SIGMA THETA TAU INTERNATIONAL

CLINICAL SCHOLARSHIP RESOURCE PAPER

Knowledge work, in service of care, based on evidence

Developed by the Clinical Scholarship Task Force, 1999

FOREWORD

The Clinical Scholarship Task Force was first convened in 1996 to explore the concept of scholarship in practice and to promote the unity of clinical and academic settings. When nursing education first shifted from the hospital to the academic setting, the separation of pedagogy from practice was essential for developing the nursing profession as an intellectual endeavor. Now we have reached the era in which practice itself is a scholarly undertaking; theory and research are grounded in clinical phenomena and the old distinctions between clinician and academician are spurious, at best.

For the last two biennia, the task force has met regularly to deliberate the various dimensions of clinical scholarship and the ways in which it can be promoted by Sigma Theta Tau. From the beginning, the task force operated less like a committee and more like a nursing think tank. Members shared their views on--and experiences with-- clinical scholarship, described nurses who functioned as clinical scholars, and identified barriers to scholarship in both academic and practice settings. Meetings took on a fervor that comes with examining one of the most fundamental objectives of intellectual activity in nursing – how to improve care and build the body of nursing knowledge, mutually reinforcing science and technology in the advancement of nursing practice.

The task force conceived this publication as a means of communicating its deliberations to the wider membership of Sigma Theta Tau and the profession. It is intended less as a definitive statement on clinical scholarship and more as a work-in-progress, inviting discussion, debate, new information and new technology, and inspiring ideas that will shape the direction of nursing practice. There are a number of omissions that we anticipate will appear in subsequent editions. For example, we would like to see a greater emphasis on nursing practice in both nonhospital environments and settings that do not have a strong teaching orientation. Nonetheless, it contains our best thinking about clinical scholars and scholarship, as well as the environments most conducive to advancing scholarship in the practice setting. You will find real examples of clinical scholarship as they occurred in Baystate Medical Center in Massachusetts, the University of Texas Medical Branch, Kaiser Permanente and California Pacific Medical Center, and the University of Iowa Hospitals and Clinics and College of Nursing. It also explores vehicles for advancing clinical scholarship (Clinical Scholars Mentor Program, Clinical Fellowships, celebrations of clinical scholarship, etc.) and, last, it provides a brief but exceptional bibliography that we believe will be a useful start for students, clinicians, educators and administrators as they begin their exploration of clinical scholarship.

At the end of the volume, we pose questions about clinical scholarship. They are intended to stimulate discussion in Sigma Theta Tau chapters, in departments, schools and colleges of nursing, hospitals, home health and long term care facilities, public health agencies, primary care clinics, school and occupational health settings or any one of the myriad of environments in which nurses practice. Our goal is to sensitize the nursing community to the importance of clinical scholarship. We thus offer this volume to stimulate ideas and activity among practitioners, educators and administrators. We welcome your responses.

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Descriptions of: Clinical Scholars, Clinical Scholarship and The Context In Which Clinical Scholarship Will flourish

Adopted by the Sigma Theta Tau International Board of Directors, February 13, 1999

Clinical Scholars

Clinical scholars are characterized by a high level of curiosity, critical thinking, continuous learning, reflection and the ability to seek and use a spectrum of resources and evidence to improve effectiveness of clinical interventions. They consistently bring a spirit of inquiry and creativity to their practice to solve clinical problems and improve outcomes. As clinical scholars mature, they assume an active role in creating and perpetuating an environment in which clinical scholars will grow in sharing the results of their work with the nursing community.

Clinical Scholarship

Clinical Scholarship is an approach that enables evidence-based nursing and development of best practices to meet the needs of clients efficiently and effectively. It requires the identification of desired outcomes; the use of systematic observation and scientifically-based methods to identify and solve clinical problems; the substantiation of practice and clinical decisions with reference to scientific principles, current research, consensus-based guidelines, quality improvement data and other forms of evidence; the evaluation, documentation and dissemination of outcomes and improvements in practice through a variety of mechanisms including publication, presentations, consultation and leadership; and the use of clinical knowledge and expertise to anticipate trends, predict needs, create effective clinical products and services, and manage outcomes.

The Context of Clinical Scholarship

Since nursing is practiced within organizational settings such as hospitals, clinics and schools, the degree to which clinical scholarship can emerge is related to specific features of these settings. Although clinical scholarship is not dependent on any one characteristic of the environment, it is likely to flourish in a context that includes many of the following features:

- where the administration understands the importance of clinical scholarship and supports it;
- where creativity, questioning, innovation are promoted and valued;
- where the improvement of clinical outcomes and efficiency are expected, encouraged and rewarded;
- where there are consistent and accessible vehicles for disseminating innovations and outcomes of clinical scholarship and for exposure to the clinical scholarship of colleagues;
- where evidence-based practice and the application of new knowledge are institutional expectations;
- where there are mechanisms through which novice scholars work with senior scholars who serve as role models, mentors, and consultants;
- where resources, including time, technology, and access to knowledge are accessible in the clinical environment;
- where there is mutual respect and collaboration between nurses and professionals in related disciplines; and
- where linkages with academic nursing are established so that clinicians and academicians can work together to improve patient outcomes.

Clinical Scholarship Exemplar: The University of Iowa

Rose Marie Friedrich, RN, MSN
Melanie Dreher, RN, PhD, FAAN

In the medical profession, clinical fellowships have been used extensively to prepare physicians in new and specialized areas of clinical practice. Fellowship programs create a scholarly ambiance in the practice setting where clinician-scholars advance medical science and technology as well as clinical practice. In nursing, however, in spite of the profound and rapid change that has taken place in clinical practice, clinical fellowship programs are relatively rare. New clinical technology and knowledge in nursing generally have been imparted through specific in-service and continuing education programs. While these strategies have been widely and successfully used to promote clinical proficiency, they do not necessarily promote clinical scholarship, which stresses identification of outcomes, systematic inquiry and an evidence-based approach to practice, as opposed to practice based on tradition and ritual. Clinical fellowships provide an extended opportunity to acquire new clinical knowledge but also to enhance clinical decision making and participate in the improvement of patient outcomes.

In order to explore the value of the clinical fellowship for promoting nursing scholarship and clinical practice, the University of Iowa Hospitals and Clinics (UIHC) and the College of Nursing initiated the Clinical Fellows Program. The program has two compelling objectives. One is to expose nursing educators to the most recent trends in clinical management and thus improve the quality of clinical instruction. The other is to promote scholarly inquiry in nursing practice to solve clinical problems and improve patient outcomes. In the example given below by clinical fellow, Professor Rose Marie Friedrich, the goals of enhancing education of the faculty and students while improving patient outcomes were mutually reinforcing.

To begin, over the past 25 years, there have been major advances in the pharmacological management of schizophrenia, as well as societal shifts in social policy that promote the non-institutional care of patients. As a result, most people with schizophrenia now remain in the community and are hospitalized only during acute episodes. The goals of institutional care have shifted from long term therapy and gradual re-entry to the community to stabilization with an abbreviated time frame to hasten discharge. The undesired consequences of this shift include medication noncompliance, illness relapse, frequent re-hospitalization and an overall poor quality of life. In addition, these changes in clinical practice as well as changes in reimbursement structure have transferred the burden of care from institutions to patients' families and communities. In Iowa about 60% of persons with mental illness live with their families. Nationwide, from 49% to 66% of persons with mental illness return to families after hospitalization. While managed care increasingly restricts in-patient services, very few resources are available to persons with schizophrenia in the community. Thus patients return to their families much sicker than previously and most families are not prepared to assume the care-giving responsibilities that are expected of them. Nor are institution-based staff adequately prepared for more family-oriented intervention.

These changes in the treatment and financing of schizophrenia mandate changes in psychiatric/mental health education in nursing. In addition to undergraduate students, master's students preparing for advanced practice careers in mental health must understand these changes in clinical management, including the latest pharmacological protocols. In order to increase her effectiveness in a community-based undergraduate curriculum and in a newly-instituted psychiatric/mental health nurse practitioner program, Professor Friedrich used the clinical fellowship to advance her clinical knowledge and practice. At the same time, the clinical

fellowship described below provided an opportunity for the hospital-based staff to receive consultation from Professor Friedrich, who has an extensive record of scholarship and experience related to the impact of schizophrenia on families.

A Clinical Fellowship in Neurobiological Nursing: A Catalyst for Scholarship

Rose Marie Friedrich, RN, MSN

After receiving a letter of appointment as a clinical fellow, I received a two week orientation to the neurobiological medicine unit and then joined the interdisciplinary team for at least one day each week throughout the academic year. I had many years of experience in guiding students during their clinical practica in psychiatric nursing, as well as an extensive record of scholarship on the impact of mental illness on families. Now, I had the opportunity to be a "learner" and become well versed in the current clinical management of persons with schizophrenia. As a clinical fellow, I worked closely with an interdisciplinary team of master clinicians to inform and expand my practice. I wanted to update my clinical knowledge and practice so that I could provide the most effective instruction to both undergraduate and graduate students. Since the majority of patients would return to their families after discharge, our goal was to determine ways in which the family members could be better prepared to receive their family member and achieve desired outcomes. Together, the staff and I identified the desired outcomes of greater medication compliance, reduced re-admissions, and an increased ability of the family to cope with the illness. My fellowship responsibilities thus included working directly with both families and staff to identify ways in which the clinical team could more effectively engage family members in the management of care.

