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# Clinical Faculty Perceptions of Using a Skills Checklist in Teaching Pn Students Bedside Physical Assessments

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**Doctor of Nursing Practice Capstone Project**

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Clinical Faculty Perceptions of using a Skills Checklist in Teaching PN Students Bedside

Physical Assessments

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Submitted to Pamela Stoeckel, PhD, RN in partial fulfillment of

NR 706B DNP Capstone Project

Regis University

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## Abstract

An area of student learning where assessment and support is most important is in the teaching of physical assessment to practical nursing (PN) students. Faculty teaches techniques of body system assessments and then evaluates student learning. First year practical nursing (PN) students at a Midwest community college were reported to be deficient in performing bedside physical assessments by clinical nursing faculty and hospital staff. It was proposed that the use of a bedside physical assessment checklist would assist faculty in teaching physical assessment and improve student outcomes. This qualitative phenomenological study involved a purposive sample of seven nursing faculty who taught a one day physical assessment class and who assessed students in the clinical area. The nurse researcher developed a comprehensive bedside physical assessment checklist and oriented the faculty to the use of the checklist. After using the checklist to teach and evaluate students, the faculty was interviewed about their perceptions of the tool. The interviews were taped, transcribed, and coded for themes using constant comparative analysis. Two major categories emerged from the data on faculty perceptions of the physical assessment checklist. The categories included “Checklist Structure and Use” and “Checklist Changes.” Themes included: *Diverse Views of the Checklists, Need for Further Student Instruction, Needed Structural Changes, and Alternative Uses of the Checklist*. Faculty perceived that the physical assessment checklist was a valuable tool to evaluate students in the clinical area.

Key terms: Qualitative, student learning, student evaluations, clinical skills, physical assessments, checklists

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To my husband Bill, thank you for all of your computer expertise and for hanging in there with me. To my son Ivan, thank you for believing in me, and to Mildred, my mom, you always kept the faith that I could finish this.

## Faculty Perceptions of Using a Bedside Physical Assessment Checklist with Practical Nursing Students Executive Summary

### **Problem**

An area of student learning where assessment and support is most important is in the teaching of physical assessment to practical nursing (PN) students. First year practical nursing (PN) students at a Midwest community college were reported to be deficient in performing bedside physical assessments by the clinical nursing faculty and hospital staff.

### **Purpose**

The purpose of this study was to determine if the introduction of a skills checklist would improve faculty's perceptions of students' abilities to perform bedside physical assessments. The intention was to improve students' abilities to do bedside assessments. The research question was: In first year practical (PN) nursing students how does the implementation of a physical assessment skills checklist affects clinical faculty's perception of PN students' abilities to perform comprehensive bedside physical assessments?

### **Goals**

Goals for this project included that the researcher develop a comprehensive bedside physical assessment checklist and then orient the faculty to the use of the checklist for the purpose of teaching and evaluating students.

### **Objectives**

The objective of this capstone project was to interview faculty after they used the checklist to teach and evaluate students in order to determine their perceptions of using the new tool.

### **Plan**

The sample for this qualitative phenomenological study was seven nursing faculty who teach a one day physical assessment class and assess students' abilities to perform bedside physical assessment in the clinical area. After using the checklist, the faculty members were interviewed individually about their perceptions of the tool. Interviews were taped, transcribed and coded for themes using constant comparative analysis.

### **Outcomes and Results**

Two major categories emerged from the data on faculty perceptions of the physical assessment checklist; Checklist Structure and Use and Checklist Changes. Themes included: *Diverse Views of the Checklists*; faculty felt that the checklist was concise, well-organized, and easy to use. They liked the ability to give feedback but were unsure about whether to prompt students in the final evaluation. The theme of *Need for Further Student Instruction* relayed the faculty's perception that students were weak in some body system assessments and needed additional instruction. A theme of *Needed Structural Changes* indicated faculty suggestions for spelling out abbreviations and including a larger section for comments during the debriefing session. A final theme of *Alternative Uses of the Checklist* included that that the checklist should be used earlier in the nursing program, and combined with textbook assignments in beginning courses. Overall faculty perceived that the physical assessment checklist was a valuable tool and should continue to be used for evaluation of PN's in the clinical area.

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## Clinical Faculty Perception of Using a Skills Checklist in Teaching PN Students Bedside

### Physical Assessments

Nursing faculty has the important roles of supporting and evaluating student learning. Billings and Halstead (2009) state that “savvy faculty will embrace the diverse learning needs and characteristics of students enrolled in their nursing programs and work diligently to develop environments that supports students’ professional growth” (p. 20). An area of student learning where support and evaluation are most important is in the teaching of physical assessment to practical nursing (PN) students. Conducting physical assessments is one of the primary areas of responsibilities for nurses. Walsh (1991) suggests that physical assessment is an essential stage in nursing practice. Nursing faculty teaches assessment skills, and then evaluates students’ performances at the bedside. A challenge faced by nurse educators is to present information in a form that helps students learn and can also be used as a basis for evaluation. One approach in teaching physical assessment is the use of a skills checklist to guide student learning in skill acquisition. The Clinical Mentoring Toolkit (2008) stated that “checklists can be used to improve the quality of care and outcomes by establishing a baseline of clinical skills and competencies, and identifying gaps where additional training and support are needed” (p. 1).

### **Problem Recognition and Definition**

#### **Statement of Purpose**

The purpose of this study was to determine if the introduction of a skills checklist would support faculty in teaching and evaluating students in a physical assessment class. The intention was to improve student performances of comprehensive bedside physical assessments. In

reviewing the physical assessment course it was determined that there was not a tool that summarized the required physical assessment skills by which to teach and objectively determine if practical nursing students (PN's) could perform comprehensive bedside physical assessments.

### **Problem Statement Change Clearly Identified**

First year associate degree nursing students at a community college in the Midwest were reported to be deficient in performing bedside physical assessments by the nursing faculty and staff at hospital sites. Faculty and nursing staff observed that students were unaware of how to take pulses and unaware of how to do a comprehensive respiratory and cardiac assessment. These deficiencies in physical assessments could result in negative patient outcomes and failure to identify early patient deterioration as discussed by Harris, Wilson-Barnett, Griffiths, and Evans (1989). Students were expected to review areas of assessment on their own to determine significant areas to assess, resulting in poor performance of assessment at the bedside. By implementing a physical assessment checklist it was proposed that the tool would provide faculty with a guide to teach and evaluate students.

### **PICO Articulated**

#### **Population-Intervention-Control Group-Outcome**

This project employed a Population-Intervention-Control Group-Outcome format for development of the research question to be investigated.

**Population**-Clinical nursing faculty teaching physical assessment skills to first year associate degree nursing students

**Intervention**-Development and implementation of a physical assessment skills checklist

**Comparative**-None

**Outcome-**Perception by clinical nursing faculty of practical nursing students' abilities to perform complete bedside physical assessments using the skills checklist

**Research Question:** In a first year associate degree nursing program how does the implementation of a physical assessment skills checklist affect clinical faculty's perception of students' abilities to perform a complete bedside physical assessment?

### **Project Significance Scope and Rationale**

Performing bedside physical assessments by nurses is an important part of nursing care. According to Barker (1987), performing a physical assessment on a patient should be the basis for planning nursing interventions. Students in an associate degree nursing program learn physical assessment in the first year or PN portion of the nursing program. The course is taught following medical surgical nursing which provides an introduction to basic body systems. The NLN (2005) views physical assessment as an essential part of the curriculum to providing safe and efficient care.

Teaching physical assessment is done by systems in a logical order. An example of how systems are taught is head to toe. Physical assessment textbooks show anatomy and physiology of each system and then proceed to talk about subjective and objective data obtained from the exam. Skills for performing assessments on each body system are taught, with common findings shared. Assessment is taught in a variety of time frames including a 15 week course, eight week course, or even a single day course. This is determined by the curriculum of each school. The Associate Degree program in this study completed a one day physical assessment course.

According to Bonner (2001) students require time to practice skills that will be used in the clinical setting. Bonner noted that both theoretical and experiential knowledge are necessary

for skill development. She emphasized that procedural knowledge “is acquired through practice” (p.30). Students evolve through the cognitive phase in the first year, towards a more autonomous phase by graduation, demonstrating that it takes time to master skills in order to acquire competence.

In order to teach and help students practice, a checklist was described as an efficient and organized way of presenting physical assessment techniques and skills. Sparks (2013) suggested that a checklist was a way to improve performance by declaring standards that ensured important tasks were completed. Development of a checklist provided a baseline for care, helped identify gaps and areas for additional training, and tracked student improvement over time (The Clinical Mentoring Toolkit, 2008).

