Case Study: IHPA

Finding a better way to help fund our hospitals

IHPA (the Independent Hospital Pricing Authority) is an independent government agency established to contribute to significant reforms that improve Australian public hospitals. A major component of these reforms is the implementation of national Activity Based Funding (ABF) for Australian public hospitals. IHPA relies on a range of data to undertake its functions. This includes de-identified patient-level activity and cost data from public and private healthcare services in Australia. The data is subject to the secrecy provisions in the National Health Reform Act 2011, which circumscribe the use and disclosure of the data. To ensure that IHPA meets its obligations under the Act, IHPA needs to ensure that data is being managed appropriately to prevent unauthorised disclosure of sensitive data.

Challenge

- A data management system weighed down by many disparate data-collection processes across multiple platforms.
- A slow, complicated and expensive platform that prevented IHPA staff from being able to update critical data and update data validation rules in a timely manner.
- Limitations around data visibility and analysis.

Solution

- A cloud-based, Big Data platform, with additional layers of controls to ensure patient confidentiality. Ongoing DXC management of the environment.
- The solution was designed to meet the key 35 requirements from the Australian Government Information Security Manual (ISM) and was subsequently reviewed and approved by third party security assessors against these requirements.
- The first AWS-based, Big Data deal to go through the Australian Government’s Cloud Services Panel.

IHPA experienced lengthy and costly delays with their legacy data management solution. The data latency and overhead management of this prohibited staff from timely updating of critical data and validation rules, meaning data errors could not be detected at the time of data submission, leading to delays in finalising data sets.

Solution

Facing an aggressive time frame, DXC Technology (DXC) worked with Amazon Web Services (AWS) and other partners to create a managed, cloud-based, Big Data platform, with tight security controls at all layers. It includes a new portal that state health departments log onto to submit their data. This data passes through complex data validation, with
interactive progress reporting, before being loaded into the data store.

DXC brought together expertise from its AWS, Big Data & Analytics and Cybersecurity teams to design and develop the solution, including the complex web application component for the portal. The DXC team worked hand-in-hand with associates at IHPA.

“We were embedded with the IHPA data scientists to get the job done,” says Brad McKendry, client sales executive.

“The team approach was essential to achieving the outcome. We put people on site. We were on the same page very early with IHPA about the structure and focus of the team.”

The various DXC teams had worked on projects together before, but not with this sort of focus, with such aggressive time frames or with the same demands. It set a new precedent for DXC. The IHPA project was also the first AWS-based Big Data deal to go through the Australian Government Cloud Services Panel.

Results

The IHPA now has a modern, inexpensive and scalable data storage platform with multi-layered security. Its user base – state and territory health departments – can load files, follow the progress of their verification and even get status reports.

The time it takes the states and territories to load data has gone from weeks to minutes. It’s just as important for IHPA that the platform allows for on-demand capacity. With four major data loads a year, the system can flex to meet IHPA’s peaks. This variable capacity helps IHPA manage its costs.

IHPA staff no longer need to transport encrypted hard drives to load data. The new automated system allows all users access to their data via the portal, which improves transparency for everyone.

“There has been a massive boost in the functionality IHPA provides to its users on one end, and to recipients of the data at the other end,” says McKendry.

“And that’s its core function as an organisation – providing the right information and advice to people who make decisions about funding.”

A massive amount of data goes into this environment – more than 250 gigabytes in the first six weeks of operation – and there are many data classification rules about how it needs to look to ensure national consistency of the data and resulting analysis. All these rules are built into the new platform. Once the data is loaded into the data warehouse, it is ready for statistical analysis.

“This data goes to many government departments, and national funding bodies,” says McKendry. “Eventually, it helps to determine how much money the Federal Government is going to give our hospitals. It is critical data.”

The infrastructure-related costs of this IHPA solution are less than half what would be expected for a traditional on-premise environment.

From the day IHPA signed the contract, to the day the new portal went live with the first portal – accepting data submissions – was six months and one day, exceeding the expectations of IHPA. The AWS platform was critical to meeting the cost, timeline and capability needs of IHPA.

About DXC Technology

DXC Technology (NYSE: DXC) is the world’s leading independent, end-to-end IT services company, helping clients harness the power of innovation to thrive on change. Created by the merger of CSC and the Enterprise Services business of Hewlett Packard Enterprise, DXC Technology serves nearly 6,000 private and public sector clients across 70 countries. The company’s technology independence, global talent and extensive partner network combine to deliver powerful next-generation IT services and solutions. DXC Technology is recognized among the best corporate citizens globally. For more information, visit www.dxc.technology.