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Nursing Guideline for specimen handoff

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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Walden University
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Abstract

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MS, Walden University, 2016

BS, Hahnemann University, 1984

Project Submitted in Partial Fulfillment

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Abstract

The absence of clinical practice guidelines (CPGs) and collaboration with significant stakeholders may lead to gaps in the delivery of patient care. Specimen handoff in the endoscopy unit plays a critical role in patient diagnosis and treatment plans; errors can compromise patient safety. The purpose of this project was to provide endoscopy nursing staff with a CPG to improve the accuracy of the specimen handoff process during the endoscopy procedure. The practice-focused question addressed the feasibility of developing a quality and usable CPG to improve the accuracy and efficacy of handling the specimen handoff process during endoscopy procedures. Walden University guidelines and the Appraisal of Guidelines for Research and Evaluation Instrument (AGREE II) provided a framework for CPG development. Evidence came from peer-reviewed articles available from the Cochrane Database of Systematic Reviews, PubMed, and MEDLINE. A panel of four experts with experience in leadership, education, pathology, and procedural areas evaluated the newly developed CPG finding it to be of high quality with no revisions needed. Domain scores were 100% in scope and purpose, 99% in stakeholder involvement, 100% in the rigor of development, 100% in clarity of presentation, and 100% in editorial independence; the overall assessment was 100% for usability. This newly developed guideline may bridge the gap in practice by clarifying handoff in specimen collection in the endoscopy unit. If implemented, it may promote positive social change through improvements in patient safety, cost-savings incentives, and confidence in correct diagnosis for final treatment plans.

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Section 1: Nature of the Project

Introduction

Medical errors are a key issue in nursing practice because they compromise patient safety. According to the Institute of Medicine (2000), 98,000 people die each year from medical errors in the United States. This is a startling statistic given that medical errors should never occur. Accurate patient, specimen, and site identification is an important national patient safety goal and concern in U.S. health care organizations (Goodwin, 2018). The Joint Commission directive is very clear in its expectations for patient safety protocols, especially with regard to handling of patient specimens. Identification of the correct patient and specimen with two identifiers is imperative in nursing practice. An adverse event is harm that results from the medical intervention but may not be attributable to the original condition of the patient (Institute of Medicine, 2000). A near miss is an incident that refers to a violation of an established rule for safe practice in health care (Institute of Medicine, 2000).

Some errors are preventable in health care. With the proper clinical guideline to use as a practice tool, nursing staff may be able to decrease the number of preventable errors in practice. The specific focus of this Doctor of Nursing Practice (DNP) project was on preventing errors in specimen collection in endoscopy. I created a clinical practice guideline (CPG), which may lead to positive social change if implemented. It may decrease the number of errors in specimen handoff, which could improve patient safety and health care quality. Lack of knowledge and consistency with specimen handoff has led to errors in practice in the endoscopy unit at the clinical practice site. The

implementation of the guideline may help to foster a learning environment that helps prevent the reoccurrence of these errors.

Problem Statement

In the local endoscopy department, there was a gap in specimen handoff that has resulted in delayed diagnosis and treatment for patients. The focus of this DNP project on creating a CPG to close this gap. This gap has interrupted nursing care due to the time needed to correct these errors during the scheduled day of procedures in endoscopy. Preventing missed or incorrect diagnoses may benefit family members by reducing the trauma associated with colon cancer and the high cost of repeated procedures. Staff at the facility continue to use a paper document for the specimen handoff process, though a paperless system is forthcoming. The gap in practice was the absence of clear guidance for staff, which has resulted in a decreased lack of focus on proficiency in the process. The current system may be improved by clarification of instructions and specific steps. To that end, I developed a clinical nursing guideline to clarify processes, ensure a standard of care, and reduce specimen error in the endoscopy unit.

Miscommunication in handoff exchanges of information between health care providers of departments accounts for approximately 80% of adverse events in the health care setting (Galatzan & Carrington, 2018). Nurse professionals devote 10-15% of their workday to handoff exchanges (Galatzan & Carrington, 2018). This process has not changed much over the last 20 years despite the possibility of errors. Communication and handoff of information are essential to ensure patient safety. Miscommunication or handoff of information to the pathology department from endoscopy must be accurate

and precise. Errors can lead to patients being misdiagnosed or undiagnosed. They may also require patients to return to provide more specimens. The clinical guideline for specimen handoff may alleviate questions about how to handoff specimens in the endoscopy unit. This guideline may ensure a standard of care for all staff rotating through the department.

Purpose Statement

There is a significant gap in handoff communication with specimens leaving the endoscopy unit and going to pathology. Nurses engaged in handoffs in medical or surgical settings have an obligation to be detailed and accurate with their information; however, this was not the case at this site. Douglas et al. (2021) found that adverse events in at least 43% of malpractice claims were associated with a communication failure in the operating room setting. Standardization of specimen handoff may decrease the number of errors and improve time management and efficiency for the endoscopy staff.

Practice-Focused Question

Patient transfer of information from one area to another is critical for the continuation of care and safety (Shendell-Falik, 2007). Patient safety is a Joint Commission Goal. Handoff with the specimen is similar to other forms of communication in patient care that require appropriate communication. The development of a clinical guideline for staff may address the practice gap and improve patient safety while eliminating errors. I sought to answer the following practice-focused question: Will evidence and theory support the development of a quality and useable CPG that aims to

improve the accuracy of handling the specimen handoff process during endoscopy procedures?

Nature of the Doctoral Project

I formulated the clinical guideline for staff to follow to standardize the care of specimen handoff. To obtain data for this DNP project, I performed an exhaustive search of the literature. Walden University Library databases, specifically Cochrane Database of Systematic Reviews, PubMed, and MEDLINE with Full-Text, were sources of current peer-reviewed articles. In my database searches, I used the following phrases: *specimen handoff and errors*, *practice guidelines for specimen handoff, operating room specimen errors*, and *patient errors.*

To complete the analysis phase, I followed the guidance set forth in the Walden University (2019) CPG manual and the Appraisal of Guidelines for Research and Evaluation Instrument (AGREE II) (Brouwers et al., 2010). The problem was determined to be a lack of standardization related to specimen handoff in the endoscopy unit. I determined that the development of a CPG was the best practice design to address the gap. The development phase was continued after Walden University Institutional Review Board (IRB) approval (IRB # 11-11-22-0475068), and the literature search continued until the guideline was completed. The current peer-reviewed, evidence-based literature was the basis for the development of the CPG. I drew from contemporary literature to create a standardization of practice in the endoscopy unit for specimen handoff.

Significance

The stakeholders who may be affected by this project are the leadership team, the endoscopy procedural staff, the pathology department, and the patients at the project site. There are multiple potential benefits of implementing the CPG that was developed for this project. The leadership team may realize decreased rates of errors in specimen handoff. The number of calls from the pathology department may decrease requests for corrections on the paperwork or specimen containers. The procedural endoscopy nurses may not be pulled away from their daily tasks to correct the errors that occur. The nurses may be able to focus on their current patients in their room. The pathology department may no longer have to track down the nurse in the department to correct the errors. The patients, who are the most important stakeholders, may have a smooth procedure with correct labeling of their specimen, no return visits for errors, and/or no missing diagnoses that are critical for their treatment.