Dolan (2002) emphasized that any assessment process should ensure that an objective measurement was used but goes on to say that objectivity was particularly difficult in assessing clinical competence. Dolan discussed that “many assessment strategies are based on direct observation by a clinical preceptor and are therefore subjective” (p. 133). Creating a checklist reduced inconsistencies in clinical evaluation by providing a standard for faculty and students to follow. Benner, Sutphen, Leonard and Day (2009) suggested that educators should use formative and summative evaluations. It was proposed that in this capstone project a skills checklist would be used for teaching skills in class, during practice sessions, and for the final evaluation addressing the need for different types of evaluation.

### **Theoretical Foundation**

Benner’s Model of Novice to Expert (1984) provided a framework for this study. Benner discussed that in order to acquire and develop a skill, a nurse must pass through the five levels of proficiency: novice, advanced beginner, competent, proficient, and expert. The focus of this



study was on the novice stage of Benner's Model. It is at this stage that the nursing student has no knowledge or limited knowledge of clinical skills. Benner (2004) explained the novice stage of skill acquisition as a time when the student had no experiential background on which to base an approach to clinical situations. Benner stated that an educator must offer descriptions of features and attributes of the situation that the novice can recognize and refer to. A checklist fits this description and is "designed to structure nurses assessment of a patient's physical condition" and consists of "a list of items relating to possible significant changes in the patient's physiological status" (Harris, Wilson-Barnett, Griffiths, & Evans, 1998). Benner further discussed the rule-governed behavior of a novice as being limited and inflexible. She suggested that a nursing instructor should provide coaching about the possibility of changes in the patient's condition and make the student aware of what is expected of their behavior. Benner explained that novices have limited ability to anticipate the future due to lack of experience. A physical assessment skills checklist was anticipated to structure students' final evaluation and give clarity to expectations.

Another theoretical framework used in this research was the Byron Physical Assessment Framework [BPAF] (Harris, Wilson-Barnett, Griffiths, and Evans, 1998). According to Harris et al., the BPAF is a systems-based checklist of physiological signs, measurements, and symptoms designed to structure nurses assessments of a patient's physical condition. The framework was presented as a checklist with 56 items containing patient assessments. The systems that comprised the checklists were: (1) respiratory, (2) cardiovascular, (3) vital signs, (4) gastrointestinal, (5) urinary, and (6) neuromuscular assessment data (Harris et al., 1998). The assessment list had spaces between each item where the absence or presence of an abnormality were noted. The purpose of the BPAF was to add structure to the assessment process and

prevent assessment data omissions by nurses. The assessment checklist developed by the nurse researcher in this study was patterned after the BPAF and contained 60 items addressing seven body systems: (1) respiratory, (2) cardiovascular, (3) gastrointestinal, (4) genitourinary, (5) musculoskeletal, (6) skin assessments and (7) neurological. The goal was development of an assessment checklist to standardize the teaching approach by clinical faculty in the Department of Nursing.

### **Literature Selection/Systematic Process Supports Problem**

A systematic literature review to support this study was conducted in 2012-2014 using the search engines of Google Scholar, CINAHL, MEDLINE, PubMed, and EBSCO. The key search terms were qualitative, student learning, student evaluations, clinical skills, physical assessments, and checklists. A key search term “student learning” was searched in CINAHL and Google Scholar and resulted in 2,065 articles. The search was narrowed by adding other search terms such as checklists-30, student evaluations-198, clinical skills-201, checklists used in physical assessments-120, qualitative studies-188, and peer learning-116. A total of 102 articles were reviewed that directly related to this research.

A total of 39 articles were used for this capstone project that ranged in Level from II-VI in Houser’s Levels of Evidence. A summary of the journal articles reviewed included: 2-key informant techniques, 1- student in transition, 2-peer learning, 2-student evaluations, 2-theoretical framework, 10-physical assessment techniques, 7-student nurse skill building strategies, 5- supplemental instruction for students, 2-stress in the clinical setting, 1-teaching methods , 1-cognitive learning, and 4-simulation learning.

Table 1 represents the search terms and results.

Search Terms	Total Results
Student learning _____	2,065
Checklists supporting learning_____	30
Qualitative studies_____	188
Physical assessments_____	120
Student nurses and clinical Skills_____	204
Student evaluations_____	198
Peer learning_____	116
Total articles used for this study_____	39

### **Scope of Evidence Summarized and Appropriate**

Inclusion criteria for this project included the broad areas of nursing and education. Exclusion criteria included resources that were non-English speaking. There were various scholarly journals, and articles that related to this project. The number of types of studies was: qualitative-15, quantitative-3, expert opinion-2, descriptive-6, and experimental studies-4. The qualitative studies focused on physical assessments, student learning, checklists used for learning, clinical competency, and skill-building for students. The quantitative studies focused on perceptions of faculty evaluations, and skills used in clinical education.

### **Review of Evidence**

#### **Background of the Problem**

Teaching health assessments can be challenging. Aik (2010) suggested that teaching and assessing are two dimensions that can be challenging and demanding. The three dimensions where nursing students should be assessed are: cognitive, psychomotor skills, and the affective

domain. Kerr (1997) emphasized that teaching assessment skills can be a major task due to the new emphasis of learning skills in the clinical laboratory. According to Kerr, the amount of time students spend in the real world settings has tended to decrease, while time spent learning skills in the skills laboratories has increased.

Lashley (2005) contends that the way health assessments were taught in the past consisted of lectures, teacher-developed tests, practice, hands-on demonstration, and computer assisted learning. Further discussion noted that due to the rapid advances in technology, teaching health assessments has changed. Lashley explained that although the majority of the nursing education field now uses the Internet for learning, there has been limited use of the Web to teach psychomotor skills. Lashley states that this approach allows for greater flexibility and independence.

### **Systematic Review of Literature**

Sparks (2013) explained that checklists are a powerful way to improve group, as well as individual performances. Checklists were a declaration of a standard that ensured that important tasks were completed. Additionally, checklists focused on priority areas of student learning based on sources of evidence. Sparks suggested that checklists addressed core tasks of teaching, such as the development of acknowledging a student's work and using assessment lists to promote learning.

According to Roberts, Vignato, and Moore (2009) inconsistent teaching techniques by nursing faculty were discussed as a factor in contributing to the lack of proficiency in performing bedside physical assessments by student nurses. Further discussion by Harris, Wilson-Barnett, Griffiths, and Evans (1998), emphasized how a consistent teaching approach was critical to successful learning. Moreover, Harris et al., suggested that a physical assessment checklist had

been shown to add structure to the physical assessment process and could help to reduce omissions of assessments data. Additionally, Harris et al., stated that an added potential benefit of using a consistent teaching tool was that it allowed for early identification of patient deterioration. Finally, the discussion included that the use of the physical assessment checklists provided documentation of a patients' status without the need for increased nursing notes.

Lomas (2010) supported the idea of using a checklist in nursing practice and stated “using checklists in routine clinical practice would help nurses improve across a range of key areas and that “checklists improved communication and reliability of care that patients received” (p.1). Further support of the use of checklists in the literature was noted by Strickland and Strickland (2000) who confirmed that checklists could be used efficiently to evaluate students' abilities at particular tasks.

Rowlands (2007) supported the idea of using checklists to support learning. The author noted that well-designed checklist can identify steps that students need to internalize a new process. Some of the advantages of using checklists, as suggested by Rowlands, are that they are easy to construct and are flexible. Further discussion suggested checklists can be used as a management tool for teachers and students. Rowlands believed that checklists, when used effectively, can help students develop metacognitive awareness, which is described as an individual understanding of both the process of learning and how learning certain knowledge and skills can be optimized.

Gawande (2009) supported the use of checklists in the healthcare environment. Gawande suggested that checklists provided reminders of the most critical and important steps of specific skills, and that checklists served to make priorities clear. Additionally, checklists “helped with

memory recall and clearly set out the minimum necessary steps in a process” (p. 39). Giddens (2007) discussed accrediting agencies, such as the Commission on Collegiate Nursing Education and the National League for Nursing Accrediting Commission as agencies that set the standards for nursing education, however, the translation and the interpretation of the standards was left up to nursing faculty in their courses. Giddens implied that although assessments are an essential part of competency in nursing education, not much has been done to specify exactly the criteria for competency. Giddens described a descriptive research study conducted by the use of a survey to 250 registered nurses. Of the 250 surveys distributed, a total of 199 were completed and returned. Thirty core techniques were identified in the survey. The findings suggest that the sample of nurses incorporated a small set of physical examination skills on a regular basis. In other words, the skills were being taught but were not fully utilized in the clinical setting.