Over a period of months, I educated and nurtured families by developing individualized bibliographies, supporting family members during electro-convulsive treatments, easing the transition from the hospital by helping families to access community resources as well as consulting with staff about families that were, themselves, depressed and angry. Specific work with staff included informal teaching about the needs of families. Sometimes this occurred during the morning report to the interdisciplinary team; other times it occurred when I would talk with staff one-to-one about a particular patient. The grief model of adaptation to severe mental illness was valuable in helping the staff to understand family behaviors toward the staff that often ranged from depression to anger.

Initially, I assessed the educational materials that were available on the unit as well as in the UIHC library for patients and families. Since they were minimal, I assisted the nursing staff in applying for a small grant to purchase books and videotapes from the local chapter of the National Alliance for the Mentally Ill. My major role in the application was to develop a list of references for a unit library that would be useful to educate and prepare families to receive a family member with schizophrenia.

In addition to serving as a role model and consultant to the staff in family management, I met routinely with the team to discuss the significance of family members and the ways in which they could be included in the plan of care. Together we explored the "evidence," drawn from the literature, from known clinical practices in other facilities, and from experience and observations on the unit. The ideas that were reviewed and discussed in these sessions subsequently were incorporated into a psycho-educational family intervention. The literature identified studies that had, in fact, tested a number of family interventions but these tended to be of a long duration, require significant staff involvement and were not cost-effective. Studies

involving hospital to home transition drawn from the neonatal and geriatric literature, however, suggested that the inclusion of families in the treatment plan would reduce the negative consequences of rapid discharge on both the family and the member with the illness. The evidence suggested that phone calls and modest follow-up can reduce costs, complications, re-admissions and create better management of the illness. From this body of evidence, we discussed possible interventions such as using the grief model to assist families adapt to loss, connecting families to other families with similar experience, and communicating with families post-discharge through follow-up phone calls.

Approximately six months into the fellowship, we decided to disseminate our clinical intervention and outcomes. To our knowledge, there were no hospitals in Iowa that provided a comprehensive psycho-educational intervention for families. If an evaluation of the intervention revealed that inclusion of families in the management of care during hospitalization improved the patient's quality of life, reduced recidivism, and lowered cost, we believed it would be useful in other settings. There was a high level of investment and enthusiasm for a systematic evaluation of the intervention among the team members, including the clinical staff, the nurse manager, and the psychiatrists.

The evaluation of the intervention was funded by an intramural trust fund and currently is being carried out on the unit described above. Thus my role on that unit has continued beyond the original fellowship and now includes the implementation and evaluation of the project. The study will evaluate the outcomes of families who receive the psycho-educational intervention by comparing them with those who have the traditional relationship with staff on the unit. Outcomes include the effect on family members' knowledge of schizophrenia, satisfaction with health care services, coping behavior, levels of psychological distress and ultimately, the reduction of medication noncompliance and re-hospitalization.

Often, faculty members are removed from the everyday experiences and problems of clinicians and clinical management and issues of credibility arise in the preparation of students. The faculty member may be seen by the staff as uninformed and unrealistic in their goals, thus undermining student confidence. Clinicians, on the other hand, may be so mired in the day-to-day problems of getting the work done, that it is difficult to engage in an evidence based practice and identify patient outcomes. Thus, the lack of real world experience by the faculty member and difficulty in applying the process of inquiry by clinicians impede progress in resolving clinical problems, advancing nursing science and technology, and improving education. In the clinical fellowship described above, the faculty member, as a clinical fellow, had the opportunity to become the learner as well as the consultant. The clinical fellowship thus establishes an ambiance of learning and exploration in which clinical scholarship can flourish.

In this clinical fellowship, the goals of the college were consistent with the goals of the UIHC and it was mutually initiated with the support of the chief nursing officer and the dean. The primary goals were (1) for the clinical fellow to acquire knowledge and expertise to improve instruction and (2) for the clinician team to acquire consultation on family-centered care in a schizophrenic population. Thus the college benefited by faculty member who was better prepared to teach in a new nurse practitioner program; the hospital benefited by developing a cost-effective intervention in managing the care of patients with schizophrenia. It is possible, of course, to initiate a clinical fellowship from either the practice or the academic community, depending on the specific needs. The program creates an academic ambiance in the practice setting and provides a vehicle for clinicians as well as faculty members, who may not be oriented to or prepared to conduct research, to express their scholarship.

Research fellowships are now part of the professional nursing argot while clinical fellowships remain relatively uncommon. While both foster inquiry and intellectual curiosity, research focuses on explanation and theory building, while clinical scholarship is focused on clinical problem solving. Nonetheless, this example demonstrates how clinical scholarship is not only informed by research but actually can lead to research as nursing technology and nursing scholarship are mutually reinforcing.

Clinical Scholarship Exemplar: The University of Texas Medical Branch

Suzanne Prevost, RN, PhD,CNAA
Cheryl Lehman, RN, MSN

In 1993 the hospitals of the University of Texas Medical Branch established a Department of Outcomes Evaluation. Nurses employed in this department developed a model and a process to continuously improve quality of care, cost effectiveness and customer service (Stonestreet & Prevost, 1997). For 6 years, the model has evolved and has been applied to a variety of clinical issues from pressure ulcers to pain management to staff satisfaction. These nurses and their work exemplify the people and the process of clinical scholarship. The following case illustrates the work of one clinical scholar.

Cheryl Lehman: A Clinical Scholar in Pursuit of Quality and Cost-Effectiveness

Cheryl Lehman, a rehabilitation clinical nurse specialist, was hired into the Outcomes Evaluation Department upon graduation from her master's program. Cheryl had several years of experience as a staff nurse, preceptor, and clinical educator in various rehabilitation settings. She eagerly accepted her new role and the challenge to develop and implement a hospital-wide program to reduce morbidity and costs associated with pressure ulcers. She started by assembling an interdepartmental Skin Care Team and leading them in conducting research to document the baseline incidence and prevalence of nosocomial pressure ulcers in the institution.

Under Cheryl's direction, the team used their research findings, a comprehensive literature review, and resources from professional organizations and the Agency for Health Care Policy and Research (AHCPR, 1992) to design research-based policies, procedures, and protocols for the prevention and treatment of pressure ulcers. Some of the changes in pressure ulcer care included: incorporation of the Braden Scale (a validated pressure ulcer risk assessment tool) into the nursing admission assessment, development and implementation of algorithms and decision trees for prevention and treatment interventions, identification of pressure ulcer experts and implementation of a nurse-to-nurse consultation process, preparation and distribution of skin care manuals for each nursing unit, and modifications to nursing documentation forms. Cheryl also played a leadership role as nurses in this institution participated in regional and national benchmarking projects, in collaboration with other academic medical centers, to determine best practices in pressure ulcer prevention and treatment.

Another step in this change process was the evaluation of supplies and devices used for pressure ulcer care. Everything from hospital mattresses, to low air loss beds, to incontinence pads, and wound care supplies were critically examined. Cheryl led the team in data-based decision-making by reviewing the research base for each product, as well as the ease of use, and cost-effectiveness. She successfully negotiated with vendors for discounted pricing on some high volume items, and she negotiated donations of free supplies for indigent patients. Simultaneously, she applied her knowledge of information systems to design and implement instruments and processes to track patients at risk for pressure ulcers, the interventions they were receiving, and the associated costs. Through the application of this system, Cheryl detected several incidences where the hospital had been over-billed by vendors supplying pressure ulcer products.

Then Cheryl directed her focus toward education. She collaborated with nurse educators and other members of the Skin Care Team to design a creative and comprehensive educational program explaining the rationale and processes for the new pressure ulcer protocols. She prepared and presented individualized classes for physicians, nurses, and unlicensed staff. Due to the size, diversity, and turnover of staff in this university system, Cheryl and her partners repeated the offerings numerous times, and reinforced the didactic content with bedside consultation and role modeling. She also guided members of the team in developing patient and family educational resources to promote skin integrity.

After a year of aggressive education, the team replicated the pressure ulcer incidence and prevalence studies, and demonstrated significant improvements in both. Prevalence decreased from 13.7% to 10.5% and the incidence of nosocomial ulcers dropped from 11% to 5.2%. Likewise, actual expenditures for specialty beds and other pressure ulcer products dropped by more than $100,000 in one year. Cheryl and her team shared these results through a variety of mechanisms. The outcomes and implications were published in the staff newsletter, and were presented at nursing management meetings and medical staff meetings. Then Cheryl and other team members shared their results through regional and national conferences and publications, and provided consultation to nurses in other settings (Prevost & Lehman, 1996, Prevost, 1998, Stonestreet & Prevost, 1997).

Nurses at the University of Texas Medical Branch replicated the pressure ulcer prevalence study annually for five years. The prevalence rate continued to decrease each year. After the fifth year, this outcome measure was incorporated into a quarterly quality improvement program based on the American Nurses Association Report Card for Acute Care. (ANA, 1995).

