

> Wesley Hospital Back Rehabilitation Centre

Australian hospital strengthens patient monitoring capabilities

Situation

The Wesley Hospital Back Rehabilitation Centre is the largest private hospital in Queensland, Australia. It is also the only Australian hospital to have won the Australian Quality Award—Australia's equivalent of the U.S. Malcolm Baldrige National Quality Award. The Wesley Hospital treats more than 60,000 patients annually and has a staff of more than 1,500.

Critical issue

Wesley Hospital offers a 10-day rehabilitation program for patients who have had surgery, suffer from unresolved or recurrent episodes of back pain or are unable to return to work. Staff must record a staggering amount of information for each patient. Because this information was captured in hard copy form until mid-2002, annually finding and sorting through patient files was a time-consuming and laborious process; one which made it difficult to truly evaluate patients' individual progress and nearly impossible to measure the program's overall success.

Solution

The Wesley Back Rehabilitation Clinic turned to PASW Statistics to establish a patient database. Hospital staff can now enter patient data and retrieve it from one central database, allowing quick and easy analysis of patient performance. They can also analyze metrics relating to all patients to assess the overall success of the rehabilitation program.

Results

- Enabled hospital staff to quickly retrieve and analyze patient data
- Provided quantitative proof of the program's success

** PASW Statistics, formerly called SPSS Statistics, is part of SPSS Inc.'s Predictive Analytics Software portfolio.*

At a glance

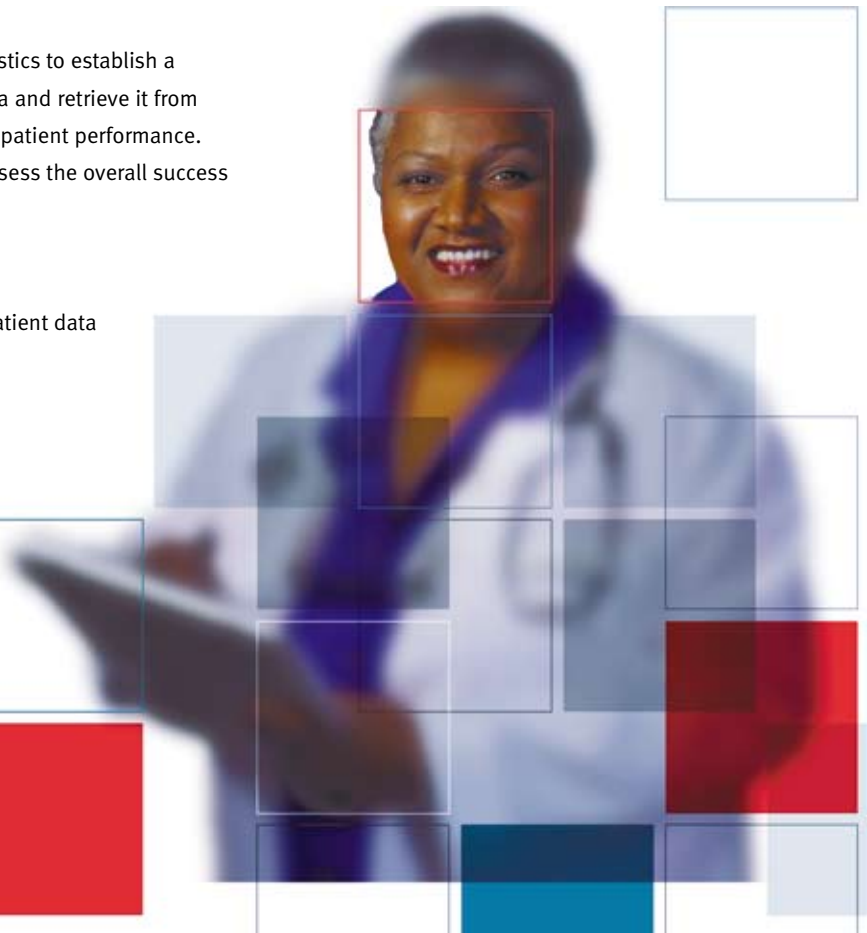
Wesley Hospital
Country: Australia
Industry: Healthcare
Founded: 1977
Status: Non-Profit
Employees: 1,500