Further review of nursing literature suggested that nursing professionals teaching assessment were not adequately prepared to function optimally in the healthcare setting. Giddens suggested that perhaps the time has come for nurse education to put away equipment such as ophthalmoscopes and assist nursing students to develop improved observation and assessment skills. The findings from the study suggested that the focus of education should actually reflect nursing practice instead of building complex skills. Other suggestions from Giddens included implementing additional assessment tools by nurse educators, however, nursing educators must be informed of when and how to implement assessment tools for additional patient assessment and observation.

Checklists used in the clinical setting can be used to improve the quality of care and patient outcomes. Checklists can be used to establish a baseline of a provider’s clinical skills

and competencies in the delivery of care and treatment. Further, a checklist can be used to identify gaps and areas in which additional training and support may be needed. Checklists are also used to track improvements over time (Clinical mentoring Toolkit, 2008).

Finally, Teach Thought (2013) suggested that checklists can contribute to student learning in the following ways: (1) checklists help students to feel in control and holds them accountable by removing obstacles such as, “I forgot to do that part”, (2) checklists adds order to the chaos of learning and offers a pathway to accomplish complex tasks, (3) checklists keeps students on task rather than losing focus or forgetting where they left off, and (4) checklists helps communicate the goals of an assignment (p.1-4). The literature supported the use of a checklist to enhance student learning.

### **Project Plans and Evaluation**

#### **Market /Risk Analysis**

The director of the associate degree nursing program at the community college was very supportive of instituting a physical assessment skills checklist with students in the physical assessment class. Clinical faculty expressed interest and willingness to participate in the project. There were no major risks associated with this project. The study had the potential to improve student learning and skill performance.

#### **Project Strengths, Weaknesses, Opportunities, and Threats**

A SWOT (strength, weakness, threat, and opportunities) analysis was conducted on the use of the physical assessment checklist used for this study (see Appendix B). The attributes of the physical assessment checklist were that it: organized skills to be learned, was of minimal cost, was used by experienced nurses, contributed to the well-being of patients, and was efficient to

use. The weaknesses were that it: increased workload of the faculty, took longer to use, and required that the researcher convince faculty of the value of the tool.

The strengths of the project were used to take advantage of the opportunities. Fortenberry (2010) identified that opportunities are external events that can positively impact the business. The opportunities that existed for the newly developed checklist were that it: contributed to patient safety, improved PN performance, and improved organizational reputation. The threats identified were that the checklist could: bring about possible disagreement with faculty about inclusion criteria, be difficult to convince faculty of the benefits, increase faculty workload, increase time to perform assessments, and cause students to be inefficient in performing assessments.

### **Driving/Restraining Forces**

Synnot and associates (2013) described driving forces as factors which can be internal or external. A driving force for this research included the need for increased patient safety by performing a more comprehensive bedside physical assessment. Other driving forces included key stakeholders, such as the director of the nursing program, nursing faculty, the hospital, the patients, and the community college. All stakeholders benefited from the development and implementation of a physical assessment tool. Patients received a direct benefit from a more comprehensive physical examination, while the hospital and the college of nursing maintained their reputation of excellence in patient care. Restraining forces for this research project were: fear of using a new learning tool, lack of faculty training with the new assessment tool, and a lack of incentives for the faculty to use the tool consistently. A strategy used to eliminate the restraining forces in this study included having a faculty training session to familiarize the



faculty with the new assessment tool. The training session helped to eliminate the fear of lack of understanding and a perceived greater workload.

### **Need, Resources, and Sustainability**

A needs assessment was conducted during a faculty meeting in the summer, 2013. First year students in the associate degree program (PN's) were reported by clinical faculty and the staff at clinical sites to be deficient in performing physical assessments. Students were unsure of how to perform a comprehensive bedside assessment. The physical assessment class did not have a tool to objectively determine if the PN students were performing complete bedside physical assessments. The approach to teaching assessment in the past was that each faculty subjectively determined if the students were performing a complete bedside assessment independently. According to Roberts, Vignato, and Moore (2009), inconsistent teaching techniques by nursing faculty was discussed as a factor in contributing to the lack of proficiency in performing skills by student nurses. Further discussion by Harris, Barnett, Griffiths, and Evans (1998), emphasized how a consistent teaching approach was critical to successful learning. The authors further implied that early identification of deterioration in a patient's condition is another benefit of using a consistent teaching tool. Based on the needs assessment from the clinical faculty and the hospital staff at various clinical sites, it was proposed that developing and implementing the use of an assessment checklist would address the problem and improve the performance of bedside physical assessments by first year PN students.

The resources for this research were provided by the research facility. The research project required access to a copy machine, paper, pens, and a locked storage facility to store confidential information. This was accomplished by using the Word Processing Department. The researcher was provided with a locked office and storage cabinets by the college. Additionally, an

administrative assistant in the nursing department assisted with copying the checklist for dispersal to faculty and students.

Sustainability plans are intended to assist an organization to examine its' goals and to continue to thrive over the long term. A sustainability plan helps projects proceed forward and last into the future (Community Toolbox, 2013). Bardeline (2011) discussed four key criteria to add sustainability to a business plan: (1) problem statement, (2) environmental stewardship, (3) social responsibility, (4) and reporting.

The plan for sustainability for this project after the implementation of the protocol included: orientate faculty to the protocol, continue to answer questions as needed, consider all suggestions for improvement, on-going follow-up every semester for suggested changes, and review results of the study that supports the protocol.

### **Feasibility Risks Unintended Consequences**

There was a high feasibility of developing and implementing the physical assessment skills checklist. There was solid support from the nursing director and from the faculty. The use of a skills checklist was viewed positively as a means of guiding students and faculty improve a process that was in need of change. The checklist was used as a management tool for both students and faculty (Rowlands, 2007).

There were minimal risks to the participants in the study. Use of the skills checklist by nursing faculty occurred in classrooms during a scheduled one day physical assessment class, and during subsequent scheduled clinical days. The nurse researcher used a campus office to interview study participants with the permission of the college. Unintended consequences included possible failure of the digital recorder during one of the interviews which did not occur.

### **Shareholders and Project Team**

The stakeholders and team members are an important part on any new project. Peterson et al., (2011) implied that “stakeholders include everyone who has a vested interest in the company, what the company does, and how it operates. The stakeholders may include employees, customers, suppliers, consultants, and other interested parties“ (p. 291).

The stakeholders for the research included faculty members who contributed to the research by using the assessment tool, and then giving their opinions on the affect on student learning. Other key stakeholders in the department of nursing include the director of nursing. In the beginning the director was instrumental in helping to assist with conducting a needs assessment by interviewing key faculty members on how the department can improve on student performances.

In addition to the nursing department, other stakeholders included the community college and the greater community where the research was conducted. The ultimate goal of the college was to provide a high quality education to students and contribute to life-long learning (JALC, 2013). Improving students’ abilities to perform comprehensive bedside assessment also contributed to maintaining the reputation of excellence of the nursing program.

Other major stakeholders were the patients in the hospital where the clinical evaluation was conducted. They benefited by having well-prepared nursing students care for them. The benefit to the patient also included having a more extensive and accurate assessments of their health status. Finally, employers that hire new nurses from the program can expect that the novice nurse will be better prepared to care for patients in the clinical area.

### **Cost Benefit Analysis**

In this research, there was a cost of time to the faculty who participated in the study to use the checklist to teach physical assessment and in completing the follow-up interview. To

address this all interviews with the clinical faculty were set up at the convenience of the participants. There was also a cost of time to students in doing more comprehensive assessments. A benefit to students was the possible improvement of students' abilities to perform comprehensive bedside physical assessments. Other benefits included improved student confidence and maintaining a reputation of the excellence in the community. The budget and replication costs for the project are shared in Appendix D.

### **Mission, Vision, Goals Statement**

The mission of the DNP Capstone Project was to improve performance of PN students' in performance of comprehensive bedside physical assessments.

The vision was the development and implementation of the physical assessment skills checklist in order to determine faculty perceptions of students' performance using the new tool

The main goal of the research was to conduct interviews to determine the perceptions of the faculty after using the checklist to teach and evaluate students.

