

AN INTERNATIONAL CONSORTIUM EXEMPLAR

A Common Professional Practice Framework for
Standardizing Quality and Advancing Interoperability at
the Point of Care



CPM Resource Center
An Elsevier Business

www.cpmrc.com

Provider organizations are looking ahead as momentum builds behind an unprecedented federal effort aimed at supporting the development of a nationwide electronic health information system.

Nearly \$20 billion has been allocated through the Health Information Technology for Economic and Clinical Health Act (HITECH) to support a national healthcare information infrastructure. According to David Blumenthal, MD, national coordinator for health information technology with the Department of Health and Human Services, the system will help facilitate, inform, measure and sustain improvements in the quality, efficiency and safety of healthcare delivered to every American.

In early 2010, HHS will define “meaningful use” criteria that will form the basis for awarding grants to provider organizations for electronic medical record acquisition and implementation.

As this vital initiative gets underway, it is worth reviewing the central objectives of the HITECH program. Providers should also give consideration to tools already in place that can be harnessed to help organizations achieve program goals in the fastest, most cost-effective manner possible.

Although an electronic infrastructure is essential to improving care, information technologies alone cannot provide coordinated patient care that is focused on quality and safety. True coordination depends on a common framework designed to meet the needs of interdisciplinary providers, patients and families. If hospitals opt to “reinvent the wheel” when it comes to establishing a professional practice framework, the federal program will fall far short of its potential.

A Unique Consortium

The Clinical Practice Model Resource Center, based in Grand Rapids, Mich., has worked for more than 20 years to develop a coordinated, integrated approach to improving all elements of the care process, from physician-nurse relations to point-of-care decision support. The foundation for these efforts is an EHR-embedded, evidence-based framework designed to guide quality care, documentation and information exchange across the care continuum.

The CPMRC framework includes more than 200 clinical practice guidelines that reflect the latest consensus guidance for diagnosing and treating a wide range of morbidities. Both the practice framework and the guidelines have been developed in partnership with a consortium of hundreds of North American hospitals and health systems. The consortium — a voluntary organization made up of existing users of the CPMRC framework — provides invaluable feedback, advice and validation regarding the practice framework and the evidence-based guidelines.

The consortium’s involvement creates a continuous feedback loop that helps ensure that the framework and guidelines reflect not only the best scientific and clinical information but also conform to realities faced by patients, clinicians and working healthcare organizations.

CPMRC’s unique combination of a tested practice framework, evidence-based guidelines and broad-based consensual validation conducted by diverse healthcare organizations has resulted in some of the most comprehensive and intensely scrutinized decision-support systems in the world.

Meeting Program Goals

Dr. Blumenthal, National Coordinator for Health Information Technology, reiterated the central goals of the HITECH Act in a November 2009 letter to the healthcare community. He stated that a key premise behind the program is that “information should follow the patient and artificial obstacles -- technical, business related, bureaucratic -- should not get in the way.”



Specifically, Dr. Blumenthal made the following points with respect to program objectives:

- » **The Act tackles commercial barriers:** HHS will not support arrangements that restrict the secure, private exchange of information required for patient care across provider or network boundaries. “Some of these arrangements may improve care for those inside their walls,” Dr. Blumenthal said. “But ultimately, they have the potential to carve the nation up into disconnected silos of information, and thus, to undermine the vision of a secure, interoperable, nationwide health information infrastructure...”
- » **The Act tackles economic barriers:** The HITECH Act will create economic incentives for hospitals and other providers to embrace information technologies. The meaningful use criteria that will be used to award grants won't be finalized until 2010. But early indications are that the criteria will involve a series of progressive goals that will gradually extend interoperability, decision support and quality improvements over a five-year period.
- » **The Act tackles technical barriers:** The Act focuses on interoperability or interoperable products. That means that policies, programs and incentives must aim for EHR software and systems that can share information with different EHRs so that information can follow patients wherever they go. To build this pipeline, HHS is directed to invest in the infrastructure to support the nationwide electronic exchange and use of health information, including connecting health information exchanges.
- » **The Act provides building blocks for information exchange across jurisdictions:** The grants for states and state-designated entities in Section 3013 target information exchange across boundaries, not only within each state but explicitly as part of a national framework. The grantees will partner with HHS in building this national infrastructure.

Aligned for Success

CPMRC's Practice Framework and healthcare consortium have anticipated many of the objectives outlined under the HITECH Act. Specifically, the Framework -- built into the EHR-- breaks down silos of information and provides consistency in how patient information is documented and shared. At the same time, the evidence-based clinical guidelines help ensure consistent and appropriate care across the continuum, regardless of the provider. Significantly, the Framework has been replicated in multiple healthcare settings and organizations and, with proper security safeguards, can be made available across diverse provider organizations and networks.