The major contribution of this doctoral project may be improved handoff and disposition of specimens collected during endoscopy. The development of a clinical guideline for nursing staff is potentially transferable to operating room areas that have the same process for specimen handoff. The project's potential implications for positive social change include increased confidence from the patient population that they are obtaining the best practice of nursing care and standards of care.

Summary

I formulated a clinical guideline to avoid errors in specimen handoff communication to the pathology department. This guide may standardize the process of

specimen handoff. Its implementation may eliminate errors and provide patients the critical diagnosis that is needed for their treatment plan.

Section 2: Background and Context

Introduction

Developing a clinical guideline to assist staff members in the handoff process may decrease the number of errors that occur. In developing the clinical guideline, I sought to ensure a standard of care and eliminate specimen errors in the endoscopy unit. The DNP project question was, Will a nursing clinical guideline improve the accuracy of handling specimen handoff during endoscopy procedures?

Miscommunication in handoff exchanges of information between health care providers in different departments accounts for approximately 80% of adverse events in the health care setting (Galatzan & Carrington, 2018). Nurse professionals devote 10-15% of their workday to handoff exchanges (Galatzan & Carrington, 2018). This process has not changed much over the last 20 years despite the possibility of errors. Communication and handoff of information are essential to ensure patient safety. Miscommunication or handoff of information to the pathology department from endoscopy must be accurate and precise. Errors may lead to patients being misdiagnosed or undiagnosed. Patients may also need to return to the facility for other procedures to provide more specimens. The CPG may alleviate questions about how to hand off specimens in the endoscopy unit. This guideline may ensure a standard of care for all staff rotating through the department.

Concepts, Models, and Theories

The health care industry has been under increasing pressure to improve patient safety. With the implementation of occurrence reporting, leaders have taken steps to

improve team performance and improve safety by changing processes. The Federal Aviation Administration mandated the development of crew resource management practices for all air services (Doucette, 2006). This implementation was designed to improve the recognition and utilization of all available resources, personnel, information, and equipment to be successful and achieve safety (Doucette, 2006). The occurrence reporting system used in the health care industry mirrors this model. Like the airline industry, there is no room for errors. The Occupational Safety and Health Act of 1970 led to the creation of the Occupational Safety and Health Administration (OSHA). OSHA is charged with creating a safe and healthy work environment that enforces standards and provides training, education, and assistance to health care and other workers all over the United States. In the health care setting, these standards help to create a safe environment not only for the staff but also for patients.

Research shows that clinical guidelines are best practices that decrease errors. A new stance toward errors has permeated the health care industry. . Leaders are no longer punitive about errors but see their occurrence as an opportunity to learn and to improve processes (Institute of Medicine, 2000). This significant change has led to rewarding staff for reporting errors to assist in making improvements. Reporting errors is the bridge to process improvements.

The model that underpinned the development and evaluation of this DNP CPG project was the AGREE II model (Brouwers et al., 2010). The AGREE II model addresses variability in the quality of practice guidelines from user to user, policy makers, administrators, and stakeholders (Brouwer et al., 2010). The AGREE II tool

provides a means for assessing the quality and useability of a guideline. The model's developers, Brouwers et al. (2010), validated that it provide a framework for developing best practice. The model has six quality domains:

- Domain 1: Scope and Purpose
- Domain 2: Stakeholders' Involvement
- Domain 3: Rigor of Development
- Domain 4: Clarity of Presentation
- Domain 5: Applicability
- Domain 6: Editorial Independence

The AGREE II tool has two final assessment items that require (a) an overall appraisal of the clinical guideline for overall quality and usability and (b) recommendations for use (Brouwer et al., 2010). I used the Walden University (2019) manual for CPG development as a framework to guide the development and implementation of the doctoral project.

Relevance to Nursing Practice

The exchange of communication in an organization is an essential part of patient safety. The communication that is needed for patient care has several layers: handoff reports from nurses to nurses, nurses to physicians, pharmacists to nurses or physicians, nurses to the pathology or lab departments, and nurses to charge nurse or manager to leadership. Any break in the communication line can be detrimental to patient safety. The miscommunication that can occur between providers accounts for 80% of adverse events in health care organization (Galatzan & Carrington, 2018). Although electronic medical

records were created to help eliminate patient errors, not all U.S. healthcare organizations are completely electronic. There is a need for continued research on handoff communication to help reduce errors and improve patient care. Nursing professionals have created many different types of forms to write down pertinent information to be handed off in reports to either nurses or physicians to avoid this miscommunication. To improve handoff communication in an acute dialysis unit they created such a process with a form that was a faxed report for handoff to the nursing units (Senyitko & Dohnalek, 2008). This improved 85% of the miscommunications on the floors (Senyitko & Dohnalek, 2008). The endoscopy unit also has a form that is started in the pre-op area to communicate to the procedural area and then the post-op area with pertinent information like medications, transportation individuals, allergies, lab values, and primary care physicians. This communication form is not a part of the medical record and is discarded at the end of the patient's visit.

The current state of practice in the specimen collection and communication of handoff in endoscopy at the project site is a paper form, with electronic physician progress procedural notes. These two should match. Specimen labeling, paper, and electronic medical record all need to match. Specimen labeling errors in the health care systems are costly. Process improvement projects such as specimen scanners or all electronic medical forms have reduced the rates of error in labeling. The current practice in endoscopy will not be moving in that direction soon. There is a need to help alleviate this miscommunication between the pathology department and endoscopy. This clinical guideline provides staff with clear concrete steps to follow.

Strategies in the past to alleviate this miscommunication have been education driven but have not eliminated these errors in communication. Patients' treatment plans have been delayed. Also, some patients have need to return for a second procedure have occurred to obtain a diagnosis. These factors have contributed to a decrease in patient satisfaction. This gap in communication may be alleviated with this clinical guide. This doctoral project addressed the communication gap in endoscopy specimen handoff by providing staff a guide to follow that has eliminated errors.

Local Background and Context

Specimen handoff is a key element in proper diagnosis and treatment for many patients coming through the endoscopy department. The Association of periOperative Registered Nurses has a specific guide for the operating room nurses to follow when collecting specimens (Yu et al., 2019). This guide is a tool to help implement safe practices in the operating room. The endoscopy unit currently does not have this tool to follow. Specimen handoff errors are a significant problem and can contribute to misdiagnosis, increased length of stay, and decreased patient satisfaction scores (Saathoff et al., 2018). The specimen handoff to pathology has gaps in patient care. The endoscopy unit has not collected data on the number of events in specimen handoff errors; however the frequency of calls from pathology are consistently daily over the last 3 years.

The endoscopy unit is in a community hospital that has an 839-bed capacity. This organization has earned a Magnet designation, bestowed by the American Nurses Credentialing Center as one of the top hospitals in this area, and is top in quality patient care and nursing excellence. This organization has specialized expertise in heart,

vascular, cancer, neuroscience care, obstetrical, and pediatrics as well. It is a Level III neonatal intensive care and Level II trauma center. This organization consecutively earns an A grade for patient safety from The Leapfrog Group. This group evaluates the hospital in an effort to protect patients from preventable injuries and harm. The endoscopy unit performs many procedures that are minimally invasive and alleviate the need for surgical techniques. There is a team of highly skilled gastroenterologists who perform procedures such as radiofrequency ablation for GERD and Barrett's of the esophagus, endoscopic retrograde cholangiopancreatography (ERCP) which alleviates obstruction of the cystic and bile ducts. The newest addition to this organization is the oncology building which expands the department to an increased need for specimen handoff.

