Avalon Healthcare Solutions: First-of-its-kind cloud service reviews lab charges at lightning speed

Summary Statement
By collaborating with Accenture, Avalon Healthcare Solutions built a first-of-its-kind platform on the Amazon Web Services (AWS) cloud, helping payers reduce unnecessary lab spend while maintaining quality care.

Overview
In the United States, as much as 30 percent of laboratory tests are deemed overused or unnecessary. Avalon Healthcare Solutions, founded in 2013, is a laboratory benefit management company helping payers manage cost and effective use of diagnostic lab tests.

To meet aggressive development time lines, Avalon turned to Accenture for deep knowledge of the health industry and their alliance with Amazon Web Services. The Accenture AWS Business Group (AABG) supported Avalon in the architecture and build of their 100-percent, cloud-based Claims Editor as a Service (CEaaS), which can edit more than 150,000 claims per hour with 99 percent uptime and 99.5 percent accuracy. The solution uses AWS elastic capability to support rapid onboarding of
additional health plans and rising claims volume. In the first three months, average response time for editing claims was approximately 856 milliseconds.

CEaaS has a built-in foundation for analytics that can deliver greater insight over time, thereby helping Avalon clients save by reducing or denying reimbursement for unneeded lab claims based on findings from clinical research.

The Story

Client profile

Headquartered in Tampa, Florida, Avalon Healthcare Solutions develops, deploys and enforces policies for complex laboratory environments. The company, which includes a provider network, combines evidence-based recommendations from its clinical advisory board with innovative information technology solutions to guide delivery of the right lab tests at the right time.

Opportunity

The laboratory industry is exploding with innovation and the ability to evaluate new advances is critical. Avalon's area of expertise is in bringing the science to laboratory policies and the tools to enforce them.

In the United States, more than 8 billion lab tests are performed annually, and up to 30 percent are deemed overused or unnecessary. Underutilization of lab tests can also be problematic as it may increase risks and treatment costs in patients with chronic conditions.

As a startup, Avalon sought to accelerate service delivery, choosing Accenture for deep knowledge of the healthcare industry, technology skills and cloud-based solutions.

Solution

In the initial strategy phase, Accenture helped Avalon executives weigh go-to-market options. Avalon decided to go with a cloud-based platform to avoid an extended timeline and the higher cost of building infrastructure in-house. A service on the cloud, could be rapidly deployed and would not require large outlays of capital—important for startups. The AWS cloud has a history of secure operations, which is essential for health providers and payers complying with strict US privacy guidelines.

On behalf of Avalon, AABG architected and supported the implementation of a first-of-its-kind, 100-percent, cloud-based Claims Editor as a Service (CEaaS). A portal for providers, patients and health plans provides appropriate access to data, claims and prior authorization.

The Accenture and Avalon team developed the detailed business rules and algorithms that enable processing in real time for submitted claims. By fetching member and lab historical data in real-time from Avalon's partners, the service can review claims for lab services, approving or denying, all within the context of an insurer's end-to-end process of evaluating the full range of medical claims.

“Digital innovations enable us to deliver our services to insurers and health payers at blazing speed. Our first-of-its-kind, cloud-based platform can scale up easily as our business grows. This flexible solution will help us reduce unnecessary lab charges based on solid clinical research and provide guidance on appropriate access for improved health outcomes.”

Gordon Sween

Chief Operating Officer

Avalon Healthcare Solutions

Results

AABG helped Avalon roll out the new cloud-based service with lightning speed. The service demonstrated an ability to edit up to 150,000 claims per hour with 99 percent uptime and 99.5 percent accuracy, and response time averages under a second: 856 milliseconds, to be precise.

The cloud-based solution is flexible and can be scaled up easily as demand grows for Avalon's services. The web-based platform is “future proofed,” meaning it can be easily updated depending on changing insurer policies, research findings and regulatory guidelines. It also provides agility for payers to implement specific provider contracts or group benefits.

The service has a built-in foundation for advanced analytics. Growing volumes of digital data can be mined for statistical analysis, which is critically important as new lab tests and treatments continually emerge. Insights arising from statistical analysis are key to Avalon's ability to help clients save by minimizing unnecessary lab tests while maintaining quality care.

1G2 Intelligence 2010; Francisco Partners analysis.
2See, e.g., the Health Insurance Portability and Accountability Act (HIPAA)
The Avalon Claims Editor as a Service (CEaaS)

- Can edit up to 150,000 claims per hour
- 99 percent uptime
- 99.5 percent accuracy
- Response time averages under a second: 856 milliseconds per claim.

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About Accenture AWS Business Group

The Accenture AWS Business Group offers integrated consulting and technology solutions designed to help enterprise clients take advantage of the flexibility and economics of an “as-a-service” operating model where IT and business services are delivered on-demand, via the AWS Cloud. Accenture is a Premier Consulting Partner in the AWS Partner Network (APN) and one of a select few global systems integrators to achieve the recently launched AWS Migration Competency. Accenture is also an audited member of the AWS Managed Service Partner program and was recognized by IDC as a leader in public cloud services, in both Industry Cloud Professional Services and Worldwide Cloud Professional Services, in recent MarketScape reports.

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