### **Process/ Outcomes Objectives**

The objectives for this research project were:

1. Obtain written permission to conduct the study including approval to utilize the files to develop a purposive study sample by August 1, 2013 (see Appendix F).
2. Submit for IRB approval from Regis University by September 20, 2013 to receive approval by October 1, 2013 (see Appendix E).
3. Development of the physical assessment checklist by December, 2013
4. Identify a purposive sample of clinical nursing faculty and give complete written permission documentation from the perspective participants by October 10, 2013.
5. Set up an orientation and explanation of the physical assessment checklist with

participants at the community college January, 2014

6. Interview participants about perceptions of the checklist. Record and transcribe the interviews by April 2014
7. Code interview data and determine themes using constant comparative analysis by April 1, 2014.

The project objectives were all met within the planned timeline.

### **Logic Model**

The Logic Model communicated the practice issue of PN students being deficient in their physical assessment skills and how the interventions worked to impact the research:

- Fundamental purpose
- Importance of the project
- Results
- Language and reference points
- Determine if actions led to results

The Logic Model for this research listed resources used, activities, output from the activities, short and long term goals, and what impact the research has on the research facility and the clinical sites (Schmitz & Parson, 2012, p. 3). The Logic Model is shared in Appendix D.

### **Appropriate for Objectives and Research Design**

This study used a qualitative phenomenological design. Polit and Beck (2004) suggested that a phenomenological design was used with individuals and groups to provide a way of uncovering deep understanding of the experiences. The intent was to obtain the perceptions of the participants in their words based on their experience. A qualitative method was appropriate for this study because the nurse researcher wanted to gain understanding of the experiences of

using the physical assessment checklist to teach and evaluate students in the classroom and in the clinical area.

### **Population Sampling Parameters**

Participants in this study were required to be clinical nursing faculty in the first year physical assessment course for PN students in the associate degree nursing program. Faculty could have a variety of nursing experience. All ages and both male and female could be included. Nurses had to agree to an orientation to the new checklist.

Recruitment methods included inviting by email all PN clinical nursing faculty who teach and evaluate first year practical nursing students in physical assessment to participate in the study. The researcher met with each clinical faculty individually to review the purpose and parameters of the research project. Participants agreed to use the skills checklist developed by the researcher to teach and evaluate student's performance in completing the bedside physical assessment. They were asked to share their perceptions of using the tool. Each participant signed a document giving informed consent to participate in the study. (see Appendix C).

### **Setting Appropriate for EBP Project**

The setting of a Midwestern community college campus was appropriate for this project. The nursing classrooms and skills laboratory used for physical assessment day were located on campus. The hospital clinical unit where nursing students were assigned for their clinical experiences was also appropriate for their skill evaluations by the clinical faculty. The college campus office was used to conduct the interviews and was also appropriate. The closed office afforded confidentiality and privacy during the interviews. The college director approved the use of the facility.

### **EBP Design Methodology**

This study used a qualitative phenomenological research design. A phenomenological design is used with individuals and groups to explore their feelings and ideas, and can provide a means to uncover deep understanding of the experience from the perception of an individual or group (Polit & Beck, 2004). Phenomenology gathers words that describe the lived experiences of individuals through interviews and can generate thick description of great value for understanding a problem that has been studied (Leedy, 1997, p. 161). This research study fits a phenomenology design because the objective of the researcher was to get the perceptions of faculty about the use of the physical assessment checklist. This was the best approach to obtain rich data and in-depth responses from the participants.

### **Data Analysis**

The interviews were transcribed and the responses organized by questions. Data was read numerous times and coded for common concepts and ideas in a process of open coding. Categories were identified. Themes and subthemes emerged using a process of constant comparative analysis (Creswell, 1998, p. 57). The themes were presented as they emerged in the data.

### **Trustworthiness**

The aim of trustworthiness is the degree of confidence that researchers have in their data, assessed by using the criteria of “credibility, transferability, dependability, and confirmability (Polit & Beck, 2004, p. 734). Trustworthiness was addressed in this study by these methods: (1) admitting bias, (2) peer debriefing, and (4) audit trails (Polit & Beck, 2004; Lincoln & Guba, 1985). A threat to trustworthiness is the biases of the researcher. Bias in this study was minimized by early identification of any biases by the researcher. Other methods to establish trustworthiness was peer debriefing. For credibility, doctoral prepared qualitative

researchers were used for peer reviews such as the mentor and the capstone chair of this research project. To assure confirmability in this study, the mentor and the capstone chair used peer reviews. Both the mentor and the capstone chair are experienced qualitative researchers who asked questions, read the research thoroughly, and offered suggestions as the project progressed.

Finally, an audit trail is a method of establishing dependability and transferability. (Lincoln & Guba, 1985). The authors suggested that an audit trail should be a transparent description of steps that a researcher takes from the beginning of the project to the end in order to report findings. Lincoln and Guba discussed transferability as the extent to which qualitative findings can transfer to other settings. The audit trail for this study included the research design, data collections methods, steps that are taken to analyze and report data findings, such as line-by-line coding of the findings for themes, and notes taken by the researcher.

### **Protection of Human Rights**

The participants in this study signed a consent form giving permission to voluntarily participate in the study. Participation included agreeing to be oriented to the new checklist and then using it to teach and assess students. Faculty were informed that they could withdraw from the study at any time. They were assured of confidentiality and anonymity. No identifiers were included in the write up of the data. Tapes and transcribed research data were kept in a locked drawer and will be destroyed at the end of three years. Only the researcher and the director had a key to the drawer. An online file on the computer was in a password protected file throughout the study. Participation did not have an effect on employment status at the college. IRB exempt status was obtained from the college IRB and from Regis University. The nurse researcher passed the CITI course (see Appendix K).

### **Data Collection and Treatment Procedure Protocol**



Data collection was achieved through thirty minute face-to-face interviews conducted after the participants used the checklist to teach and evaluate students in the physical assessment course. The interviews were digitally recorded with participants' permission. Open-ended questions included the following:

- a. What is your perception of students' abilities to perform bedside physical assessments following the use of the physical assessment skills checklist?
- b. What would you have done differently in the construction of the assessment skills checklist to determine if the checklist improved students' abilities to perform their assessments? A follow-up question was: Describe what you would change about the checklist.

The protocol for this study was based on the development of a 60-item assessment checklist based on seven body systems. The researcher developed the checklist based on a comprehensive review of the literature. Byron's Physical Assessment Framework (Harris, Wilson-Barnett, Griffiths, and Evans, 1998) was a primary source for identifying the body systems used in the checklist. Other sources for different frameworks were reviewed, such as the Objective Structured Clinical Examination (OSCE) Framework (Ross, Carroll, Knight, Chamberlain, Bourbonnais, & Linton, 1988) and the Five Dimensional Framework (Gulikens, Bastiaens, & Kirschner, 2004). Byron's Framework was a better fit for the nursing curriculum.

The body systems included in the checklist are: (1) respiratory, (2) cardiovascular, (3) gastrointestinal, (3) genitourinary, (5) musculoskeletal, (6) neurological, and (7) skin. Each system had an area on the checklist for use by the faculty to indicate if the student met the criteria for assessment, or not. Additional space was provided for faculty comments. Clinical faculty used the tool to teach physical assessments and then used it as a tool to assess

performance of comprehensive bedside physical assessment skills in the clinical area. A copy of the checklist is shared in Appendix A.

### **Project Findings and Results**

Participants included seven practicing clinical faculty teaching at a community college in Midwestern Illinois. All were females. One participant earned a PhD in Health Education, while the remaining six participants earned master's degrees in nursing. The number of years each faculty taught nursing ranged from 2-46 years. Two major categories emerged from analysis of the data on faculty perceptions of the physical assessment checklist. The categories included "Checklist Structure and Use" and "Checklist Changes" each with two major themes. The themes are presented as they appeared in the course of the faculty interviews.

#### **Checklist Structure and Use**

##### ***Diverse Views of the Checklist***

A study theme that emerged was that participants had different views about the structure and use of the physical assessment checklist. The checklist structure was helpful according to the faculty because "it was concise and organized" and "kept to one page" and was "easy to check off items on the list." A participant stated that the items on the tool "clearly specified expectations" and gave faculty "the ability to quickly see if assessment criteria were met." It was important to the faculty that the checklist provided a place to give feedback to students after completion of their assessments. A participant confirmed that they "liked the opportunity to give feedback and assess students' abilities." Another faculty stated that they "liked written versus telling." Other comments included that the checklist "was a place to write things, and a place for observations (of students' abilities) using the checklist."