The operational process for this doctoral project was to create a CPG as a tool for endoscopy nurses and traveler nurses to utilize. The relevance of this project has decreased or eliminated specimen errors and closed the gap for miscommunication to the pathology department.

The federal government instituted policies related to patient safety which is the highest priority not only at the government level but in all organizations. According to Escandell-Rico et al. (2021) currently worldwide, up to four out of ten patients will suffer damage in the primary or outpatient setting, of which 80% can be prevented. There are multiple factors that contribute to errors in the health care setting, distraction is just one. CPG's allow staff to follow step-by-step instructions to alleviate these errors.

Definitions of Local Terms

Clinical practice guideline (*CPG*): A step-by-step guide for a process or procedure for staff to follow.

Exchange of communication: The process by which individuals share knowledge, information, thoughts, and messages that are pertinent to a situation or event they are involved in. Primarily in patient care, it is key to successful outcomes

Gastroenterologist: A physician who specializes in diseases that affect the gastrointestinal tract.

Handoff: An exchange made by handing off information or items related to patient care.

Patient safety: The absence of preventable harm to a patient during a hospital visit, or outpatient procedure.

Role of the DNP Student

My role in this project was to develop the CPG, utilizing expert evaluators to produce a final product suitable for implementation for the endoscopy unit. I have helped to identify and address gaps in the practice of specimen handoff that were based on existing theories and implement changes that improved this practice.

The motivation for this project was not only a disruption to the unit as a whole but the disruption for patients that may have had to return for a second procedure to gain an accurate diagnosis to begin their treatment. The organization recently opened a new oncology tower which has expanded treatment options for the community, the organization must have concrete systems that are standardized to ensure excellent clinical

outcomes. The endoscopy unit performs many biopsies per day for this community and it must be accurate. Potential biases for this project may occur when the evaluation is completed by staff utilizing this process, and shortcuts may be created. The steps taken to address this were an evaluation from a pathologist in the lab, an administrator with known longevity in an endoscopy unit, evaluation from an educator who directly teaches this process, and a nurse practitioner who works in the operating room.

Role of the Project Team

There was an expert panel from the partner site to evaluate and provide adjustments if needed in the CPG. The expert panel consisted of an expert in pathology, an educator in the operating room, a nurse practitioner in the operating room, and a clinical manager of the endoscopy department. Following completion of this project, and upon recommendation for use, the educator of the endoscopy unit will develop in-services to present the new CPG to the staff.

Summary

There are many reasons for specimen collection errors in health care, the primary cause is being distracted. Distraction and interruptions were the primary cause of handoff errors in hospitals (Hohenhaus, & Powell, 2008). The CPG provides the procedural nurses with the tools necessary to complete handoff safely. Having the CPG locally has provided the procedure nurses with the necessary tools to provide safe and effective handoffs.

Section 3: Collection and Analysis of Evidence

Introduction

Specimen handoff in the target endoscopy unit lacked standardization and a guideline to follow. I undertook this project to provide unit nurses and staff a working tool to follow and standardize this process. With the opening of a new oncology tower at this site, there was an increased need for correct biopsy and specimen handoff. The mission of the target organization is quality and patient safety. These aims extend to the endoscopy unit as well. I developed the CPG for staff to follow. The CPG is evidence-based and may increase the knowledge related to specimen handoff for endoscopy.

Practice-Focused Question

The current process for specimen handoff has led to handoff errors for nurses in the endoscopy unit. The process outlined in the CPG provides employees with an updated evidence-based process for specimen handoff. The focus of this CPG was to ensure a standard of care and eliminate specimen errors in the endoscopy unit. The practice-focused question was, Will evidence and theory support the development of a quality and useable CPG that aims to improve the accuracy and efficacy of handling the specimen handoff process during endoscopy procedures?

The purpose of this doctoral project was to develop a CPG to eliminate specimen handoff errors in the local endoscopy unit. Miscommunication in handoff exchanges of information between health care providers of departments accounts for approximately 80% of adverse events in the health care setting (Galatzan & Carrington, 2018). Nurse professionals devote 10-15% of their workday to handoff exchanges (Galatzan &

Carrington, 2018). This process has not changed much over the last 20 years despite the possibility of errors. Communication and handoff of information are essential to ensure patient safety. The handoff of information to the pathology department from endoscopy must be accurate and precise. Errors can lead to patients being misdiagnosed or undiagnosed and having to return for procedures to provide more specimens. To address this gap in practice, I created a CPG that was based on an extensive literature review. Appendix A contains the literature review matrix.

Sources of Evidence

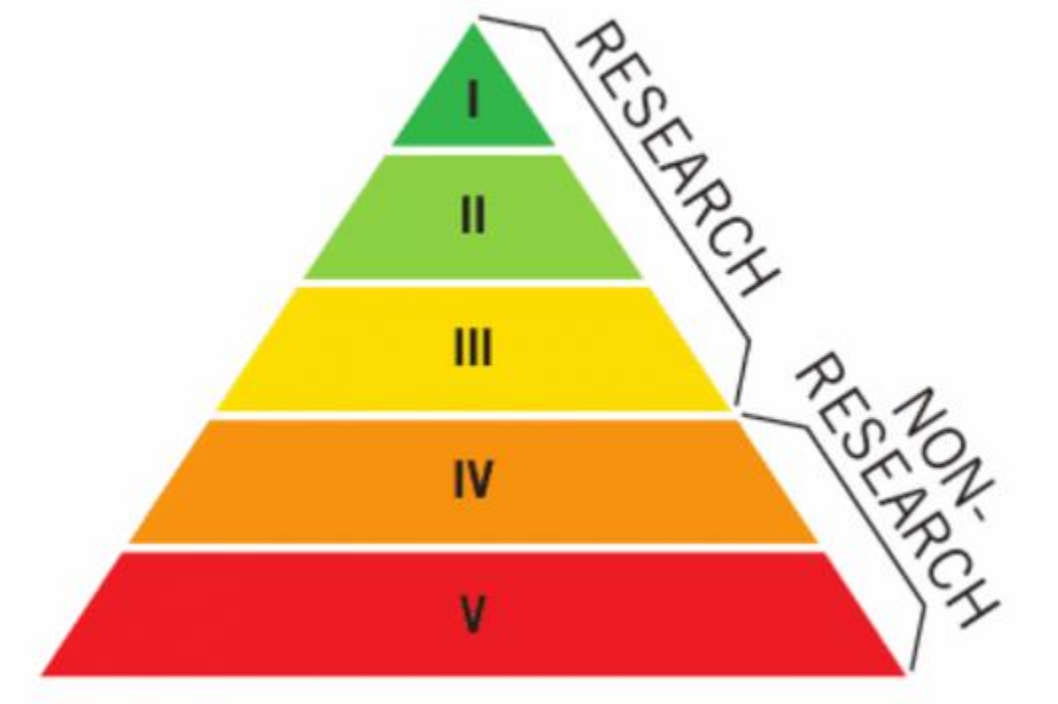
The purpose of this doctoral project was to create a CPG for endoscopy employees to use as a tool for specimen handoff. Using the Johns Hopkins nursing evidence-based model, I performed a systematic review and evaluation of the literature. An expert panel then used AGREE II to evaluate the content.

