

Reconfiguring Clinical Teamwork for Safety and Effectiveness

There is a question that seems pervasive in modern health care practice. It usually arises in puzzlement steeped with frustration, asked of care givers by patients and their families. The question is: "Don't you people talk to each other?" Practitioners think in reply, "Of course we talk to each other. If you only knew how hard we work at it. We call each other, we page each other, we email, we write orders in the chart. We return phone calls, answer pages, discuss cases at conferences. We talk in the hallways, in the cafeteria, in the office, at the nursing station. We spend time talking with family members. It's not easy." Yet, for all this hard work, the question persists. It is worth thinking about, because hidden within that question are hundreds of unintended consequences—many frustrating, some lethal.

Health care: A new, yet old system

The question that won't go away is a natural consequence of what happens when a human endeavor, such as health care, changes. In terms of scientific capability, health care is vastly more capable than in the early 1900s when the principles of "modern" scientific medical practice were first widely accepted. But the organizational structures and patterns of communication used today are persistent relics of this bygone era. Even the newest computer systems automate methods of practice that are nearly a century old. At the heart of health care practice, then and now, is an implicit assumption that health care is an intensely individual activity. Yet knowledge and capability have expanded so remarkably that rarely does a single individual provide comprehensive care for most conditions. Practitioners train individually, think individually, take responsibility and are held accountable individually; yet actually practice collectively.

Health care has become a collective activity. But health care is not yet organized to support collective practice. Until health care assimilates this new reality—which requires fundamentally changing the way practitioners think and perform their work—the question will not go away.

Clinical teams—or loose collections of practitioners?

A common-sense definition of teamwork is shared activity resulting in something greater than the sum of the individual parts. This understanding conveys ideas of collective identity and aligned effort. Yet, when health care "teams" are carefully examined, rarely do they show evidence of a collective identity; even more rarely are there signs of planning, practice, or review of performance as a functioning unit. Most clinical "teams" are in fact loose collections of individual practitioners attempting with varying degrees of success to connect with other individual practitioners.

Clinical microsystems, human factors science and the science of safety

Although true teamwork in health care is rare, Nelson, Batalden and others have pointed out that consistent groupings of people and resources come together in response to certain patterns of patient need. These groupings of people and resources are known as "clinical microsystems." For example, a clinical microsystem such as an open-heart surgery unit would include the surgeons, nurses, pharmacists, therapists, nutritionists, social workers and others who routinely interact to care for open-heart patients, along with the resources necessary to do their work. Clinical microsystems are seldom formally recognized in the infrastructure of health care; therefore the value of focusing on microsystems as leverage points for care process transformation is rarely appreciated. There is extensive literature developed from other industries' experience in optimum conditions for individual and team performance, coordination of action and communication in human groups, and achieving high reliability in complex, dynamic environments. In contrast to health care, which has traditionally emphasized an individual approach to performance and safety, it is well-accepted in other disciplines that system-based, collaborative approaches are much more likely to produce superior outcomes.

The Concord Collaborative Care Model

Can these methods from other industries be used successfully in a health care setting? The Concord Collaborative Care Model is an ongoing effort to apply principles of clinical microsystem theory, human factors science, and the science of aviation safety to clinical practice in a cardiac surgery unit at the Concord Hospital in Concord, New Hampshire. The center point of the work is a new way of making morning rounds. Rather than coming one at a time throughout the day to see each patient, members of the extended cardiac surgery team come together at one time each day to make rounds at each patient's bedside. Family members are encouraged to be present, and each patient and family member is encouraged to be an active participant in the rounds process. Every effort is made to speak in "ordinary language" instead of medical terminology.

Developing a collaborative communications cycle

Working with a human factors expert, a structured communications process for the rounds was developed, known as the "collaborative communications cycle." This cycle, repeated each day for every patient, begins with a review of the plan developed the day before. In turn the patient, family members, nurse, pharmacist, therapists, social worker, spiritual care provider, surgeon, and other members of the care team discuss the patient's progress, medications, and concerns.

The team works together to develop a plan of care for the day. Roles and responsibilities are clarified and the plan is summarized for the patient's approval. Every patient, family member, and team member is asked about anything that didn't go as expected. These events, known as "system glitches," are discussed openly by the care team, patient, and family members and are recorded for further review and action, immediately if possible, or later at a

bimonthly team meeting known as "system rounds." The Concord Collaborative Care Model is an ongoing effort to reconfigure clinical teamwork from a traditional, loosely connected individual activity to a coordinated, collective activity. Improved outcomes and high patient satisfaction have followed.

New teamwork system produces measurable results

Since the institution of the collaborative care model, morbidity and mortality have improved significantly (Northern New England Cardiovascular Study Group data); staff satisfaction has improved measurably (internal survey); and patient satisfaction has been maintained consistently in the high 90th percentile nationally on standardized surveys (Press-Ganey, and Associates). There have been many challenges along the way, including the difficulty of finding a time for rounds that would not interfere with team members' schedules. It took time for practitioners to develop the trust and confidence necessary to discuss clinical situations openly with patients and families as active participants, and to accept input into their decision-making process.

Practitioners, patients and families respond positively

The most-frequently heard comment from practitioners is how rewarding it is to see how much the rounds process means to patients and families. Team members also comment that having a complete picture of what is happening leads to better decisions. Pharmacists note that the process helps avoid medication errors because it allows immediate interaction among all of the parties involved in medication decisions, including the patient.

Most practitioners have found the collaborative rounds process requires an investment of time up-front but saves time and more over the course of the day. The response of patients and families has been overwhelmingly positive.

The way it should be

By the way, patients and families don't ask anymore, "Don't you people talk to each other?" Since we started making rounds together—with them—they, and we, know exactly what is happening and what is planned...without question. Isn't that the way it should be?