Faculty shared views of difficulties of using the checklist. One participant stated that there was “not consistent instructions about how to use the checklist given to faculty.” Some faculty felt there was “confusion about whether the checklist was intended to question and prompt students during the final evaluation.” Another faculty felt that students were confused by abbreviations and stated that “abbreviations should be spelled out for clarity.” Another faculty felt that “more space was needed (to give feedback to students).”

Many faculty stated that students needed more time to adjust to using the checklist in order for it to be used to fairly evaluate them. Participants consistently stated that they felt more time was needed to teach physical assessments in the classroom and to conduct the final physical assessment using the checklist. One participant stated that “all they (the student) had was one day (to learn and complete the physical assessment)” . Another participant commented “one day is not enough” (to successfully learn physical assessment).”

### ***Need for Further Instruction***

A second theme that emerged was that students’ need for further instruction about specific body assessments in order to be successful in using the checklist. Participants noted that students had difficulty with specific body system assessments. One participant noted that “students had difficulty completing the lung assessment, especially “palpation, percussion, and fremitus.” Another faculty commented that “abdominal assessment was another area where students had difficulty in their final physical exam. Specific areas of difficulty were “liver borders identification, flank pain, percussion, and (abdominal) inspection.” One faculty stated that “further instruction was needed on cardiovascular assessments.” Yet another participant noted that “jugular vein distention” was an area where students lacked comfort in performing assessments.”

## **Checklist Changes**

### ***Form Structure Changes***

After using the physical assessment checklist faculty identified ways that they felt the checklist should be changed. A theme emerged that there should be structural changes to the checklist. Participants suggested additions to the tool that included “adding more space to give additional give feedback.” Another participant stated “The only thing to add is to put a not applicable column because some of these assessment pieces aren’t for every patient.” Another participant stated “abbreviations should be spelled out for clarity (to not confuse students).” One participant felt that debriefing after the assessments was important and wanted “a specific debriefing section.” Another participant felt that comments were important and wanted “a bigger comment section that was longer and wider.” Suggested form changes included adding “a record of follow-up after the debriefing session with “a student signature line as proof that the teacher met with the student for a follow-up discussion following the final assessment process.”

### ***Early Introduction of the Checklist***

A final theme that emerged in the category of checklist changes was earlier introduction of the checklist. Participants suggested different ways and time that the physical assessment checklist could be utilized to help students be successful. A participant expressed the fact that students should have exposure to the checklist earlier in the nursing program and should “refer to the assessment checklist in their medical-surgical nursing course when reading assignments in their textbooks.” This was offered as an opportunity to gain greater understanding of body systems earlier in the nursing program. Another faculty commented that students should

“practice on each other and do return demonstrations on classmates to gain experience using the checklist.”

Another faculty suggested that students be given the chance to practice on their own with “a couple of patients in the hospital to have more experience using the tool.”

One participant suggested:

Let them go on their own (using the checklist on patients) so they don’t have the pressure of the instructor looking over them and being nervous and all. Then take the tool and have them go in and do the assessment and then assess them based on these criteria.

Faculty agreed that the physical assessment checklist should continue to be used for evaluation, and that students needed adequate practice before the final assessment.

### **Discussion**

This study revealed the perceptions of using a physical assessment checklist by seven full time faculty teaching first year nursing students in an associate degree program in the Midwest. Faculty in the study described the checklist as concise, organized, well-structured, and kept to one page in length. This supported how Fletcher-Wood (2014) described how checklists should be designed in order to provide simple, swift, and effective reminders in complicated procedures. Gawande (2009) also supported the idea that a good checklist should be clear and concise.

Participants confirmed that the checklist gave them the ability to determine if students were meeting the specified physical assessment criteria. They also noted that the checklist provided a place to give feedback in order to further student learning. Strickland and Strickland (2000) supported the idea that checklists can be used efficiently to evaluate students’ abilities at particular tasks. Lomas (2010) agreed with using checklists in teaching nursing and stated

“using checklists in routine clinical practice would help nurses improve care across a range of key areas” and help “improve communication and the reliability of care that patients receive” (p.1).

Faculty shared that they had some confusion about how to use the checklist. They asked if it was appropriate to use it as a guide to question and prompt students in the final physical exam. Benner (2004) supported the idea that novice nursing students need to be coached in order to integrate knowledge from textbooks with actual patient care experiences. It was recommended in the future that faculty use the checklist to question and prompt students at the time concepts are taught and while they practice skills followed by minimal prompting during the final exam.

Faculty identified a need for further instruction on specific body system assessments in order for students to be competent in the final physical examination. Students were weak in cardiovascular and respiratory assessments. This finding was expected due to the fact that before the checklist was implemented only basic physical assessment skills were taught. The checklist provided a more comprehensive assessment. Following the use of the checklist participants felt that a longer period of time was needed to prepare students for cardiovascular and respiratory assessments. Barbarito et al., (1997) confirmed that skills related to respiratory and cardiovascular assessments are most often emphasized in associate degree nursing programs. Students in associate degree programs take physical assessment at the first year level. Students that leave the program at the PN level perform physical assessment under the direction of a registered nurse. Those that go on to complete the associate degree (AD) function with the full scope of practice of the RN and are responsible for the full assessment. The checklist in this study was prepared and taught at the AD level for this reason and reflected comprehensive skills

in the cardiovascular and respiratory areas. In response to the findings additional time should be provided beyond the one day physical assessment review in order to teach comprehensive skills related to cardiovascular and respiratory assessment.

Faculty identified changes to improve the structure of the physical assessment checklist. They felt that more space was needed for debriefing and feedback. The literature supported that giving feedback about skill acquisition was important and supported learning. Roberts et al., (2009) suggested that faculty should refer to the skills checklist, review student performances, and give suggestions for improvement. Dreifuerst (2009) also supported the findings of the need for more space by suggesting that debriefing provides opportunities for feedback from instructors in order to help students learn what they did right, get explanations about what they did wrong, and specific information about how to improve their performances.

An additional suggestion for structural changes to the checklist was that abbreviations not be used in order to reduce student confusion. A search of the literature confirmed that abbreviations used to save time and space is common in medical records. Rodwin (2013) noted that the use of abbreviations can be a source of confusion and can be an increased risk of medical errors in clinical practice. Wahl (2013) supported the idea of not using abbreviations and explained that the 2005 Joint Commission adopted a list of medical abbreviations that cannot be used by any Joint-Commission-accredited organizations. The list, which is part of the Joint Commission's 2006 National Patient Safety Goal Initiative, is in response to a national summit on medical abbreviations and extensive feedback from the public. In response to the findings of this study and the literature review, abbreviations should not be used in the checklist in the future. Other suggested changes to the form included providing additional space to write comments, using a "not applicable column", and a signature line for students as proof that the

teacher met with the student. These changes could be implemented to make the checklist more user-friendly.

Expanded uses of the checklist were also recommended. Participants suggested that students be given the physical assessment checklist earlier in the program in order to expand their understanding of body systems as they read assignments in their fundamentals and medical-surgical textbooks in earlier classes. This finding supported Benner's views on how learning skills begins with basic understanding and building on their skills. Benner (2004) stated that "the rule-governed behavior of the novice is extremely limited and inflexible; the student is coached in comparing and matching textbook examples with actual clinical cases" (p.191). Based on these findings future students could be given instructions about the purpose and use of the physical assessment checklist in the fundamentals class which would increase their familiarity and understanding of the tool.

Informants in the study also suggested that the skills checklist be used in class to do return demonstration on classmates. The literature supported that psychomotor skills are improved with practice. Ginzburg and Dar-El (2000) states "psychomotor skills deteriorate over time even among licensed experienced professionals" (p. 327). Practicing on peers reduces stress and increases confidence. Moscaritolo (2009) stated that "peer instruction and mentoring are interventional strategies that can be implemented at all educational levels to decrease student nurse anxiety" (p. 21). Practicing skills on classmates could be integrated into the physical assessment class to increase student comfort with performing assessments.

Another suggested use of the checklist according to the faculty was that students be given the chance to practice with the checklist while taking care of patients. In the past, students were assessed at the bedside with only minimal practice time. Students appeared uncomfortable and



stressed. Mahat (1998) stated that the clinical settings can be stressful which can hinder student progress and performance. Schank (1995) suggested that it is easier to implement learning by doing because “if you do something often enough, you get better at it” (p.2). These types of “doing experiences” contribute to building the students’ knowledge base. Students need hands-on experience to bolster their ability to be successful instead of just hearing about how to assess patients. Practice time using the assessment checklist could be integrated into earlier clinical courses.

