

# Best practice initiatives in geriatric nursing: Experiences from the John A. Hartford Foundation Centers of Geriatric Nursing Excellence

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**Four of the five John A. Hartford Foundation Centers of Geriatric Nursing Excellence (HCGNEs) have been involved in efforts designed to improve the quality of nursing care to older adults through evidence-based Best Practice Initiatives. This article describes the important role these initiatives play in building academic geriatric nursing capacity. Building on the work of other nurse researchers, these projects attend to organizational and individual aspects of change theory, the scientific basis for practice innovations, and the role of expert consultation to support change. Best practice examples from the HCGNE demonstrate how the science involved in translating research into gerontological nursing practice has evolved, creating important educational opportunities for nursing students at all levels. In order to build academic geriatric nursing capacity, it is essential that schools of nursing help undergraduate and advanced practice nursing students develop an appreciation for how research and education can improve the care of older adults.**

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**Nurs Outlook 2006;54:212-218.**

0029-6554/06/\$—see front matter

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doi:10.1016/j.outlook.2006.05.002

Students are drawn to the nursing profession because they understand that clinical practice can make a difference in the lives of individuals. In order to build academic geriatric nursing capacity, it is essential that schools of nursing help undergraduate and advanced practice nursing students develop an appreciation for how research and education can improve the care of older adults. Four of the five John A. Hartford Foundation Centers of Geriatric Nursing Excellence (HCGNEs) have been involved in Best Practice Initiatives (BPIs). These initiatives are designed to improve the quality of nursing care to older adults through the implementation of evidence-based nursing interventions. Using a variety of methodologies, gerontological nursing research is translated into “Best Practice” models of care. Partnerships with clinical agencies involved in these best practice initiatives provide outstanding training venues for students and demonstrate cutting edge strategies for the diffusion of innovations into practice.

The purposes of this article are to (1) discuss the importance of BPIs in building academic geriatric capacity in nursing; (2) describe the different approaches to best practice implementation used by each HCGNE; (3) present outcomes from BPIs and the lessons learned; and (4) make recommendations for future efforts in this area.

## **BUILDING ACADEMIC GERIATRIC CAPACITY THROUGH BEST PRACTICE INITIATIVES**

In a recent review of evidence-based health care innovations, Greenhalgh et al<sup>1</sup> describe how, early-on, health care professionals assumed a linear path to the clinical adoption of research-based innovations: research → published evidence → change in practitioner's behavior.<sup>2</sup> Unfortunately, that model was overly simplified. An in-depth review of the diffusion of

**Table 1. Pioneering Nursing Research Utilization Projects**

Regional Program for Nursing Research Development (WICHE), 1978.	Involved teaching change theory and research utilization to nurses from a variety of clinical agencies in a workshop format and pairing clinicians and researchers to solve clinical problems using research.
Conduct and Utilization of Research in Nursing (CURN) Project, 1978.	Developed a method to evaluate research findings, translate those outcomes into practice guidelines and then assist practicing nurses to adopt these new practices.
Nursing Child Assessment Satellite Training (N-Cast-1), 1980.	Developed different strategies to disseminate research findings to pediatric nurses (satellite transmission, videotapes . . .) using specifically recruited nurses to translate the research findings into practice.
Robert Wood Johnson Teaching Nursing Home Project, 1984.	Paired nursing homes with schools of nursing in order to improve nursing home care by integrating nursing research into practice and to identify areas in need of additional research.
Nurses Improving Care of Hospitalized Elders, 1992.	A comprehensive program that hospitals use to foster system-wide improvements in the care of older patients through the adoption of evidence-based nursing practices.
Stetler Model of Research Utilization, 1994.	Identifies a conceptual model for how organizations can utilize nursing research findings to improve practice.

innovations into practice suggests that successful quality improvement work involves a “pervasive culture that supports learning throughout the care process.”<sup>3</sup> In order for older adults to fully realize the benefits of gerontological nursing research, the next generation of nurse scientists needs a comprehensive understanding of the intricacies of research utilization and must be conversant in methodologies for translating research into practice.

The BPIs of the HCGNEs provide fertile ground for the training and professional development of nurse researchers by providing educational opportunities for students that involve evidence-based nursing interventions. The different models of care developed and implemented by the HCGNEs provide important vehicles for evaluating different approaches to adopting best practices and for conducting effectiveness research. Students have unique opportunities to explore the challenges involved in implementing research-based practice protocols within the context of a health care system that must be responsive to varied constraints (eg, limited financing, staffing shortages).