The Johns Hopkins nursing evidence-based practice model uses a three-step process called PET: practice question, evidence, and translation. This process involves identifying the practice question, identifying the best evidence to answer the question, and then translating the evidence into practice. The practice model has five levels of analysis. The first three levels are research- and evidence-based. Level I includes experimental studies, explanatory mixed-methods studies, and systematic review studies with or without meta-analysis. Level II is quasi-experimental, explanatory mixed methods and systematic reviews. Level III is nonexperimental studies. The fourth and five levels are non-research-based reviews and opinions. Level IV is based on the opinion

of respected authorities. Level V is based on experiential and nonresearch evidence. Figure 1 illustrates the hierarchy of evidence.

Figure 1

Hierarchy of Evidence in the Johns Hopkins Evidence-Based Practice Model



Note. "Johns Hopkins Evidence-Based Practice Model (JHNEBP) - Avera Library Resources (for Nursing Staff) - LibGuides at University of South Dakota (usd.edu)" by University of South Dakota, 2022. https://libguides.usd.edu/avera/jhnebp.

My goal was to identify the latest, most relevant data and findings to incorporate into the CPG. The AGREE II model provides a methodological strategy for identifying what information ought to be in the CPG. The AGREE II tool was instrumental in assessing the quality and useability of this clinical guideline (see Appendix B). I used the evaluation results to modify the CPG as needed.

The databases and search engines used to find outcomes related to best practices in specimen handoff were as follows: Medline, CINAHL, Science Direct, OVID, Wiley Online Library, and ProQuest. Some of the key search terms utilized for this research were *specimen handoff*, *reported errors in nursing units*, *operating room errors*, *endoscopy specimen handoff*, and *clinical guides to specimen handoff*. The evidence from the literature search shows a gap in communication and nursing practice. The nature of this data and the evidence found contributed to the CPG. I undertook this comprehensive and rigorous development process to formulate an effective CPG for the local endoscopy unit.

Participants

I identified an expert panel and invited members to evaluate the developed CPG for specimen handoff following the AGREE II model (Brouwers et al., 2010) recommendations. The panel included a clinical manager of endoscopy with a Master of Science in Nursing (MSN), an educator in the operating room also with an MSN, a DNP-prepared nurse practitioner who directly works in the operating room, and the director of clinical lab services and quality management individual in the pathology department. These individuals were chosen for their expertise and their ability to address the practiced-focused question. They had knowledge of the literature and could provide direct correct instructions to the staff regarding specimen handoff.

Procedures

After a thorough literature review, I developed a literature matrix, grading each article using the Johns Hopkins tool method (see Appendix A). The literature review

included 15 peer-reviewed articles with a variety of conclusions. Ten of the peer-reviewed articles were graded as Level I, three of the articles were graded as Level II, and two were graded as a Level IV. The peer-reviewed articles that had lower grades were limited studies with too many variables to have conclusive evidence. Some of the articles did not have clear measurements for a conclusion. Ten of the grade A peer-reviewed articles concluded that set standards and clinical guidelines, or check-off forms, will improve the communication of information. Following Walden IRB approval, a packet of information was presented to the expert panel, including a preapproved disclosure to the expert panelist form, along with an introductory letter, the AGREE II scoring instructions the AGREE II tool (see Appendix B), the literature matrix, and the developed CPG (see Appendix C). I asked the panel of experts to use the AGREE II tool to assess the quality of this clinical guideline and provide feedback to me within two weeks. After revisions are made and a general consensus is reached the content of this clinical guideline was utilized in endoscopy for specimen handoff.

Protections

There are no identifiable ethical risks involved in the clinical guideline for endoscopy. Ethics approval from Walden's IRB as well as approval from the facility was obtained to show compliance with the IRB requirements. Each of the expert panelists received the preapproval disclosure form with an accompanying letter introducing them to the AGREE II site and instructions for evaluation. Electronic records are stored in a password-protected file and will be deleted after 5 years. This site name and locations are masked and unnamed in the capstone.

Analysis and Synthesis

The expert panel that was chosen was evaluated and scored on the AGREE II trust site (https://www.agreetrust.org/). These scores were tabulated through the site, and I did receive a report which provided an overall assessment of the clinical guideline for endoscopy. This assessment displayed a percentage for each of the six domains in the AGREE II model. Once the results were compiled, the score were synthesized and assessed to modify the CPG as needed. The completed AGREE II tool results were saved on the AGREE II website.

Summary

The evidence from the literature supports the need for a CPG in endoscopy for specimen handoff. The above section reviewed the practice-focused question. The evidence for this DNP clinical guideline was obtained through an exhausted literature review and an expert panel completing the AGREE II tool for the overall assessment of this clinical guideline. Modifications were done as necessary and will be reflected in the final clinical guideline. In the next section, I have discussed the findings and the implications of the interpreted data.

Section 4: Findings and Recommendations

Introduction

The local problem that was addressed in this project was the lack of guidance in specimen handoff in the endoscopy procedural room. Standards of practice in specimen handoff should be followed to provide accurate and consistent implementation. The newly developed CPG may provide current and new staff rotating in the department with the tools they need to collect and handoff specimens in the correct manner. The project practice-focused question was, Will evidence and theory support the development of a quality and useable CPG that aims to improve the accuracy of handling the specimen handoff process during endoscopy procedures? The purpose of this DNP project was to provide an evidence-based process for nurses to follow in collecting and handing off specimens.

Via Walden University Library, I accessed peer-reviewed articles from the Cochrane Database of Systematic Reviews, PubMed, and MEDLINE with Full-Text to address the gap in practice and create a CPG. The CPG was assessed by a panel of four content experts, who used AGREE II criteria to score each domain. To ensure confidentiality, I assigned a number to each appraiser and used that number in my reporting instead of names, email addresses, or any other identifying characteristics.

Findings and Implications

Four expert panelists used the AGREE II tool to provide an evaluation of the CPG (see Appendix C). The results show data from 23 items and six individual domains. I tabulated a percentage within each domain. Per the AGREE II tool (Brouwers et al.,

2010), any domain scoring a percentage of 50% and above is considered acceptable; however, any domains scoring under 75% should be reviewed. Table 1 includes scores for the domains.

Table 1

Domain Scores

Domain	Domain name	Domain score (%)
Domain I	Scope and practice	100
Domain II	Stakeholder involvement	99
Domain III	Rigor of development	100
Domain IV	Clarity of presentation	100
Domain V	Applicability	100
Domain VI	Editorial independence	100
Overall assessment	Usability	100

In a review of the results, one expert panelist added a comment stating that there were no preferences for patient age or economic status. The population was the adult community with no preferences of age, sex, race, or economic status. When discussing the findings with the expert panelists, I found that they appreciated the potential of the CPG to assist procedural nurses with the handoff of specimens, especially because there were none in endoscopy at the time of the project. They strongly recommended that this CPG be present in all the exam rooms and at the nurse's station to advocate for increased knowledge and care in handling these important specimens.

Recommendations

I addressed the gap in practice by providing a CPG regarding the process of collecting and handoff of specimens in the endoscopy unit. After leadership approval of this CPG, I recommend the implementation of the CPG in the endoscopy unit for the management of specimen handoff. Suggestions for monthly auditing for specimen errors are included in this CPG.