Throughout all of these experiences, Cheryl drew upon her expert clinical knowledge, her knowledge of the research literature and research processes, her knowledge of information systems, and her interpersonal and political skills. She collaborated and negotiated with nurse clinicians and nurse researchers, physicians, other health care providers, administrators, vendors, and patients to build consensus, introduce changes, and demonstrate improvements. She also applied her knowledge of complex systems and the change process to recommend creative strategies for facilitating the changes in practice.

In 1996, Cheryl was appointed to a new position wherein she managed a group of clinical scholars. Some of these nurses were prepared at the masters' level, some at the baccalaureate level. Cheryl and her colleagues designed an automated tracking mechanism to document the interventions, clinical outcomes, and cost savings accomplished by these individuals and the group. After a very productive year in management, Cheryl elected to return to a clinical nurse specialist role, believing that she could make her greatest contributions through daily interactions with patients and staff.

References:

AHCPR. (1992). Pressure Ulcers in Adults: Prediction and Prevention. Clinical Practice Guideline, Number 3. AHCPR publication No. 92-0047. Rockville, MD: AHCPR, Public health Service, U.S. Department of Health and Human Services.

American Nurses Association. (1995). Nursing Care Report Card for Acute Care. Washington, DC: American Nurses Publishing.

Prevost, S. (1998). “Evidence-based practice: Putting the pieces together.” Presented at the American Association of Rehabilitation Nurses Annual Research Symposium, Dallas, Texas.

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Stonestreet, J. & Prevost, S. (1997). focused strategic plan for outcomes evaluation. Nursing Clinics of North America, 32(3), 615-631.

Clinical Scholarship Exemplar: The Baystate Medical Center

Cheryl B. Stetler, RN, PhD, FAAN

The nursing division at Baystate Medical Center (BMC) in western Massachusetts, under the leadership of our former VP of Nursing, Mary Brunell, MS, RN, established a vision of evidence-based nursing for professional practice. It encompassed Henderson's definition of nursing[1]; a primary nursing model[2]; a group of clinical nurse specialists; and a mission built around both critical thinking and healthy patients and families. More recently, it was recognized that to succeed, such a vision must be grounded in a supportive culture[3] of clinical scholarship.

Evidence-based practice is defined as an approach to nursing that de-emphasizes ritual, isolated and unsystematic clinical experiences, ungrounded opinions and tradition as a basis for nursing practices. Rather, it stresses use of research findings as well as other sources of credible facts, information, or data[4]. These other sources include reliable, verifiable data from quality improvement, operational and evaluation projects; consensus of recognized experts; and affirmed clinical experience[5].

Inclusion of affirmed experience recognizes the importance of documented observations regarding patients' goal-related progress that should be routinely affirmed as valid and reliable by fellow clinicians. It also recognizes the value of shared reflections on practice and experience. Simply accepting one's self-perception of an experience, or, as Diers' suggests, "simply feeling, or intuiting, is not scholarship without informed, intelligent and clinically grounded analysis"[6] within, we would add, the context of available internal or external evidence. These reflections can be developed formally through written clinical narratives[7]. They also, however, can occur in daily interactions in which experience is externalized, reviewed and clarified.

Refection, self-scrutiny[8] and subsequent dialogue forms can thus form the basis for personal growth and mutual learning among peers. They often enable exploration of the "art" of nursing, that includes establishing caring, empathic relationships; grasping meaning in patient encounters; practicing morally and as a patient advocate[9]; and, akin to evidence-based practice, rationally determining appropriate courses of action. In summary, evidence-based practice is contrasted with "task-oriented practice." The latter practice is routinized versus deliberate, mindless versus rational, habitual versus individualized, and unquestioning versus evaluative.

A culture supportive of evidence-based practice is that of clinical scholarship, wherein the corporate environment promotes, values and concretely supports a maturational process of integrating knowledge/ evidence and clinical experience to achieve excellence in nursing practice. Such a culture makes known its values; enhances the capacity of individuals to move in

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[1] Henderson, V. (1961). Basic principles of nursing care. London: ICN.

[2] Manthey, M. (1980). The practice of primary nursing. Boston: Blackwell Scientific Publications, Inc.

[3] A corporate culture, or "the way we do things here," consists of common beliefs, values & assumptions which shape institutional behavior & set norms. A culture is visible through an organization's values and philosophy, managerial behavior, polices & procedures, day-day staff behavior, committee agendas, organizational priorities and recognition & rewards (AONE).

[4] Stetler, C., Brunell, M., Giuliano, K., Morsi, D., Prince, L., & Newell-Stokes, G. (1998). Evidence-Based Practice and the Role of Nursing Leadership. Journal of Nursing Administration, 28(7/8), 45-53.

[5] Ibid.

[6] Diers, D. (1995). Clinical scholorship. Journal of Professional Nursing, 11/1, 24-30.

[7].BennerP. (1984). From novice to expert: Excellence and power in clinical nursing practice. Menlo Park, CA: Addison-Wesley.

[8] Diers, op cit

[9] Johnson, J. (1994). A dialectical examination of nursing art. Advances in Nursing Science, 17(1), 1-14.

the desired direction; and reinforces desired attitudes, competencies and behaviors through adaptation of routine structures and systems[10]. These desired attributes, as described in this monograph's overview, include a high level of curiosity, critical thinking, continuous learning, reflective practice, and an ability to seek/use a spectrum of inter-disciplinary resources and evidence to improve effectiveness of clinical interventions. They also include data-based decision-making; access and synthesis of new knowledge; and the use of innovations to improve practice and clinical outcomes (Clinical Scholarship Task Force, Sigma Theta Tau International, 1999).

The following exemplars, written as clinical narratives, describe the activities of "clinical scholars" at BMC. In one case, the scholar is an individual clinical nurse specialist (CNS), in another it is a group with staff members at various maturational stages led by a CNS. Each illustrates the attitudes, competencies and behaviors required of a young or mature clinical scholar. Critical to the success of both was a supportive environment which valued and encouraged their efforts, enhanced their capacity to change through provision of needed resources, and formalized their efforts into the infrastructure of nursing practice[11]. In both cases, it is evident that nurses as well as patients benefited from these collective efforts.

[10] Op cit, Stetler.
[11] Beatty, R., Ulrich, D. (1991). Re-energizing the mature organization. Organizational Dynamics, 20(1), 16-30.

Clinical Scholarship Exemplar for an Advanced Practice Nurse

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Psychiatric Liaison Nurse Specialist

I have been a psychiatric consultation liaison nurse specialist (PCLN) for eighteen years, since my graduation from the psychiatric clinical nurse specialist program at the University of Pennsylvania. In my role as a PCLN in both academic and community medical centers, one of my primary concerns has been the lack of knowledge that I have seen in both nurses and physicians caring for the patient with a concurrent substance abuse problem, especially in the acute care environment. For example, during my practice in one former medical center, it was clear that the acute care patients with unidentified alcohol withdrawal syndrome (AWS) were at significant risk for harm due to this lack of knowledge; and in turn, nurses caring for them were at risk. During the interview process at my current medical center, questions and scenarios to which nurses asked me to respond generally involved a patient's substance abuse problems. As I practiced in this setting, it became apparent that nurses were troubled by treatments of patients experiencing AWS; again, up-to-date caregiver knowledge approved to be a factor.

Upon my arrival at Baystate Medical Center in October 1995, I was asked to assist in addressing the problem of improving care for this special and growing population of patients at risk for developing alcohol withdrawal syndrome. Specifically, I was asked to co-lead a quality improvement initiative and to focus clinical consultation on related problems. This was the first time that I had worked in a healthcare environment that was willing to commit resources to actually assess the level of risk that these patients pose to both themselves and to the system when not identified and treated in a focused and individualized manner. My interest in this clinical problem had spanned almost my entire nursing career. Now, I was finally going to have the opportunity to have direct impact on changing nursing and medical practices to benefit patients and the healthcare system.

One of my first steps in addressing this issue was to use my national networking contacts to obtain new information from the addiction field for use in this acute care environment. For example, I had been a part of a related work group within the National Nurses Society on Addictions (NNSA) and had numerous international connections through my work with the International Society of Psychiatric Consultation Liaison Nurses (ISPCLN). I used contacts to discover new research, unpublished work and lessons learned by other experts working in academic medical centers. Thus, I would update my own knowledge in this evolving field, and enhance the work of the quality improvement team through providing information on others' success. The next immediate step was to conduct a chart review audit with team members during a dinner retreat sponsored by the nursing division. The goal was to obtain evidence to validate the extent and better understand the nature of the problem in this setting so that we could focus our efforts.

