

BLUE CROSS BLUE SHIELD OF SOUTH CAROLINA FOUNDATION

PRESIDIO AND AWS DELIVER DATA CAPTURE AND ANALYTICS SOLUTION TO HELP DIABETES FREE SOUTH CAROLINA (DFSC) TRANSFORM THE HEALTH OF CITIZENS AFFECTED BY DIABETES

The Challenge

Diabetes Free South Carolina is a long-term initiative funded by the BlueCross BlueShield of South Carolina Foundation. It aims to reduce disparities and improve the health status of South Carolinians affected by diabetes through prevention, education and care.

More than 13% of adults in South Carolina suffer from diabetes, while another 34.9% of adults in the state have prediabetes. According to DFSC, “Black South Carolinians suffer disproportionately: research shows 16.4% of Black adults have diabetes compared with 11.3% of white adults. Even worse, Black individuals have more than double the risk of dying from diabetes than white individuals.”

DFSC’s mission is to improve the outcomes of diabetes patients in the state, while promoting equity across demographic lines.

The success of an initiative of this magnitude hinges on a tremendous amount of data, and how effectively it can be captured and acted upon in an intelligent manner. However, the DFSC IT team had limited internal bandwidth and relied on legacy systems that were no match for its ambitious goals. Additionally, DFSC’s strategy requires an independent environment outside of the BlueCross BlueShield data ecosystem.

DFSC thus required its own fully supported turnkey solution that included a hosting platform and data and analytics software implementation.

The Solution

DFSC partnered with Presidio and AWS to implement a healthcare sciences-focused data capture and data analytics solution hosted on AWS Cloud Servers. This solution digitally transformed the collection and organization of massive volumes of critical data, while ensuring sensitive health data would be closely protected.

Presidio and AWS built a compliance-based multi-account AWS landing zone. With this new foundation in place, the project team customized and automated the deployment of a new DFSC data capture and data analytics solution.

The data repository and analysis platform contains modules for data transfer, data landing and archiving, structured database, and data analysis. Role-based access allows DFSC staff



members to interact with modules that pertain to their area of responsibility. This structure allows the right DFSC users to easily monitor project progress and analyze and publish outcome data.

To alleviate the strain on DFSC’s IT staff, Presidio’s Cloud Managed Services (CMS) team was engaged prior to go-live to ensure a seamless transition to the ongoing support of the entire solution. Two CMS offerings — Foundations and Operate — are critical to the support, monitoring, and maintenance of the solution.

CMS Foundations

- ◆ 24x7 AWS support and a named Customer Success Manager
- ◆ Well-Architected Reviews
- ◆ Infrastructure event management
- ◆ VMware CloudHealth dashboard for cost visibility and management

CMS Operate

- ◆ Cloud governance
- ◆ Enhanced monitoring
- ◆ Proactive remediation
- ◆ Backup and patch management

The Presidio CMS team monitors and extends the governance of the AWS environment to ensure the solution remains secure. Presidio customized the implementation of AWS Security Hub, Config, GuardDuty, WAF and various other security-focused AWS services.



In addition to the heavy focus on governance, alerting and remediation, the CMS team also provides full monitoring of the data capture and data analytics solution. This support is delivered 24/7/365 by a global team of professionals.

"WE ARE UTILIZING DATA TO IMPROVE THE OUTCOMES OF OUR DIABETES PATIENTS IN SOUTH CAROLINA. WE SAW CHALLENGES WITH ANALYZING THIS DATA RAPIDLY. PRESIDIO WAS ABLE TO ADDRESS THIS CHALLENGE WITH THEIR AWS CLOUD KNOWLEDGE, ATTENTIVE TEAM, AND CLOUD-MANAGED SERVICES OFFERINGS."

- Dr. Arthur Fu, M.D., Ph.D., Data Scientist at Diabetes Free South Carolina

Services & Technology Used

Amazon Web Services, AWS Security Hub, AWS Config, AWS GuardDuty, AWS WAF, AWS Workspaces, AWS Beanstalk, RDS and RedShift, AWS Managed AD, Presidio CMS Foundations, Presidio CMS Operate, Presidio Digital Business Solutions and Services

Results & Benefits

The resulting cloud-based data and analytics solution is essential for DFSC to achieve its mission of prevention, education, care, and equity as it pertains to diabetes in South Carolina. The solution is:

- ◆ Secure — Private health information is protected, and user access is strictly governed.
- ◆ Scalable — Designed to ingest and analyze massive data volumes at high velocity.
- ◆ Low Impact — Presidio Cloud Managed Services removes any strain on Internal IT resources.

Partners



About Presidio

Presidio is a global digital services and solutions provider accelerating business transformation through secured technology modernization. Highly skilled teams of engineers and solutions architects with deep expertise across cloud, security, networking, and modern data center infrastructure help customers acquire, deploy, and operate technology that delivers impactful business outcomes. Presidio is a trusted strategic advisor with a flexible full life cycle model of professional, managed, and support and staffing services to help execute, secure, operationalize and maintain technology solutions. For more information visit www.presidio.com.

About BlueCross BlueShield of South Carolina

Headquartered in Columbia and operating in South Carolina for 75 years, BlueCross BlueShield of South Carolina is an independent licensee of the Blue Cross Blue Shield Association. The only South Carolina-owned and -operated health insurance carrier, BlueCross BlueShield of South Carolina comprises more than 20 companies involved in health insurance services, U.S. Department of Defense health program and Medicare contracts, other insurance and employee benefits services, and a philanthropic foundation that funds programs to improve health care and access to health care for South Carolinians.

About Diabetes Free South Carolina

Diabetes Free SC (DFSC) is a long-term, statewide initiative that aims to transform the health of South Carolinians, with a particular emphasis on promoting equity, and reducing disparities in access and quality of diabetes prevention, education, and care. Launched in 2020, a key aim of this effort is to support and align existing efforts against diabetes, in order to gain efficiencies of scale and foster collaboration.

In addition, DFSC aims for statewide, population-level change through innovative strategies that take maximum advantage of new technologies. Since diabetes does silent damage to the human body over years or decades, we focus on early interventions to prolong healthy life. Funding for DFSC projects is from the BlueCross BlueShield of South Carolina Foundation; accordingly, there is a major focus on health disparities and on improved health for under-resourced communities.

For more information on how we connect IT of today to IT of tomorrow, visit presidio.com