Strengths and Limitations of the Project

The strength of this project is directly related to the positive feedback from the expert panelist who expressed the need and implementation of this CPG in endoscopy. The expert panelist expressed the possibility of elimination of specimen errors received in handoff to pathology. Management of specimens in all areas of the organization is essential for diagnosis and treatment plans for the critically ill population. The facility shows support and interest in the utilization of this CPG.

The AGREE II tool was a limiting factor for the completion of this project. The need to recruit and register the panel of experts was challenging. The panelists required instructions to help them understand how to use this tool. I sent out videos with instructions to the panel, including follow-up reminders to complete the evaluation in a timely manner to meet the deadline. The potential positive social change from this CPG is consistent handoff and standardization of specimen collection, improved patient safety, and satisfaction.

Summary

The findings for this project were created around the anonymous data used for analysis of the AGREE II appraisal tool by the panel of four experts. This panel of experts appreciated the CPG for the endoscopy unit and recommended active use in all procedural rooms. The practice gap was addressed, and the practice-focused question was answered. I plan to disseminate the project after graduating from Walden University. In Section 5, I will provide a self-analysis and summary of this project to include challenges, solutions, and insights gained from the DNP journey.

Section 5: Dissemination Plan

The implementation of the new CPG within the target organization may be challenging. The endoscopy unit is active in three separate buildings within this organization, and standardization will be important when implementation begins. Collaboration is essential, both within each department and within the education teams that are actively involved in practice changes. Via email, I plan to send the CPG to the manager of both the inpatient and outpatient endoscopy units. The new facility has a separate endoscopy manager whom I will email separately. The CPG may provide standardization for all endoscopy units in the organization to collect specimens and hand off to pathology with the same process.

Analysis of Self

I began my career as a registered nurse in the medical and surgical intensive care unit at a hospital in the city of Philadelphia. In this role, I learned just how crucial I was in direct patient care and how the handoff of information is essential to improve patient outcomes. My goal of advancing my education led me to Walden University's DNP program as well as my current leadership position in the target organization. These experiences gave me the opportunity to improve patient care and outcomes, and they encouraged me to lead a team of successful nurses. I plan to continue in these roles after graduating with my DNP to better serve the patient population and staff members within my organization. This project has provided me with the skills needed in the utilization of evidence to develop a CPG. I feel prepared to evaluate practice outcomes as the next step in quality improvement.

The CPG has ethics- and practice-related dimensions. I have learned the importance of the evaluation process to implement a practice change. This advanced nursing practice project may improve specimen handoffs in the endoscopy unit and the delivery of care for patients. The education of nursing professionals in the endoscopy unit is imperative for the success of this project.

Completing this DNP project has been an exciting, if exhausting, experience. This journey has helped me focus on learning objectives related to identifying problems in the clinical setting, conducting research, and formulating a plan to implement change. This education has helped me recognize alternative avenues in the nursing process to align evidence-based practice and research in real-time clinical settings. As the leader in this project, I was able to successfully manage not only the project but the panel of experts. I completed a literature review that included research literature that helped support this project. I also selected appropriate panelists to grade and evaluate the CPG for content and usability. The panel members were excited to finally have a CPG specific to endoscopy specimen handoffs. As the project manager, I found it a challenging but rewarding undertaking. I am enthusiastic that the results may benefit the patient population in the endoscopy department as they wait on their treatment plans.

Challenges, Solutions, and Insights Gained

During this program, I faced many challenges in my personal life. The stress of full-time work, full-time school, and some traumatic personal events made completing this DNP program extremely difficult. Staying focused on the task and the learning objectives were imperative for me. One of the most significant academic challenges was

trying to use the AGREE II website for the first time. The website was unclear and confusing and did not offer instructions or a contact/tech help number. Explaining the site to the expert panelists was essential for evaluation and completion of this project. However, in the end, the coordination of this project was a very gratifying experience. It taught me how involved leadership and management must be to promote change within an organization.

Summary

In this DNP project, I created a CPG to address a gap in practice related to specimen handoff in the endoscopy unit. This project's implications for positive social change include giving the nursing staff tools to standardize the care for specimen handoffs with the aim of improving patient care and outcomes. This CPG may facilitate accurate diagnosis of specimens to begin patients' treatment plans. Patient-centered care and safety are a priority for nursing staff, delivering the best, appropriate care to patient population is a professional obligation. The newly developed CPG may increase endoscopy procedural nurses' knowledge of best practices for specimen handoff to improve accuracy.

References

Brouwers, M., Kho, M. E., Browman, G. P., Burgers, J. S., Cluzeau, F., Feder, G., Fervers, B., Graham, I. D., Grimshaw, J., Hanna S. E., Littlejohns, P., Makarski, J., & Zitzelsberger, L. (2010). AGREE II: Advancing guideline development, reporting, and evaluation in healthcare. *Canadian Medical Association Journal*, *182*(18), E839–E842. https://doi.org/10.1503/cmaj.09044

Doucette, J. N. (2006). View from the cockpit: What the airline industry can teach us about patient safety. *Nursing*, *36*(11), 50–53. https://doi.org/10.1097/00152193-200611000-00037

Douglas, R. N., Stephens, L. S., Posner, K. L., Davies, J. M., Mincer, S. L., Burden A. R., & Domino, K. B. (2021). Communication failures contributing to patient injury in anesthesia malpractice claims. *British Journal of Anaesthesia*, *127*(3), 470–478. https://doi.org/10.1016/j.bja.2021.05.030

Embree, J. L., Onuorah, E., Kitchens, J., Smith, C., Hazlett, T., & Arebun, J. (2020). Reducing nursing specimen collection errors. *The Journal of Continuing Education in Nursing*, *51*(10), 450–452. https://doi.org/10.3928/00220124-20200914-05

Escandell-Rico, F. M., Perpiñá-Galvañ, J., Pérez-Fernández, L., Sanjuán-Quiles, Á., Gómez-Beltrán, P. A., & Ramos-Pichardo, J. D. (2021). Nurses' perceptions on the implementation of a safe drug administration protocol and its effect on error notification. *International Journal of Environmental Research and Public Health*, *18*(7), Article 3718. https://doi.org/10.3390/ijerph18073718

Galatzan, B. J., & Carrington, J. M. (2018). Exploring the state of the science of the nursing hand-off communication. *CIN: Computers, Informatics, Nursing*, *36*(10), 484–493. https://doi.org/10.1097/CIN.0000000000000461

Hohenhaus S. M., & Powell, S. M. (2008). Distractions and interruptions: Development of a healthcare sterile cockpit. *Newborn & Infant Nursing Reviews, 8*(2), 108–110. https://doi.org/10.1053/j.nainr.2008.03.012

Institute of Medicine (2000). *To err is human: Building a safer health system*. The National Academies Press. https://doi.org/10.17226/9728

Leighton-Robinson, N. (2016). Promoting patient safety with perioperative hand-off communication. *Journal of PeriAnesthesia Nursing, 31*(3), 245–253. https://doi.org/10.1016/j.jopan.2014.08.144

Saathoff, A. M., MacDonald, R., & Krenzischek, E. (2018). Effectiveness of specimen collection technology in the reduction of collection turnaround time and mislabeled specimens in emergency, medical-surgical, critical care, and maternal child health departments. *CIN: Computers, Informatics, Nursing*, *36*(3), 133–139. https://doi.org/10.1097/CIN.0000000000000402

Senyitko, L., & Dohnalek, L. (2008). Improving hand off communication in the acute dialysis unit. *Nephrology Nursing Journal*, *35*(2), 179.