The BPIs generate interest and excitement in undergraduate and graduate students who might not understand how research can make a difference in the lives of older adults. They also help to build clinical practice sites in which students can observe and participate in high quality care based on research. These sites are critical in order to ensure that learning opportunities reflect the best that gerontological nursing care can be. The enduring relationships between clinical agencies and academic centers has also been instrumental in

helping to develop an educational infrastructure that integrates clinical geriatric nursing principles into each school’s curricula. Moreover, the partnerships between schools of nursing and clinical agencies create an environment that encourages practicing nurses to return to graduate school and pursue an academic career in gerontological nursing.

## BEST PRACTICE INITIATIVES

This work builds on that of other nurse researchers who have tested strategies to integrate research into clinical practice. Three pioneering nursing research utilization projects were conducted in the 1970s: The Regional Program for Nursing Research Development, sponsored by the Western Interstate Commission for Higher Education (WICHE);<sup>4</sup> the Conduct and Utilization of Research in Nursing (CURN) Project;<sup>5,6</sup> and the Nursing Child Assessment Satellite Training (NCAST-I)<sup>7-9</sup> (Table 1).

In the 1980s, the Robert Wood Johnson Foundation’s Teaching Nursing Home Initiative partnered Schools of Nursing with long-term care facilities in an effort to improve care to older adults.<sup>10-15</sup> These partnerships served to inform gerontological nursing research while also providing clinical placement sites for nursing students. More recent efforts include Nurses Improving Care of Hospitalized Elders (NICHE)<sup>16-18</sup> and the Stetler Model of Research Utilization,<sup>19,20</sup> to name just a few in this burgeoning field (Table 1).

In each of these projects, the authors point out the importance of (1) basing practice changes on sound science, (2) attending to both organizational (eg, infra-

structure changes, obtaining “buy-in” at all levels within the organization) and individual (eg, recognizing readiness to change, identifying early adopters) aspects of change theory, and (3) the role of expert consultation to provide ongoing support for change. Examples from the BPIs of the HCGNEs demonstrate how the lessons learned from earlier work have evolved to further develop the science involved in translating research into gerontological nursing practice, and simultaneously creating important educational opportunities for nursing students at all levels.

### *Using Sound Science*

The push to integrate evidence-based innovations into nursing practice has been accompanied by increased emphasis on evaluating the quality of the evidence.<sup>20</sup> A debate continues in nursing regarding the level of skill in appraising published research reports that should be expected of nurses at the bedside.<sup>21</sup> While it is not within the scope of this article to try to resolve this debate, it is clear that appropriate appraisal of specific bodies of research is an integral aspect of research utilization.

One of the goals of the BPI at the University of Pennsylvania (Penn) HCGNE is to develop exportable innovations in nursing care that are based on sound research. *GERO TIPS Online* translates academic research into practical applications and disseminates these “practical solutions” to clinicians in the field via the Internet free of charge. This translation involves a comprehensive review of the research and a distillation of the key concepts for practice into a brief and accessible form. For example, one of the resources is for “restraint-free nursing home care” and is based on a program of research on individualized care by Strumpf and Evans.<sup>22-34</sup> This on-line module is written in language that is free from “researchese” and provides clear definitions of terms that may be new to some nurses.

In addition, a key goal of the Penn HCGNE is dissemination of research directly to practice arenas through the Penn Nursing Consultation Service, one of the School of Nursing’s practices. Further work by gerontological nurse researchers is directly put into practice at the Penn School of Nursing’s Living Independently For Elders (LIFE) program, a PACE (Program of All-Inclusive Care of the Elderly) site adjacent to the Penn campus.

### *Organizational Change*

According to Rogers,<sup>35</sup> organizational adoption of innovations depends, in part, on how well the innovation matches the organization’s priorities. Similarly, Greenhalgh et al<sup>1</sup> noted that innovations that were compatible with the user’s perceived needs were more readily adopted than innovations that required the organization to develop new priorities. Clinical innova-

tions in nursing practice often involve a level of complexity that requires support at multiple levels within the organization. This support is more readily available if the innovation is attuned with an organization’s overall strategic initiatives.

