

# Infusing Research Into Practice

## *A Staff Nurse Evidence-Based Practice Fellowship Program*

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This article describes the framework and dynamics of an evidence-based practice mentorship program for staff nurses. Staff development educators can be instrumental as leaders in an evidence-based practice fellowship program, as they foster a thirst for lifelong learning, assist with developing a questioning attitude, and inspire nurses to ask clinical questions. The program serves as a bridge to bring research into real-world patient care that results in improved patient outcomes.

To foster the professional development of staff nurses and strengthen their foundation of nursing practice, the nursing department at Ronald Reagan University of California-Los Angeles (UCLA) Medical Center implemented an evidence-based practice fellowship program. This program assists staff nurses in solving practice issues through a mentorship program. Staff nurse fellows collaborate with unit-based colleagues to lead an evidence-based practice change in their clinical area. The program blends staff nurses' clinical knowledge with research utilization and the process of making evidence-based practice changes (Cullen & Titler, 2004; Gawlinski, 2004, 2008; Warren & Heermann, 1998). Concepts and processes are chosen from a review of the literature and are adapted to meet organizational requirements (Cullen & Titler, 2004; Happell, 2004; Happell, Johnston, & Hill, 2003; Hinds, Gattuso, & Morrell, 2000; Kajermo, Nordström, MsocSci, & Lützén, 2001; Lopez-Bushnell, 2002; Valente, 2003; Warren & Heermann, 1998; Wells, Free, & Adams, 2007).

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## PROGRAM DESCRIPTION

The evidence-based practice fellowship program is a year-long program whereby staff nurses interested in resolving a clinical practice issue by applying the latest research and other levels of evidence are mentored through a series of steps:

1. identifying a clinically relevant practice issue suitable for the evidence-based practice process,
2. searching for and retrieving the latest research and evidence on the practice issue,
3. critiquing and summarizing the evidence into a synthesis table,
4. creating an evidence-based practice document that describes the proposed practice change,
5. implementing the evidence-based practice change, and
6. evaluating the outcomes of the practice change (Gawlinski, 2008).

A doctorally prepared research nurse directs the program, which includes didactic education and facilitated work on the evidence-based practice project. The didactic education consists of 6–8 hours of classes that provide both theory and practical information to facilitate development, implementation, and evaluation of the fellows' project. Each fellow receives additional guidance from a clinical nurse specialist who is familiar with the population of patients. In some cases, the nurse educator or unit manager serves in this role (Gawlinski, 2008).

Fellows develop multiple skills, including locating pertinent literature via searches of journal databases such as PubMed and MEDLINE, learning to critique and synthesize research, creating an evidence-based practice innovation, applying change theory during implementation, and measuring project outcomes. In addition, fellows prepare educational sessions to share project-related information with nurse colleagues. Project results are disseminated internally to the nursing units and system wide to departmental committees. Dissemination may also occur externally through national presentations and/or publication. Each fellow integrates the practice change into his or her unit or department and develops processes to promote sustainability of the change in practice (Gawlinski, 2008).

Funding is provided from the mandatory education cost center within the Department of Nursing and covers the estimated expenses for each staff nurse fellow: 8 hours per month paid class time and additional paid time of a

maximum of 12 hours per month to work on the project (Gawlinski, 2008).

## **IMPLICATIONS FOR NURSING PROFESSIONAL DEVELOPMENT**

The Evidence-Based Practice Fellowship provides a unique opportunity for the staff nurse to develop the corollary roles of clinical leader and scientist. Regardless of educational preparation (e.g., diploma, associate degree, and bachelor's degree), experienced staff nurses, who may be unaware of the evolving science that affects their professional practice, can expand their focus during the program to achieve patient care outcomes for a patient population rather than a specific patient or shift (Krugman, 2003). For less experienced clinicians, the fellowship increases their knowledge and skills in a supportive mentoring environment. For master's entry-level clinical nurses, such as those who graduated from clinical nurse leader programs, it provides the experience of collaborating with colleagues, integrating knowledge at the bedside, and leading a practice change.

## **LEADERSHIP SUPPORT AND STAFF DEVELOPMENT EDUCATOR'S ROLE**

The director of research and evidence-based practice coordinates the fellowship projects with staff nurses and their mentors in all phases of their project. The director of research and evidence-based practice functions as a consultant to the fellow-clinical nurse specialist dyad, evaluating methods of research utilization and the development of policies, procedures, and standards of care that are evidence-based and related to the projects (Gawlinski, 2004, 2008). Additional support is provided by the assistant coordinator in relation to content in the didactic classes and development, implementation, and evaluation of projects.

Clinical support to the fellow through all phases of the project is critical but especially necessary during the implementation and evaluation portions of the project. Familiarity with the patient population, staff nurse's colleagues, and key stakeholders is essential for anticipating and addressing challenges that occur during project implementation, such as barriers to change and use of appropriate communication channels.

