

Successfully Managing Patient Data

Physician Involvement in the Development of ConnectCare at Bon Secours Health System Proves Beneficial on Many Levels

Although “quality” has become a buzz word in health care circles, the increasingly complex care of individuals with multiple health problems, seen by multiple specialists, in many settings, requiring several methods of payment, often results in less than optimal, or even poor, patient care. The challenges derive, in part from hospital structures developed when hospitals were sites of care for the dying. In many cases, these structures have persisted into our era, one in which highly skilled and knowledgeable experts provide complex care for, say, a patient with diabetes and heart failure who requires cardiovascular surgery and rehabilitation along with control of the chronic diseases that increase the risk of complications and death.

Eliminating the gap between possible patient outcomes and realized outcomes calls for structural transformation, but strong forces resist it. Like most hospitals, those in the Bon Secours Health System, have developed many effective work arounds for the hurdles created by the persistence of the original hospital structure. Recently, though, applying the Institute of Medicine’s definition of quality of care — “The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” — Bon Secours initiated an effort to develop a patient-centered partnership between hospital leadership and members of the medical community.¹ This effort focused on

the following six characteristics of high quality care: patient-centered with the patient at the center of control, safe, efficient, effective, characterized by evidence-based decisions, and coordinated among clinicians.²

A mutually beneficial relationship with a mostly volunteer medical staff — one that is not employed by the health system — is foundational to transforming the way patients experience care in all Bon Secours sites. When the system’s leaders committed to providing the financial and human resources needed for clinical transformation, it was clear that an appeal to the hearts and souls of clinical leaders would be foundational. The goal was to achieve world-class outcomes by enabling caregivers to provide superior, consistent, and compassionate patient care, and to leverage leading clinical practices through an integrated system of clinical information.

Four discrete but interrelated outcomes-focused efforts were chosen to energize the partnership:

- Building and deploying an electronic health records system
- Eliminating preventable deaths
- Reducing deaths from sepsis
- Strategically positioning clinical leadership

Although all four efforts are well on their way to implementation, this article is focused on the first: building and deploying an electronic system.

A PARTNERSHIP IS ESTABLISHED

In 2006, Bon Secours partnered with Epic Systems Corporation and launched ConnectCare, an advanced electronic clinical information system that links all clinical information into one integrated patient record, available to physicians and other clinicians 24 hours a day, seven days a



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VOICES

Clearly in all of our courses in medical school and residency, we know there is a component of spirituality that makes some people get better quicker than others. Catholic health care gives us the ability to actually put that on top of the cake, maybe make it the central part of our treatment plan.

—Thomas C. Royer, MD
President and Chief Executive,
CHRISTUS Health,
Irving, Texas



Photo by Bon Secours

Brad Howard, MD, director of emergency medicine, Bon Secours St. Francis Health System, Greenville, S.C., uses one of ConnectCare's "Workstations on Wheels."

week, no matter where they — or the patients — are located. The system's implementation began successfully at Bon Secours St. Francis Health System in Greenville, S.C., in June 2008.

Although it is a huge undertaking to build a communications tool such as ConnectCare, true clinical transformation involves far more than installing sophisticated software. In developing ConnectCare, Bon Secours has drawn from the best clinical talent throughout the health system to design and customize the electronic record system to reflect our health system's needs. Bon Secours partnered with Zynx Health for decision-support guidelines based on peer-reviewed studies, best practices and the latest scientific evidence as a template. More than 100 physicians representing a full range of specialties participated in developing the clinical content, working together to identify clinical order sets for more than 30 different specialty areas.

At its most basic level, because all Epic applications pull from the same database, a patient record can be viewed by all caretakers, whether a

patient has been admitted to multiple Bon Secours hospitals in different markets, was seen only in the emergency department at a Bon Secours hospital, and/or, went directly from a physician office visit to a hospital admission.

Patient information is easily accessible and can be easily updated with the most recent lab tests, imaging, and other diagnostic information. Access to the chart by multiple individuals simultaneously ensures the ability to record a note or review information so that the right care can be provided to the right patient at the right time.

THE SYSTEM TODAY

The system, as of its implementation date, contained 235 standardized order sets for some 235 diagnoses, covering 90 percent of patient encounters in the inpatient and emergency department setting. The system provides links so that clinicians can review the "why" of the order set, review the journal articles that discuss it, and even review videos that demonstrate procedures. Order sets and care pathways will be updated continuously, and at least annually, based on best practices and new findings. Physician development teams as well as nurse leadership teams will meet to talk about new clinical evidence and review order sets to determine whether they need to be revised. Further, the system offers alerts, reminders and warnings to help prevent errors and omissions and, to compensate for variables among patients, allows clinicians to make changes or additions on an individual basis.