One way to maximize the match between evidence-based innovations and health care organizations is to encourage the health care organization to select which innovations it will implement into practice. At Oregon Health & Science University (OHSU), the Best Practices Initiative developed a “Partnership Model” in order to maximize the input of health care agencies involved in the projects. The selection of evidence-based innovations to pursue was derived out of a series of discussions with the clinical partners regarding their priorities and individual organizational needs. Rather than bringing an innovation to the agency to adopt, this model ensured that the work was of specific and high interest to the organization and, thus, the interest and motivation for change were heightened.

In this partnership model, work groups were developed that included gerontological nurse researchers, doctoral students, health care administrators and front-line workers. Using an organizational facilitator, the work groups developed and implemented evidence-based innovations in the management of chronic leg ulcers and pressure ulcers.<sup>36</sup> The agencies’ interest in this work led to significant in-kind contributions and sustained their commitment to change because it was an area they had recognized a priori as being important to address.

### *Individual Change*

Adoption of change by individual clinicians typically occurs through a process that unfolds over time. While some authors suggest that individuals can be classified along a continuum from “early adopters” to “laggards,”<sup>35</sup> others argue that this process involves a more complex interactive process where clinicians require opportunities to experiment and test out the use of innovations in practice before adoption occurs.<sup>1</sup> Many experts agree that, while presenting research findings to clinicians is necessary, it is insufficient to change practice alone.<sup>37</sup>

An important part of implementing evidence-based practices is getting accurate information into the hands of clinical nurses in a usable format and assisting them to change their individual practices. The University of Iowa College of Nursing (Iowa) has developed a number of evidence-based practice protocols for nurses (eg, acute pain management in the elderly, bathing a patient with dementia). The Iowa HCGNE developed companion pieces (ie, supporting materials for implementation, subscription to a listserv to provide ongoing access to support) for these protocols and a toolkit to facilitate adoption of the evidence-based innovations. In addition, ongoing support is provided through indi-

vidualized workshops where expert clinicians work with individuals and teams to explore ways of changing specific practices and generating solutions to challenging clinical cases. This support is essential for nurses as they are going through the processes of changing their approach to the care of older adults.

### *Expert Consultation*

A growing body of research supports the use of advanced practice nurses to improve the care of older adults.<sup>38,39</sup> These clinical experts play an important role in translating research into practice by forming a bridge between bedside clinicians and researchers. By assisting clinicians in the development and implementation of scientifically based clinical protocols, these consultants have been shown to improve the outcomes for patients in a variety of settings.<sup>38,39</sup>

The BPI at the University of Arkansas for Medical Sciences (UAMS) was designed to teach providers in a geriatric clinic to properly assess, manage, and counsel elderly patients who fall or are at high risk for falls. The UAMS HCGNE allotted funds for a part-time nurse practitioner in the clinic to champion the project, encourage provider participation, and work out process problems. A video demonstrating the proper procedure for conducting a falls screening and full assessment was available to providers as a ready reference and teaching tool. This project demonstrates how nursing experts can play a leadership role in introducing strategies to implement evidence-based practice in a setting.

## **OUTCOMES FROM THE MEASUREMENT GROUP AND LESSONS LEARNED**

An evaluation of the BPI was conducted by The Measurement Group (TMG), an independent group of researchers which specialize in program evaluation for health sciences. They explored the BPI models of care that were developed by the HCGNE and they explored the improvement in the capacity or quality of care for older adults. The Measurement Group documented a number of activities, outcomes and lessons learned (see Tables 2, 3 and 4 for selected exemplars).

The HCGNEs conducted activities to develop, test or implement evidence-based models that seek to improve geriatric care delivery and health outcomes. Many of the HCGNEs indicated that they learned the difficulty of managing, providing direction to, and guiding the conceptualization of an integrated model when it does not fall under the direct financial and administrative control of the HCGNEs. Additionally, the HCGNEs noted the important role that staff plays in the development and implementation of models of care. Specifically, the HCGNEs observed that many programs and models are understaffed and could benefit from leadership training. Lastly, the HCGNEs noted the impor-

tance of Hartford Foundation funding and other funds to allow for the development of models of care.

All of the HCGNEs also conducted activities to directly improve care of older adults and increase the number of treatment slots available to elderly patients. The number of activities, outcomes, and lessons learned reported by all HCGNEs related to improving the capacity or quality of elder patient care during each 6-month reporting period were also measured. HCGNEs efforts to improve care capacity and the quality of care delivered to elderly patients included developing and implementing best practices or evidence-based protocols, assessing the state of existing care, and providing tools to help nurses deliver quality care (Table 4).

