

St. Jude Medical Center

Guidelines and Software Help Hospital Identify Potentially Avoidable Delays

St. Jude Medical Center, a non-profit hospital based in Fullerton, Calif., is part of the St. Joseph Health System, which covers California, West Texas and Eastern New Mexico. Recognized by state and national health organizations, St. Jude wanted to improve care quality and coordination at the bedside, as well as to increase efficiencies. To do this, St. Jude caregivers needed to understand what was causing variances from best practices, particularly those variances causing potentially avoidable delays.

The hospital turned to the *Milliman Care Guidelines*®, annually updated, evidence-based clinical guidelines covering the continuum of care, and *CareWebQI*®, the company's interactive care management software. Together, the guidelines and software helped to identify the causes of delay, providing St. Jude with a starting point and roadmap to create an agenda for change.

"The *Care Guidelines* and *CareWebQI* helped us identify what was causing variances," says Opal Thomas, RN, MSN, manager of care management at St. Jude. "The tools helped us to uncover root causes of delays, allowing us to see where we could change procedures to improve care. In addition, the Milliman experts helped us to deploy the *Care Guidelines* and *CareWebQI* to meet our care objectives."

Identifying Variances

In the spring of 2008, St. Joseph leaders chose St. Jude, to test using evidence-based practices

in an integrated teamwork approach. It set out to evaluate the impact of the *Care Guidelines* and *CareWebQI* in inpatient care delivery.

Identifying variances from best practices -- the differences between the patient's clinical status, interventions, medications, evaluations or therapies, and those outlined in nationally recognized guidelines -- was crucial to the project. One project goal was to improve the staff's ability to identify and track potentially avoidable days (PADs); days when care was delayed unnecessarily.

PAD variances are opportunities to strengthen process efficiencies supported by evidence-based best practices. The *Care Guidelines* and *CareWebQI* made it easier to identify and track avoidable days. Using these tools, St. Jude staff identified as PADs 6.6% of inpatient days for the studied diagnoses in June 2009, up from 2.2% for same diagnoses a year earlier.

"The *Care Guidelines* gave us a starting point for improving staff performance and tracking potentially avoidable days," Thomas says. "There was an overall increase in the staff's ability to identify potentially avoidable delays from the baseline."

Using *CareWebQI* variance tracking, chest pain admissions showed the largest increase in potentially avoidable days, jumping to 19% of total inpatient days for this diagnosis from 1.5%. Pneumonia admissions also significantly increased in PADs, rising to 7% from 1.04%. Other

increases were in heart failure admissions, to 5.1% from 2.8%, and in acute myocardial infarction admissions, to 5% from 2%.

Uncovering Root Causes

Most PADs were attributed to:

- Physician circumstances (34% of PADs)
- Patient and family circumstances (32%)
- Hospital system delays (28%)
- Admission or transfer delays (6%)

The underlying reasons varied by diagnosis or procedure. For example, physician-related delays in discharge, or delayed workups and therapy starts accounted for 73% of joint replacement PADs. Physician-related discharge delays, and outpatient procedures being done on an inpatient basis, were the top variance reasons for 60% of acute myocardial infarction PADs.

Some 63% of PADs for stroke patients were due to lack of adequate home caregiver, financial circumstances, family disagreement with the treatment plan, or patient treatment or procedure refusal.

Also, 40% of PADs for heart failure patients were due to patient treatment or procedure refusal, and family disagreement with the treatment plan. Physician-related PADs were discharge delays, and alternate site being unacceptable to the physician.

Drilling Down

CareWebQI helped St. Jude to develop a list of reasons for each variance category that provided further detail on the PADs.

Circumstances associated with hospital system delays included:

- Transfer to desired level of care
- Discharge planning
- Therapy or test initiation
- Nursing intervention

- Lack of weekend therapy, surgical, or diagnostic service

CareWebQI and the *Care Guidelines* enable hospitals to record and monitor relevant variances. A hospital can tailor the software, listing as many different causes as desired for a given delay.

“We configured *CareWebQI* to be very specific, allowing us to focus on causes unique to our hospital,” Thomas says. “This helped us identify reasons for the variances, which we could act upon.”

Length of Stay

Using the *Care Guidelines*, St. Jude also moved patients through the hospital more efficiently, reducing the average length of stay (LOS) for commercial patients in 8 of 13 diagnostic related groups during the first half of 2009, compared with the same period in 2008. The hospital continues to use the *Care Guidelines* to improve LOS in other areas, and to improve care quality hospitalwide.

For more information about Milliman Care Guidelines, visit “<http://www.careguidelines.com>”

For more information about St. Jude Medical Center, visit “<http://www.stjudemedicalcenter.org>”