### **Limitations and Recommendations**

A small sample size was a limitation of the study as there were only seven participants. Recommendations include using a larger sample size and carrying out the study at other associate degree nursing programs. Another recommendation would be to implement the suggested changes identified in this study and interview the faculty again to determine their perceptions of the changes.

### **Implications for Change**

The implications of this research are that the physical assessment checklist was an efficient and organized method of teaching and evaluating students in a skill based course. Consistency was achieved by using the checklist. Faculty was able to see changes in student behavior and were able to give feedback in a concise and supportive manner.

### **Conclusion**

The overall findings of this research support that faculty at this community college nursing program felt that the checklist should continue to be used but with specific changes. The findings also supported that additional time should be used in teaching and evaluating students

with the checklist. The checklist could be utilized earlier in the program with structural changes that would improve efficiency.

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### **List of Tables**

#### *Table 1*

#### *Search Terms and Results*

Search Terms	Total Results
Student learning _____	2,065
Checklists supporting learning _____	30
Qualitative studies _____	188
Physical assessments _____	120
Student nurses and clinical Skills _____	204
Student evaluations _____	198
Peer learning _____	116
Total articles used for this study _____	39

## Appendices

### Appendix A

#### Proposed Intervention

#### Loretto Heights School of Nursing, Regis University, Denver, CO. Physical Assessment

#### Skills Checklist Developed by H. Moncrief, RN, MSN ED

Instructor \_\_\_\_\_ Date \_\_\_\_\_

Criteria	Met	Not Met	Comments
<p style="text-align: center;"><b>Respiratory Assessment</b></p> <p>1. Inspect thorax and respiratory movements</p> <ul style="list-style-type: none"> <li>a. Respiratory rate rhythm depth effort</li> <li>b. Eupneic dyspneic tachy/bradypneic</li> <li>c. Cough-if productive-note characteristics or no cough</li> <li>d. Oxygen delivery systems, pulse ox.</li> <li>e. Chest tubes</li> <li>e. Position for breathing</li> </ul>			
<p>2. Palpate</p> <ul style="list-style-type: none"> <li>a. Tenderness or visual abnormalities</li> <li>b. Respiratory expansion</li> <li>c. Tactile fremitus</li> </ul>			
<p>3. Auscultate</p> <ul style="list-style-type: none"> <li>a. 8 anterior sites</li> <li>b. 6 posterior sites</li> <li>c. 4 lateral</li> </ul>			
<p>4. Assess transmitted lung sounds    clear    diminished</p> <p>Adventitious- a.crackles b.wheezing c.rhonchi d.other</p>			

<p style="text-align: center;"><b>Cardiovascular Assessment</b></p> <ol style="list-style-type: none"> <li>1. VS Pain level _____ Last pain med_____ Both arms (if possible) Note graphs/fistulas</li> <li>2. Palpate peripheral pulses 4+ _____ 1+</li> <li>3. Cap refill- if less than 3 sec. note extremity</li> <li>4. Note edema – current scale 1+ _____ 4+</li> <li>5. Evaluate JVD (Sit client at 45 degrees to evaluate)</li> <li>6. Auscultate- heart sounds- apical rhythm murmur</li> </ol>			
<p style="text-align: center;"><b>Genitourinary Assessment</b></p> <ol style="list-style-type: none"> <li>1. Identify <ol style="list-style-type: none"> <li>a. Incontinence or bladder distention</li> <li>b. Burning, frequency, dysuria, hematuria</li> <li>c. Urine-ACCO (amount color consistency odor)</li> <li>d. Foley catheter (secure)</li> <li>e. Identify/report low or no output &lt; 30ml/hr</li> <li>f. Flank pain</li> <li>g. Significant previous GU surgeries</li> </ol> </li> </ol> <p style="text-align: center;"><b>Gastrointestinal Assessment</b></p> <ol style="list-style-type: none"> <li>1. Inspect abdomen <ol style="list-style-type: none"> <li>a. Skin- contour pulsations peristaltic waves</li> </ol> </li> <li>2. Auscultate <ol style="list-style-type: none"> <li>a. BS 4 quads-normal 5-15 sec. Absent BS-report</li> <li>b. &lt; 5 sec. hyperactive &gt; 15 sec. hypoactive</li> <li>c. Percussion tympany/dullness</li> </ol> </li> <li>3. Palpate <ol style="list-style-type: none"> <li>a. Light-assess for guarding distention ascites</li> <li>b. Deep-assess liver border</li> <li>c. Pain- patient should identify by pointing</li> </ol> </li> <li>4. Last BM (amount color consistency) Passing flatus (y) or (N)</li> <li>5. Previous surgeries sutures ostomies</li> <li>6. Remind if NPO</li> <li>7. Meals- Type _____ % taken _____ <ol style="list-style-type: none"> <li>a. Dysphagia                      c. Enteral feedings-type _____</li> <li>b. N/V                                      d. NG tube-Yes      No</li> </ol> </li> </ol>	<b>Met</b>	<b>Not Met</b>	<b>Comments</b>
<p style="text-align: center;"><b>Musculoskeletal Assessment</b></p> <ol style="list-style-type: none"> <li>1. Assess or identify <ol style="list-style-type: none"> <li>a. Fall status</li> <li>b. Amputations</li> <li>c. ROM-full or limited      contracted or flaccid</li> <li>d. Strength in extremities</li> <li>e. Numbness or tingling      note location</li> <li>f. Skin temp. in extremities (especially affected extremity)</li> <li>g. Assess dressings <ol style="list-style-type: none"> <li>a. Drainage sutures staples drains</li> <li>b. SCD's TEDS, casts, abductor pillows braces splints</li> </ol> </li> </ol> </li> </ol>	<b>Met</b>	<b>Not Met</b>	



<p style="text-align: center;"><b>Neurological Assessment</b></p> <p>1. Assess or identify</p> <ul style="list-style-type: none"> <li>a. Alertness awake lethargic stupor unresponsiveness</li> <li>b. Orientation x 4 person place time situation</li> <li>c. Speech-clear incoherent mumbles</li> <li>d. PERRLA- pupils equal round reactive light accomodation (size)</li> <li>e. Motor response and gait</li> <li>f. Senses-vision (glasses) hearing (hearing aids)</li> <li>g. Glasgow Coma Scale. If applicable</li> </ul>	<b>Met</b>	<b>Not Met</b>	<b>Comments</b>
<p style="text-align: center;"><b>Skin</b></p> <p>1. Note</p> <ul style="list-style-type: none"> <li>a. IV location      condition      solution      rate</li> <li>b. Intact skin, lesions, incisions, or pressure ulcers (stage)</li> <li>c. General skin temperature dry, diaphoretic, clammy, etc.</li> </ul> <p style="text-align: center;"><b>Miscellaneous</b></p> <p>Special equipment, beds, PCA pumps, epidurals etc.</p>	<b>Met</b>	<b>Not Met</b>	<b>Comment</b>

*Appendix B*

SWOT Analysis-Physical Assessment Skills Checklist

<b>Strengths</b>	<b>Weaknesses</b>
<p>Efficient and concise to use</p> <p>Minimal cost</p> <p>Experienced faculty</p> <p>Contributes to patient safety</p> <p>Improved PN performance</p> <p>Maintains organizational reputation</p>	<p>Increased faculty workload</p> <p>Full curriculum</p> <p>Possible disagreement among faculty on what to include on the checklist</p> <p>Difficulty convincing faculty of the benefits of the physical assessment checklist</p> <p>May take longer to perform assessments</p> <p>Must convince faculty of the value</p>

<b>Opportunities</b>	<b>Threats</b>
<p>Institutional growth</p> <p>Increased enrollment</p> <p>Better prepared PN students</p> <p>Employers demand quality in new hires</p> <p>Graduates better prepared for the workplace</p>	<p>One university nearby with high enrollment</p> <p>Checklist not as comprehensive</p> <p>Assessments may take longer</p> <p>Professional as a new hire</p> <p>Inferior marketing skills</p>