In this structure, unit-based clinical nurse specialists and educators fulfill the mentor role. The clinical nurse specialists' education and clinical role provide expert clinical knowledge and experience within the fellow's unit. Other organizations may find it more effective to "house" this program in the staff development department because approximately 30%–40% of the fellowship program can be accomplished within the classroom setting.

Staff development educators, familiar with the evidence-based process, can then partner with unit-based leaders to facilitate the implementation (or diffusion) of the evidence-

based practice change and the measurement of outcomes. The role of the fellow's clinical mentor includes being present during one or more of the educational sessions to ensure a successful experience for the fellow.

The clinical mentor's role includes reviewing drafts of the fellow's practice document, assisting in obtaining key stakeholder support, assisting the fellow in developing an educational PowerPoint presentation for teaching nurse colleagues about the new innovation, arranging the unit-based class schedule, and administering knowledge surveys before and after the intervention. The mentor demonstrates behaviors and coaching processes for the fellow by initially making rounds with the fellow and leading by example. The mentor may assist the fellow with data collection at baseline and after implementation of the practice change.

Unit directors (nurse managers) provide two types of support. First is the dedicated release time from direct patient care for fellowship classes and the activities required by the program (Barnsteiner, 1996; Cullen & Titler, 2004; Gawlinski, 2004, 2008; McSkimming, 1996; Walczak & Krumm, 1994; Warren & Heermann, 1998). Second is creating an environment that encourages learning and innovation. The manager validates the worth of the fellow's activities, provides the fellow with opportunities to share activities with the staff, and facilitates time and resources to work on the project according to agreed upon goals (Barnsteiner, 1996; Cullen & Titler, 2004; Gawlinski, 2004, 2008; McSkimming, 1996; Walczak & Krumm, 1994; Warren & Heermann, 1998).

The clinical mentor and unit manager guide the staff nurse in defining an appropriate practice issue that is of high priority for the unit and consistent with organizational imperatives. They attend the last hour of all the educational sessions, which is dedicated to reviewing the fellow's "to-do list," guiding the fellow in completion of the activities, and ensuring the fellow has the needed resources for the project, such as computer access and entrée to committees/department heads. Mentors have a further obligation to meet one-on-one with the fellow for a minimum of an additional 1 hour per month to ensure that the fellow has made progress on the project.

## **MARKETING**

Annual announcement of the fellowship to all nurses at the UCLA Health System occurs through electronic notification and flyers with emphasis on clinical leadership rather than knowledge of research. Unit directors, clinical nurse specialists, and/or educators announce and discuss the fellowship program at staff meetings. Leaders can also approach specific nurses who have expressed interest in addressing important and/or frequently encountered unit-based practice issues that may be solved through the fellowship program.

## APPLICATION PROCESS

Interested nurses complete the application form which asks for general demographic information that includes the applicant's name, credentials, leadership partners (unit directors and clinical nurse specialists or educators), clinical area, and previous nursing experience. The applicants identify their initial project idea by describing the clinical issue, the significance of the problem, and possible solutions along with the preliminary supportive literature. The applicant submits letters of support from unit director and clinical nurse specialist or educator. Supportive letters address the need for the project, confidence in the staff nurse's ability to be a "change agent" within the unit, and the letter writer's commitment to support the fellow throughout all phases of the evidence-based practice project. Optional attachments to the application include the following:

- applicant's resume,
- letters of support from multidisciplinary team members, and
- any pertinent prior work (e.g., professional unit/hospital activities, serving as a preceptor, teaching skills, poster presentations, and publications).

The unit director, clinical nurse specialist, or educator assists the staff nurse with the application. The nurse applicant agrees to attend all classes, meetings, and activities; be actively engaged in the program by staying

abreast of assigned reading materials; participating during classes and group discussions; and scheduling timely meetings with the clinical mentor to discuss project development and plans for implementation. The nurse fellow agrees to complete the project in a timely manner and disseminate the results of the project via presentations within the fellow's unit and throughout the nursing department.

## SELECTION PROCESS AND CRITERIA

The applicant is required to submit the original and 10 copies of the application to the director of research and evidence-based practice. Applications are forwarded to the Nursing Practice Research Council for review and scoring according to set criteria (See Table 1).

Applicants representing diverse clinical inpatient and ambulatory areas, both adult and pediatric, are solicited. The program is highly desired by nurses; for example, in one "call for applications," 14 applications were submitted, and seven staff nurses were chosen for the fellowship program.