Shendell-Falik, N. (2007). Enhancing patient safety: Improving the patient handoff process through appreciative inquiry. *JONA: The Journal of Nursing Administration, 37*(2), 95–104. https://doi.org/10.1097/00005110-200702000-00012Walden University. (2019, May). *Manual for clinical practice guideline*

development (CPGD): Doctor of Nursing Practice (DNP) scholarly project. https://academicguides.waldenu.edu/ld.php?content_id=63848268

Appendix A: Literature Review Matrix

A Clinical Practice Guideline for Specimen Collection in Endoscopy

Citation	Main finding	Research method	Strength of study	Weakness of study	Level [a]
Elizabeth Manias, Maryann Street, Grainne Lowe, Jac Kee Low, Kathleen Gray, & Mari Botti. (2021). Associations of person-related, environment-related, and communication-related factors on medication errors in public and private hospitals: a retrospective clinical audit. *BMC Health Services Research*, *21*(1), 1–13. https://doi.org/10.1186/s12913-021-07033-8	Errors in medications were significantly reduced with double checking orders, and in the presence of electronic systems for prescribing. Errors are multifaceted and decreasing errors some key factors are double checking and electronic health care records.	Retrospective clinical audit of medication errors taken over 18 months in 2 health services comprising 16 hospitals	Strength is the size and length of the study. Comparison to other facilities and taking into consideration, who caused the error (doctor, pharmacist, patients, families, nurses, or midwives), double checking compared to single check, and electronic system compared to not.	Weakness is also so many variables to consider, trying to find one cause is difficulty	I
Embree, J. L., Onuorah, E., Kitchens, J., Smith, C., Hazlett, T., & Arebun, J. (2020). Reducing nursing specimen collection errors. *The Journal of Continuing Education in Nursing*, *51*(10), 450–452. https://doi.org/10.3928/00220124-20200914-05	Using a multi-faceted intervention, they achieved a 30% reduction in mislabeled, unlabeled specimens.	Use of multifaceted approach included all stakeholders such as clinical nurses' specialist, staff nurses, clinical managers, laboratory professional staff.	The stakeholders involved were appropriate and led to educational intervention with specimen collection. There was a 30% decrease in errors and reduced to 28 errors a month from 40.	Difficult to analyze which intervention was key to reduction of errors	II

Francis, D. L., Prabhakar, S., & Sanderson, S. O. (2009). A Quality Initiative to Decrease Pathology Specimen–Labeling Errors Using Radiofrequency Identification in a High-Volume Endoscopy Center. *American Journal of Gastroenterology (Springer Nature)*, *104*(4), 972–975. https://doi.org/10.1038/ajg.2008.170	An off-shelf 3M library sciences RFID system was modified and installed in 41 endo suites as well as in the specimen processing accessioning laboratory in the division anatomic pathology. RFID stickers tags were places on the bottom of specimen bottles. These tags uniquely identify each bottle.	Process changes and evaluation post implementation.	The results of this study were 765 mislabeled or unlabeled decreased to 47 mislabeled or unlabeled. The new RFID Technology improved the events of errors.	Limitation to the study was the use of an electronic database for the endoscopy unit that is entered in real time during the procedures was developed by and used solely within the institution, not compared to any other sources. They developed their own labeling system classification and did not investigate other options. This system was not commercially available to others to try.	I

Goodwin, B. (2018). Specimen errors carry large consequences. *Urology Times*, *46*(7), 38.	Time of error may be undeterminable when or where. Failure to properly check patient identifiers, label specimens, error in electronic medical records, mix up in the lab, etc. etc. It is estimated that it cost an average of 880 million in wasted medical treatments cost for errors. Each organization has a different process for handling specimens and workflow vary, the use barcode technology is preferable, however not all organization have this available to them.	Root Cause Analysis (RCA) of patient who did not receive any treatment after they were positive for adenocarcinoma.	This article was only informative. It identified patient identifiers as an issue	No specific measurements or suggestions except use of patient identifiers	IV
Higham, H., & Baxendale, B. (2017). To err is human: use of simulation to enhance training and patient safety in anaesthesia. *British Journal of Anesthesia*, *119*(Supplement 1), i106–i114. https://doi.org/10.1093/bja/aex302	Anesthesia developed and used a simulation in health care to enhance education and training of al healthcare professionals and promoted the integration of human factors methodologies in the design of safer	Leadership role in the application of simulation-based interventions to training and systems design across health care.	Comparison with aviation who cannot have any error. Crew Resource Management (CRM). Since the UK airline crew implemented this design there have not been one single death.	Lack of pre and post measurement of errors.	II

Humphrey, K., Sundberg, M., Milliren, C., Graham, D. & Landrigan, C. (2022). Frequency and Nature of Communication and Handoff Failures in Medical Malpractice Claims. *Journal of Patient Safety, 18* (2), 130-137. doi: 10.1097/PTS.0000000000000937.	Retrospectively reviewed and random sample of malpractice claims.	Communication failures were identified in 49% of the claims. Claims with communication failures were significantly less likely to be dropped or dismissed than claims without versus	They utilized a national claims database. Two researchers were the reviewers	Unclear of the demographics and economics of the individuals submitting the claims.	I
Kim, J. K., Dotson, B., Thomas, S., & Nelson, K. C. (2013). Standardized patient identification and specimen labeling: A retrospective analysis on improving patient safety. *Journal of the American Academy of Dermatology*, *68*(1), 53–56. https://doi.org/10.1016/j.jaad.2012.06.017	Average monthly rates of events were 1000 cases for the time period. Prior to implementation errors were 1000 cases for this time period. Rates were at 5.79 events per 1000, post decreased to 3.53 events per 1000.	Monthly aggregated rates of specimen labeling events occurring with skin specimen processed through Duke University Medical Center Department of pathology from 12/08-6/2011.	Low-cost process driven interventions that showed reduction of errors	Limitations of study include sampling error and regression toward the mean.	I

Lee, T. (2016). Specimen Labelling Errors Just Don't Cut It in the Operating Room. *ORNAC Journal*, *34*(3), 14–37.	The group of nurses met every 2-3 weeks for a total of 4 months. A report was run of all errors between Jan. 2012 and June 2014. The errors were identified as label/specimen mismatch, unlabeled, incorrect label, or lost specimen. Prior to this quality initiative specimen labeling errors had been under reported by the histology making It difficult to determine an accurate incident. Standards for practice were integrated within the process to support and provide necessary evidence making this process replicable in other organizations and in the OR.	Focus group from a convenient sample of 15-20 nurses with a variety of education time. The Reasons model was used for analysis allowing comparison between active errors and the standardized process established by the focus group.	Recognized that a standardization process is necessary to reduce errors. The focus groups assisted withs the development of this process.	Since many of these errors have gone unreported will the future collection all consistently comply with the new process or go unreported?	I
Lim, F., & Pajarillo, E. J. Y. (2016). Standardized handoff report form in clinical nursing education: An educational tool for patient safety and quality of care. *Nurse Education Today*, *37*, 3–7. https://doi.org/10.1016/j.nedt.2015.10.026	Miscommunications are the one and leading cause of serious but preventable errors. They used a standardized form that is used by nursing students, faculty, healthcare staff, and in the medical, surgical clinical practicums	This was a systematic review conducted to understand the barriers to effective handoff reports, this study is meant to evaluate the application of best practice	Strengths of this study showed this handoff communication to prompt nursing students to implement evidence-based safety alerts with confidence and autonomy, prevent errors and promote safety.	Weakness there was no clear measurement of improvement.	IV