Application

Process improvement

Solutions used

PASW® Statistics*



■ Process improvement

The Wesley Hospital Back Rehabilitation Centre is proof that both quantity and quality can co-exist in medicine. It is the largest private hospital in Queensland, Australia. With 430 beds, 60,000 patients annually and a staff of more than 1,500, it offers the state's most comprehensive range of private medical facilities. Due in no small part to its highly qualified and caring staff, the Wesley Hospital is also the only Australian hospital to have won the Australian Quality Award—Australia's equivalent of the prestigious U.S. Malcolm Baldrige National Quality Award.

Led by Kay McGrory, clinical coordinator, the Wesley Hospital offers a 10-day back rehabilitation program for patients who have had surgery, suffer from unresolved or recurrent episodes of back pain or are unable to return to work. The program uses a multi-faceted treatment regimen with emphasis on physical conditioning, education, and a cognitive behavioral approach to pain management.

Programs may be individually tailored according to patients' needs. Benefits include enhanced recovery, improved physical and mental well-being, and increased self-esteem and confidence.

The amount of information that the hospital staff must collect on each patient, particularly given that the number of patients per month total between 60 and 90, is staggering. In addition to age, gender, education, occupation, and type and extent of injury, they also gather data on the following physical and mental parameters, each assessed by a battery of tests:

- Psychological state
- Perception of disability
- Pain levels
- Medication intake
- Bilateral lifting tolerances
- Sitting, standing, and walking tolerances



■ Process improvement

They record this data at four time points: (1) at admission; (2) at the program's completion; (3) after three-months; and (4) after six-months. Until mid-2002, these records were kept as hard copies.

Manually sifting through the records to evaluate an individual's progress was time consuming and laborious. In addition to the sheer volume of records, this process was made even more difficult because patient records from the various time points were not filed together. And as a result of the manual nature of the record keeping, it was all but impossible to judge the overall impact of the hospital program.

Kay McGrory turned to Data Edge consultant Brian Maclachlan. After extensive consultation with hospital staff, Brian recommended that the hospital use PASW Statistics to create a comprehensive patient database.

"While I have used other products, I have remained loyal to PASW Statistics because the Windows version is so easy to use," Maclachlan said. "The first class technical support and training makes me confident in recommending SPSS Inc. products because I know my clients will get the same level of support and continue to be happy with the work I have done."

Maclachlan created a database for each point of collection in the treatment process, describing each patient based on more than 400 variables. He then merged the files into a single file spanning the entire treatment process, using a unique patient identification number.

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– *Brian Maclachlan*
Consultant
Data Edge

Enabled hospital staff to quickly retrieve and analyze patient data

With PASW Statistics installed, hospital staff can now retrieve an individual's records by simply inputting the patient's identification number into the system. They can view all the parameters, e.g., pain levels, over the duration of the patient treatment process, from admission to the six-month follow up. And they can view patients by a specific parameter, e.g., patients with lumbar pain, to compare patients with the same problems, and identify potential patterns.



“Without the assistance of Brian Maclachlan and SPSS Inc., none of this would have been possible.”

– Kay McGrory
Clinical Coordinator
Wesley Hospital Back Rehabilitation Centre

Provided quantitative proof of the program's success

Having all patient files located in a single database made it easy to evaluate the overall performance of the back rehabilitation program. McGrory's team was able to create key performance indicators (KPIs) to evaluate the program on a regular basis. For instance, McGrory uses workload—the number of patients admitted to the program at any one time—as a KPI to help justify her unit's allotment of resources.

In a recent senior management meeting, McGrory used the SPSS TableLooks™ module to visually demonstrate the Back Rehabilitation Centre's high level of success. Hospital management was so impressed that they presented her program with the 2003 Quality Award “in recognition of demonstrating improved workplace performance,” and are expanding her treatment program to include new programs such as pain management.

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