As part of the Quality Improvement design phase, the QI team members conducted a thorough literature search for assessment tools. Our interdisciplinary contacts proved fruitful and decreased some of our searching and work time. For example, we were able to obtain reports of outcomes of projects initiated in other organizations as well as unpublished information on the reliability and validity of two specific assessment tools. The first tool was needed to screen the patient for substance abuse. The current method of assessment was haphazard and typically reported social use or significant drinking without any quantification

for the amount of alcohol or other substance ingested. The CAGE assessment tool[1] *was selected after review of relevant criteria which team members had agreed upon. Specifically, we wanted to be certain that the tool was user friendly, but it had to have been used and demonstrated to be valid and reliable for use with medical-surgical patients. Although other available tools provided more clinical information, they were not as easy to incorporate and use at the time of admission of the patient as the CAGE, which met all of our criteria. One step that I took in this decision making process was to evaluate the CAGE based on criteria for assessing the applicability of research findings for practice.*[2]

The second assessment tool was needed for identification of the stage of patients' alcohol withdrawal based on concrete and observable symptoms. I had previously used the Clinical Institute Withdrawal Assessment-Alcohol-revised scale (CIWA-Ar)[3] *in my practice as a critical care nurse, but I wanted to search out any comparative tools that might have been developed specifically for medically ill patients. So again I turned to the literature and research colleagues at major academic addiction research centers in the US, United Kingdom and Canada. After reviewing new tools that were created within critical care environments or modified from the CIWA-Ar, discussion with team members, and consultation with another PCLN in the midst of implementing the CIWA-Ar on similar medical units, it was decided to select the CIWA-Ar scale to quantify AWS. However, based on evaluation of this tool using our criteria for assessing the applicability of research findings for practice, we recognized that it was not as well substantiated as the CAGE. We decided to use it because it fit our needs, but we planned to pilot it to assess whether it provided expected data. A meta-analysis*[4] *of pharmacologic treatment of AWS provided further substantiation for our guideline recommendations about screening and assessing AWS.*

The next step in the process was development of a treatment guideline to individualize sedation management of patients experiencing AWS. Once again, a review of research was conducted, and an intense discussion ensued about the often-conflicting information regarding how much medication and which benzodiazepine agent would be best for the medically ill patient. Data from our medical record review had informed us of the predominant current, and less desirable from a scientific view, treatment choices of physicians. I continuously focused the group on the level of evidence that was available to facilitate an appropriate choice for the guideline ... and one that could be supported by science when it was disseminated. My medical colleagues reminded me that in the process of change, incrementalism[5] *is at times more effective and that our initial choice of dosage could be piloted to obtain evidence to make further change.*

For implementation, I collaborated with the clinical director, a nurse manager, and CNS from medicine to obtain their support for a pilot test on a general medical unit. I provided classes for nurses, as well as on-unit consultation and precepting. In turn, I worked with both the nursing and medical staff to understand their concerns about the symptom-triggered sedation management model. After the month-long pilot, we collected formal and informal feedback from

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[1] Bush, D. Shaw, S., Clearly, P., et al. (1987). Screening for alcohol abuse using the CAGE questionnaire. The American Journal of Medicine, 82, 231-235.
[2] Stetler C. (1994). Refinement of the Stetler/Marram model for application of research findings to practice. Nursing Outlook, 42, 15-25.
[3] Sullivan, J., Sykora, K., Schneiderman, J., Naranjo, C., & Sellers, E. (1989). Assessment of alcohol withdrawal: The revised Clinical Institute Withdrawal Assessment for Alcohol Scale (CIWA-Ar). British Journal of Addictions, 84, 1353-1357.
[4] Mayo-Smith, M. (1997). Pharmacological management of alcohol withdrawal: a meta-analysis & evidence-based guideline. Journal of the American Medical Association, 278, 144-157.
[5] Cook, D., Guyatt, G., Laupacis, A., & Sackett, D. (1992). Rules of evidence and clinical recommendations on the use of antithrombotic agents. Chest, 102, 3055-3115.

staff and again reviewed charts. Based on this internal evidence, the QI team revised the guideline to decrease the level of monitoring while increasing the initial dose of medication that patients would receive. One major concern that was frequently articulated actually revealed a need for additional knowledge about physiological tolerance. I then worked shoulder to shoulder with nurses to demonstrate the model and its outcome, that is, how individualized benzodiazepine replacement for alcohol does not usually lead to over-sedation. Several reinforcement sessions helped me to increase the nurses' confidence that they were practicing safely and not placing the patient in a potentially harmful situation. By discussing the inter-rater reliability between my scores and those of a staff nurse, I was able to role model critical thinking about important differentiations in assessment. As the innovation moved forward, the QI team obtained support, because of nursing and medicine leadership's value for evidence-based practice, for inclusion of the CAGE in a redesigned admission assessment form − despite the initial reaction of some nurses that such questions were unnecessary and even intrusive.

I believe that having the Nurse Specialist in Evidence-Based Practice within the Division of Nursing has been a significant contribution for an organization that wants to move practice from "it's the way we do it here" to practice based on clinical research outcomes and internal evaluative evidence. The ability for me to collaborate with this specialist when I became concerned about a conflicting research finding or how best to encourage early adopters to assist their colleagues in this evidence-based practice change was a support for me as I am developing my clinical scholarship skills. Additionally, this specialist assisted me to stay focused on the need to communicate this information and outcomes within the professional community. Presently, I am collaborating with the psychiatric consultation physician in writing an article describing both the process and the clinical outcomes of this project. The initial pilot outcomes and project process also have been presented at local schools of nursing and at the American Academy of Psychosomatic Medicine, at the American Society of Addiction Medicine and the American Nurses' Association annual convention.

In summary, the use of evidence-based practice has increased nurse and physician knowledge related to alcohol withdrawal syndrome and implemented a focused method of assessment and treatment that is preventing stage 3 withdrawal. This use of clinical research and QI evidence, as well as my continuous curiosity, has helped me to further develop my own practice while helping to improve care in this critical area.

Clinical Scholarship Exemplar at a Group Level
Fall Prevention Interest Group
Barbara Corrigan, MSN, RN
Geriatric Clinical Nurse Specialist

In April of 1996 upon beginning my role as a new geriatric clinical specialist, I was assigned leadership of a group composed of staff nurses committed to reducing falls in the institution. These nurses were part of a team that previously had implemented a fall prevention program after hearing from an external consultant, who shared the experience of another acute care setting. As a result, a number of steps were taken e.g., a list of possible risk factors to be assessed at the time of admission was disseminated to units, and a limited number of alarms purchased.

Although the group had a clear goal in mind and sought an expert resource for assistance, the traditional paradigm which they used for problem solving did not include a conceptual framework for change or a scientific basis for fall prevention. They chose innovations primarily through group consensus and distributed alarms to selected units based on their assumption that falls were more of a problem on those units. Periodic random quality improvement audits were being conducted but resultant data were not provided to nursing staff nor meaningfully presented to the unit's manager. At the time I entered the group, members assumed that all was well with fall prevention and indeed could point to positive changes that had been made such as the successful use of no-skid stockings and decals which were placed outside the patient's room. However, members recognized that not all staff were paying attention to the recommended strategies; and the group was discouraged but curious when I informed them of the number of falls and major injuries from falls had increased in recent months. Administration thus identified falls as a formal performance improvement initiative and continued to support staff nurses' attendance at the Fall Prevention Interest Group, despite budget constrictions on staff availability for such activities. Using the Juran Institute Quality Improvement process, a multidisciplinary team including many of the original group of nurses, met weekly to develop a refined fall prevention program.

Simultaneous to my assignment as leader of the prevention group was my introduction to the concept of evidence, with top administrative support for a new way of thinking about practice. The following strategies supported that initiative:

- *A specialist in evidence-based practice was hired, who mentored and taught a group of us how to conduct an integrated review of the literature and to assess the applicability of research findings and the research process to daily practice.*
- *A close affiliation with local university schools of nursing was established to provide evidence-based experiences for graduate nursing students.*
- *Internal grant funds were made available to support systematic program evaluations.*
- *A framework for thinking about evidence and its role in practice was developed, widely disseminated within the department, and tied to our goal to improve critical thinking in daily clinical practice.*

To integrate this new approach into the fall prevention program, two types of evidence were needed: a) evaluative evidence regarding our current practice, as well as usefulness of any innovations we implemented; and b) scientific evidence for selection of a fall risk tool and preventive interventions. A positive attitude toward such evidence and a process for continuous learning would be needed of group members. I also found that this new approach required a shift in my own thinking. For example, instead of doing a quick survey of the literature and

choosing a tool or intervention that "looked good," I had to consider what it meant to truly achieve evidence-based practice. This is something I had not learned in graduate school, but I found it reassuring to think that the time and energy I was putting into this would more likely pay off if it were evidence-based.

