SA Health: Optimizing Hospital Patient Flow with SAP® BusinessObjects™ Dashboards Software

Addressing patient flow and managing hospital capacity is a critical issue for hospital management professionals. Using SAP® BusinessObjects™ Dashboards software to provide real-time status information and reporting of hospital services, South Australia Health is enhancing hospital-wide information transparency to help patient flow management.
Executive overview

**BUSINESS TRANSFORMATION**

**The company’s top objectives**
- Improve and modernize reporting of hospital status information to manage patient flow
- Display real-time information from multiple sources in a clear and user-friendly way
- Empower hospital administrators with real-time data

**The resolution**
- Implemented SAP® BusinessObjects™ Dashboards software to create patient flow dashboards
- Prioritized the emergency department dashboard, then delivered waiting list dashboards for inpatients and elective surgery
- Engaged with hospital end users to define information format

**The key benefits**
- Improved management of patient flow across metropolitan and rural hospitals
- Widespread use by external health agencies
- Access to real-time data for improved transparency and reporting

“The new business intelligence enabled by SAP software gives our hospitals unprecedented visibility of bed availability, patient flow, and waiting times – in near-real time.”

Eleanor Royle, Project Manager, Corporate Systems Development, South Australia Health

**TOP BENEFITS ACHIEVED**

- **30 minutes**
  Patient data refreshment cycle
- **4–6 weeks**
  Reduction in wait time for performance measurement information
- **75%**
  Elimination of data gathering time

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**Company**
South Australia Health

**Headquarters**
South Australia, Australia

**Industry**
Life sciences – healthcare

**Products and Services**
Complete healthcare services delivery

**Employees**
29,000

**Revenue**
AU$3.454 billion
(US$3.476 billion)

**Web Site**
www.health.sa.gov.au
Improving patient flow management capabilities

South Australia Health (SA Health) provides world-class healthcare to communities across the state of South Australia. The organization’s eight metropolitan hospitals provide high-quality care to residents of Adelaide. At the same time, the organization also operates a network of hospitals and health services for residents in 67 rural locations. SA Health is committed to transforming health services and providing leadership in health reform. As part of its 10-year plan, SA Health will open Australia’s most advanced hospital in 2016, make significant new investments in hospitals across the region, provide better coordinated hospital services, and alleviate the pressure on emergency departments.

Using SAP® BusinessObjects™ business intelligence (BI) solutions since 2001, the administrators of SA Health already benefited from operational business intelligence and standardized monthly reporting. However, they were heavily reliant on manual data-processing procedures. Information captured on inpatient and emergency department activity took between two to six weeks to be translated into real business intelligence. The same applied to elective surgery waiting lists from each of its health districts. The most up-to-date hospital data was always at least one month old.

With Australian government grant funding available to improve access to hospital services, SA Health realized that the time had come to improve its patient flow management capabilities. By providing real-time information on bed availability and waiting times in its emergency departments, and for elective surgery across its metropolitan and rural hospitals, SA Health could also enhance access to its services.
Using SAP software for crystal clear reporting

To analyze bed availability, waiting times in emergency departments, and waiting lists for elective surgery, SA Health needed to provide real-time reporting of hospital services status information. Having secured government funding with strict implementation conditions, SA Health had a two-year window for improving access to its hospital services.

SA Health selected SAP BusinessObjects Dashboards software to improve its management of patient flow and provide real-time hospital status visibility. Enabling data to be validated against hospital systems, the software displays complex information as clear data. With automatic data-refresh capabilities from the source, the software eliminates the need for user intervention.

With considerable time constraints on the project, the scope of the dashboards was deliberately restricted by SA Health to organization-wide patient flow analysis. “To achieve an optimal result from the implementation, we consulted with key users at the hospitals, who were given pivotal roles on the project steering committee as well as other areas of governance,” comments Eleanor Royle, project manager of the corporate systems development section.

“We also had plans to make the dashboards available to the general public and to our end-user audience of almost 1.5 million South Australian residents. This meant that our dashboards had to be universally accessible, easy to use, and free of any logon requirements,” continues Royle.

Following best usability practices, the implementation team restricted the number of mouse clicks required to access the data by utilizing hover tips and providing a detailed metadata definition guide.
Healthier access to data for improved patient flow

SA Health now delivers real transparency across its healthcare services. It uses data sourced from eight emergency department systems, the state-wide clinical system, and 12 patient-administration systems, as well as the SA Ambulance computer-aided dispatch system.

Patient data is updated every 30 minutes, giving healthcare workers and the general public alike information on bed occupancy, average length of stay, and the number of patients in each of the hospitals. The emergency department dashboard provides up-to-date patient flow and capacity data, which helps hospital employees to monitor and manage the patient flow.

Prior to implementation, hospital executives were spending between two and five days per month investigating performance against key performance indicators, and reports were made some two to six weeks after data collection. Now, this reporting uses near-real-time data and has freed up executives to focus on hospital performance.

KEY BENEFITS

- **30 minutes** Patient data refreshment cycle
- **4–6 weeks** Reduction in wait time for performance measurement information
- **75%** Elimination of data gathering time
A prognosis for even greater access

While the project scope was quite narrow because of the government mandate, future developments may, however, provide real-time information for healthcare fields that require specific and discrete procedures.

“Looking ahead, future implementations of SAP BusinessObjects Dashboards will focus on providing real-time information for different specialties and patient types,” comments Royle. “Specialties such as mental health services or perinatal care for women and newborns each require very specific protocols. We can envisage setting up dashboards to provide hospital personnel who work on these specific groups of patients with the information they need to maximize the quality of care provided while also improving efficiency.”