

Research utilization models help disseminate research findings and ultimately improve patient outcomes

Editor's note: This column highlights research issues related to perioperative nursing practice. The authors, AORN's codirectors of perioperative research, provide practical advice for reading, conducting, and using research in perioperative nursing practice.

In the two previous "Research Corner" columns, we have explored the importance of using and reading research. This month, we will focus on nursing research utilization and discuss research utilization models that individual nurses and groups of nurses with common practice interests or goals can use.

Many models for nursing research utilization have emerged since the 1970s (Table 1). These various models developed from efforts to use or disseminate nursing research and ultimately improve patient outcomes. The models differ in their organizing frameworks and processes in terms of their target populations, structures, processes, and specific outcomes. For example, the target population may be an individual caregiver, educator, or researcher. The structure may be established within an institution or a professional organization. The specific outcomes and processes of any research utilization project may be influenced by available resources and support systems.

GOALS AND PROCESSES

The initial goals of research utilization may include facilitating nurses' application of research findings or changing clinical prac-

tice. Other goals may include dissemination of research findings or development of research-based protocols and new clinical practice guidelines.

After an individual or group establishes goals for research utilization, the next step is to determine the most effective process. With some research utilization models (eg, Conduct and Utilization of Research in Nursing Project, the Iowa Model of Research in Practice, the Dracup-Breu Model), the first step is to identify a clinical practice problem. The next step is to review and critique research published in the nursing literature. If adequate research exists, the individual or group must decide to use or reject the available data; however, if information is insufficient, a clinical study may be indicated. If a practice change is recommended and subsequently implemented, the next step is to measure patient outcomes. Thus, evaluation serves as a continuous ongoing procedure throughout the entire process.

The University of North Carolina Model for nursing research utilization focused on dissemination of research findings during the years when funding was available. The process included steps

such as calls for abstracts, research presentations, annual conferences at which nurse researchers could present their studies, and publication of conference monographs. This model's overall goals—the delivery of research-based nursing care—were accomplished primarily by establishing opportunities for practicing nurses to receive clinical research updates.

The Stetler Model (ie, formerly called the Stetler-Marram Model) focuses on assisting individual nurses or groups of nurses with research evaluation and utilization. This model has six steps: preparation, validation, comparative evaluation, decision making, translation/application, and evaluation. The focus of this model is research utilization as an approach to decision making and provision of evidence-based nursing care. The Stetler Model includes criteria to help practicing nurses make decisions about the applicability of research findings to clinical practice.

A recent trend in nursing research utilization is the development of specialty-based models. Some specialty nursing organizations have recognized the need for and the effectiveness of collaborating on research-related issues. The American Association of Critical-Care Nurses (AACN) Thunder Project is an example of a specialty nursing organization's collaborative research effort. This project involved development and implementation of a research protocol to investigate the practice of flushing central arterial and

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Table 1

NURSING RESEARCH UTILIZATION MODELS

Date	Model	Published Information
1975 to 1977	Western Interstate Commission for Higher Education	J C Krueger, "Utilization of nursing research: The planning process," <i>Journal of Nursing Administration</i> 8 (January 1978) 6-9.
1975 to 1981	Conduct and Utilization of Research in Nursing Project	J A Horsley et al, <i>Using Research to Improve Nursing Practice: A Guide</i> (Philadelphia: W B Saunders Co, 1983).
1976 to 1985	The Nursing Child Assessment Satellite Training Project	D King, K E Barnard, R Hoehn, "Disseminating the results of nursing research," <i>Nursing Outlook</i> 29 (March 1981) 164-169.
1976	Stetler-Marram Model	C B Stetler, G Marram, "Evaluating research findings for applicability in practice," <i>Nursing Outlook</i> 24 (September 1976) 559-563.
1977	Dracup/Breu Model	K A Dracup, C S Breu, "Using research findings to meet the needs of grieving spouses," <i>Nursing Research</i> 27 (July/August 1978) 212-216.
1987	Goode Research Utilization Model	C J Goode et al, "Use of research based knowledge in clinical practice," <i>Journal of Nursing Administration</i> 17 (December 1987) 11-18.
1987	The Quality Assurance Model Using Research	C A Watson, G M Bulechek, J C McCloskey, "QAMUR: A quality assurance model using research," <i>Journal of Nursing Quality Assurance</i> 2 (November 1987) 21-27.
1994	Stetler Model	C B Stetler, "Refinement of the Stetler/Marram model for application of research findings to practice," <i>Nursing Outlook</i> 42 (January/February 1994) 15-25.
1994	Iowa Model of Research in Practice	M G Tier et al, "Infusing research into practice to promote quality care," <i>Nursing Research</i> 43 (September/October 1994) 307-313.
1989	American Association of Critical-Care Nurses	P H Mitchell et al, "American Association of Critical-Care Nurses Demonstration Project: Profile of excellence in critical care nursing," <i>Heart and Lung</i> 18 (May 1989) 219-237.
1989 to 1994	University of North Carolina Model	S G Funk, E M Tomquist, M T Champagne, "A model for improving the dissemination of nursing research," <i>Western Journal of Nursing Research</i> 11 (June 1989) 361-372.

venous catheters. The research protocol developed from a research utilization effort and led to a multisite clinical study that involved many AACN members working at various facilities.

INTEGRATIVE REVIEWS

Integrative reviews of the research literature are another approach to research utilization.

The Agency for Health Care Policy and Research (AHCPR) has modeled this approach to research utilization by having panels of experts conduct critical, integrative reviews of published research. The AHCPR clinical practice guidelines (eg, acute pain management, urinary incontinence) systematically evaluate available research and

make specific research-based recommendations for clinical practice.

AORN publishes a new edition of *AORN Standards, Recommended Practices, and Guidelines* each year. As research findings become available, the information within this publication will reflect new knowledge.

FUTURE TRENDS

As we move into the next century, nursing research utilization will become more collaborative and research-based nursing interventions will be needed to provide cost-effective, quality care. New networking opportunities (eg, Internet services, *Online Journal of Knowledge Synthesis*) will facilitate consultations and cooperation among nurse researchers and nurses who use research in their clinical practice

settings. Clinical nurse experts and specialty-based nurse researchers will play key roles in facilitating future research utilization efforts.

CONCLUSION

No particular research utilization model works for all nurses or all clinical practice settings. Examine the various models to understand their frameworks and implementation strategies. Regardless of the

model you choose, approach research utilization with a questioning mind, a willingness to use existing research, and a commitment to evidence-based perioperative nursing practice. As individuals and as group members, we are responsible for research utilization. ▲

Readers who have questions and ideas about perioperative nursing research are encouraged to call AORN's codirectors of perioperative research at (800) 755-2676 x 8277.