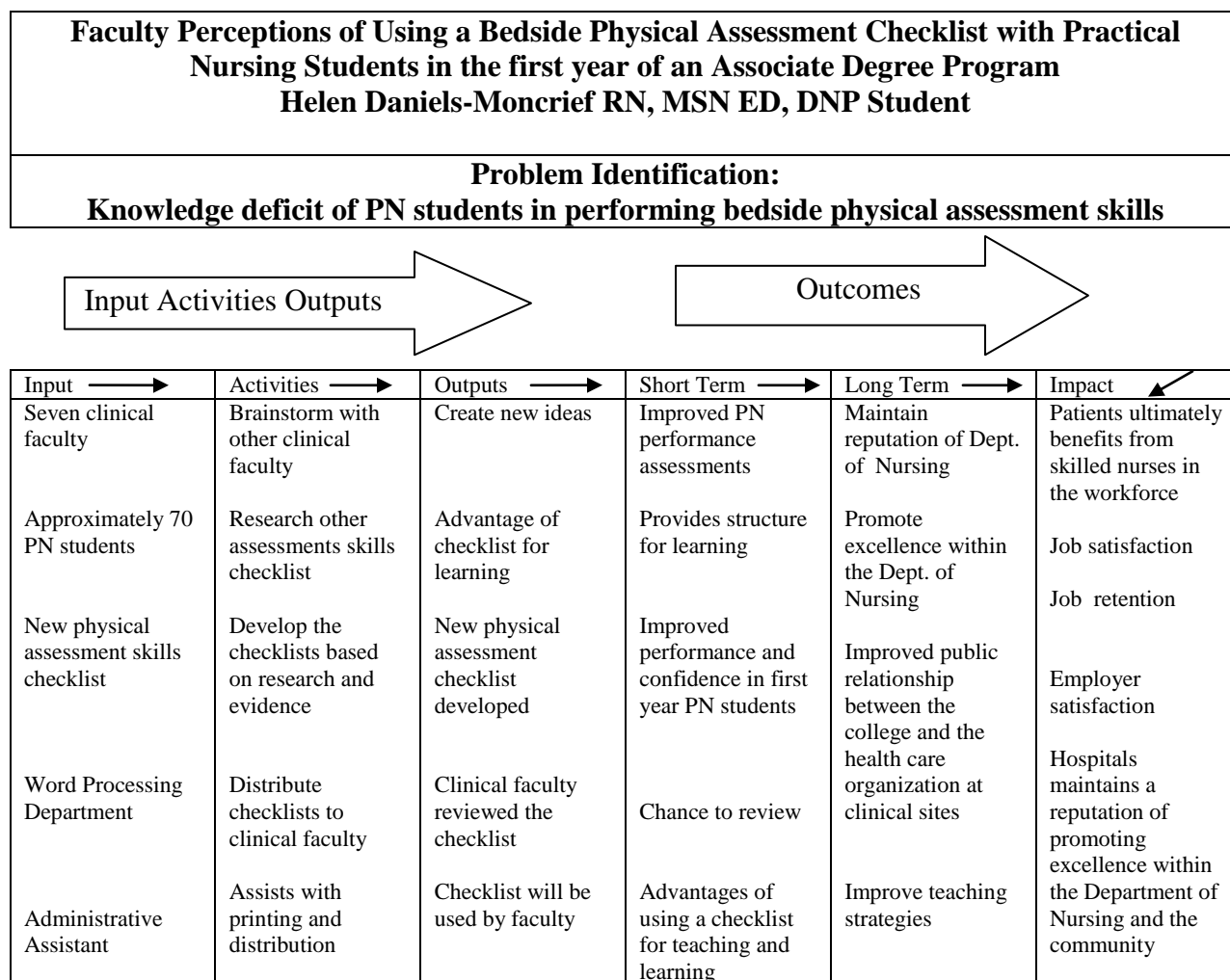
*Appendix C*

## Budget Analysis

<b>Cost</b>	<b>Benefit</b>
Time	Possible improvement in PN performances
Interviews scheduled at convenience of the participants	Improved PN confidence
Follow-up e-mail and phone calls	Maintain standards of practice in school of nursing
Minimal risk to participant	Maintain standards of practice at clinical sites

## Appendix D

## Logic Model/Conceptual Model



Adapted from Zaccaaganini and White's (2009) *Templates for Logic Models of Project*

## *Appendix E*

### Acknowledgment of Informed Consent

**Invitation-**My name is Helen Daniels-Moncrief. I am a John A. Logan faculty member. I am a doctoral nursing student in the DNP Nursing Program at Regis University, Denver, Colorado. I am inviting all practical nursing (PN) faculty to participate in a phenomenological research study. I have received approval from John A. Logan's IRB on 9/4/13 to conduct this study.

**What will happen-**In this study the participant will be asked to sign a consent form giving voluntary permission to participate. Participants involved will teach and assess student performance on completing a comprehensive bedside assessment during clinical in the spring semester. A follow-up 30 minute interview will be scheduled also during the spring semester at the convenience of the participant to collect data on faculty perceptions on the use of the physical assessment checklist on PN student performance.

**Time Commitment-**The time commitment includes the time of use and evaluation of the students by using the checklist and the time of the 30 minute interview on your perceptions on the use of the physical assessment skills checklist.

**Cost-**There is no cost to the participant except for the cost of time.

**Participant Rights-**You may decide at any time to stop being a part of this study without explanation. You have the right to ask that your data be destroyed. You have the right to ask questions and have your questions answered. Feel free to ask questions before the study.

**Benefits and Risks-**There is no known risks associated with this research study. The possible benefits include improved PN performance of assessments and possible improved PN confidence.

**Human Rights Protection-**No identifying data will be linked to the participant. All transcribed participant interviews and other research data will be kept in a locked office. Electronic data will be password protected. All research data is confidential and will be destroyed after 3 years.

### Informed Consent

**Project Title-Clinical Faculty Perception of Using a Skills Checklist in Teaching Practical Nursing Students Bedside Physical Assessments**

**Project Summary-A phenomenological research study to gather faculty perceptions on the use of the physical assessment checklists by practical nursing students as determined by clinical faculty interviews during the spring semester, 2014..**

By signing below you are agreeing that: (1) you will use the physical assessment skills checklist to teach, (2) evaluate the PN students abilities to perform a complete bedside physical assessment using the checklist, (3) you are taking part in this research study voluntarily.

Participants Information

Contact information for me

Participant Name (Printed)

Name-Helen Daniels-Moncrief

Participant's Signature

Phone -618-964-9160 (H) 618-889-0260 (C)  
(W) 618-985-3741 [email-helenmoncrief@jalc.edu](mailto:helenmoncrief@jalc.edu)

Date

John A. Logan College, Carterville, IL. 62918

*Appendix F*

## Acknowledgment of Informed Consent

### Section I: Identification of Project and Responsible Investigator:

I hereby agree to participate in a research project entitled “Faculty’s perception of the implementation of a skills checklist for PN nursing students” at John A Logan College to be conducted by Helen D. Moncrief as principal investigator.

### Section II: Participant Rights and Information:

#### 1. Purpose of the Project:

This project involves research. The purpose of the research is to determine if the implementation of a physical assessment checklist will enhance PN nursing students’ performance in physical assessment skills as determined by the faculty’s perceptions through an interview process.

#### 2. Description of Risks:

There should be minimal risks or discomforts to the participants that are associated with the research project.

#### 3. Description of Benefits:

The expectation of the research project is that nursing students will be able to perform a complete bedside physical assessment with the implementation of this tool. The faculty will give their perceptions by way of an interview as to whether the checklists assisted students in performing better assessments at the bedside. .

#### 4. Disclosure of Alternative Procedures:

There are no alternative procedures for this research except for non-participation.

**5. Confidentiality of Records:**

All records will be kept confidential. The records will be kept in a locked cabinet, within a locked office on campus. All participants will be kept confidential to the extent possible.

**6. Available Assistance:**

There is no compensation involved with this research project.

**7. Contact Information:**

You may contact Helen Moncrief @ Phone 618-964-9160 (Home)

Personal [e-mail-hdmoncrief@netzero.net](mailto:e-mail-hdmoncrief@netzero.net) with any questions related to this research project, or business e-mail included below.

**8. Statement of Voluntary Participation:**

If you choose to join this research project, your participation will be voluntary. You can ask to withdraw from the research at any time.

