



MATER HEALTH SERVICES GAINS INTELLIGENT INSIGHT TO PREDICT FUTURE STAFFING AND TRAINING DEMANDS FOR SMARTER WORKFORCE PLANNING



OVERVIEW

■ THE NEED

Mater Hospital required a solution which could help its management identify gaps in the organisation's future ability to confidently resource quality patient healthcare requirements.

■ THE SOLUTION

A workforce planning and analytics solution to sustain the organisation's ongoing ability in support of the highest quality of care and service to the community.

■ WHAT MAKES IT SMART

- Predictive analytics enable 'What-If' scenario planning.
- Granular detail down to job role, skill and location.
- Drive the delivery of new learning programs with tertiary institutions.

■ THE RESULT

Visibility of data for important workforce decisions, including scenario planning down to individual hospital ward levels.

About Mater Hospital, Brisbane

Mater Health Services (Mater) is one of the largest private health service providers in Australia. The organisation operates a network of seven hospitals which employ 7,500 staff and volunteers and provide care to some 500,000 people each year. Indeed, one in six people born in Queensland enter the world through Mater's hospital facilities, delivering more than 10,500 babies every year.

Demographic Dynamics

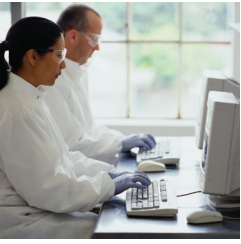
In the past, Australian industries have attracted 160,000 net new entrants to the workforce annually. Recently this figure began to drop significantly and the Australian Healthcare industry now recognises that this is the beginning of a decline in the numbers joining its ranks and an significant increase in retiring nurses and midwives. Indeed, the industry faces a shortfall of more than 14,000* nurses nationally by 2010. The problem is accentuated by an aging population which has an increasing demand for health and aged care services.

As Caroline Hudson, Mater's Executive Director of People and Learning, says, "These figures have certainly been a wake up call to the industry. At the same time, we're working in an industry which has a long lead time in being able to place a healthcare worker. It can take several years to create a program with a tertiary education institution and then it can take several years to train individuals in their own clinical speciality."

Mater predicts that by 2012 it will start to see a gap in its ability to meet demand.

As a result, workforce planning is high on the agenda and Mater set out during 2008 to find a solution which could help it to forecast and plan for gaps in the size and scale of its workforce and the critical periods over the next 20 years in which acute shortages may hit.

Like many other healthcare providers at the time, Mater was using multiple decision-support tools with different sets of rules to measure attrition. These had no consistency in their presentation of data and were typically spreadsheet driven. As a result, there was uncertainty and conflict when determining if the data was accurate.



The time had come for the organisation to implement a workforce planning solution which would provide the organisation with a single source of the truth, an ability to benchmark targets and provide Mater's decision-makers with easily understood information to plan for job role requirements – from doctors, midwives, nurses and allied health professionals through to the organisation's valued army of volunteers.

Smart Decision Making

The decision to partner with IBM Cognos for workforce planning followed an organisational review of several industry solutions. However, only IBM Cognos was able to provide the customisation, scalability and robust reporting, along with the essential implementation services, required for long-term scenario planning and workforce management.

IBM Cognos 8 Workforce Performance software is a key component of IBM's approach to information management, where industry-specific software and consulting services are geared to helping clients use information as a strategic asset across their businesses.

Mater was already a user of IBM Cognos solutions, however, the pressing requirement presented a number of technical challenges, including the need to leverage existing Mater data, connect previously isolated data, and calculate new metrics. In addition, any workforce supply and demand tool needed to aggregate both numeric and text information.

The response to this business imperative was a Workforce Planning solution with two key parts – Attrition Reporting and a Workforce Supply and Demand tool. The former, using IBM Cognos 8 BI, provides a picture of the size and composition of the Mater's workforce. There are many hundreds of different roles at the Mater, from front-line nursing and medical staff, to associated therapies staff and medical services, accommodation and hotel staff, and finance and administration. Prior to the creation of Attrition Reporting, the Mater had no real visibility of how many staff it required for the future and accessible detail about who was leaving or joining the Mater.