As nurses gained additional knowledge and skills through these activities, the HCGNEs reported improvements in the quality of care in many sites. The HCGNEs conducted activities to directly improve the quality of care of older adults and increase the capacity of treatment options available to elderly patients. Through these activities, the HCGNEs primarily recognized the importance of staff empowerment in providing a higher quality of care. Specifically, the HCGNEs indicated that increased educational opportunities, the recognition of staffing excellence, the consideration of staffing input and an overall sense of staff buy-in all positively contribute to improvements in the capacity and quality of elderly patient care.

An important lesson learned by the HCGNEs is that it is difficult to convince elderly patients of the need for additional services—such as prevention—and justify the expenditure. As a result, the HCGNEs concluded that further expansion and promotion of services is an important next step. In addition, the HCGNEs reported learning that partnerships and linkages are critical to translating research into practice. Nurturing ongoing relationships with clinical colleagues is an integral part of sustaining evidence-based innovations over time and creating an atmosphere conducive to continuous improvements.

## **RECOMMENDATIONS FOR THE FUTURE**

It is essential that geriatric nurses have the organizational, financial, and management skills to take a leadership role in guiding interdisciplinary teams in the change process. The University of Pennsylvania made a good start on the use of technology to disseminate information and UAMS installed the Falls Best Practices in templates on the computerized medical records. Similarly, OHSU worked with the Portland Veterans' Administration (VA) Medical Center to develop an evidence-based template for wound assessment that is now part of the permanent computerized medical records. More emphasis should be placed on using computerized medical

**Table 2. Selected Exemplars of HCGNE Best Practice Activities**

HCGNE	Activities
OHSU	<ul style="list-style-type: none"> <li>• Worked to develop a cost-effective model of wound care for home care patients with one of the partners of the Best Practices Initiative.</li> <li>• Concluded one phase of a statewide initiative to change the existing “behavior management” culture in licensed facilities to a more person-centered care model.</li> <li>• Developed a Web-based structure for remote wound care consultation in collaboration with strategic partners.</li> <li>• Worked to improve staff retention in long-term care facilities by enhancing the work environment of direct-care workers.</li> </ul>
UAMS	<ul style="list-style-type: none"> <li>• Worked on an interdisciplinary team to create culture change in LTC facilities.</li> <li>• Developed a model of enhanced interdisciplinary case management for elders living at home in collaboration with a transitional care and an elder service facility.</li> <li>• Developed and tested a model of interdisciplinary clinical care in Senior Health Centers in Arkansas.</li> <li>• Implemented the South Arkansas Health Education, Living and Life Options program, a partnership of South Arkansas Healthcare and Social Service Providers.</li> <li>• Developed and marketed models of care to increase options of care for elders and improve transitional care outcomes.</li> </ul>
Iowa	<ul style="list-style-type: none"> <li>• Developed, disseminated and tested evidence-based protocols through partnerships in long-term care settings.</li> <li>• Increased RN and LTC leadership access to and participation in best practices education.</li> <li>• Developed and marketed models of care and case management through partnerships with long-term care, county healthcare and social service providers.</li> <li>• Collaborated with an interdisciplinary team to create culture change in corporate nursing homes.</li> <li>• Implemented Home Safe, a nurse-managed program that coordinates, monitors and provides services for older adults in their own residence, which can be a single family home, apartment, or assisted living.</li> </ul>
Penn	<ul style="list-style-type: none"> <li>• Formed research workgroups to build an interdisciplinary research infrastructure, determine interest of health systems and insurers related to research on transitional care and test intervention modules, including one on the efficacy of mental health care intervention.</li> <li>• Obtained financial support for palliative care practice model research and provided nursing expertise in the form of consultation to the “Education for Physicians on End-of-Life” proposal.</li> <li>• Examined the organizational culture in nursing homes, focusing particularly on patient-centered cultural change in a nursing home setting.</li> <li>• Developed a planning outline to guide the project team’s effort to complete work assignments necessary to launch a national clinical demonstration project as part of the “Transitional Care Research &amp; Model Replication” project.</li> </ul>

records and other technology to both implement and monitor best practices.

