Cape Cod Healthcare is the leading provider of healthcare services for residents and visitors of Cape Cod. It has two acute care hospitals: Cape Cod Hospital and Falmouth Hospital, as well as the largest home health services agency on the Cape (VNA), a skilled nursing and rehabilitation facility, an assisted living facility, and numerous health programs. In all, there are more than 450 physicians, 4,500 employees and 1,100 volunteers.
Automation is a Catalyst for Standardization

In 2004, Cape Cod Healthcare’s two community hospitals, Cape Cod Hospital and Falmouth Hospital, each had its own distinct perioperative workflows and processes. Both hospitals were using a combination of paper-based systems and different legacy operating room (OR) management systems that were not integrated and lacked the advanced functionality needed to meet the ambitious clinical documentation, operational and financial goals of the organization.

To rectify the situation, Cape Cod Healthcare sought a new, integrated perioperative management system that would:

• Bring both hospitals into a single, integrated system
• Standardize online documentation, reporting and supply usage across both entities
• Provide intelligent patient tracking that could streamline patient throughput
• Make booking and scheduling of cases easier
• Provide better management of supplies, inventories and charges
• Offer seamless integration with the facilities’ health information systems
• Improve family, patient, staff and physician satisfaction

After a review of available systems, Cape Cod Healthcare selected the Optum Intelligent Perioperative Suite. “Optum Clinical Solutions was the only vendor that could deliver on all our objectives and provide the necessary integration with our other hospital information systems,” said Robin Grace, RN, Director of Surgical Services.

OR Manager Implemented First

Optum OR Manager was installed in Falmouth Hospital in May 2004 and in Cape Cod Hospital in March 2005. The system automated key operating room applications, including patient scheduling, online nursing documentation, preference card and supply chain management, staff credentialing, and integrated billing. The system also provided a flexible platform to help standardize OR operations across facilities, including reporting, documentation and supply management. In addition, OR Manager improved communications and scheduling of shared resources with other departments.

Optum Clinical Solutions completed interfaces to the hospitals’ Meditech HIS and other specialty systems as part of the implementation. Cape Cod Healthcare implemented the Siemens Soarian system for clinical and financial management and integrated it with the Optum Intelligent Perioperative Suite.

Better Preference Card Management

More efficient and accurate preference card management was a priority for Cape Cod Healthcare. Bringing preference cards up to date and making them easier to manage and maintain was essential to improving surgeon satisfaction and meeting the organization’s supply management goals.

One of the first initiatives undertaken during the implementation of OR Manager was a massive project to update all preference cards at both hospitals. Because of this effort, Cape Cod Healthcare was able to reduce the number of preference cards by 5,000. This contributed to cost savings and, more important, led to cards that are more accurate.

Recently, Cape Cod Hospital initiated a performance improvement project designed to fine-tune the preference card management process. “We reviewed the top 20 preference cards with each surgeon to get their input,” said Kerry Tokla, Senior IS Analyst. “Engaging
them is important and has not only reduced the number of preference cards at Cape Cod Hospital from 3,006 to 2,123, but also improved surgeon satisfaction.

**Increased Charge Capture and Reduced Supply Costs**

Optum OR Manager is used to bill for and decrement all supplies and implants used on every surgical and endoscopy case. “We knew we weren’t charging for everything we should be charging for,” said Grace. “The system now automatically captures these charges as part of documenting the procedure.”

OR Manager is also providing Cape Cod Healthcare with the tools and retrospective data needed to better manage inventory and reduce costs. “We rely heavily on the cost analysis- and preference card-related reports produced by OR Manager,” said Tokla. “In support of a major performance improvement project this year, we examined our most expensive cases using Optum Clinical Solutions cost reports sorted by facility, service and surgeon. We focused on orthopedics and neurosurgery initially and were able to identify areas where we could save.” As a result of this effort, Cape Cod Healthcare realized annual savings of more than $815,000 for Cape Cod Hospital and $377,000 for Falmouth Hospital. Another performance improvement effort that proved very successful was the implementation of custom procedure packs at both hospitals. “When you are removing or consolidating supplies, you have to make sure you have the data to back up the decisions, especially when it comes to surgeons’ preference cards,” said Tokla. “The Optum Clinical Solutions system gave us the data to do that.”

