**Quality Improvement and Research: Understanding the Differences and Their Application in Healthcare**



(QI) Quality improvement and research are two approaches that healthcare professionals employ to achieve these goals. While both QI and research share similarities in their pursuit of improving patient care, their methodologies, objectives, and regulatory requirements differ. This essay aims to discuss the distinctions between quality improvement and research, explain why a DPI (Doctor of Nursing Practice) project is considered a quality improvement, describe a patient practice problem suitable for a QI intervention, explore the concept of peer-reviewed sources and empirical evidence, and evaluate the usefulness of the GCU Library Research Guide in locating a relevant peer-reviewed research article. Continuous improvement is essential in healthcare to enhance patient outcomes and optimize care delivery processes.

**Differences between Quality Improvement and Research:**

https://youtu.be/hyWJLhyKWjQ

**QI:** QI focuses on systematically analyzing healthcare processes to identify and address areas for improvement. Its primary objective is to enhance patient care and outcomes, improve patient safety, and optimize healthcare delivery. QI initiatives often utilize existing data, employ evidence-based practices, and employ various improvement tools and methods (such as Plan-Do-Study-Act cycles) to implement changes. The purpose of QI is to improve the quality and efficiency of healthcare processes within a specific setting, often driven by the local needs and resources of the organization.

**Research:** Research, on the other hand, is a systematic investigation conducted to generate new knowledge, expand the existing evidence base, or test hypotheses. Its primary objective is to contribute to the scientific community's knowledge and understanding of a particular field. Research studies often involve collecting new data, rigorous methodology, and compliance with ethical and regulatory standards. Research projects are typically designed to answer specific research questions, and their findings can be generalized beyond the study population.

**Improving Medication Reconciliation for Patient Safety**

***QI Nature of DPI Project:*** A DPI project for this program is considered quality improvement rather than research due to its primary aim of improving patient care outcomes and enhancing the quality of healthcare delivery. The DPI project involves implementing evidence-based interventions, utilizing existing data, and applying QI methodologies to drive change and improve patient outcomes within a healthcare setting. While the project may include data collection, the purpose is to evaluate the implemented interventions' effectiveness rather than generate new knowledge or contribute to the scientific community's understanding.

***Patient Practice Problem Suitable for a Quality Improvement Intervention:***At my practice site, a patient practice problem that could be addressed through a quality improvement intervention is medication reconciliation errors during patient transitions of care. Medication reconciliation refers to creating an accurate and up-to-date list of a patient's current medications to ensure safe and effective medication management. Errors in medication reconciliation can lead to adverse drug events, medication discrepancies, and compromised patient safety.

This problem is considered a patient practice problem because it directly affects the quality of care and patient outcomes. Several steps can be taken to address this issue through a quality improvement intervention. First, a multidisciplinary team comprising nurses, pharmacists, physicians, and other relevant stakeholders should be formed.

The unit can then conduct a comprehensive assessment of the current medication reconciliation process, identify areas for improvement, and establish evidence-based guidelines and protocols. Implementing standardized tools, such as electronic health record templates and checklists, can help streamline the process and minimize errors. Additionally, providing education and training sessions for healthcare providers regarding medication reconciliation best practices can enhance their knowledge and skills in this area.

This intervention would be appropriate and feasible for my practice site because it focuses on a specific patient practice problem that can significantly impact patient safety. By implementing evidence-based guidelines and improving the medication reconciliation process, patient outcomes can be improved, and adverse drug events can be minimized. The resources and expertise necessary to implement this intervention are available within the practice site, making it a feasible project.

**Quality Improvement and Research: Peer-Reviewed Sources and Empirical Evidence**

The "Introduction to the GCU Library: Topics and Assignments" Guide explains several key terms and concepts. When a source is described as "peer-reviewed," the article has undergone a rigorous evaluation process by experts in the same field to ensure its quality, validity, and adherence to scholarly standards. Peer-reviewed papers are considered reliable and trustworthy sources of information.

On the other hand, if a source is described as "empirical," it means that it is based on empirical evidence derived from direct observation or experimentation. Practical sources present original research findings, data analysis, and conclusions from systematic and rigorous scientific investigation.

A nursing database such as CINAHL (Cumulative Index to Nursing and Allied Health Literature) or PubMed can be used to search for a peer-reviewed research article. These databases specialize in nursing and healthcare literature, providing access to a wide range of peer-reviewed articles, systematic reviews, and other relevant research studies. Appropriate source types for a comprehensive search include research articles, systematic reviews, meta-analyses, and clinical trials.

Utilizing the GCU Library Research Guide: The "Introduction to the GCU Library: Topics and Assignments" was instrumental in locating, evaluating, and organizing information to find a peer-reviewed research article. The guide provided valuable insights into the importance of using peer-reviewed articles in scholarly research and highlighted the rigorous review process that ensures their credibility.

Using the "Keywords and Boolean Searching" section of the Research Guide, I constructed a search strategy that refined my search and yielded relevant results. Combining relevant keywords and utilizing Boolean operators (such as AND, OR, NOT) allowed me to narrow my search and find specific articles related to my proposed intervention.

A peer-reviewed article was necessary for my research project because it guarantees the validity and reliability of the information presented. Peer-reviewed articles undergo thorough scrutiny by experts in the field, ensuring that the research methods, data analysis, and conclusions are sound. This evaluation and critical assessment level is essential to establish the credibility and trustworthiness of the information used in scholarly research.

***Importance of Peer-Reviewed Articles:*** A peer-reviewed article is crucial in scholarly research because it provides an authoritative and reliable source of information. Unlike academic/scholarly sources like videos, webpages, or reference resources, peer-reviewed articles offer higher scientific rigor, methodology, and adherence to educational standards. They present original research findings, contribute to the existing knowledge base, and undergo a comprehensive evaluation process to ensure accuracy and quality.

Furthermore, peer-reviewed articles allow researchers to critically analyze and assess the research methodology, data analysis, and conclusions presented. This level of scrutiny facilitates evidence-based decision-making and enhances the credibility and validity of the research project.

 In conclusion, quality improvement and research are distinct but interconnected approaches in healthcare. Quality improvement focuses on optimizing healthcare processes and improving patient outcomes, while research aims to generate new knowledge and expand the evidence base. A DPI project is considered quality improvement when its primary objective is to enhance patient care and implement evidence-based interventions.

By addressing patient practice problems through quality improvement and research interventions, healthcare organizations can drive positive change and improve patient outcomes. Peer-reviewed articles are crucial in scholarly research, providing reliable and credible information based on rigorous evaluation and adherence to academic standards. The GCU Library Research Guide is a valuable resource that assists in locating, evaluating, and organizing peer-reviewed research articles, contributing to evidence-based practice, and advancing nursing knowledge.

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