The initial group, as I noted above, had not reviewed the research literature systematically for tool selection; and a more cost-effective way of identifying high risk patients would be to choose a risk assessment tool with an acceptable level of sensitivity and specificity. Relevant research regarding such a tool was gathered and analyzed by a small group educated in use of the integrative review process.[6] *Once this was shared with group members − and they began to see the value of the risk tool in practice− they realized the importance of such scientific evidence and were proud of the fact that our tool had been so carefully selected. One member said, "The tool encourages us to focus our thinking on prevention, not just post-fall reactions." Members of the group became role models and advocates for use of the tool and were able to explain to their peers its value to their patients. In some cases, their language also began to change. Words like sensitivity and specificity, operational definitions and evidence were commonly used terms in our discussions. I felt proud to be leading this group of dedicated professionals.*

For interventions, again the initial group had not based their choice on systematically obtained evidence. Staff were seemingly "reacting" to individual issues with routine procedures: for example, when a patient had been given certain medications such as narcotics, side rails automatically were used, whether such a medication in reality created a high risk situation or not. Unlike selection of the tool, there was no sound body of scientific evidence to guide identification of risk-related preventive interventions. What did exist, however, were detailed operational definitions of each risk factor that we used to help the group brainstorm conceptually sound preventive actions. These would then be used in a context of continuous improvement. Tthat is, we would present these optional interventions for use by staff on a falls prevention tool and, as a group, monitor their usefulness. Through this process, group members could help to identify the pros and cons of certain innovations in selected patient situations. Critical thinking thus was encouraged among group members as well as staff, as sound nursing judgment would be essential when selecting interventions to meet individual risk-related needs. The presence of graduate students, who became ad hoc group members assigned to explore specific risk factors, provided additional evidence to the group for their consideration. For example, one graduate student raised the awareness of members regarding toileting schedules and another undertook evaluation of the advantages and disadvantages of different types of alarms for different patient situations.

Implementation of the overall program occurred in January 1998 when members of the Fall Prevention Interest Group, called Fall Reps, became actively involved in educating their own staff. One nurse noted that this implementation was more effective than other programs because the Reps were available as a resource who could assist with problem solving when identifying strategies … in turn, the Reps had expert advanced practice nurses or related graduate students as resources.

[6] Stetler, C., Morsi, D., Rucki, S., Broughton, S., Corrigan, B., Fitzgerald, J., Guiliano, K., Haverner, P., & Sheridan, E.A.(1998). Utilization –Focused Integrative Reviews in a Nursing Service. Applied Nursing Research, 11 (4), 195-206.

The other strategy that facilitated members' value for evidence-based practice and growth in critical thinking was the continual use of evaluative evidence. Evaluation[7] *was begun soon after implementation with the purpose of a) assessing the use and usefulness of program components and b) providing concrete feedback to staff and project leaders for continuous improvement. Specifically, data were collected on our educational strategies; staff perceptions regarding the Fall Prevention Program innovations; staff's skill, as well as performance regarding accurate risk assessment; and staff's skill, as well as performance regarding both appropriate selection and implementation of interventions. After data were shared with the Reps, they brought this back to their staff for discussion. Staff looked forward to the quarterly posting of new data on a unit-specific poster. One Rep said that "data from reports provide a kickoff for problem solving." It also gave them "confidence." One nurse said that "evidence-based programs make them credible." Another nurse commented, "This is one of the best changes implemented since I've been here. It is constantly being re-evaluated."*

The enthusiasm of the Reps was transferred to the staff. One Rep said that there is a lot more talking about fall risk factors among staff and a "heightened awareness." Staff now welcomed investigation of a fall by the nurse manager or Rep because as one nurse put it, "we learn from the investigation." Prior to this they felt like they had done something wrong if the patient fell; now they wanted to know where it went wrong and how they could improve it. Staff were increasingly engaged in reflective practice by using data from each fall as a learning tool to change practice. The value of the Rep in this process was also re-enforced by nurse managers. For example, one Rep reported how she was given time by her manager to round and do spot-checks and audits.

Although advanced practice nurses were critical to the success of this effort, it was the team collectively that made it effective. As described in a publication on the program,[8] *not only were patient outcomes improved, but various members of the team exhibited growth in critical thinking, reflective practice, and use of evidence in practice. Some members were at a higher level of maturation at the beginning of the program than others but, more and more, I can see Fall Reps developing from novice to more senior scholars, highly respected by their peers. More work does remain to be done with individual staff, especially the more novice clinician; and long-term success of the program will depend on providing staff with on-going feedback to reinforce the shift from group ritual and routine fall prevention practice to day-to-day use of evidence.*

The Fall Prevention Interest Group's effort has been recognized by the organization as it was nominated for the Safety Award three years in a row. Through two publications[9] *and multiple national presentations, we have shared the related process and results. Most importantly, the success of this collective group of clinical scholars has served as a foundation for other initiatives. I am now leading a Restraint Reduction Program using the same conceptual framework and with many Fall Reps as members. These individuals maintain their confidence that what we are doing is credible and worthwhile. Their growing clinical scholarship will help make that assumption come true. I, in turn have grown to value the use of*

[7] Stetler, C., Corrigan, B., Sander-Buscemi, K., & Burns, M. (1999). Integration of Evidence into Practice and the Change Process: A Fall Prevention Program as a Model. Outcomes Management for Nursing Practice, 3 (3), 102-111.

[8] Ibid.

[9] Corrigan, B., Allen, K., Moore, J., Samra, P., Stetler, C., Thielen, J., & the NICHE Faculty. Fall Prevention in Acute Care. In: M. Bottrell, I. Abraham, M. Mezey, & T. Fulmer. (1999). Geriatric Nursing Protocols for Best Practice. New York: Springer Publishing Co.

evidence in every aspect of my work and have a greater confidence that the initiatives I am leading will have a positive outcome.

Clinical Scholarship Exemplar: The Kaiser Permanente and California Pacific Medical Center

Kerry M. Turley, MSN, MPA, RN, PNP
Clinical Nurse Coordinator, Pediatric Cardiovascular Surgery

In 1991 a pediatric heart surgery program was established between two metropolitan San Francisco hospitals, Kaiser Permanente San Francisco and California Pacific Medical Center. Each facility would have its own medical and nursing staff but the responsibility for coordinating the programs would be under the leadership of a Clinical Nurse Coordinator who would work at both institutions. I accepted that responsibility.

The goal was to have a pediatric heart surgery program with the most optimum outcomes yet function in a cost- effective and efficient manner. It was agreed to develop critical pathways for this select patient population. Prior to this pathways had only been used in heart surgery programs with homogeneous populations. Children and their congenital cardiac anomalies present a heterogeneous population making the development of pathways more difficult.

Initially, my task became the development of the nursing interventions for the critical pathway and their implementation. The fulfillment of these goals would encompass the close teamwork of the nursing administration, nurse managers, their staff, and myself. Previous research described the most common reason adult cardiac surgical patients had not met their desired pathway outcomes was that nurses did not implement their own interventions of ambulation and incentive spirometry.[1] These are two common yet important nursing interventions for surgical patients.

Nursing research has designated other considerations vital when developing criteria for nursing practice in pediatrics. The focus is how well have parents been incorporated in the participation of their child's care. [2,34,5] It is will recognized that achieving this parent/nursing partnership in a critical care setting has been a challenge[6] and the most recent studies suggest that parents should be involved in care beyond past accepted boundaries. [7] Finally, pain management in children is a recognized problem with under- medication common – a strategy to avoid this needed to be formulated. [8] Therefore, the following plan seemed to address a way for us to achieve excellent recovery from cardiac surgery and parental participation in critical pathways.

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[1] Strong, A.G., & Sneed, N.V. Clinical evaluation of a critical path for coronary artery bypass patients. Progressive Cardiovascular Nursing 6(1):29-37, 1991

[2] Miles, M.S., Carter, M.C., Spicher, C., & Hassanein, R.S. Maternal and paternal stress reactions when a child is hospitalized in a pediatric intensive care unit. Issues in Comprehensive Nursing, 7:333-42, 1984.

[3] La Montagne, L.L. Stress and coping of parents of children in a pediatric intensive care unit. Heart and Lung: Journal of Critical Care, 19(4):416-21, 1990

[4] Callery, P., & Smith, L. A study of role negotiations between nurses and the parent of hospitalized children. Journal of Advanced Nursing, 16(7):772-81, 1991.

[5] Perkins, M.T. Parent-nurse collaboration: using the caregiver identity emergence phases to assist parents of hospitalized children with disabilities. Journal of Pediatric Nursing, 8(1):2-9, 1993.

[6] Rushton, C.H. Family-centered care in the critical care setting: myth or reality? Children's Health Care, 19(2):68-78, 1990.

[7] Moynihan, P., Naclerio, L., & Kiley, K. Parent participation. Nursing Clinics of North America, 30(2):233, 1995

[8] Beyer JE., Wells N., The assessment of pain in children. Pediatric Clinic of North America. 1989, 36 (4): 837-853.

Parents and their children were trained pre-operatively in techniques for positioning, ambulation, incentive spirometry exercises, and pain management. A progress chart[9] *was developed and hung at the bedside that allowed both parent and child to know when the next walk or spirometry exercise was due.*

Medications, the route, amount and time they were to be administered were also listed on the chart to meet the parents' informational needs. This provided both parent and staff a visual of the child's care for each day. Pain medication was given on an around the clock basis rather than prn and allowed the children to be quite active in the recovery period, thus accelerating recovery time.[10]*This system of around the clock pain medication was out of the ordinary for the staff nurses and parents could offer helpful reminders when they knew what time a dose of medication was suppose to be given. Nurses were always available to help the children with their activity tasks, such as ambulation, but parents understood pre-operatively that it would be their responsibility to carry out these tasks in the post-operative period.*

As the Clinical Nurse Coordinator, I eventually became responsible for the organization, implementation, and evaluation of the pathways. This included all of the pre-operative and discharge teaching, assisting with discontinuation of chest tubes and all other monitoring lines, participating in the child's first walk post-operatively to role model for parents and staff, being available for consultation for families both pre- and post-operatively, and conducting research of patient outcomes and family satisfaction.

