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Einstein Uses Clinical Microsystems to Further Quality Improve

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Einstein Uses Clinical Microsystems to Further Quality Improve

Those of us working in health care recognize that our workplace environment is extremely complex. The intricacies of our surroundings compound the challenges professionals already face in delivering optimal care during each patient encounter. For every example of teamwork contributing to a positive patient experience or outcome (for example, a difficult obstetrical delivery coming off without a hitch, or a woman with a suspicious mammogram getting a prompt and accurate diagnosis), we can recall circumstances in which fragmentation – and even conflict – in our workplace contributed to suboptimal results. Performance improvement efforts traditionally start at a departmental level, with clinical and administrative leaders setting a quality agenda for their respective areas. It is only when considering how care is rendered that we appreciate how the interaction between front-line providers and the patient impacts the actual delivery of care and the patient's perception.

Researchers from Dartmouth-Hitchcock Medical Center have referred to the front-line healthcare providers as "clinical microsystems," defining the term as follows:

> A clinical microsystem is a **small** group of people who work together on a regular basis to provide care to discrete **subpopulations of patients**. It has clinical and business **aims**, linked **processes**, and a shared **information** environment, and it produces performance **outcomes**. Microsystems evolve over time and are often **embedded** in larger organizations. They are **complex adaptive systems**, and as such they must do the primary work associated with core aims, meet the needs of internal staff, and maintain themselves over time as clinical units.[1]

There are hundreds of clinical microsystems scattered throughout our healthcare systems. Primary care offices, nursing units, modalities within a radiology department, an endoscopy suite, a blood bank; all are examples of clinical microsystems. Since improvement in quality, safety, and outcomes start at the front-line microsystem level, the clinical and service outcomes of larger departments and organizations can be no better than those of their microsystem components.

The Dartmouth-Hitchcock researchers identified characteristics of "high-performing" clinical microsystems, as determined by awards, literature citations, expert opinion, and field research. Among the 20 clinical areas they examined, including inpatient, outpatient, home health, nursing home, and specialty care providers, there were nine common features. The success characteristics consist of: [2]

- Strong clinical and administrative leadership
- A well-defined microsystem culture
- Support of the microsystem by the macro-organization
- Patient focus
- Staff focus
- Interdependence of the care team
- Use of information/information technology
- Focus on process improvement, and
- Focus on performance patterns

Albert Einstein Healthcare Network is committed to creating high-functioning microsystems. To that end, the focus of our Quality Management structure has shifted from the quality of a department to quality at the microsystem level. For the past 8 months, Quality Management has been working with a microsystem steering committee from our Emergency Department (ED). With representation from all disciplines contained within this microsystem (i.e., physicians, nurses, technicians, radiology, respiratory, registration, clerks, and protective services) this team has learned microsystems and quality improvement principles and has worked to develop an enhanced sense of teamwork. After considering the "4 P's"– patients, people, processes and patterns - they chose to focus their improvement effort on "improving communication of the plan of care at the initial point of patient contact."[3] Interventions implemented/being implemented thus far include standardized scripting, uniforms with unique colors to allow patients to distinguish between various disciplines, and a series of posters strategically placed throughout the ED informing patients and families of the different steps of their pathway (e.g., triage, registration, treatment). Since implementing this initiative, overall patient satisfaction in the ED has increased by 20%. In addition, the specifically targeted areas of staff introductions, explanations of tests and treatments, answering patients' questions, and concern about comfort/pain have all shown improved patient satisfaction. We plan to expand this initiative to other Clinical Microsystems within our organization in the future. We are optimistic that redirecting the focus of quality improvement to these front-line units will lead to the clinical experiences and outcomes we are all striving for.

References

1. Clinical Microsystems- Improving Health Care by Improving Microsystems. http://www.clinicalmicrosystem.org/

2. Nelson EC, et al: Microsystems in Health Care: Part 1. Learning from high-performing front-line clinical units. *Jt Comm J Qual Improv* 2002;28:472-494.

3. Godfrey MM, et al: Microsystems in Health Care: Part 3. Planning patient-centered services. *Jt Comm J Qual Improv* 2003;29:159-170.

About the Author

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