

## An Integrated Model of Nursing Using Evidence-Based Practice

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From diagnosis to palliation, oncology services are being challenged at every point along the continuum of care. Although managed care has led to some positive changes, such as supporting standardization of oncology care, promoting development and use of guidelines, and, in some cases, reducing costs, the reality is that in some areas of care, quality has been diminished within a tightly managed environment. Perhaps the most detrimental cost of managed care, however, is an environment that promotes less than optimal nursing care. Current nursing shortages have contributed to the loss of nursing's presence, and that void, coupled with shrinking fiscal reserves, has added to the potential loss of continuity of care for patients with cancer (Mooney, 2001).

According to Jassak (2001), evidence-based practice is an approach to clinical decision making that can improve patient care and outcomes, thus ensuring nurses' leadership roles on healthcare teams. Evidence-based practice has created a mechanism to establish nursing as a pivotal force in contributing to healthcare decisions with the ultimate goal of improving patient outcomes. The purpose of this article is to describe a model of care implemented at a large, academic, tertiary healthcare organization in an effort to promote excellence in nursing practice. Evidence-based nursing practice provided the foundation for the standardization of oncology services with subsequent enhanced nursing care, measurable nursing outcomes, and continuity of care.

This article will describe assumptions that guided the evidence-based practice project, then explain how the practice changes were prioritized at the cancer center. Next, it will describe the implementation phase, including a review of strategies that were used to make the change successful. Finally, the evaluation process will be delineated, followed by implications for practice and future directions.

Based on priority, clinical need, and staff consensus, the staff chose three nursing interventions as initial projects: care of central lines, competency-based chemotherapy administration, and development of research-

based fatigue indicators. These projects will be described in detail.

### Project Assumptions

Planning for a significant change in the delivery of oncology services included the need for open communication between nursing staff, the director of clinical services and research, the medical director, and medical staff. The chief administrative officer was updated regularly on progress and potential barriers to changes in practice. The team made several assumptions during the planning stage prior to implementation.

- The team acknowledged that the organization's mission focuses on the core values of patient care, research, service, and education.
- Practice changes would be derived from evidence-based practice.
- The ultimate desired outcome would be to create a culture of excellence with standardized nursing care for patients with cancer.
- Advanced practice nurses (APNs) would play an important role in the implementation and success of the evidence-based practice model.

Rogers' Diffusion of Innovations Theory (Rogers, 1995) provided the broad framework for the project, along with concepts extracted from Benner's Model of Novice to Expert (Benner, 1984; Benner, Hooper-Kyriakides, & Stannard, 1999).

**Rogers:** According to this theory, diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. The actual innovation, communication channels, time, and the social systems within an organization are the four main elements of the theory. According to Rogers, an innovation presents an organization with a new alternative or new way to solve problems. The diffusion of an innovation essentially is a social process during which perceived information is communicated.

An innovation is a thing, idea, or practice perceived as new by an individual or group. The key point is the perceived newness to the

intended audience, not the length of time that has lapsed since the idea or object first was used or discovered. Evidence-based practice is not a new idea but was new to oncology practice at this institution and, thus, was an innovation.

Communication channels are the means by which information or messages are delivered from one individual to another. According to Rogers (1995), communication is more effective when two or more individuals within a group are homophilous rather than heterophilous. Homophily refers to two or more individuals who are similar in certain attributes, such as beliefs, interests, or social statuses. Heterophily is defined as the degree to which two or more individuals who interact are different in certain attributes, such as beliefs, interests, and varying educational and social statuses. The very nature of diffusion requires that at least some degree of heterophily be present between the participants because when two individuals are identical in their technical grasp of an innovation, no diffusion can occur because no new information exists to exchange (Rogers).

A practice change requires communicating new ideas and forming new attitudes and behavior. To be most effective, basing practice on evidence requires communicating the ideas and the value of the innovation to a basically homophilous group with an element of heterophilous behavior. The nursing profession is congruent with this operational definition.

Time is involved in the innovation-decision process in the sense that five steps usually occur: knowledge acquisition, persuasion of others, decision to go forward with an idea or

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