In our study we compared the actual length of stay (ALOS) to the expected length of stay (ELOS) of 151 consecutive children undergoing congenital heart surgery and found hospitalization had been reduced 1 to 1 1/2 days. Family satisfaction surveys were completed by all 151 parents with positive feedback regarding the child's hospital course and their ability to participate in their child's care.[11] *Staff nurses reported a rise in job satisfaction when caring for this patient population as they claimed that their knowledge of the pathway plan as well as parents who knew what to expect allowed them more credibility and collegiality in their role with the family.*

In summary, this research and evidence-based nursing practice afforded a system for incorporating parents into the nursing care of the child as an integral part of the health care team while simultaneously providing care that accelerated recovery from pediatric heart surgery. At a time when many fear that cost-containment lowers the level of patient care, this program empowers families and yields excellent outcomes, reflected in rapid recovery, shortened hospital days, and excellent family satisfaction.

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[9] Turley, K.M., Higgins, S.S., Archer-Duste, H., & Cafferty, P. Role of the clinical nurse coordinator in successful implementation of critical pathways in pediatric cardiovascular surgery patients. Progressive in Cardiovascular Nursing, 10(1):22-6, 1995

[10] Higgins, SS., Turley, KM.,Harr J., & Turley,K. Prescription and administration of around the clock analgesics in postoperative pediatric cardiovascular surgery patients. Progressive Cardiovascular Nursing, 14(1):19-24, 1998.

[11] Turley, KM., & Higgins SS., When parents participate in critical pathway management following pediatric cardiovascular surgery. MCN American Journal of Maternal Child Nursing. 1996;21 (5):229-234.

Clinical Scholars Mentor Program

(As proposed by the Clinical Scholarship Task Force and based on the work of Marita Titler, RN, PhD, FAAN)

Purpose

The purposes of this program are to:

- Create partnerships among clinical scholars and potential clinical scholars;
- Foster clinical scholarship in nursing;
- Acknowledge outstanding clinical scholars; and
- Promote innovations that improve patient care.

Description

This 12-month program for clinical scholarship pairs an identified clinical scholar (mentor) with a nurse in practice who exhibits potential for becoming a clinical scholar (fellow). The mentor and fellow select a health care issue, develop an innovation to address this issue, and work collaboratively to implement the innovation in a practice agency. Upon completion of the program, the mentor-fellow partners and their innovations are recognized at their regional conference. This experience may be underwritten financially via the Clinical Scholarship Grant.

Criteria

The following criteria are set forth to facilitate selection of the mentor and fellow. The Mentor is a registered nurse who is a member of Sigma Theta Tau International; is nominated to serve as a clinical scholarship mentor; and provides letters of support from their cooperating agencies to serve as a clinical scholar mentor. In addition, the mentor must exhibit evidence of scholarship that enhances patient care such as the following:

- Promotes creativity
- Fosters critical thinking
- Uses data for decision making
- Synthesizes knowledge to guide patient care
- Facilitates development and dissemination of innovations
- Provides leadership for clinical scholarship within their agency
- Role models the use of data and science to promote quality care
- Shares their experience of clinical scholarship through publications and presentations
- Provides consultation for some aspect of direct patient care and/or provides direct patient care

The Fellow is a registered nurse who:

- Is a member of Sigma Theta Tau International
- Provides direct patient care to individuals, families, or groups
- Outlines a practice innovation which addresses a health care issue

The Fellow provides a letter of support from their agency that outlines the potential leadership and clinical scholarship characteristics of the Fellow.

Application Process

Mentors for Clinical Scholars will submit an application that outlines their:

1. Areas of expertise

2. Example of clinical scholarship
3. Practice setting
4. Curriculum vitae
5. Letters of support

A call for mentor and fellow applications will be done yearly. Applications will be sent to the local Sigma Theta Tau International chapter. Mentors and fellows may be paired by local Sigma Theta Tau International chapters based on geographic location, mentors identified areas of expertise, and fellow's practice issues and objectives. Local chapters may consider a two-phase application process as follows:

Phase I: The mentor and fellow submit separate applications. Pairings are made by the Sigma Theta Tau International local chapter.

Phase II: The mentor works with the fellow to provide a plan that meets the fellow's objectives. This plan can then be submitted to local Sigma Theta Tau International chapter for funding via the Clinical Scholarship Grant funding process.

Outcomes

The outcomes of this program are:

1. Professional development of new clinical scholars
2. Presentations by mentor-fellow pairs at local, regional, and international conferences
3. Publications of the experiences in *Reflections*
4. Manuscript by mentor-fellow pair
5. National data base of clinical scholars
6. Products (e.g., new piece of equipment; research based practice protocol; new service developed to address identified clinical issues)

Clinical Scholarship and Sigma Theta Tau International

As the nursing organization that has dedicated itself to the promotion of scholarship in nursing, Sigma Theta Tau International is committed to clinical scholarship through the development and nourishment of clinical scholars and the provision of resources to support clinical scholarship. These include, for example:

- the celebration of clinical scholarship at chapter, regional, and international levels;
- the opportunity to present clinical scholarship in local, regional, and international meetings;
- a newsletter that features clinical scholars and their work around the globe;
- a journal in which the research results and their clinical applications are presented to the nursing community;
- opportunities for clinicians and academicians to interact and confer on specific clinical topics;
- mentoring programs for clinical scholars sponsored and organized at chapter, regional, and international levels; and
- the *Registry of Nursing Research* and *The Online Journal of Knowledge Synthesis for Nursing* which brings accumulated and developing knowledge to practicing clinicians on-line.
- expand *The Online Journal of Knowledge Synthesis for Nursing* to be of use for the practicing nurses.
- create a forum for non-academically based researchers, to identify the methodological, operational and ethical issues confronting clinical scholarship.
- promote the use of the Virginia Henderson International Nursing Library in practice as well as academic settings.
- create a Clinical Scholarship Colloquium Series convening leading scholars for discourse on selected clinical topics.
- re-visit research funding priorities to foster the development of clinical scholars.
- advance the theme of clinical scholarship in Regional Assembly programs, showcasing the application of nursing research in clinical practice, the various dimensions of clinical scholarship. What is it? How can Sigma Theta Tau encourage it?

Clinical scholarship reaffirms the most fundamental component of Sigma Theta Tau's mission, to use nursing knowledge to improve the health of people worldwide. It brings us nearer to the culture of our membership, the majority of whom are clinicians, and links us globally through shared interests in clinical phenomena. Finally, clinical scholarship is perhaps the most visible and easily understood contribution that the nursing profession can make to the public – the public to which we must communicate the value and the promise of nursing for the future of health care.

With Sigma Theta Tau chapters housed in universities and colleges and with the majority of its members in clinical practice, the society is well positioned to promote the scientific base of practice and advance clinical scholarship.

CLINICAL SCHOLARSHIP: NURSING PRACTICE AS AN INTELLECTUAL ENDEAVOR

Melanie C. Dreher, RN, PhD, FAAN

What is clinical scholarship?

Clinical scholarship is easier to describe than to define. First and foremost, it is based on the assumption that professional nursing is an intellectual endeavor, requiring clinical decision-making that is oriented to improving patient outcomes. Clinical scholarship is about inquiry and implies a willingness to scrutinize our practice, even if it means challenging the theories and procedures that we learned and practiced. It is looking for a different and better way to nurse and refusing to accept anything just because that's the way in which it always has been done.

The spirit of clinical scholarship often appears when the policies and procedures that govern our practice start to seem inadequate or unnecessary or when clinical evidence contradicts convention. We begin to question, why are we doing this? or why are we doing it this way? It also is present when we are confronted with a problem that we have not encountered previously and we find ourselves appealing to the literature, often to discover that there is little there to assist us.

Sometimes it is easier to say what clinical scholarship is not. Clinical scholarship is not clinical proficiency. Although they are related; performing a particular nursing procedure well does not make it scholarly unless we're questioning whether we need to perform it in the first place, or whether we can find a better way to accomplish the same objective.

Clinical scholarship also is not clinical research, although it is informed by and inspires research. Certainly one of the hallmarks of the clinical scholar is a reference to and reliance on current research to inform practice. But clinical scholars often cannot wait for all the research to be done before they begin the problem solving process. Clinical scholarship requires that we take some risks, perhaps experiment on a small scale and act on a hunch with just partial information. Reform and research seldom come at the same time. While research informs clinical practice, clinical practice informs research and it is highly likely that changes in clinical practice will generate inquiry, new knowledge and new theories. No one waited until all the evidence was in, for example, to initiate the nurse practitioner model of advanced practice. On the other hand, the establishment of nurse practitioners has inspired abundant research regarding their efficacy and efficiency. Shifts in practice, born out of special circumstances, have produced studies that confirm their value. We have now established, for example, from home health nurses who had to use non-sterile dressings, that in most cases, clean dressings can be used without untoward effects.

