



Sacred Heart Medical Center

Planning for the future with SAS® Business Intelligence

As a population center in the sparsely inhabited northwestern United States, Spokane, Washington is a hub of resources for an area loosely anchored by Seattle, Minneapolis and Chicago. Residents of parts of Washington, Oregon, Idaho, Montana and British Columbia rely on Spokane as a center for commerce, culture and, especially, healthcare.

Sacred Heart Medical Center in Spokane, therefore, serves a territory that covers a remarkable range, demographically as well as geographically. And if long-range facilities planning is difficult, at best, for any hospital, for Sacred Heart it represents a particular challenge. “You’re looking at tremendous dollar amounts to build new facilities to handle demand for services 10 to 20 years in the future,” explains Melvin Ott, PhD, Sacred Heart’s director of data administration. To achieve the analytical power it needs for reliable planning, Sacred Heart turned to SAS.

Sacred Heart, a 623-bed Sisters of Providence hospital, relies on business intelligence from SAS to enhance applications that perform functions such as retrieving data for long-term planning. SAS was used to track historical insurance collections to ensure proper payment, resulting in more than \$1 million in insurance underpayments in one instance. That kind of intelligence helps the facility continue to provide services that include cardiac procedures, cancer treatments, organ transplant, psychiatric care, and health education and promotion.

“Mel used SAS software to do a frequency analysis of patient volumes with our nursing staff guidelines to develop new guidelines and a monitoring system that has enabled our nursing units to meet budget year to date in 2002,” according to Mike Wilson, president and chief operating officer at Sacred Heart. Sacred Heart’s main online data source is the proprietary Meditech system, which manages data relating to admitting, discharging and transferring patients. Meditech holds procedure and diagnostic codes as well as patient demographics. Given that Sacred Heart recorded over 23,000 inpatient discharges in 2001 alone, the volume of data available approaches the unimaginable.

“The ER, same-day surgery care and all the other lab, surgery and radiology services – many of them done on an outpatient basis – are in our database, too,” Ott explains. “And we track it for multiple years.”

SAS builds case for \$150 million bond measure

SAS helps Ott’s group root around inside that system and withdraw nuggets of business intelligence — such as the data used to support a \$150 million hospital expansion.

“We used SAS in the analysis to project population demand for healthcare services for the next 20 years,” Ott says. “We needed to see how the demographics would change because the population isn’t really growing a

Industry	Healthcare
Business Issue	Interpret thousands upon thousands of patient data elements into intelligence that will help the hospital leadership meet the demands of the future
Solution	SAS helps management generate reports dynamically for quick, easy access to all of the answers they need about patients, procedures and payments
Benefits	Funding for facilities expansion and savings of more than a million dollars in insurance underpayments

lot, but it's getting older." And that means more demand for healthcare.

A major revelation was the prediction that the demand for cardiac services in this aging population group would increase by 50-60 percent over 20 years.

"We're also opening a children's hospital, so we're going to be operating Sacred Heart Children's Hospital within Sacred Heart Medical Center," Ott explains. "We're making space for physicians to have offices within the facility and, in turn, that creates greater demand and more specialty services."

Using SAS, Ott's group has built a market database that will provide the chief operating officer of the Children's Hospital with the information he needs to determine what portion of the children's population in the region relies on Sacred Heart Children's Hospital.

"If he sees that we've got a market in a certain area and we're not getting a large part of it, he may decide that we need to open a clinic in that area," Ott explains. "It's proactive marketing."

Sacred Heart striving for Solucient 100 status

With SAS, Ott's group not only delivers data to the medical center's administration, but also enables them to run instant reports off the intranet.

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Melvin Ott

Director of Data Administration
Sacred Heart Medical Center

"From the Web page, you can activate a query that will reach out to the database and populate a response along with comparisons with other hospitals in the state of Washington," Ott says. "You can compare mortality rates, and you can see how you perform compared to other hospitals in the state relative to what you charge for lab, radiology and pharmacy services. You need to know where you stand out. If you're exceeding the norm for other hospitals, you certainly want to know that."

Such comparisons open the door to improvements in business practices and patient care, all building to a level of quality that is designed to place Sacred Heart in the Solucient 100 Top Hospitals list — the recognized benchmark for measuring achievement and performance, Ott says.

SAS assures millions in insurance payments

SAS has helped Sacred Heart perform financial analysis by payor to make sure Medicare, Medicaid and private insurers are paying according to contract; the results are kept up-to-date — and online. "The benefit is being able to see which payors are reimbursing you above your cost," Ott says. "In some instances, we've discovered that the payors were reimbursing us improperly, and we were able to recover some past payments from them."

As a result of reviewing payor reimbursements, SAS has helped the hospital save over \$1 million from a single payor.

A 20-year SAS user, Ott has embraced SAS' technological enhancements of recent years. "In the last five years, the reason I've used SAS so much is because of all the new things SAS is doing with its technologies — and the whole way of delivering data that SAS makes possible," he says. "SAS' biggest strength is the way it has embraced the Internet. It provides, summarizes and delivers data quickly and easily."



World Headquarters
and SAS Americas
SAS Campus Drive
Cary, NC 27513 USA
Tel: (919) 677 8000
Fax: (919) 677 4444
U.S. & Canada sales:
(800) 727 0025

SAS International
PO Box 10 53 40
Neuenheimer Landstr. 28-30
D-69043 Heidelberg, Germany
Tel: (49) 6221 4160
Fax: (49) 6221 474850

www.sas.com