Alberta Health Services Transforms Data into Business Intelligence

Alberta Health Services
Canada

Alberta Health Services (AHS) is Canada's first and largest provincewide, fully integrated health system, serving more than 4 million people in Alberta and some residents of Saskatchewan and the Northwest Territories. More than 108,000 AHS employees work at 650 hospitals, clinics, and other medical facilities in urban and rural areas. The health authority's 5,600 emergency medical services (EMS) professionals support more than 500,000 emergency and transfer calls each year.

AHS requires accurate, current data to make strategic decisions that keep residents safe while wisely investing scarce resources. The organization must also provide complete transparency and accuracy to government leaders, the public, news media, and other stakeholders.

AHS EMS utilized disparate systems, so data was not unified or easily accessible. Data definitions varied widely and reports were inconsistent. Without standardized processes, staff did what made the most sense at the time, producing wildly different results. They also spent so much time chasing down and verifying data that reporting became nearly impossible.

Simplifying the Reporting Process

AHS uses Hexagon's industry-leading computer-aided dispatch (CAD) software for its provincial EMS dispatching system. This positive experience led AHS to later select Hexagon's business intelligence solution to address its

demand for accurate, timely, and highly consistent complex data reporting.

"We needed a single system that could accommodate all CAD data in one repository to which we could apply standardized business intelligence setups and rules," said Darrel Anderson, EMS senior performance strategist at AHS.

Hexagon's system has dramatically expanded AHS's data management and reporting capabilities, while enhancing its ability to make strategic decisions. The solution puts accurate, detailed, and real-time data at users' fingertips and allows staff to quickly and easily run standard or custom reports.

"The business intelligence system has made our relatively small department 10 times more productive – with the main focus on integrating data from the various systems, acquiring more data, improving access to the data, and consistently improving the standardization of the definitions and reporting," Anderson said.

For example, there are 36 ways to count events in the dispatch system. With the new business intelligence solution, the AHS EMS team responsible for system performance and improvement can create rules and standard filters that produce comparable data to deliver relevant results.

"Never underestimate the value and benefit of working with agreed upon standards and methodologies," Anderson said. "It puts everyone on the same page, whether the individuals involved are internal or external."

With the new system, AHS EMS staff distribute 150-200 daily reports. AHS EMS business units rely on daily, weekly, and monthly reporting to assess performance against benchmarks and identify opportunities for improvement.

Staff then use modeling tools to forecast outcomes of actions, such as adding resources, altering supply-side management strategies, or realigning schedules. These actions deliver tangible, measurable returns.

"Hexagon's business intelligence software is now central to our organization's core business functions because it integrates our data, targets areas requiring action, and supports quality decision-making," said Jim Garland, associate executive director of EMS dispatch communications and deployment at AHS.

"AHS EMS data and reports represent the source of truth with respect to EMS performance that allows managers to be confident when making decisions."

Improving Organizational Peformance

For example, chute times in one small area of EMS decreased by 50%, even though reporting was the only new action taken.

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> *EMS Senior Performance Strategist*
> *Alberta Health Services*

"Looking at the performance metrics tells people that what they're doing matters and that people care," Anderson said. "It makes all the difference."

Exception reporting considers length intervals, including response, chute, and activation times. With more history and detail, AHS can better determine the root cause of extended intervals caused by weather, holidays, or recurring special events.

AHS EMS has always been responsible to its stakeholders because its performance and employees are constantly in the public eye. Staff members regularly address government representatives, the media, and the public. With reports and data from Hexagon's business intelligence solution, EMS management can now address misconceptions and assumptions with facts.

AHS's data-savvy management team understands reporting is like peeling back the layers of an onion to reveal what's inside. As staff continue to work with data, they will better understand how to improve performance and keep people and communities safe.

"The fact that Hexagon's business intelligence technology continues to evolve to accommodate our needs and growth ensures it will be effective and sustainable over the long term," Garland said.