Is It Research or Quality Improvement?

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Purpose/Objectives: The aim of this study was to highlight the defining criteria and ethical issues to consider when designing a quality improvement/ evidence-based practice, or research study.

Significance: Under pressure from all sides to deliver the highest quality, cost-effective care derived from evidence support while safeguarding patient rights and adhering to ethical principles, determining which activities qualify as quality improvement and which constitute research, grows increasingly dicey.

Design/Background/Rationale: Several research-intensive institutions over the past decade have had their research programs severely curtailed as a result of noncompliance with regulations governing protection of human subjects. At the same time, the healthcare delivery system is undergoing powerful forces of change. Hospitals are required to publish quality outcomes, and reimbursement for numerous hospital-acquired complications has or soon will be withdrawn. Because a key element of clinical nurse specialist (CNS) practice is improving care using research as a basis, to maintain ethical integrity, CNSs must be able to determine which activities are merely quality improvement and which represent research.

Methods/Description: Federal agencies overseeing research and human subject protection will be described, along with a historical overview. Findings from the Hastings Center Report (2006), which provides a detailed framework, definitions, and criteria for both quality improvement and research, will be addressed. Penalties imposed on institutions for violating regulations for human subject protection will be described as explanatory models. Several case examples of each study type will be analyzed, with audience participation.

Findings/Outcomes: Clinical nurse specialists will be better prepared to recognize differences and properly carry out quality improvement and research activities within an ethical framework.

Conclusions: Analysis of case examples will help to clarify differences in quality improvement and research. Implications for Practice: Properly differentiating quality improvement from research activities protects patients' rights, and CNSs and institutions from risk of violating human subject regulations while making clinical care safer and more effective.

It Takes a Village: Utilizing the Expertise of the Clinical Nurse Specialist in Creating an Acute and Critical Care Nurse Internship Program

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Purpose/Objectives: The clinical nurse specialist (CNS) given the responsibility for developing a new graduate nurse internship program faced the challenges not only of developing a program that would meet the desired objective of improving retention but also of doing so after recent hospital reductions in nursing educator positions.

Significance: Nursing turnover rates contribute to escalating costs and threaten patient safety. Studies have shown that most new graduates feel unprepared to provide direct care for multiple patients, to know when and how to call a physician, to synthesize data from multiple sources in making decisions, to manage time, to organize workload, or to prioritize tasks.

Design/Background/Rationale: In an effort to increase retention of newly graduated nurses, hospitals are developing specialized internship/residency programs to ease the transition to the role of the registered nurse while ensuring patient safety. The cost of these programs can be expensive for hospitals to provide due to the length of the programs and utilization of resources.

Methods/Description: Drawing upon the expertise of a network of CNS colleagues across a large metropolitan city, the CNS developed a unique program combining classroom and clinical practice components. Using the specialty knowledge and expertise of the CNSs allowed for the provision of evidence-based content on multiple critical topics. The 20-week program incorporated a weekly 2-hour clinical practicum under the guidance of CNSs. Objectives were to facilitate the development of nurse interns’ skills in critical thinking, prioritization of nursing interventions, identification of short-term patient goals, and patient safety risks. Classroom content was organized around 3 components: body system pathophysiology and disease management, professional topics, and quality initiatives. Professional topics such as time management, critical thinking, and effective communication allowed interns an opportunity to reflect and share concerns. Quality presentations focused on specific hospital quality initiatives.

Findings/Outcomes: Outcomes of the program to be evaluated include participant perceptions of their competence, the degree to which the program prepared them, retention rates, and impact on patient outcomes.

Conclusions: Results of this program will be used to determine future orientation initiatives. Implications for Practice: Using the expertise of CNSs in a collaborative initiative allows hospitals to share scarce resources needed to implement a nurse internship program.

Lessons Learned: Designing and Implementing an Insulin Infusion Algorithm Hospitalwide

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Purpose/Objectives: The purpose of this clinical improvement project was to design and implement an insulin infusion algorithm to improve glycemic control and nursing adherence to the algorithm, thereby increasing patient safety. The resulting algorithm was more complex than the previous protocol but also more flexible to meet the rapidly changing needs of patients.

Significance: Tight glycemic control has been shown to improve clinical outcomes related to wound healing, infection rates, length of stay, and mortality rates. The use of standardized insulin infusion protocols or algorithms has been endorsed by the American College of Endocrinology and American Diabetes Association as an approach to manage hyperglycemia.

Design/Background/Rationale: There has been long-standing acceptance of using insulin infusions to manage hyperglycemia throughout the institution in both critical care and acute care units. A chart review supported anecdotal reports of the ineffectiveness of the current insulin infusion protocol. This situation resulted in nurses “working around” the protocol to manage patients more effectively and to lessen the incidence of hypoglycemia.

Methods/Description: A clinical nurse specialist-led team reviewed existing protocols before designing a pilot algorithm and associated orders and documentation tool. The algorithm, orders, and documentation tool were initially piloted on a surgical unit. The algorithm was revised based on outcomes and subsequently piloted on 3 medicine units before hospitalwide implementation.

Findings/Outcomes: Initial findings reveal success of the algorithm on pilot units in terms of nursing adherence to the algorithm and glycemic control. Additional findings will be available after implementation is completed in the fall of 2008.

Conclusions: It can be concluded, even at this early stage of implementation, that despite the complexity of the algorithm, nurses on pilot units report that it is intuitive and effective. Additional conclusions will be offered after implementation is completed in the fall of 2008. Implications for Practice: The clinical nurse specialist as change agent is well positioned to improve the diabetes care provided to hospitalized patients. Insulin infusions can be well managed by nurses outside of intensive care units. Designing an insulin infusion algorithm or protocol that minimizes the incidence of hypoglycemia is critical to the success of the algorithm.

The Link to Relevant Research: The Research Collaborative Practice Model and the Clinical Nurse Specialist

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Purpose/Objectives: The purpose of this presentation was to provide an overview of a research collaborative practice model that was developed and implemented as a center for nursing research at a 541-bed tertiary care facility.

Significance: The lack of nurse scientists at many acute care facilities negatively impacts the ability of nursing staff to conduct nursing research and translate findings into clinical practice. A formal clinical-academic partnership between a tertiary care facility and a local health sciences center school of nursing provided an avenue for clinicians to explore and practically apply research.