



CASE STUDY HEALTHCARE

# DIGITIZING THE PATIENT/ PROVIDER EXPERIENCE

Apexon speeds time-to-market for new digital services; drives big savings

One of the largest healthcare providers and insurers in the U.S. was looking to expand its digital infrastructure and ecosystem to improve care accessibility and effectiveness for its 10 million plus members across hundreds of locations.

The company needed a digital engineering partner to address some key business and technology challenges such as the inability to connect digital health record systems, concerns about patient data security and privacy, and the impersonalization of patient-provider relationships. It also wanted to track the availability and release of controlled substances for pharmacies in its health system to minimize manual errors.



**FOUNDED IN 1945**



**10M+ MEMBERS**



**3 DIVISIONS**



**\$90B+ ANNUAL  
OPERATING REVENUES**



Apexon began work with the company in 2010 and has evolved with the company and worked on many projects during a decade-long relationship that continues to grow. Over this period, Apexon has led the design, development, and delivery of multiple digital solutions, including integrations to the existing hospital and medical practice systems. Some of the projects also included QA and testing of the applications to ensure optimal performance in use. This partnership enabled the company to launch new insight-driven technology initiatives faster, increasing patient satisfaction by easing access to care, and increasing operational efficiency, resulting in over \$5M in cost savings.

# THE CUSTOMER JOURNEY

2014

- Mobile channel focus
- Turnaround times reduced from 5 days to a few hours
- Focus on building the test architecture, frameworks, virtualization, Jenkins integration
- Focus on optimization & ROI

2016

- Became preferred vendor of the company
- Digital engineering services - portal re-design

2017

- CDTS start - Pharmacy OPIP
- Strategic partnership for key initiatives
- eVisits success
- Managed deliverables, outcomes & outcome ownership

2019

- Digital engineering services co-innovation, next-gen technology - blockchain, Alexa
- CIO 100 Award project - Mobile insights
- Managed initiatives - Mobile insights, The members' portal, Member Broker, IoT

## THE RESULTS

# KEY OUTCOMES



### FASTER TIME TO MARKET

for new insight-driven technology initiatives.



### EARLY DELIVERY GAINS

**2.5 Weeks** - Remote Care Interactions Platform.

**2 Weeks** - Corporate Collaboration Platform.

**1.5 Weeks** - Pharmacy Inventory Management Platform.



### OPERATIONAL EFFICIENCY

**20% cost savings** due to elimination of manual processes, resource allocation and SLA for reporting data availability.

**Increased patient satisfaction** due to ease of access to care and improved experience.

## OUR METHODOLOGY

# THE DIGITAL LIFECYCLE

With this company, Apexon worked across all stages of the digital lifecycle on multiple projects for two separate business units.



## GO DIGITAL

### LAUNCH & EXPERIMENT



## BE DIGITAL

### AUTOMATE & ACCELERATE



## EVOLVE DIGITAL

### BE INTELLIGENT & AUTONOMOUS

Enable digital adoption in a quick and agile manner



Build digital infrastructure and foundation for enterprises to scale



Leverage data engineering to make strategic decisions and get digital right every time

In an effort to incorporate digital into patient care, Apexon designed and developed remote care interactions using mobile and wearables devices which allowed care providers and patients to communicate on care and diagnosis remotely.

Apexon also designed and developed a post-care online survey tool for hospital staff to use with patients for Care Follow-up. The project included the development of a survey authoring tool, end-to-end workflow, and a continuous development and release infrastructure to enable more frequent release cycles for new features.

In order to streamline Inventory Management for Controlled Substances Apexon developed an application for automated tracking of the availability and release of controlled substances for pharmacies across this health system.

To provide better data-driven insight, Apexon developed an Operational Analytics solution that consolidated information about patient capacity and staffing from multiple data sources. This dashboard-in-the-cloud connected to the hospital's existing systems and devices, enabling staff in different locations to monitor patient needs and align resources with those needs.

## THE CHALLENGE

# TO INTEGRATE DIGITAL CAPABILITIES



Digital technologies have had an immensely positive impact on the healthcare industry: streamlined operations and lower costs, easier information access enabling better patient care, and groundbreaking new treatments that can be monitored and managed via cloud, mobile and IoT.

This healthcare organization had identified a number of different areas where it wanted to make improvements. Its initial focus was on those use cases where technology could have the greatest impact - for members, doctors, and other staff. But achieving the company's objectives also required the ability to integrate and tune any new digital capabilities within the unique requirements of the organizations' existing IT systems and infrastructure.

## THE SOLUTION

# WORKING AS A TEAM

**This company had a long-standing relationship with Apexon and had worked with the team on a number of important digital initiatives across different business units.**

This experience, combined with Apexon's thought leadership and deep technological expertise had made Apexon its go-to digital services partner. Working together, the company and Apexon identified several key use cases that presented a unique opportunity to provide immediate benefit in the areas of both patient care and resource utilization.

**Some of these digital initiatives included:**



## OPERATIONAL ANALYTICS

Apexon developed an insight-driven platform for both mobile and web to enable collaboration between various operational teams and medical centers. This helped establish performance outcome metrics to create a retrospective scorecard at the patient level. It was highly granular, yet also had the capacity to roll-up to an operational unit level for use by staff.



## REMOTE CARE INTERACTIONS

Apexon created a fully automated and interactive cloud-based voice recognition application platform with a patient-physician, microservice-based interaction model.

This solution minimizes the need for patient visits to the hospital, reducing waiting times for appointments, eliminating human errors in the information gathering process and enriching the overall care experience.





## CARE FOLLOW-UP

Apexon provided the technical expertise to design and develop a Survey Authoring Tool (SAT) to help the provider capture patient feedback on their conditions. This involved working with multiple teams from this large healthcare provider to understand the needs of physicians and clinical team members, define key solution requirements and testing the end-to-end workflow from survey creation to member distribution and access. Apexon also created a continuous development and release infrastructure to enable more frequent release cycles for new features and higher service levels.



## INVENTORY MANAGEMENT FOR CONTROLLED SUBSTANCES

Inventory management and procurement was severely constrained due to a resource and time-intensive process to track and log cycle count of all of its out-patient pharmacy centers manually. This also increased the chances for human error and made it difficult to conduct accurate inventory audits. Apexon developed a mobile and web application infrastructure to automate the cycle count functionality of the pharmacy inventory. The platform was integrated with a handheld scanner device, backend microservices, data consumption protocol, and API design pattern with 3rd party systems such as Supplylogix, ePIMS, and Daily Cycle Count Snapshot database.

### NEXT STEPS

## DEVELOPING NEW INITIATIVES

Apexon is currently working with the client on the development and testing of several new initiatives including one related to safer dispensing of prescriptions and another related to more convenient appointment scheduling.



Apexon is a pure-play digital engineering services firm focused on helping companies accelerate their digital initiatives from strategy and planning through execution. We leverage deep technical expertise, Agile methodologies and data-driven intelligence to modernize systems of engagement and simplify human/tech interaction.

We deliver custom solutions that meet customers' technology needs wherever they are in their digital lifecycle. Backed by Goldman Sachs and Everstone Capital, Apexon works with both large enterprises and emerging innovators — putting digital to work to enable new products and business models, engage with customers in new ways, and create sustainable competitive differentiation.

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### FEELING SOCIAL?