Once this information was obtained, the next task was to use this as a basis for the second part of the solution - forecasting into the future. For example, if the current rate of attrition in particular groups continued into the future, what programs and strategies did Mater need to put in place to minimise potential major issues?

Additionally, as Mater is not a static organisation, it needed to understand the additional human resource requirements that could arise. To solve this problem, Mater used IBM Cognos Planning and joined two data sources – Attrition Reporting and the existing Mater Finance Budgeting application. The result was a picture of demand gaps that require filling at the individual ward level as well as by job role.

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– Caroline Hudson, Mater's Executive Director of People and Learning



To assist with this technical complexity, Mater partnered with IBM Cognos Lab Services. The Attrition Reporting was created first, over four weeks. IBM Cognos Lab Services engaged Mater in design workshops and then built the application from scratch whilst also providing project management. The Workforce Supply and Demand application took eight weeks, including two weeks of prototyping the application with key Mater stakeholders. It took six weeks to build the application from scratch, connect it to other applications at the Mater and provide knowledge transfer.

Intelligent Planning for Tomorrow's Workforce

With deployment complete, the power of the IBM Cognos workforce planning solution enables Mater to plan for the future of its workforce.

"We can now extract bottom-line data to identify trends which will then put us on the front foot to react quickly and adjust staffing as needed. Indeed, we have a 99.8 percent confidence in the data being robust. This will provide our organisation with intelligent, actionable information that drives consistent, timely care and sound business decisions that health plans need today," says Hudson.

In the future, Mater will be able to model data which can then be fed into the design of learning and development programs at tertiary institutions, enabling the industry to train the right people for the right job at the right time. This will result in the industry's ability to attract qualified staff directly matching a particular skill in demand at a certain point in time.

IBM Cognos will also help the organisation forecast more immediate skills requirements resulting in Mater's ability to rapidly drive new learning programs for its current staff and cross train in new roles and functions.

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"We now have a strategic conversation at the board level and we have a whole of campus view of the business. We realised the value of working with a vendor which has a strong customer orientation which is nothing short of extraordinary. The decision to go with IBM Cognos Workforce Performance products and services was strategic for us especially since its acquisition by IBM, which we knew would provide us with peace of mind in terms of ongoing development of the toolset itself. IBM Cognos provided valuable design advice, adding value to the tool that we had not included in the original design specifications," says Hudson.

Any organisation with a large homogenous workforce could benefit from this granular view and manage it on a monthly or an annual view in order to safeguard their organisation's long-term future," says Hudson.

* Australian Health Workforce Advisory Committee

Interconnected

IBM Cognos integrates Mater's disparate systems, including Finance Budgeting and Forecasting (FinOps), Attrition Reporting (HR) and Workforce Planning, providing greater insight and accuracy for better decisions for workforce planning for the next 20 years.

Instrumented

The system leverages the work of others across the organisation, eliminating the need to manually input data more than once, ie, data from Finance Operations. Attrition reporting is calculated via Mater's payroll system and Workforce Planning information is obtained from staff recruitments plans across the ecosystem.

Intelligent

The new system provides information about staff vacancies, by department, for both current needs and future requirements. Future plans may include the capability to measure requirements for number of beds and patients required by Mater Health Services.

Business Benefits

- *Better able to predict future demand for nurses, doctors and their entire health care workforce, improving the provision of future patient care*
- *Confidence in attrition data is up from 70 per cent to 99.8 per cent.*
- *Visibility of data for important workforce decisions, including scenario planning*
- *User feedback has been extremely positive*

Solution Components

- *IBM Cognos 8 Workforce Planning and Performance*
- *IBM Cognos Lab Services*



For more information

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