Schools of nursing, in partnership with clinical agencies, need to establish ongoing, predictable meetings to discuss implementation of best practices and priorities for collaboration to strengthen care for elders. Clinical agencies need to establish best practice implementation in their core operations and fund these initiatives adequately in order to sustain ongoing practice improvements. It is essential that these operations include input from staff at all levels within the organization to achieve the level of “buy in” necessary to make and sustain fundamental changes in practice.

Finally, because best practice work is relatively new, we need additional research in translational methodologies. We must understand the context in which specific strategies work and do not work and for which kinds of

clinical issues. We need to understand what approaches are universal and which need to be tailored to the unique constraints of different clinical agencies and institutions. A better understanding of the science that underlies translating research into practice is necessary in order to promote and sustain evidence-based changes in the care of older adults.

Significant portions of this article, as well as the empirical data used in the other articles in this Special Issue of Nursing Outlook, are derived from an interim evaluation report on this Initiative: *Interim Conclusions from the Cross-Cutting Evaluation of the Hartford Centers of Geriatric Nursing Excellence* by G. J. Huba, L. B. Quach, L. A. Melchior (2005). Contributors to this evaluation at The Measurement Group include: G. J. Huba, PhD; Lisa A. Melchior, PhD; and Le B. Quach, MPH, with the assistance of Emmeline Chuang, BA; Fred Loya, BA; Maya Melczer, BA; and Jennifer Ricards, BA.

**Table 3. Selected Exemplars of HCGNE Best Practice Outcomes**

HCGNE	Outcomes
OHSU	<ul style="list-style-type: none"> <li>• Successfully implemented person-centered care projects in 10 facilities regionally.</li> <li>• Beta-tested a Web-based structure for wound care consultation 2 long-term care sites.</li> <li>• Successfully implemented an evidence-based wound care program at a home care agency.</li> </ul>
UAMS	<ul style="list-style-type: none"> <li>• Created diverse community partnerships while implementing an integrated care model.</li> <li>• Developed a Web site for South Arkansas Health Education, Living and Life Options, designed to assist older and disabled adults in locating supportive services and resources in order to continue living at home in the community.</li> </ul>
Iowa	<ul style="list-style-type: none"> <li>• Introduced Practicum sites to evidence-based practices by faculty who have students at the site.</li> <li>• Saw an increase in the number of long-term care student practicum sites using best practices.</li> </ul>
Penn	<ul style="list-style-type: none"> <li>• Secured resources to support multiple research agendas including various university institutes and community partners.</li> <li>• Completed an assessment of health systems/insurers participation in the multi-site transitional care model</li> </ul>

**Table 4. Selected Exemplars of HCGNE Best Practice Lessons Learned**

HCGNE	Lessons Learned
OHSU	<ul style="list-style-type: none"> <li>• Training long-term care staff in leadership roles enhances their ability to create and nurture a supportive work environment.</li> <li>• There is a tension between the needs of the research community to protect vulnerable populations while, at the same time, pursuing organizational improvement projects in a timely manner.</li> <li>• Having partners select projects of concern and interest to them is critical in engagement and project development.</li> </ul>
UAMS	<ul style="list-style-type: none"> <li>• It is difficult to develop and implement a model for care when the site is in the community rather under the direct control of a clinic or unit setting.</li> <li>• It is difficult to bring multiple, diverse groups together, such as social services and health care disciplines, because there are such different expectations between groups.</li> <li>• It is difficult to guide the conceptualization of the integrated model when you do not control the project financially.</li> </ul>
Iowa	<ul style="list-style-type: none"> <li>• Long-term care staff respond well to the implementation of best practices and innovative models when included as partners in the decision- and policy-making process.</li> <li>• It is important to get buy-in of the entire organization to optimize nurse and staff implementation of evidence-based practices or the introduction of any new model of practice.</li> </ul>
Penn	<ul style="list-style-type: none"> <li>• Taking a proactive approach to identifying research resources will enable the HCGNE to pursue unique private and public partnerships to support a wide variety of research.</li> <li>• Establishing focused work groups related to specific project goals is an effective mechanism to accomplish progress toward identifying "like" research agendas and promoting collaborative research.</li> <li>• It is important to develop and execute dissemination strategies that promote palliative care research collaboration, provide opportunities to secure resources to broaden the scope of research and facilitate interdisciplinary collaboration and practice.</li> </ul>

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