## PROGRAM STRUCTURE

The class work in the evidence-based practice fellowship program begins with the definition of evidence-based practice, schemas to grade the levels of evidence, how to formulate a question related to evidence-based practice, and measuring outcomes of an evidence-based practice

**TABLE 1** Criteria and Scoring for Evaluating Evidence-Based Practice Fellowship Applications

	Criteria	0 (Absent)	1 (Weak)	2 (Fair)	3 (Strong)
1	Identified the clinical issue that requires evidence-based practice solutions.				
2	Described the significance of the problem.				
3	Identified the desired outcome(s) of the clinical issue and participation in the staff nurse evidence-based practice fellowship.				
4	Estimated an appropriate number of hours per month for the project.				
5	Included supporting documentation with letter of support from unit director/clinical nurse specialist partner addressing (1) the need for the project and (2) confidence in the nurse's ability to act as a change agent within the clinical area.				
6	Identified unit clinical mentor and resource for fellowship project; unit clinical mentor signed agreement and has skills to mentor the fellow.				
7	Completed application and agreed to expectations of fellowship program by signing the application form and fellowship contract and obtaining signatures of unit director/clinical nurse specialist.				
8	<b>Total</b>				
9	<b>Reviewer's signature and comments:</b> _____				
	(1) Overall strength of staff nurse fellow's application.				
	(2) Recommendation to accept fellow or defer to next application pool.				

project. Subsequent classes include training in searching and retrieving the literature, evaluating the strength and quality of the literature through the critique process, and synthesizing the literature in a summary table. Fellows learn how to develop a practice document that reflects their innovation with supporting evidence. The final two classes address strategies to infuse the new innovation into practice and basic statistics and measurement concepts for analyzing the results of their project.

## PROGRAM PROCESSES

Using the Iowa Model of Evidence-Based Practice to Promote Quality Care (Titler et al., 2001), the evidence-based practice fellows translate new knowledge into nursing practice by developing a practice document and implementing the new nursing practice as a pilot study. The translation of new knowledge into nursing practice is pilot tested to determine if similar outcomes occur in the population of patients in the pilot study as compared to the population identified in the literature. The new knowledge, incorporated into a nursing practice document for clinical use, is implemented by using the following steps:

1. Current knowledge, practice, and patient outcomes are assessed at baseline.
2. The pilot group of nursing staff is trained.
3. The fellow, with the mentor's assistance, coaches and mentors the pilot nursing staff for several weeks.
4. Nurses' knowledge and practice and patients' outcomes are assessed after the nurses are trained and the practice change is implemented.
5. The evidence-based innovation and accompanying nursing practice document are revised as needed on the basis of the results of the pilot study.
6. Results of the practice change are disseminated at the unit level, and events to disseminate the results further are scheduled.
7. The innovation is incorporated into the practice culture.

Upon evaluation of the pilot tested evidence-based practice innovation, the new nursing practice and resulting outcomes are disseminated within the entire nursing unit. Additional strategies are implemented to promote sustainability and incorporation of the change into the practice culture. These strategies consist including the practice change in unit orientation, annual skills, and competency checks and developing an ongoing monitoring and feedback system.

The new evidence-based practice is further disseminated through presentations at grand rounds, meetings of the Nursing Quality Council, and the annual Research and Evidence-Based Practice Conference. All documents related to the fellowship project are placed on the hospital's Web site for other units to access as a guide to

managing similar practice issues. The Web site provides PowerPoint presentations and supporting documents, which comprise a "toolkit" for other units.

## PROGRAM BENEFITS TO NURSES AND PATIENTS

The evidence-based practice fellowship program is one of the important infrastructures that facilitate nurses' evaluation of existing evidence to provide solutions for clinical practice issues. The benefits of the program include enhancing the knowledge and practice of all unit nurses and improving outcomes for patients. When asked about the effect of the fellowship program, the nurse fellows stated:

"I'm glad that I got this experience. I learned a lot. It boosted my confidence."

"I recommend it to all my fellow staff members. It was an incredible experience."

"It's a very good tool in growing professionally."

Added benefits of the program areas as follows:

- Evidence-based practice processes have been integrated into clinical practice.
- Staff nurses have increased their skills in development, implementation, and evaluation of clinically relevant evidence-based practice projects.
- Staff nurses have been successful in applying evidence-based practice and practice changes have improved the quality of care.
- Professional growth and development of staff nurses has occurred, and these nurses are now champions of change.
- Innovative thinking regarding practices that are efficient and effective in improving patient outcomes has increased.
- Recruitment and retention of staff nurses by creating an environment that keeps the "best and brightest" is enhanced.
- Standards for Magnet criteria have been met by providing opportunities to participate in research conducted and used by staff nurses (Gawlinski, 2008).

## CONCLUSION

This fellowship program not only supports an environment of "inquiry" but also engages clinicians in the important processes of implementing innovation into practice. The staff nurse fellowship program at UCLA promotes sharing of new ideas and advanced learning of the skills needed to implement evidence-based practice changes. This program strengthens the scientific foundation of nursing practice, which promotes innovation and patient care that is evidence based. These factors ultimately improve patient outcomes and promote professional growth.

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