Beyond those notable achievements, however, technology has created a way for people throughout the health system to engage in dialogue and know that their opinions matter. For instance, HealthGate, a web-based document management and collaboration system for health care, allowed physicians to view draft order sets at their convenience and post comments that all participants could view. Conflicts over clinical content were resolved collaboratively.

Bon Secours has enjoyed an exceptional level of participation by its independent physicians during the process of developing ConnectCare. Physicians, whether Bon Secours employees or independent practitioners coming from multiple states, worked alongside of nurses, pharmacists, therapists, and other health care providers to hammer out a consensus on the best clinical care for each diagnosis. It was the end users — physicians, nurses and other caregivers — from around the system who decided on the clinical content to be built into the system. A group of physicians (the physician development team) and system leaders truly drove the consensus-based process,

working together to achieve superior clinical outcomes, make patient care safe, and keep pace with scientific advances and innovations, in the interest of our overall goal: "Achieve Outstanding Outcomes, Every Patient, Every Day."

Despite the amount of time and work required to build and customize ConnectCare for Bon Secours, participants have been energized by the revitalized commitment to patient-centered care. Collaboration among hospital staffs and physicians has enhanced collegiality and camaraderie and rejuvenated their sacred covenant with patients. By working together, these physicians have discovered the specialized expertise available to them within the health system. They have become comfortable in seeking advice and adopting evidence-based practices from colleagues in another location. As a result, Bon Secours is beginning to organize its clinical infrastructure on an enterprise-wide level to complement the local system and is developing a more formal structure around clinical collaboration.

In addition to the implementation of ConnectCare this past summer, the ambulatory system will be launched at Bon Secours Richmond (Va.) Health System in early 2009. Strong physician leadership at St. Francis has been credited for the overwhelming acceptance of ConnectCare at the two hospitals. Physicians have been the champions of the clinical transformation alongside their administrative counterparts. More than 240 physicians logged into the system within the first 10 days ConnectCare was operational.

OTHER BENEFITS EMERGE

Two-way communications between independent physicians and physician/hospital leadership have been a key factor in the wide acceptance. Physicians are encouraged to open a dialogue and to e-mail administrators with concerns and suggestions, and administrators strive to deliver prompt responses to inquiries.

ConnectCare makes it easier for physicians to care for their patients because the "one patient, one record" system gives them access to a more comprehensive medical record than ever before. The ambulatory record is available during an inpatient stay, and vice versa. Information on a patient's emergency department visit is available to the primary care physician during the patient's follow-up office visit.

The system promotes efficiency and safety, reduces unnecessary and duplicative tests, procedures and paperwork, improves communications

between patients and their physicians, and enables the rest of the care team to improve patient interaction and continuity of care.

Fewer phone calls are needed to set up tests or consults, to get test results and information, and to schedule admissions, procedures and therapy. Charting is easier and faster, and hunting for an inpatient chart becomes a thing of the past. With more comprehensive information available more quickly, diagnoses and treatments can occur faster, enabling shorter lengths of stays. Complex decisions doctors have to make about patients with multiple illnesses become simpler because ConnectCare supports those decisions with reliable, accurate and valid clinical data available on a timely basis. Physicians can operate at a higher comfort level, with less chance of medication error or duplicative testing.

Preliminary results of efforts to enhance the partnership of hospital leadership and the physicians have been encouraging. In facilities most engaged with ConnectCare, answers to questions related to "overall quality of care" have been increasingly positive. For instance, St. Francis, the site of the first deployment, experienced an increase to 98 percent from 91 percent in those ranking it "excellent." Building on the confidence of the electronic records effort, physician and executive leadership have empowered a system-wide pharmacy and therapeutics committee.

The experience with ConnectCare at Bon Secours has shown that refocusing hospitals and physicians on a shared mission of better outcomes for patients is the best way to improve physician relations. High quality care is the core value of clinical practice, and everyone recognizes the electronic system will make the daily delivery of health care much more efficient, effective and safe. ■



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NOTES

1. Linda T. Kohn, Janet M. Corrigan and Molla S. Donaldson, *To Err is Human: Building a Safer Health System* (Washington, D. C.: National Academy Press, 2000), 211.
2. Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century* (Washington, D.C.: National Academy Press, 2001), 5-6.

VOICES

A colleague of mine is Jewish, and he was assigned at Holy Cross Hospital in Silver Spring (Maryland). He was very nervous, but later said it was the best experience. ... He said it was the "hope-filled hallways"; that he recognized in Holy Cross a place where everybody understood that attending to the spiritual dimension was so important. He said he felt his own calling to service was supported there more than any other place.

—Christina M. Puchalski, MD

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