Clinical scholarship enhances our knowledge development also by testing the realities of clinical phenomena against many of the theories used by educators to guide practice. Maslow's hierarchy of needs theory, for example, takes on new complexity when working with patients in an emergency room when it is necessary to allay fear and apprehension in order to carry out life-saving procedures. Similarly, Erickson's developmental tasks are challenged when we try to apply them to clients and families of different cultures.

It is commonly thought that clinical scholarship is a product of maturity in the profession. Although observation and analysis can be sharpened by experience, maturity does not guarantee clinical scholarship. Indeed, we all have known those nurses for whom "ten years of experience actually is one year of experience ten times." While fledgling nurses may not have the benefit of

a vast experience on which to draw, they can appeal to the research literature and to the experience of their colleagues. It is thus possible for neophyte nurses to approach their work in a scholarly way, through strong observational skills, by discussing and comparing clinical phenomena with colleagues, and by reading the current literature.

Clinical scholarship is an intellectual process, grounded in curiosity about why our clients respond the way they do and why we, as nurses, do the things we do. It includes challenging traditional nursing interventions, testing our ideas, predicting outcomes and explaining both patterns and exceptions. In addition to observation, analysis, and synthesis, clinical scholarship includes application and dissemination, all of which result in a new understanding of nursing phenomena and the development of new knowledge.

Observing

Clinical scholarship is rooted in observation. It requires paying attention to the way in which clients respond – both to their problems and to their treatments. This is not always easy in nursing because the kind of phenomena with which nurses deal often are very subtle and veiled by other behavior. As nurses, we've always observed, but are we observing the correct things? The observations that we typically have documented often have been for the purpose of limiting liability rather than for improving patient outcomes. The emphasis on acuity, for example, as the primary indicator of need for nursing personnel resources in hospitals has tended to disregard the complex needs of patients who are about to be discharged or of those with impending procedures or hospitalization.

Analyzing

It is not enough just to observe phenomena; we also must interpret our observations by comparing them with similar phenomena (whether those comparisons are drawn from our own clinical experience or from the literature) and by contextualizing them. It is through such comparisons and contextualization that observations are identified as exceptional and worthy of our attention. It is their singularity that makes us wonder, marvel, question and then evaluate them in relation to the current thinking in the field. Comparative analysis is a process of looking for patterns and exceptions. It requires that we observe clients (individuals, families or communities) and events not just as singular encounters with unique characteristics but as one of the many encounters that comprise our practice. Equally important in analysis is a strong knowledge of the field. We cannot challenge the common assumptions regarding clinical phenomena if we do not know what those assumptions are. Knowledge derived from experience and from the literature serves as the backdrop for the creative leaps that lead to true clinical scholarship.

Synthesizing

Synthesis in clinical scholarship is the process of explaining – of attaching meaning to our observations and comparisons through reference to the literature. It builds on the analysis to create an understanding of why these patterns and/or exceptions exist. Clinical scholars look at phenomena in a thoughtful and deliberative way. Their expansive and in-depth knowledge of and exposure to particular clinical phenomena permit them to think creatively in their interpretation – often reversing traditional explanations.

Observations of women who are multiple drug users, for example, suggest the standard "gateway" or "stepping stone" hypotheses in which the use of a particular psychoactive substance creates a desire for a yet more powerful one. A closer examination, however, reveals that many women are, in fact, using substances to relieve the effects or actually diminish the need for

others. This notion of self-medicating stands in marked contrast to usual explanations centering on a more hedonistic escalation of effect. It also provides different opportunities for nursing intervention.

One of the ways in which clinical scholars generate an interpretation of their observations and comparisons is through the process of discussion with colleagues – both within the nursing community and with other disciplines and professions – crossing disciplinary boundaries in order to obtain a different perspective. The incorporation of other kinds of knowledge facilitates and enriches our explanations.

Applying and Disseminating

Clinical scholarship is about inquiry and explanation but, unlike research, it is also about application. It is concerned not only with how we apply the results of nursing research but also how we apply the results of our clinical inquiry. It requires not only a search for explanation but solving clinical problems. Clinical scholars both discover and apply knowledge. In clinical scholarship to know, and to not do, is to not know. To be considered true clinical scholars, nurses must identify and describe their work, making it conscious, so that it can be shared with researchers, colleagues, other health care providers and, perhaps most important, the public. One of the reasons that the public and even other health care providers do not really understand what we really do is that we have internalized it so much that we, ourselves, have difficulty articulating it.

In some respects clinical scholarship is like clinical research in its emphasis on inquiry, refutation, analysis, explanation and knowledge building. But the attributes of the clinical scholar are more difficult to teach and transmit than the scientific method; it really has to do with what I call the clinical scholar mind set. The inclusion of action and application in our description of clinical scholarship suggests that, in addition to intellectual curiosity and a breadth and depth of clinical knowledge, clinical scholars must have the attributes of a leader. They must be creative, courageous and even commanding. It takes courage to slay sacred cows, to put new ideas into action, to challenge and refute. In fact, it takes courage just to do something different. Clinical scholars often have to take risks and act on partial information. It requires feistiness and the willingness to try and fail. As an educator, I must confess that the attributes necessary to fulfill one's destiny as a clinical scholar - the risk-taking, audacity, irreverence, revolution, and even a sense of humor, are precisely the things that we may have discouraged in nursing education.

What are the characteristics of clinical scholarship?

Value Driven

Clinical scholarship is first and foremost, value driven. Underlying the willingness of clinical scholars to test their creativity and courage and autonomy is a love for their work. I believe that most nurses truly care about their clients with a passion that is grounded in the deep and abiding professional values to which we all subscribe – that a patient should not die alone, that families should be included in care, that each encounter with a patient should be growth producing, that the nurse-patient relationship should be therapeutic. These are the principles that we are willing to go to the wall for. Our personal worth as nurses is profoundly linked to the extent that we can consummate the values implicit in the word nurse.

Autonomy

Clinical scholarship also is about autonomy – not in the sense of independence, but in the sense of ownership, taking charge of our work and being accountable for the outcomes. When

we don't "own" our work, we have less emotional investment, less command of the patient care environment, and greater reliance on supervisors. Nurses who wait for someone else to point out the interesting features of their practice and then direct them to act on it are not practicing as clinical scholars. When we are invested, emotionally and intellectually, and perhaps even financially, in our work, we are positioned to achieve better outcomes.

Once we are invested in our work, we begin to look at the patient care environment in a different way – not as an immutable hindrance to nursing care, but as a therapeutic instrument. We then say to ourselves, "If I'm responsible for patient care outcomes, then I must have control of the context in which my practice occurs." In my experience, nurses do not really mind working hard if they have control over their practice and can see the results in the form of improved patient outcomes. I believe that it is really the bureaucratic hassles and layers of supervision that nurses hate. Without supervisors, all kinds of exciting things happen – problem solving, new initiatives, and interdisciplinary teams. When we interact directly and quickly with individuals in other departments, services, disciplines, and professions, we can be more responsive to our clients and families who are demanding expeditious and effective solutions to their problems. When we are accountable for the outcomes, we are more likely to move quickly to improve services and create new health care products and services for our clients.

Lamentably we haven't had too many new health care products in nursing lately – at least the kind that have captured the imagination of the public in the way that family-centered birthing rooms and the hospice movement have. These two nursing products are so compelling that if a hospital did not provide them or contract for them, they would not be competitive. I suggest that one of the reasons for the dearth of really exciting new products and services in nursing is that we are so intensely concerned about what we do (the activities that make up nursing) as opposed to whom we do it for (the population that is the object of our care). Imagine the influence of these two perspectives on the same specialty practice of oncology nursing:

Nurse-centered description:
I am an oncology nurse. I work in a hospital where I assist patients and their families to deal with hospitalization and treatment associated with the disease. I maintain neutropenic precautions, monitor the course of chemotherapy and bone-marrow transplants, manage the side effects of treatment and provide education and emotional support to patients and families.

Patient-centered description:
I am an oncology nurse. My clients are individuals and their families who are at risk for or have been diagnosed with neoplastic diseases. It is my responsibility to assess and analyze their needs both prior and subsequent to diagnosis and to develop products and services that will respond to those needs in a clinically excellent, aesthetic and cost-effective manner.

It is not difficult to imagine the opportunity for new products and services when we focus on the population being served instead of what the nurse currently does or where a nurse works. What we do and where we work always will change but our clients and the relationship we have with them will endure.

Creativity

Clinical scholarship is about creativity. Creative thinking may simply mean the realization that there is no particular virtue in doing things the way they always have been done.

It pains me to hear a nurse say "I'm just not creative," perhaps because, again, as an educator, I suspect that we may have damaged the creative instincts of our students by teaching the right way to nurse, which was interpreted by students as the only way to nurse. In recent years, I imagine that nursing educators, in deference to the ascendancy of nursing research, may be more tolerant and have encouraged students, for example, to try alternative ways to treat decubiti or relieve pain; but just let a student challenge nursing diagnosis or the concept of caring, or family-centered care.