The custom procedure pack project, which features preassembled procedure trays, has saved Cape Cod Healthcare nearly $1.3 million per year, down from an annual expenditure of $2.3 million. As part of the project, a report is automatically run after the next-day surgery schedule is finalized and lists the packs that are needed for the following day’s procedures. The report is then faxed to the OR supply vendor and procedure packs are delivered by 8 p.m. for all of the following day’s cases. This has substantially reduced the amount of inventory that both hospitals have to keep on hand.

**Improving the Patient Experience**

The combination of OR Manager and Patient Tracking has dramatically improved the patient experience at both Cape Cod Hospital and Falmouth Hospital. This is especially evident in three key areas:

- **Patient scheduling and improved OR utilization.** Online booking at the surgeon’s office makes scheduling more efficient for both the patient and the staff at the surgeon’s office. In addition, better OR utilization has improved efficiency.

- **Patient Tracking display board.** Cape Cod Healthcare uses HIPAA-compliant display boards in the family waiting rooms of both hospitals. These institution-customized displays keep families up to date as patients progress through the surgical process. Since its implementation, the improved communications have increased patient, family and staff satisfaction, and decreased patient-tracking phone calls by 90%.

- **Increased personal attention.** As part of a process improvement initiative, a nurse or other staff member personally reaches out to the patient’s family every 90 minutes.

“We have absolutely improved our patient experience at both hospitals,” said Tokla. “From the time a patient is registered or added as an inpatient, with Patient Tracking our staff knows where they are, when they are coming to the OR and where they’ve gone after leaving the OR.” This greater patient satisfaction is reflected in Cape Cod Healthcare’s Press Ganey scores, which have improved from the 20th percentile to beyond the 60th percentile since the implementation.
Information that Drives Better Decisions
Optum perioperative applications collect volumes of rich data as a by-product of day-to-day operations. Cape Cod Healthcare is constantly mining data from Optum Clinical Solutions to drive process improvements. According to Tokla, “Optum Clinical Solutions is the core system that drives all decisions we are making as well as documenting our successes. Our ability to report on all aspects of the perioperative process, and to make informed decisions and changes based on this data, has changed dramatically over the past several years. We are constantly involved in performance improvement initiatives and we use the data from Optum Clinical Solutions to support our decisions.”

One area where Cape Cod Healthcare is using system data to drive better performance is maximizing operating room utilization. “All our decisions on utilization for physicians are driven by data from the system,” said Grace. “There is good near-real-time data, and we send a monthly letter to each physician with utilization results so that they can better understand their block utilization.”

According to Grace, block utilization is a huge surgeon satisfier. It is important for the surgeon community to understand what they can do to improve their current utilization rather than apply for more block time. “We have very strong surgeon leadership when it comes to blocks,” she added. “Not only is the data used to help educate our surgeons, but the system gives them the transparency to figure out how they can improve their own utilization.”

Looking to the Future
“We have accomplished everything we set out to accomplish with the system,” said Tokla. “We are now seeing opportunities to use the system in other areas to facilitate additional change and improvements in those departments.”

Plans are under way to continue to expand the use of the Optum Clinical Solutions system and its capabilities. Patient Tracking will extend to new ambulatory procedure rooms and the catheterization lab. In addition, as Cape Cod Healthcare moves toward an institution-wide electronic medical record, there are plans to add the Optum Preop Manager, Anesthesia Manager and PACU Manager to help meet ARRA meaningful use criteria.

The hospitals are also planning to leverage the Optum Quality Reporting Portal to take the data already existing in the system and use it to support the Surgical Care Improvement Project (SCIP), as well as CMS and other important regulatory reporting requirements.

About Optum Clinical Solutions
Optum Clinical Solutions—part of Optum, a leading health services business, is a global provider of innovative information solutions that enable rapid and sustained delivery of clinical documentation, financial and operational results in the emergency departments, surgical suites and intensive care units of the hospital. Optum Clinical Solutions offers the most advanced suite of integrated products focused on these life-critical areas of the hospital where the patients are the most vulnerable, the care process is the most complex and an increasing majority of hospital costs and potential revenue are concentrated. Headquartered in Wakefield, Massachusetts, Optum Clinical Solutions has licensed systems for use at more than 2000 hospitals in 21 countries.

For more information about Optum Clinical Solutions, visit www.optum.com