Makary, M. A., Epstein, J., Pronovost, P. J., Millman, E. A., Hartmann, E. C., & Freischlag, J. A. (2007). Surgical specimen identification errors: A new measure of quality in surgical care. *Surgery*, *141*(4), 450–455. https://doi.org/10.1016/j.surg.2006.08.018	Communication error is mislabeled specimens. 21,351 surgical specimens were included in this analysis. There were 91 surgical identification errors, 18 not labeled, 16 empty containers, 14 incorrect tissue sites, 11 incorrect patients, 9 no name, 7 no tissue site. Identification errors occurred in 0.512% which is not acceptable. This has become a safety measure and a strategy needs to be formulated to reduce these errors.	A systematic review of specimen errors and sentinel events that were reported	This study strength it clearly gives measurable data to indicate an issue with specimen collection technique	No clear strategy to reduce this rate of error	II
Schwartz, M., Osborn, H., Palmieri, J., Patel, B., & Flug, J. A. (2020). Reducing Errors in Radiology Specimen Labeling Through Use of a Two-person Check. *Current Problems in Diagnostic Radiology*, *49*(5), 351–354. https://doi.org/10.1067/j.cpradiol.2020.01.003	Intergraded a 2 person check with specimens resulted from a 31-specimen error over 149 weeks to 3 errors over the next 46 weeks	Quality improvement project. Specimen labeling errors that are reported entered an events safety reporting system	Strength of study the use of an event reporting system to track errors	Weakness to the study is the 2-person verification clarification, could it be any 2 individuals, such as a tech and a nurse or is it only 2 nurses.	I

Snyder, S. R., Favoretto, A. M., Derzon, J. H., Christenson, R. H., Kahn, S. E., Shaw, C. S., Baetz, R. A., Mass, D., Fantz, C. R., Raab, S. S., Tanasijevic, M. J., & Liebow, E. B. (2012). Effectiveness of barcoding for reducing patient specimen and laboratory testing identification errors: A Laboratory Medicine Best Practices systematic review and meta-analysis. *Clinical Biochemistry*, *45*(13–14), 988–998. https://doi.org/10.1016/j.clinbiochem.2012.06.019	The conclusion of barcoding is an effective way for reducing patient specimen and laboratory testing identification errors in diverse hospital settings and is recommended as an evidence-based best practice.	A systematic review of the effectiveness of barcoding practices for reducing patient specimens	Strength the study followed a A-6cycle systematic review method for evaluating quality improvement practices that were funded by the CDC lab. And reported in detail. This approach was previously validated methods and design to transparently evaluate the results of studies in practice effectiveness to support the evidence-based recommendations	It added another point of care testing for the nurses to check. Some errors were traced to misread barcodes of patient identification.	I

Step-by-step approach helps reduce specimen errors in the OR. (2015). *OR Manager*, 1–13.	Specimen errors in this article are like most, containers not received, numbers do not match, tissue does not match, unlabeled containers. This organization started a task force to tackle this problem, they aim to reduce errors by 75%. They analyzed the process on collection and took steps to eliminate them. They created a standard to be used, developed a tracking system, created a quick reference wall charts for reference, standardized the transportation of specimens, and included an educational specimen handling for staff.	Systematic review of the errors and began a task force to create a new standardizes procedure for collection.	Strength of study showed changes that were planned out for specimen collection	No measurable results post implementation of new process.	I
Trask, L. (2018). How lab directors can help nursing staff eliminate mislabeled specimens. *MLO: Medical Laboratory Observer*, *50*(5), 32–33.	Barcode scanners have decreased by 87% after implementation. It is a widely accepted process from the nurses. Error may cost an organization 1 million dollars a year. The most beneficial result of barcode technology is patient	Single study compared to surrounding hospitals	Ingredients for success is positive patient identification, real-time label printing, flexibility in the hardware used.	Not compared to other options of labeling or collection	I

Xiang-Jun Zou, & Yin-Ping Zhang. (2016). Rates of Nursing Errors and Handoffs-Related Errors in a Medical Unit Following Implementation of a Standardized Nursing Handoff Form. *Journal of Nursing Care Quality*, *31*(1), 61–67. https://doi.org/10.1097/NCQ.0000000000000133	Inadequate handoffs can create important information gaps, omissions, errors, and cause patient harm. A standard approach has been proven to decrease and eliminate errors and close this gap. Standardize communication has also been suggested to be an effective approach to improve communication and patient information handoff. In this study the nursing in the group were given education about the new hand off form and errors were measured prior to the use. Data was analyzed using a SPSS version 18.0. The total number of errors went	Prospective intervention study. Evaluating a nursing hand off form that was designed and implemented to improve the rates of nursing errors.	Strengths of study utilization of a standard approach and compared to prior approach.	No weakness	I

Note. I used the Johns Hopkins evidence-based practice model to grade and evaluate the sources in the literature review.

[a] "Level" refers to level of evidence in the Johns Hopkins framework.

Appendix B: AGREE II Tool and Assessment

AGREE II Tool

Domain 1: Scope and Purpose

1. The overall objective(s) of the guideline is (are) specifically described.
2. The health question(s) covered by the guideline is (are) specifically described.
3. The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.

Domain 2: Stakeholder Involvement

4. The guideline development group includes individuals from all the relevant professional groups.
5. The views and preferences of the target population (patients, public, etc.) have been sought.
6. The target users of the guideline are clearly defined.

Domain 3: Rigor of Development

7. Systematic methods were used to search for evidence.
8. The criteria for selecting the evidence are clearly described.
9. The strengths and limitations of the body of evidence are clearly described.
10. The methods for formulating the recommendations are clearly described.
11. The health benefits, side effects, and risks have been considered in formulating the recommendations.
12. There is an explicit link between the recommendations and the supporting evidence.

13. The guideline has been externally reviewed by experts prior to its publication.
14. A procedure for updating the guideline is provided.

Domain 4:Clarity of Presentation

15. The recommendations are specific and unambiguous.
16. The different options for management of the condition or health issue are clearly presented.
17. Key recommendations are easily identifiable.

Domain 5: Applicability

18. The guideline describes facilitators and barriers to its application.
19. The guideline provides advice or tools on how the recommendations can be put into practice.
20. The potential resource implications of applying the recommendations have been considered.
21. The guideline presents monitoring or auditing criteria.

Domain 6: Editorial Independence

22. The views of the funding body have not influenced the content of the guideline.
23. Competing interests of guideline development group members have been recorded and addressed.

