescriptive Healthcare

- **Financial Intelligence**  
(ex: risks of non-payment, re-admission)
- **Operational Intelligence**  
(ex: predicting inpatient conversion)
- **Clinical/Disease Intelligence**  
(ex: LOS predictions)
- **Population Health**  
(ex: early intervention through social determinants)
- **Device Intelligence**  
(ex: medical device failure prediction and remediation)



## Clinical Value Chain

Clinical/Medical Imaging Applications, Patient Portals, Cloud/Mobile Health Apps, NLP & Chatbots, Clinical Device Firmware Development/Re-engineering, Regulatory Reporting, Enhancement & Support for MedTech like Allscripts, Cerner, Epic



## Clinical Performance Improvement

BI Solutions, Clinician Scorecard, Quality Measures Reporter, Health Provider Performance, Clinical Surveillance & Decision Support



## Applied Sciences

Intervention & Inquiry Platform, Healthcare Database, Collaborative Research & Innovation Platforms

## Customer Success Stories

	Need	Solution	Outcomes
1	A leader in patient care data management solutions required a transformative product to modernize their data collection and handling processes.	Development, management, and production support for their flagship product and a fully integrated suite of solutions, through end-to-end product engineering driven by DevOps & automation tools	<ul style="list-style-type: none"> <li>• Market leadership driven by unparalleled product performance and customer experience</li> <li>• Reduced fulfilment time for environment/infrastructure provisioning</li> <li>• Significant reduction in infrastructure maintenance costs, through automation</li> </ul>
2	One of the fastest growing health insurance companies serving ~1.2M members in NY, was challenged by delays in ticket resolution & go-to-market, and a high-risk, unsecured environment.	Fully automated deployments with DevOps support, ServiceNow integration, Jenkins CI/CD pipeline automation, on-demand infra integration, QA automation, and 24x7 Service Desk & remote SOC	<ul style="list-style-type: none"> <li>• Increase in deployment success rate from <b>60% to 96%</b></li> <li>• <b>90%</b> faster application delivery due to automation</li> <li>• <b>300%</b> acceleration of security incident discovery</li> </ul>



	Need	Solution	Outcomes
3	The largest provider of human services in NY required the integration of new program sites and users when they took over behavioral health programs worth over \$75 million.	End-to-end AI-led Managed IT Support including infrastructure, applications and security operations	<ul style="list-style-type: none"> <li>Helped save up to <b>\$1.6M</b> through outsourcing</li> <li>Handled up to <b>40%</b> increase in call volume without additional resources</li> <li>Increased first call resolution rate to <b>70%</b></li> </ul>
4	One of America's leading health care and health plan providers required transformative solutions to modernize their offerings and improve overall process efficiencies while reducing operational costs.	Highly flexible, scalable, and automated process models through XaaS - Everything-as-a-Service, API Management and AI/ML-led Digital Transformation	<ul style="list-style-type: none"> <li>Accelerated time to market by reorienting business capabilities</li> <li>Enabled secure innovation</li> <li>Increased interoperability and agility</li> </ul>
5	GS Lab   GAVS and a large healthcare provider in the U.S. are in a partnership built on co-innovation & transformation, to bring AI-driven IT and security operations to healthcare organizations in the U.S.	Offshore Product Development & Enhancement, IP-led Managed Infrastructure Services (NOC) delivered in a managed capacity model, and Security Operations (SOC)	<ul style="list-style-type: none"> <li><b>40%+</b> cost savings through infrastructure rationalization</li> <li>Streamlined and optimized CI/CD pipelines</li> <li>Re-engineering and modernization of legacy clinical systems</li> </ul>
6	A leading healthcare provider processing claims using a legacy-based rule engine, required a re-platforming of their Perl applications – roughly 24,000 in number, to Microsoft Azure.	Re-engineered the legacy system and enabled digital transformation by re-platforming their applications on the cloud through lift & shift, migrate & integrate, and refactor & upgrade.	<ul style="list-style-type: none"> <li>Improved scalability &amp; flexibility of systems</li> <li>Enabled extensibility to support quick incorporation of new requirements</li> <li>Improved security through data encryption mechanisms</li> </ul>



GS Lab | GAVS is a global technology company focused on creating business impact for its 200+ customers across the USA, Europe, the Middle East, and APAC. It offers digital product engineering, AI-led managed services, and digital transformation services to customers across BFSI, healthcare, communications, and high-tech segments. With 4000+ technologists and a strong talent grooming engine, it is a trusted growth partner to its customers.

The company focuses on deep tech engineering skills, innovative win-win business models, and customer success. Its IPs, such as ZIF™, zIrrus, Rhodium, and zDesk, help accelerate technology adoption and reduce inefficiencies in operations.

For more information on how GS Lab | GAVS can help solve your business problems, write to [healthcheck@gavstech.com](mailto:healthcheck@gavstech.com) or visit us at [www.gavstech.com/healthcare](http://www.gavstech.com/healthcare)