



Dr. Greg Forzley enters orders in a tablet.

# CPOE Makes “Doc-ing” Smooth

Michigan hospital uses physician-led planning to involve docs in decision-making and innovative training and support to achieve high CPOE adoption rates.

By Kathleen Waton, Associate Editor

and adopt CPOE? Get an M.D. to champion the cause full time among his peers and provide just-in-time training tailored to their needs.

That’s what Saint Mary’s Health Care, a 230-bed community hospital in Grand Rapids, Mich., started doing two years ago when it began planning to go live with CPOE in October 2004. It paid off handsomely.

Saint Mary’s implemented CPOE as part of Project Genesis, a \$280-million, five-year initiative its parent organization, Novi, Mich.-based Trinity Health, began launching in 2003 to create a common platform for clinical information, revenue cycle and supply chain management systems among its 45 hospitals in seven states. With more than 16,500 annual admissions, 2,500 employees and 755 physicians with privileges at the hospital, Saint Mary’s is the third and largest of Trinity’s hospitals to adopt CPOE.

A decade ago, Saint Mary’s developed its own system for clinicians to access laboratory and radiology reports electronically. But until it went live with CPOE last fall, Saint Mary’s had few computers readily available for clinicians to access, let alone enter information. Physicians handwrote all treatment and medication orders, synthesizing an array of orders located in various places.

### Two-year Planning Process

Trinity’s timeline for rolling out major IT systems like CPOE typically is 20 to 24 months. So, in the fall of 2002, under the aegis of Trinity, Saint Mary’s formed a core readiness team, with the physicians represented by

Greg Forzley, M.D. Included were representatives from management in nursing, pharmacy, radiology, laboratory, health information management, registration and finance. The chief financial officer and vice president of clinical services were the “accountable execs” on the team to maintain a big picture and budgetary perspective and to keep the CEO and the rest of the executive team current. In addition, Forzley led a monthly advisory team of physicians from many different specialties that provided support for the initiative.

“At the time, we were essentially a paper-based hospital,” says Forzley. “Even though we could access lab and X-ray results electronically, we had to print them out and put them in a paper chart.”

Because Saint Mary’s had been predominantly a Cerner shop since 2000 when it swapped its home-grown clinical reporting systems for Cerner’s PowerChart EMR and central data repository, it was natural to go with Cerner’s CPOE solution. To meet its needs, Saint Mary’s specifically selected PowerOrders, ordering application; Care Documentation, Medication Administration Record for automated clinical documentation; FirstNet for ED care management, including an “electronic grease board;” CareNet for nursing; RadNet for ordering and tracking radiology reports, and PharmNet for pharmacy operations.

During the first year of planning, Saint Mary’s core readiness team and Trinity’s information services staff took inventory of hardware and software needs, assessed workflow and began customizing the product to meet the needs of its users.

### Innovation Station

To engage his fellow physicians, Forzley and his team got doctors involved at the very start of planning and focused on the 200 to 300 physicians and 10 residents who regularly cared for patients at Saint Mary’s, plus the 85 members of a primary care group closely aligned

with Saint Mary's. Some 250 order sets were created and customized for all disciplines through Saint Mary's usual validation process involving medical staff and Saint Mary's pharmacy and therapeutics committee. Then, Trinity's IS department translated them into the language of PowerChart.

The planning team set up an "Innovation Station" to allow the physicians and other clinicians to assess hardware devices and wireless options, give feedback and select which equipment would work best at Saint Mary's. "For the Innovation Station, we took over a hospital room, which was relatively accessible so they didn't have to go off to a special room, like IS," says Forzley.

In the second year, Forzley and his team applied lessons learned from their sister hospitals in Port Huron and Muskegon, Mich., which rolled out CPOE ahead of them. Saint Mary's, however, was a bigger entity with more patients and systems that needed to "talk" to each other. Because Saint Mary's had about 100 additional beds licensed at nearby Pine Rest Christian Mental Health Services, "it created a whole other layer of complexity," says Forzley, because they had to address security and privacy issues around who could view behavioral health medications.

### "Doc-ing" Station

Three months before go-live, the planning team turned an empty room across from medical records into a secure "Doc-ing" station—a quiet, relaxing, secure room away from patient care where physicians could learn on one fixed computer and seven mobile computers from full-time trainers.

Nurses, for whom CPOE use was required, participated in 16 hours of mandatory training in four, four-hour sessions, squeezed into eight weeks prior to go-live. Some 120 clinical "super users" were trained and relieved of regular clinical duties for the first five to six weeks after go-live to provide staff with continuous support.

Unlike nurses, doctors were not required to use CPOE. Knowing flexibility and convenience were critical for gaining the doctors' attention, Forzley and his colleagues would nab physicians on the fly, giving them bite-size training sessions, seven days a week, a month before and a month after go-live. "Four or five of us would sit at the entry hall to the hospital and catch physicians coming in on weekends," says Forzley. "Or we'd catch them as they did rounds or were coming out of surgery and give them one-to-five-minute lessons. If we were able to teach them something and they said 'let's keep going,' we would. If not, we'd stop and circle back with them later."

In launching CPOE, Saint Mary's opted for a big-bang approach, converting the applications in all departments and on all floors simultaneously. Taking their cue from sister hospitals Mercy Hospital in Port Huron, which went live in 2003, and Mercy General Health Partners in Muskegon, which went live in July 2004, the night before go-live, Saint Mary's "dotted every 'i' and crossed every

't,'" says Forzley. On Friday, Oct. 15, 2004, they took inventory of patients and made sure all orders were written and up-to-date in preparation for all the old systems, including registration, to be turned off at midnight. "We registered patients manually and did manual tracking overnight as we implemented the new software and reregistered all patients on Saturday," Forzley says. "You say you flip a switch, but in reality, of course, it's not that easy."

### College-age Coaches

To supplement the help of the "super users," Saint Mary's hired eight to 10 tech-savvy college students as part-time employees and trained them on the new CPOE system. "The college students didn't necessarily have IT backgrounds," Forzley says, "but they were comfortable with computers, understood the functionality of the system and could work for three-hour shifts to provide quick lessons if a physician had forgotten a step or never quite got the hang of it."

Today, Saint Mary's has its new CPOE solution interfaced with an older Cerner lab module, PathNet Classic, and another vendor's registration product. A perinatal data system stands alone for now. It's a different world at Saint Mary's. Clinicians have easy access to computers, which have quadrupled from 120 to nearly 500. Twenty percent of the computers are portable. No longer do physicians have to cajole unit secretaries from their computers so they can look up X-ray or lab information. There are plenty of devices to go around.

Some 200 wall-mounted WALLeroo computers (Carstens) are now located in the cubbyholes that used to hold paper charts. Nurses and physicians carry almost an equal number of handheld mini-laptops or tablets, or use battery-powered computers on wheels at bedsides. A computer stands outside each of the 250 patient rooms at Saint Mary's. Beyond the hospital walls, physicians log into the system and place orders ahead of arriving at Saint Mary's, increasing their productivity and speeding care to patients.

### Impressive Stats

The easy accessibility of computers—plus the solid planning and preparation for implementing CPOE at Saint Mary's—has resulted in impressive statistics.

After the first week of use, the entry rate for attending physicians, who write the majority of the orders at Saint Mary's, was in the mid-60 percent range. The entry rate for ED and residents ran 85 percent to 90 percent—for an average entry rate for physicians of 72 percent to 74 percent.

"We consider it good success," says Forzley, "and that's just a placeholder for what we really want to be able to measure in terms of efficiency of physician practices, better outcomes for patients and high levels of patient safety."

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