Overall Guideline Assessment

1. Rate the overall quality of this guideline.
2. I would recommend this guideline for use.

Appendix C: Clinical Practice Guideline for Specimen Collection in Endoscopy

Purpose

The purpose of this guideline is to provide direction to the endoscopy nursing staff on the standard of practice for specimen collection.

Procedures

- The clinical practice guideline (CPG) will be reviewed with all the endoscopy procedure nurses.
- The CPG will be included in the orientation of new staff members to the unit.
- The CPG will be included in the policy and procedural manual on the PULSE Page.

Target Population

The CPG will be a clear tool to address the correct procedure in collecting specimens in the endoscopy procedural area.

Recommendations

There is a lack of knowledge and consistency with specimen collection, while the literature review clearly shows that education and consistency with guidelines will improve the quality and outcome for patient care.

Key Evidence

- Barcoding technology has been proven to reduce specimen errors in the surgical areas and improved quality, service, and nurse satisfaction (Yu et al., 2019).
- CPG improve the management of patient care and create standards (Lufang et al., 2022).

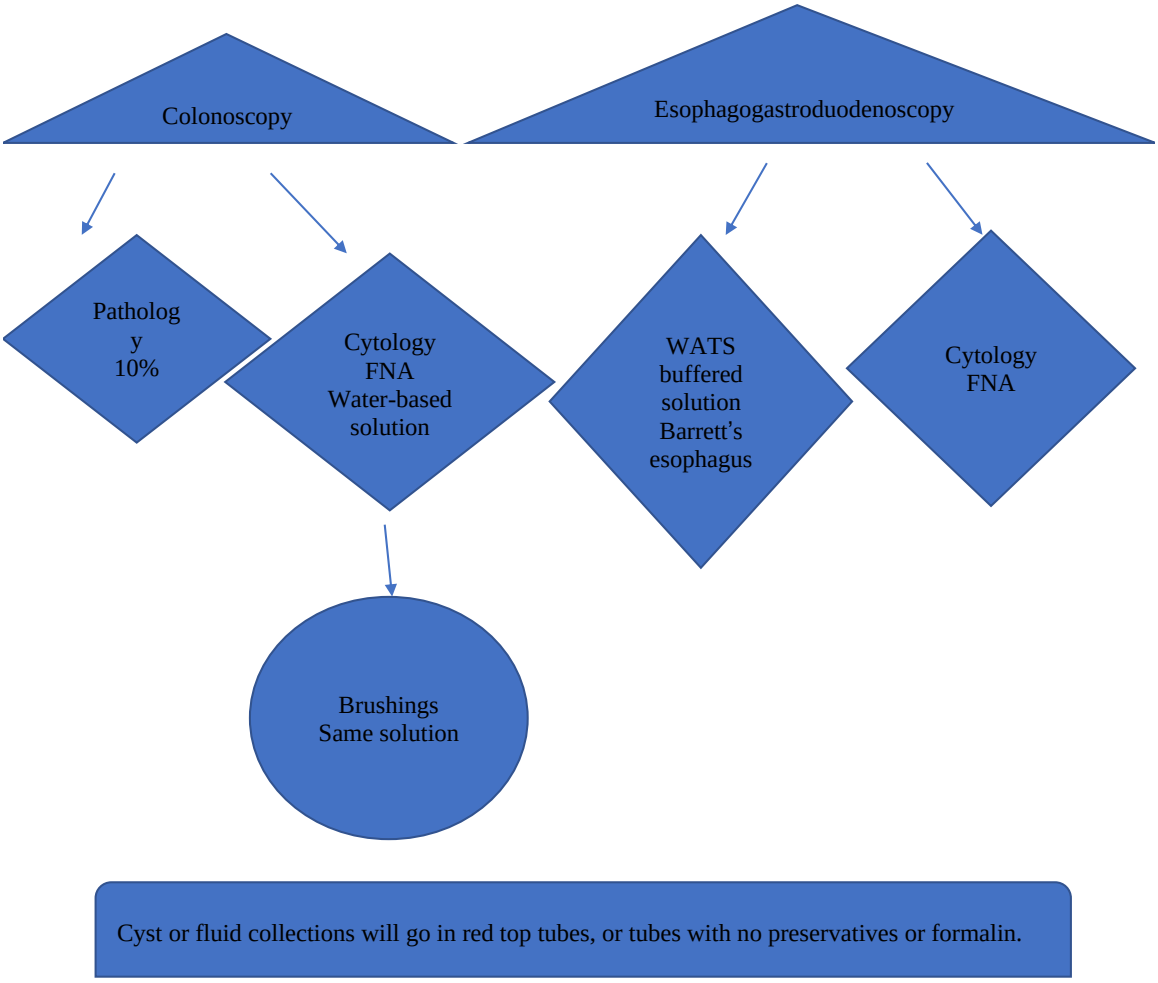
- Nurses provide have a key role in providing more evidence for the improvement and quality of guidelines.
- Specimen error are costly to the organization
- Specimen errors can delay diagnosis and treatments for patients.
- Specimen errors disrupt the workflow in the endoscopy unit.

Guideline Monitoring

- This CPG should be reevaluated every three years or updated with any new implementation of technology.
- Barriers to applying this guideline should be addressed as they arise by the nurses in endoscopy before implementation.

Specimen Collection in Endoscopy: A Clinical Practice Guideline

This guide is intended for the Endoscopy procedural nurses to utilize as a tool to collect specimen in the unit.



- The procedural nurse will collect all items necessary for the procedure and specimen collection in the room prior to the case beginning.
- The requisition form will have the patients label on all three pages filled out with the primary care provider, endoscopy provider, and all necessary lines filled out with legible handwriting (Firm enough to carry through 3 copies).
- The major three types of specimens collected are cytology, pathology, and cultures.
- Cytology and Cultures must be placed in the specimen bin post case and called for immediate pick to lab by our volunteer department.
- The specimen label must contain the patients name, DOB, and current VID#, current time and date, nurses, and Certified Surgical Technologist CST's initials, following the letter or number (site, and specimen).
- The Endoscopist will collect the specimen with the Certified Surgical Technologist (CST) and state the specimen and location.
- The specimen is handed off and placed on the CST worktable and label with a letter A, B, C (example).
- The CST will hand off the specimen to the procedural nurse and the specimen's name and location will be repeated as they place it in the appropriate container.
- The container will be labeled with the letter given by the physician and CST.
- The procedural nurse will fill out the requisition form with matching letter and description of what the physician called the specimen.

- All specimens will be handed off by physician to CST then to RN, and all specimens names will be repeated by the CST, and RN. Any clarification needed will be communicated immediately. If spelling is required, this will be communicated at this time.
- At the completion of the case the specimens' names and letters will be repeated for clarification assure correct and complete collection.
- The procedural nurse will go over the form a final time to assure the completion of all lines and items necessary for the pathologist to run the appropriate test for the patient.

References

Lufang Zheng, Guichen Li, Yiming Qiu, Cong Wang, Chunyan Wang, & Li Chen. (2022). Clinical practice guidelines for the prevention and management of frailty: A systematic review. *Journal of Advanced Nursing*, *78*(3), 709–721. https://doi.org/10.1111/jan.15067

Yu, M., Lee, T., & Mills, M. E. (2019). The effect of barcode technology use on pathology specimen labeling errors. *AORN Journal*, *109*(2), 183–191. https://doi.org/10.1002/aorn.12585