HHS meaningful use criteria will, in all likelihood, involve a series of progressive goals designed to move the care system from the capture and sharing of data through advanced care processes and decision support to improved outcomes. CPMRC's Practice Framework accommodates this progression by embedding evidence-based decision support tools within the EHR.

The concept of interoperability traditionally has focused on the ability of information technology systems to seamlessly share data across the spectrum of care. But interoperability also involves people and their capacity to understand, use and exchange clinical information in near-real-time across multiple disciplines, care settings and distances.

That's why CPMRC -- in its collaborative work with consortium hospitals -- has placed a great deal of emphasis on behavioral capabilities and disciplines, including organizational development, communications theory, interpersonal dynamics, systems thinking, complexity science and healthcare best practices.

By synthesizing these elements, a powerful culture can be developed to provide interdisciplinary, evidence-based care, improve patient safety and enhance the efficiency and effectiveness of the care process. In simplest terms, the objective is to construct a complex but flexible interactive framework for supporting practice interoperability standards in the pursuit of safe, quality, efficient and humanistic care.



Interoperability Elements

Key elements needed to support and sustain true practice interoperability include:

- » **Intentionally designed automation (IDA)[™]** expedites interoperable systems by preparing and engaging clinicians, supporting an evidence-based practice framework and delivering quality outcomes.
- » **Practice interoperability** supports utilizing a professional practice framework to exchange patient information and interdisciplinary professional services across all clinical settings.
- » **Content interoperability** involves the use of consistent professional data that is exchanged accurately and effectively within the technological systems across the continuum of care.

Practice standards must integrate with emerging HIT standards needed to securely and effectively exchange patient and clinician information. Put another way, if the HIT standards represent the underlying infrastructure, or railroad tracks, then an integrated care framework is the train that moves across the tracks.

Successes

CPMRC's Professional Practice Framework and evidence-based guidelines are deployed at approximately 300 consortium hospitals in the U.S. and Canada. For client hospitals, the benefits have included 100 percent Joint Commission compliance, increased nurse satisfaction, decreased patient falls, decreased decubitus ulcers and outperformance of U.S. and mean regional Centers for Medicare & Medicaid Services measure averages by 85-to-95 percent.

Among the individual successes:

- » **Abington Hospital** located in the Philadelphia suburb of Abington, has implemented evidence-based clinical practice guidelines for clinicians at the point of care. Barbara Wadsworth, Abington's chief nursing officer, says the results have reduced care variance, improved interdisciplinary collaboration and increased accountability among caregivers.

"It's very reassuring to know that nurses and others have access to the data they need to make confident, informed decisions," Wadsworth says. "We had some guidelines before, but the difference in terms of the quality of the CPMRC information and its ease of use is like night and day. We feel like we've fundamentally transformed the way we provide care."

Beyond boosting quality, the clinical practice guidelines — along with the interdisciplinary practice framework and clinical documentation system that accompanies them — have played a central role in helping Abington achieve coveted Magnet Status under the Magnet Recognition Program, an initiative designed to recognize quality of care, professionalism and best practices in nursing.

Today, the CPMRC Professional Practice Framework, evidence-based guidelines and clinical documentation system — combined with the hospital's EHR technology — are utilized throughout the hospital's medical/surgical, pediatric and critical care units. The applications also are being rolled out in the neonatal intensive care and psychiatry departments. With workstations strategically placed on each unit, the practical benefits of the guidelines and documentation have been immediate, Wadsworth says.

"It gives the novice nurse immediate information that he or she needs to care for the patient," she says. "At the same time, it provides more experienced clinicians with a reference point for a disease that they perhaps haven't seen in a while, or one they've never cared for before. Now, signs and symptoms of complications, nursing interventions and patient education — everything they need to be doing for that patient — is clearly articulated and just a mouse-click away."



And because the guidelines are embedded in the charting system at the point of care, they're readily accessible not just to nurses but also physicians, rehab medicine personnel, nutritionists, pastoral care, respiratory therapists, social workers and case managers.

For clinical managers, the system also provides safeguards and transparency that helps ensure the highest quality care. "I have great confidence when regulatory bodies show up, because I can look into the system for each patient and know the guidelines are being used for an interdisciplinary, individualized plan of care, and the care is being documented," Wadsworth says. "It's really provides a whole new level of oversight and accountability."

» **North Shore-Long Island Jewish Medical Center**, (North Shore-LIJ) is partnering with CPMRC to add evidence-based content to its EHR system and to facilitate the system's transition to an integrated, enterprise-wide, evidence-based model of practice. Since 2007, North Shore and CPMRC have zeroed in on interdisciplinary clinical documentation by integrating data previously entered separately by disciplines as diverse as physical, occupational, speech and respiratory therapy, nursing, dietitians, social work, case management, child life and pastoral care.

"Because providers typically completed documentation within their own 'siloes,' paper-based documents, redundancy was a severe problem," says Cathy Halloran, North Shore-LIJ's Assistant Vice President for Clinical Systems. "Providers often asked patients the same series of questions over and over again, wasting valuable staff time and sometimes annoying patients and family members."