I believe that everyone can generate and act on an idea, but there is a deadly and deadening tendency in nursing to look to the "leadership" (usually referring to administration) to set the trends. We wait for "the vision" to trickle down in policies that are reinforced by layers of middle managers who are supposed to "do something about this." In my opinion, real leaders should be dis-organizers in the sense of challenging the existing ways of doing things. In fact, I love it when faculty members complain about ambiguity or the absence of structure, because in reality, there is only problem solving. The real "structure" is the professionalism and intellect that exists inside of us. We need to get away from expecting administrative luminaries to have all the ideas and, instead, assume that every nurse is the star of his or her own show. The administrator's job is to create an environment for that to happen.

Any thinking person is capable of creativity. It may require, however, a purposeful attempt to get out of a rut. If we make our beds every morning, or wash the car every Saturday, we should try not doing it and see what happens; or perhaps take a different way to work so that we can see things from a different perspective. I suspect it is very difficult to solve a problem by trying to solve it. Sometimes we have to simply put it on the back burner and let it percolate or incubate while we hike or bicycle ride or simply enjoy some beautiful scenery. Being creative does not mean producing a major invention. Examples of the "in charge," creative, clinical scholar mind set include, for example, charting by exception, keeping supplies in the patient's room, establishing a pre-admission calling program to answer any questions the patient may have, connecting families with the same health problem so that they can assist each other, or formulating a post-hospital rehabilitation and teaching program.

Clinical scholarship and contemporary health care

Despite the challenges created by today's market-driven care environment (or perhaps because of them), clinical scholarship is more important than ever before. For nurses, these are truly the "best of times and the worst of times." While some nursing positions in hospitals are being displaced, new ones are being created in primary care, prevention, sub-acute facilities, school health, case management and rehabilitation centers. The roles and responsibilities of nurses will continue to expand as they become the key health care providers of the next decades. And all indicators suggest that we are not producing sufficient numbers of nurses at the baccalaureate and master's levels to meet the needs of an aging population, chronic illness and primary health in the next millennium.

The realities of health reform are (1) an increasing movement of nurses from hospital to community settings, often with inadequate preparation; and (2) even greater control of nursing practice by reimbursement systems that are oriented primarily to cost and time outcomes. There is no doubt that these economic imperatives driving the system will not go away. On the other hand, we cannot assume that the health care system that we once knew is the health care system we need.

I believe that the implications for nursing in the ensuing decades are promising:

* There will be an increased opportunity for autonomous practice.

* We are the profession that will guide clients through systems of care.
* Our long-standing interest in non-hospital based settings for the delivery of care, such as schools and the work place, will be realized.
* We will work consultatively with each other and with other kinds of providers in integrated care delivery systems.

But in order for the nursing profession to realize its full potential as a profession and to be part of the constructionist team, we will need to move quickly in several arenas – all of which are grist for the clinical scholarship mill:

1. Health care reform requires that nurses be open to change in prevailing models of practice. Currently, it is the role (nurse practitioner, clinical nurse specialist) and setting (intensive care, labor and delivery, home care) that determine the character of nursing practice. But these parameters for delineating practice are less useful in a market-driven system in which health care is based on the client's needs and not the nurse's product.

2. Health care reform requires new solutions, new ways of doing things, challenging traditions, and creating products and services to meet the needs of clients – whether they be individuals, families or communities.

3. Health care reform requires clinical judgment, brainwork. Nurses will be the patient care managers, the decision-makers. That is why all the concern about whether nurses or assistive personnel perform certain procedures misses the point. It is not so much about who is performing a procedure but who decides who will perform the procedure. This is a clinical decision and it is essential that it be grounded in clinical inquiry and an assessment of desired outcomes.

4. Health care reform will make nursing increasingly outcome driven. The goal of clinical scholarship also is to improve patient outcomes but we must seize the opportunity to develop outcomes that reflect nursing values and not just the time and cost outcomes proposed by health care consultants and third party payers.

   (We certainly would not evaluate an airline based solely on whether the plane arrived on time, and in one piece. In addition we would consider criteria such as the experience of the pilots, the qualifications of the mechanics, the hospitality of the gate agents and flight attendants, comfort, service, cleanliness, safety precautions, and many more.)

5. Health care will be increasingly system oriented. The search for better clinical outcomes necessarily takes nurses who practice in a scholarly manner beyond their own discipline to work directly and collegially with other health providers and nurses in other settings – both in the discovery and the application of new knowledge.

In summary, clinical scholarship will assist us to function autonomously as managers of patient care in an administratively flattened and integrated health care system, to document improvements and measure our effectiveness with reference to outcomes; to assume accountability for our work; to solve clinical problems and develop new products and services that are patient-centered and population-based; and to function in collaborative and interdisciplinary teams.

The changes that are taking place are not foreign to nursing, nor are they antithetical to nursing. For many years, we have advocated early discharge and shifting care to family members in home-like environments. Early detection, prevention, health promotion, are all long held nursing values and part of the nursing vision. We know that all the players – consumers, providers, and insurers – benefit when frequent and expensive hospitalizations and emergency room services are reduced. Case management certainly is not new to nursing (there is a rich history of private duty nursing and home care) and we know the value of pre-admission and pre-operative counseling and teaching. We also have acknowledged the importance of clinical evidence and research for guiding practice. We have recognized the need for outside the walls (continuous, coordinated, comprehensive) nursing care. Indeed, the nursing community has encouraged the shift from a physician-controlled, fee-for-service, home health delivery system to a capitated, population-based, nurse controlled delivery system. Clinicians and researchers already have identified the need for new models of nursing care delivery such as post-hospitalization or "sub-acute" facilities, respite care, and day care for technology-dependent patients, sick children, and the elderly.

Nurses must have both the vision and the initiative to propose a high-quality, low-cost system, guided by our professional values. In many respects, the changes in health care are providing the nursing profession with an unparalleled opportunity to activate its long-standing vision of holistic, continuous, integrated and cost-effective health care. As we assume the role of patient care managers in integrated, population-based health care systems, clinical scholarship will be the vehicle through which we can re-direct our practice, take advantage of the opportunities before us, and seize the moment to shape the future of health care.

- **Clinical scholarship is problem solving, innovation and creativity**
- **Clinical scholarship results in better patient outcomes**
- **Clinical scholarship is about activating and disseminating practice innovations**
- **Clinical scholarship is collaborative and interdisciplinary**
- **Clinical scholarship is value driven**

Clinical scholarship and careers

As a clinical scholar, it is essential to make the distinction between your job and your career – otherwise we attempt to hang on to something that is not real. A job is not a career; rather, it is simply the vehicle through which we express our career goals. If it no longer holds the possibility for doing that, it probably is time to look for or create a new vehicle. It is all right to put your job on the line because it's only a job. What is really important is having the self-confidence to acquire or create another job. Actually, the thought of doing any one job for a lifetime seems depressing to me and I am convinced that we will enjoy our work a lot more when we have more variety in it.

Practicing as a clinical scholar is, in fact, what distinguishes a job from a career in nursing. As it is in most areas of contemporary society, job security is essentially gone in the nursing profession. But it has been replaced by something much more important – the intellectual capital – of knowledge, genius, and creativity that nurses bring to health care. Today, the driving force of a career comes from the individual not from the organization; that is, security lies not in where we work, but in ourselves. The exciting feature of contemporary health care is that nursing is now unleashed to create new positions and new roles, as yet undreamed of.

Those who want to be part of the health care system of the future need to take the initiative to study and know the health care industry and the specific problems it's facing. Then

they need to develop a presentation that effectively shows how they can solve those problems. Taking initiative does not mean being pushy, obnoxious, or aggressive. It does mean identifying the health care needs of citizens and acknowledging our responsibility to make things happen in relation to these needs. Nurses of the future must know how to solve problems, develop solutions, create new products and positions and carry them out. New graduates should go where they can learn the most, not just where they're paid the most (the monetary rewards will come). They should find positions where they can advance their careers by associating with the top people in their chosen field of nursing, achieve recognition for their efforts and, ultimately, affect practice. But most of all, they should seek an environment providing a rich and satisfying work life, truly functioning as clinical scholars.

Naturally, these notions would only serve as grandiose ideals without the support of real-life, practical examples of how they can be achieved. The following series of exemplars does just that, for these are the stories of nurses wholly devoted to raising the standard of clinical scholarship for all who practice. For those who come behind these pioneers, the future is very bright indeed.

Clinical Scholarship Questions

1. How does a clinical scholar's practice differ from that of other nurses?

2. How does a clinical scholar demonstrate the integration of evidence into their practice on a day-to-day basis?

3. What skills/competencies enhance development of clinical scholarship?

4. At what stage in a nursing career trajectory is it possible to function as a clinical scholar?

5. What are the characteristics of clinical scholars and how do they differ from other types of scholars?

6. How does a clinical scholar apply nursing theories in their practice? How does a clinical scholar participate in the generation of new theory?

7. What is the relationship between clinical scholarship and clinical research?

8. What do we need to change in nursing education and in nursing administration to promote clinical scholarship?

9. How can nursing educators, administrators and clinicians work together to promote clinical scholarship?

10. How can Sigma Theta Tau International acknowledge and celebrate clinical scholarship?

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