What Promotes Evidence-Based Practice in Routine Nursing Care?

Study on improving the quality of care through routine, successful implementation of evidence-based practice at the bedside

**SUMMARY**

An international research team led by investigators at the Boston University School of Public Health examined the factors that promote the use of evidence-based practice in routine health care by comparing and contrasting departments of nursing at two U.S. hospitals:

- A 350-bed academic medical center identified as a "role model" in integrating evidence-based practice in routine care.
- A 400-bed community hospital that identified itself as a "beginner"—still early in the process of integrating evidence-based practice into the organizational culture of its nursing units.

**Key Findings**

At the role model site:

- Key leaders at different levels of the organization have pursued policies, strategies and activities that support integrating evidence-based practice.
- A supportive organizational culture, which reflected values, norms and expectations, has helped institutionalize evidence-based practice.

At the beginner site:

- There were fewer reports of key leaders spearheading activity related to evidence-based practice.
- Evidence-based practice was not yet embedded or reflected in the way nurses and other staff members talked about their work, did their work or expected it to be done.
**Funding**
The Robert Wood Johnson Foundation (RWJF) supported this project with a grant of $61,374 from November 2005 to November 2007.

**THE PROBLEM**
In its 2001 report, *Crossing the Quality Chasm: A New Health System for the 21st Century*, the Institute of Medicine's Committee on Quality of Health Care in America noted that scientific knowledge about best care is not applied "systematically or expeditiously" to clinical practice. The committee noted that it takes an average of 17 years for new knowledge gained from randomized controlled trials to be incorporated into practice.

There have been numerous efforts to incorporate evidence-based practice into routine care. Many of these initiatives have taken a fragmented, narrow approach, focusing on a specific project, practice, standard or procedure in order to improve the way that care was delivered, according to a research team led by nursing researcher and educator Cheryl B. Stetler, PhD, RN.

An evolving body of research suggests that evidence-based practices are adopted only after their use becomes "normalized" or "institutionalized" as part of a health care organization's culture. Whether practices are adopted may depend on contextual factors—such as organizational leadership and employee collaboration—that research has not yet fully described, Stetler and colleagues said.

**CONTEXT**
For many years, RWJF has worked to ensure that all Americans, especially those with chronic conditions, receive quality health care in outpatient settings. Specifically, RWJF has supported efforts to create national and local pressure for more transparency as a way to drive quality improvement, to engage consumers and purchasers in understanding and assessing quality and to track progress in achieving better care.

**THE PROJECT**
An international research team led by investigators at the Boston University School of Public Health examined the factors that promote the use of evidence-based practice in routine health care by comparing departments of nursing at two hospitals.

The research team included investigators from McGill University Health Centre, Montreal, Canada, and the University of Wales, Bangor, U.K.
The investigators consulted with board members of the American Organization of Nurse Executives, an affiliate of the American Hospital Association, to identify hospital nursing departments that were "role models" in the use of evidence-based care. Out of 26 nominated hospitals, the research team chose a 350-bed academic medical center that had consistent high rankings from the board, had rated itself highly and was willing to participate in the study.

For comparison, the research team recruited a self-identified "beginner" hospital that was still early in the process of integrating evidence-based practice into its nursing department's culture. The 400-bed community hospital, which the researchers said shared many characteristics with the role model hospital, was one of 37 that had responded to newsletter and e-mail solicitations for volunteers drafted by the research team and distributed by the American Organization of Nurse Executives to its members.

The researchers chose to protect the identity of the two hospitals.

The researchers collected data from nurses and supervisors at three nursing units at both the role model and beginner sites:

- A medical/surgical unit
- A specialty unit
- A critical care unit.

At both the role model site and the beginner site, nursing department leaders as well as nurses on each unit completed surveys probing their perceptions of their:

- Hospital's, nursing department's, and unit's cultures and leadership
- Practice environment
- Direct and indirect use of research in practice.

In addition, the investigators visited each site and:

- Conducted focus groups with unit nurses.
- Interviewed nursing, medical and other hospital leaders.
- Observed interdisciplinary meetings related to policy, procedures, evidence-based practice initiatives and quality improvement.
- Reviewed documents and publications related to evidence-based practice initiatives and research.
Communications

The researchers published an article describing their study protocol in the open-access online journal *Implementation Science*. (See the Bibliography; article available online.) They also presented key findings in a poster presentation at the 2007 American Academy of Nursing annual meeting in Washington.

Challenges

Although the project began in November 2005, data collection did not begin until March 2007, primarily because of delays in winning approval from the participating hospitals' institutional review boards (IRBs) on informed consent documents and study protocols. Requirements varied between the hospitals, and changes mandated by each one had to be vetted, in turn, by the principal investigator's home institution. In addition, members of hospital IRBs often are more familiar with the workings of randomized controlled trials run by pharmaceutical companies than with the observational, case study approach of research projects such as this.

FINDINGS

Leadership

- **At the role model site, key leaders at different levels of the organization have pursued policies, strategies and activities that support integrating evidence-based practice.** The chief nursing officer, for example, articulated a vision and built a structure for supporting evidence-based practice, whereas other leaders, such as researchers and nurse managers, promoted and implemented these programs on a day-to-day basis.

  Also, key leaders linked to and worked with groups and people outside the hospital who either directly or indirectly supported evidence-based practice.

- **At the beginner site, there were fewer reports of key leaders spearheading activity related to evidence-based practice.** A small number of people within the nursing service were noted as leading efforts for specific, isolated evidence-based practice initiatives. A significant number of sources at this site described leadership as a barrier to evidence-based practice.

Organizational Culture

- **The role model site maintained a supportive organizational culture, which reflected values, norms and expectations that helped institutionalize evidence-based practice.** More specifically, evidence-based practice was reflected in the way that nurses and other hospital staff members talked about their work, the way things were expected to be done and the "way things were done."
As one RN described it:

*Our unit focuses on EBP [evidence-based practice], we talk about it, it gets brought up...l. We ask the nurses, "Where's the evidence?" and they expect it, bring it in, post it on the wall, bring copies to the nurses, people [want to] read it, people [want to] hear about it.*

- At the beginner site, evidence-based practice was not yet embedded or reflected in the way nurses and other staff members routinely talked about their work, did their work or expected their work to be done.

**Nursing-Initiated Projects**

- The role model site had a record of nursing-initiated projects, research and other activities that led to practice changes and attendant outcomes.

- The beginner site had a handful of projects underway, with some still in the developmental stage. There was more focus on conducting research rather applying it. The role of staff as facilitators/champions in enhancing successful implementation of change had yet to emerge in a significantly visible way.

**CONCLUSIONS**

- Even when evidence-based practice is normalized, it is challenging to sustain practice and patient outcomes. The role model site was in a better position to deal with fluctuations in evidence-based practice, however, because its culture was receptive to it. In particular, staff nurses operated as both facilitators and champions of sustained change at the unit level.

**LESSONS LEARNED**

1. **The value of an international group of investigators with similar interests but complementary skills cannot be underestimated.** According to the principal investigator, much of the work and expertise in "implementation science"—the study of how evidence-based practice is incorporated into care—at the time were found in Canada and overseas. As a result, it would have been difficult to put together a similarly experienced team composed solely of investigators from the United States. (Project Director/Stetler)

2. **Researchers working in the area of organizational research should be prepared to help IRB panel members understand what they are doing and substantiate its value.** There may be people on the IRB panel who are not familiar with or comfortable with this kind of research. (Project Director/Stetler)
AFTERWARD

The investigators have completed a paper on their findings and have submitted it for publication.

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Grant ID# 53955
Program area: Quality/Equality
BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

Articles
