

## Steward Health Care Transforms Care Through Digital Innovation.

Steward Health Care has been at the forefront of using technology to make healthcare better. With a network of hospitals and clinics across North America and Europe, Steward Health Care wanted to improve operational efficiency by reducing patient length of stay at its facilities. The organisation needed a modern IT platform to provide pervasive intelligence at scale, so it partnered with Insight's Digital Innovation team to pilot a new length of stay monitoring system.

### The Challenge

Steward Health Care wanted to reduce patient length of stay and improve the overall patient experience.

The organisation found the balance was off between a patient's length of stay and them receiving clinical care, and administrative inefficiencies meant a significant amount of downtime. For example, the time taken for a lab result to come back and when the doctor would then see the patient, or when the decision was made that the patient could be discharged and then the patient actually was discharged.

They decided to approach Insight to build a pilot application for a length of stay monitoring system that aimed to drive a better quality of care while managing their hospitals more cost effectively.

Insight needed to construct a robust, unified data platform to conform and host data from dozens of production systems. Additionally, an array of highly secure applications was needed to provide visibility and intelligence — from the hospital floor to the C-suite.



### Quick Overview

Together with Insight, Steward Health Care created a pervasive platform for intelligence and decision support, which helped the organisation rethink its approach to patient management and transform the way it does business.

By embracing the cloud from the onset, Steward Health Care was able to leverage the elasticity and cost savings of a more agile environment — and strategically apply powerful analytics to every part of the business, from volume prediction and staffing to billing and claims.

“The providers are happier about it. The patients are happier about it. And our length of stay has dropped by about a day and a half since we started doing this initiative.”

Laura Tortorella, Executive Vice President of Operations at Steward Health Care.

## The Solution

The Digital Innovation team proposed a combined solution that would take advantage of Microsoft Azure® native Role-Based Access Control (RBAC) and encryption to provide HIPAA-compliant security at every level, leveraging cloud-enabled real-time business data and analytics.

Using the length-of-stay monitoring system, Steward Health Care was able to identify and address crucial time gaps in patient care.

Inefficiencies included downtime between lab results and provider consultations and between when patients were cleared to go home and when they were finally discharged.

“The organisation reprioritised its patients. They were able to flag when a patient could go home and have the ability to page providers.”

For example, a provider may visit his or her first patient of the day, order a test and then move on to the next patient. When the results of the test come back, administration can page the provider so they can return to that patient and review the test results in a timely manner.

“We are now at a point where we can predict with a 98% accuracy our census out to a week and continue to improve beyond that.”

City Police Sergeant

## The Benefits

The new monitoring system had a waterfall effect that did more than reduce patient length of stay. With the cumulative data collected and analysed from every department and health centre, Steward Health Care was able to adapt its length-of-stay model to staffing as well — one of the greatest operational expenses for health centres.

The data-driven staffing model took the guesswork out of scheduling. Steward can dynamically staff every unit of every floor of every hospital. Administrators know in advance which patients are coming and which clinical capabilities they’ll need to have on the floor for an optimised workforce.

They can now predict, with a 98% accuracy, their census out to a week — seven days — and continue to improve beyond that.

With an optimised workforce, Steward Health Care is able to meet the needs of the communities it serves more effectively, and with a deep commitment to digital innovation, it has led to multiple care and financial improvements, saving millions of dollars per hospital, per year.

## The Results Highlights



Millions of dollars in cost savings per hospital, per year.



98% accurate prediction of patient load out to a week at a time.



Reduced patient length of stay by 1.5 days.



Reduced operational costs and predictable staffing.