Implementing a professional practice framework and care model has allowed North Shore-LIJ move forward with evidence-based practice guidelines across nine institutions. Prior to the system's involvement with CPMRC, each hospital had its own screens for patients at risk for pressure ulcers or falls. Using its EHR system North Shore-LIJ, was able to combine best practices for nine hospitals while allowing hospital clinics to develop their own post-anesthesia scoring systems and full-risk assessment programs.

"Our patients can be confident that wherever they go within this system, they will benefit from providers' use of a single, consistent scale," Halloran said. "Hospitals also benefit by using the evidence to determine how effectively they achieve outcomes, as well as the impact of the full-risk program on patients."

While Halloran is pleased that North Shore-LIJ's work now meets or surpasses the emerging meaningful use criteria, she sees the system's real drivers as the patient, families and evidence-based care. "We're turning Northshore-LIJ into the best place to receive care and to give care," she said. "No matter where a patient with heart failure goes within our system, we're confident that he or she will receive the same high level of care."

» **Fairview Health Services**, based in Minneapolis, in 1999 began developing a strategy to bring clinical documentation to the next level and unite disciplines around interdisciplinary, evidence-based content.

Addressing the problem of discontinuity was a key objective in the effort. Nurses often face what Thomas R. Clancy, Ph.D., RN, Clinical Professor in the School of Nursing at the University of Minnesota, calls "compression complexity", or the need to respond to anticipated events while handling multiple responsibilities – all within a highly condensed time frame.

Such multi-tasking is often the cause of medical errors, inefficiency and waste, according to Dr. Clancy, who documented his findings in "Improving Patient Safety, Increasing Nursing Efficiency and Reducing Cost through Technology Supported Pull Systems," to be published in 2010.

After discovering that the time required to complete inter-shift or professional exchange reports (PER) varied greatly among nursing units (from 40 minutes to more than an hour), Fairview nursing leaders launched a program to reduce end-of- shift compression complexity. To understand the working of the PER process on nursing units, nurse leaders



entered into a collaborative study with the University of Minnesota School of Nursing and The Clinical Practice Model Resource Center. The CPMRC framework brought with it a process and format for PER that has evolved through the years by leveraging key patient information from the clinical documentation system.

Survey results revealed that nurses completing a PER focused on patient assessment, signs and symptoms and impending orders, but limited discussion of progress toward goals, integration with interdisciplinary team members and nursing orders, and discharge needs.

From this study, a new process emerged that incorporated an understanding of the patient story and included documentation throughout the day, the “pulling forward” of meaningful patient information, updates by each disciplines and information transmittal to a new shift. It also revealed that nurses who leverage a framework for coordinating and documenting care produced a professional exchange report (PER) cycle time that was 62 percent more efficient than a typical medical/surgical unit. In addition, the nurses enjoyed a 29 percent improvement in PER effectiveness survey scores.

Lessons Learned

By virtue of its leadership role in the consortium, CPMRC has learned many important lessons over the past two decades. Chief among these is the importance of complimenting an EHR infrastructure with an intellectual framework that can help ensure standardized patient care and efficient information exchange. True interoperability involves not only electronic connectivity, but also a well-conceived framework for coordinating and documenting care. In addition, considerable effort must be given to change management to ensure adoption and use of the available infrastructure. Finally, evidence-based guidelines delivered to the point-of-care are an essential element in a truly integrated, quality-driven care system.

As the healthcare community prepares to embark on a journey toward a national healthcare information infrastructure, the experiences of this unique consortium could be widely disseminated and the lessons learned incorporated into larger strategic goals. CPMRC and its consortium members look forward to working closely with other providers and the Department of Health and Human Services to ensure that all providers and patients can learn from these pioneering efforts.

Regardless of what the outcome of current healthcare reform efforts turns out to be, the automated interoperability developed by the CPMRC consortium has been demonstrated to improve care, reduce errors and reduce costs. Consequently, the concepts developed as part of the Professional Practice Framework should enjoy widespread support from both providers, patients and policy-makers.

About CPM Resource Center

For over 25 years, the CPM Resource Center has been offering evidence-based, interdisciplinary clinical practice guidelines, care planning and documentation at the point of care. Based on the CPM Professional Practice Framework™, these EMR compatible and web-based solutions are developed and maintained by expert interdisciplinary colleagues, and tested/validated through a Consortium of nearly 300 member hospitals. In addition, the company offers Practice Transformation services to assist organizations with clinical practice advancement and EMR/EHR adoption and implementation. CPMRC is a business unit of Elsevier, the world’s leading provider of science and health information. For more information email cpmrc@elsevier.com, or visit www.cpmrc.com.



CPM Resource Center
An Elsevier Business

www.cpmrc.com