



# INTEGRIS HEALTH

Maintaining a healthy lifestyle with SAS®

## Industry

Healthcare

## Business Issue

Provide strategic information to hospital executives and physicians.

## Solution

Enterprise information system powered by SAS®.

## Benefits

SAS® reveals information vital to the organization's health.

When it comes to maintaining good health, the things that sometimes go unnoticed can make the biggest difference. Good nutrition, consistent exercise, adequate rest and regular wellness checkups can improve your quality of life now and prevent health concerns from developing in the future.

The decision-support team for INTEGRIS Health, Oklahoma's largest not-for-profit healthcare system, understands what it takes to use data to drive clinical and financial improvement efforts. Leva Swim, INTEGRIS' Director of Decision Support, and her team have helped develop a healthy decision-support business plan for INTEGRIS Health, one that's supported by SAS® software.

### Monitoring enterprise health

INTEGRIS Health has used SAS to implement an enterprise information system (EIS) that provides regular updates to executives and service line managers on several strategic imperatives, including quality and cost of care. The imperatives monitored by the EIS are based on those that have been established through organizational strategic planning. Two versions of the EIS have been developed, including an Executive Management Team EIS and a Service Line Administrator EIS. Both of the EIS applications allow for data drill-downs so users can slice and dice the data to meet their needs. For example, the cost per case can be examined by Diagnosis Related Group (DRG), by DRG by payor, by DRG by attending physician, or by DRG by ZIP code.

"The springboard for using SAS to develop an EIS was a desire on the part of the chief financial officer in 1997 to bring data from disparate systems to managers' desktops," says Swim. INTEGRIS Health used SAS to bring together data from multiple applications within the organization in order to analyze financial, human resources and clinical quality performance.

Now that INTEGRIS Health has grown to include hospitals, rehabilitation centers, physician clinics, mental health facilities and home health agencies throughout much of Oklahoma, providing reliable information to the executives guiding the organization — as well as the physicians providing patient care — has become more important than ever.

### Behind the scenes

While busy administrators and physicians are still learning all that the EIS can provide for them, Senior Systems Analyst Robert Muzny has set out to make it even simpler to get SAS results. Daily HTML reports for executives include information on patient census, charges and surgeries. Case managers receive daily reports that are used in their staff rounds. Nursing supervisors get monthly reports that describe daily admission, discharge and transfer activity on each unit.

SAS is further used to make other software tools work more effectively. Every other week, SAS automates the delivery of more than 300 e-mails with individualized reports to personnel at

“The ability to provide data in a timely manner and to ensure data integrity are the two major gains we have realized using SAS for decision support.”

**Robert Muzny**  
Senior Systems Analyst  
INTEGRIS Health

five INTEGRIS Health hospitals. Behind the scenes, SAS is generating more than 41,000 lines of code to make the process of providing those reports more timely and efficient. Each report is based on the information needs of the recipient.

Strategic planning is another area where SAS is making a healthy contribution at INTEGRIS Health. The company's strategic planning department has provided raw data that is analyzed by SAS software to plot hospital locations and patients' home counties. From this information, they can see which hospitals serve which areas and plan more effectively how to provide patient care in convenient

locations. “The great thing about SAS is that you can get data from just about any place and put it together in any way you want,” says Swim.

#### **Saving time, improving quality**

Providing the most positive patient experience possible is always a goal of a successful healthcare organization. Decision support capabilities enhance an organization's ability to reach this goal. “The ability to provide data in a timely manner and to ensure data integrity are the two major gains we have realized using SAS for decision support,” says Muzny. As the SAS applications have matured, processing times have dropped dramatically.

Requests that initially took almost four hours to produce are now completed in less than an hour. As end users expand their use of the EIS, Muzny is also using the power of SAS to increase the scope of processing requests.

Like good nutrition and exercise, data integrity and processing time are easy to take for granted when they are done consistently. But the folks at INTEGRIS Health know that maintaining a balanced, proactive approach to corporate health is always essential. And SAS helps make it easy.



THE  
POWER  
TO KNOW.

SAS INSTITUTE INC. WORLD HEADQUARTERS 919 677 8000  
U.S. & CANADA SALES 800 727 0025 [www.sas.com](http://www.sas.com)

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration. Other brand and product names are trademarks of their respective companies. Copyright © 2007, SAS Institute Inc. All rights reserved. 46246\_429728.0207