**Section III: Signatures**

1. Participant: \_\_\_\_\_ Date: \_\_\_\_\_

2. Principal Investigator: Helen D Moncrief Date: April 16, 2013

3. Principal Investigator's address: 12528 E Blackberry Hill Marion Illinois 62959

4. Principal Investigator's phone number-618-964-9160 (Home)

5 E-Mail: [helenmoncrief@jalc.edu](mailto:helenmoncrief@jalc.edu)

[hdmoncrief@netzero.net](mailto:hdmoncrief@netzero.net)

*Appendix F*

Capstone Letter of Intent

To: Marilyn Fa!aster- Director of Nursing and the Administrator at John A. Logan College, Carterville, IL

From: Helen Daniels-Moncrief-DNP Student

Subject: Capstone Project Proposal

Date: July 8, 2013

I am writing to obtain permission to conduct a qualitative phenomenological research study in your facility with the purpose of determining if the implementation of a physical assessment checklist in the classroom will assist practical nursing students' in their abilities to perform a complete bedside patient physical assessment as determined by interviews of the clinical nursing faculty. This study will be done to fulfill requirements for completion of the Doctor of Nursing Practice degree at Regis University, Denver, CO. The following information will review the study:

This project will employ a **Population-Intervention-Control Group-Outcome (PICO)** format for development of the research question to be investigated

**Population=** Clinical nursing faculty at John A. Logan College teaching physical assessments to first year practical nursing students

**Intervention=** Development and implementation of a physical assessment skills checklist

**Comparative=** Currently no physical assessment skills checklist in use

**Outcome=** Perception by clinical nursing faculty of practical nursing students' abilities to perform complete bedside physical assessments using the skills checklist

**Research Question:** How has the development and implementation of a physical assessment skills checklist in teaching physical assessment affected practical nursing students' abilities to perform complete bedside physical assessments as determined by clinical nursing faculty interviews?

**Project Significance:** First year practical nursing students at John A. Logan College are reported to be deficient in performing physical assessments by the clinical nursing faculty and staff at clinical hospital sites. Presently the nursing department does not have a tool by which to objectively determine if practical nursing students are performing complete bedside physical assessments. It is proposed that development and implementation of an assessment checklist will address this problem and improve the performance of physical assessments by first year practical nursing students. A broad review of the literature suggests that nursing students may not be adequately prepared as new graduates to enter the



workforce. According to Roberts, Vignato, and Moore (2009), inconsistent teaching techniques by nursing faculty was discussed as a factor in contributing to the lack of proficiency in performing physical assessments by student nurses. Further discussion by Harris, Wilson-Barnett, Griffiths

### **Project Goals and Objective**

The main goal of this project is to conduct a phenomenological qualitative study at John A. Logan College located in Carterville, Illinois in order to determine the affect of using a physical assessment checklist on the ability of practical nursing students to perform complete bedside assessments contributing to knowledge related to the use of a physical assessment checklist.

#### Objectives:

1. Obtain written permission to conduct the study including approval to utilize the files to develop a purposive study sample by August 1, 2013.
2. Submit for IRB approval from Regis University by August 10 to receive approval by end of September 2013.
3. Identify a purposive sample of clinical nursing faculty and give complete written permission documentation from the prospective participants by October 1, 2013.
4. Set up participant meetings either at John A. Logan or at a destination of choice with the nurse researcher by December 1, 2013
5. Ask the participants the following main questions with follow-up questions as needed related to use of the Physical Assessment Skills Checklist by April, 2014:
  - a. Describe how students performed bedside assessments before and after using the physical assessment checklist.
  - b. What is your perception of students' abilities to perform bedside assessments following the use of the physical assessment checklist?
6. Tape record, and transcribe individual participant interviews:
  - a. Put transcriptions into NVivo software by March 1, 2014.
  - b. Code for research themes, complete study by May, 2014

Permission is requested to conduct this research study at John A. Logan College Department of Nursing

700 College Rd

Carterville, Illinois

*Helen Daniels-Manning*  
 \_\_\_\_\_  
*Marilyn Lauster*  
 \_\_\_\_\_  
*Eric Pulley*  
 \_\_\_\_\_

*Appendix G*

## Regis IRB Approval

February 6, 2014

Helen Daniels-Moncrief

12538 E Blackberry Hills Lane

Marion, Illinois 62959

Re: **IRB #**: 14-021

Dear Ms. Daniels-Moncrief:

Your application to the Regis IRB for your project, "Clinical Faculty Perception of Using a Skills Checklist in Teaching of Practical Nursing Students Bedside Physical Assessment," was approved as an exempt study on January 24, 2014. This study was approved per exempt study categories 45CFR46.101.b(#1 and #2).

The designation of "exempt" means no further IRB review of this project, as it is currently designed, is needed.

If changes are made in the research plan that significantly alter the involvement of human subjects from that which was approved in the named application, the new research plan must be resubmitted to the Regis IRB for approval.

Sincerely,



Patsy McGuire Cullen,

PhD, PNP-BC

Chair,

Institutional

Review Board

Professor & Director

Doctor of Nursing Practice & Nurse

Regis University

cc: Dr. Pamella Stoeckel

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*Appendix H*

## Research Facility IRB Approval



JOHN A. LOGAN COLLEGE  
700 Logan College Road  
Carterville, Illinois 62918

September 4, 2013

Associate Professor Pamela Stoeckel, RN, PhD, CNE

Loretto Heights School of Nursing

Regis University Mail code G8

3333 Regis Boulevard

Denver CO 80221-1099

RE: Capstone Project Proposal – Helen Daniels-Moncrief, DNP Student

Dear Dr. Stoeckel:

As director of institutional research for John A. Logan College, I have carefully scrutinized the above-referenced proposal and granted permission for Ms. Daniels-Moncrief to perform the research study.

It is our hope the project results will provide the data necessary to make adjustments in our practical nursing program, thus improving our first-year student deficiencies in completing physical patient assessments at clinical sites.

Should you have questions or concerns, please do not hesitate to contact me at (618) 985.3741, Ext. 8655, or via e-mail [ericpulley@jalc.edu](mailto:ericpulley@jalc.edu). Thank you.

Sincerely,

Eric Pulley

Director of Institutional Research

vlkp

DIRECT EXTENSION ACCESS: (618) 985-2828 or 457-7676  
OPERATOR: (618) 985-3741, 549-7335, 542-8612, 937-3438, TTY 985-2752  
WEB SITE: <http://www.jalc.edu>

*John A. Logan College does not discriminate on the basis of race, religion, color, national origin, disability, age, sexual orientation, or gender orientation.*

*Appendix I*

## DNP Timeline

August,27, 2012	NR 701 Theoretical Application-PICO question formulated
September 4, 2013	Written IRB approval granted for research at the research facility
October 22, 2013	Oral presentation on DNP Capstone project
November 22, 2013	Regis University IRB application submitted
January 24, 2014	Regis University grant approval for DNP research
February 15, 2014	Participants will begin using the physical assessment skills checklist for the classroom
February 21, 2014-March 1, 2014	Clinical faculty will begin to use the checklist on the clinical unit
March 17, 2014-March 28, 2014	Set up 30 minute interview with clinical faculty
April 1, 2014	Meet with transcriptionist
April 14, 2014-June, 2014	Input data into NVivo software for themes
June-July, 2014	Create final written DNP research paper
August 1, 2014	NR799 Capstone Oral Defense-submit final paper for publication

*Appendix J*

## Driving and Restraining Forces

<b>Driving Forces</b>	<b>Restraining Forces</b>	<b>Strategies</b>
Patient safety	Fear of using a new tool	Answer all questions
Comprehensive physical assessments	Lack of faculty training	Offer additional time for instruction
Highly skilled nurses	Lack of incentives for faculty	Offer encouragement and praise
Excellence within the Department of Nursing	Inconsistent use of the skills checklist	Reeducate on the benefits of using a skills checklist

*Appendix K*

CITI Training

**Human Research Curriculum Completion Report  
Printed on 11/17/2012**

**Learner:** Helen DanielsMoncrief (username: h@1147)

**Institution:** Regis University

**Contact** Department: Nursing

**Information** Email: hdmoncrief@netzero.net

**Social Behavioral Research Investigators and Key**

**Personnel:**

**Stage 1. Basic Course Passed on 11/17/12 (Ref # 9191631)**

Required Modules	Date Completed	
Introduction	11/17/12	no quiz
History and Ethical Principles - SBR	11/17/12	3/5 (60%)
The Regulations and The Social and Behavioral Sciences - SBR	11/17/12	4/5 (80%)
Assessing Risk in Social and Behavioral Sciences - SBR	11/17/12	5/5 (100%)
Informed Consent - SBR	11/17/12	5/5 (100%)
Privacy and Confidentiality - SBR	11/17/12	5/5 (100%)
Regis University	11/17/12	no quiz

**For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.**

Paul Braunschweiger Ph.D.  
Professor, University of Miami  
Director Office of Research Education  
CITI Course Coordinator

*Appendix L*

## Facility Acknowledgements

I would like to extend a special thank you to my Capstone Chair, Dr. Pamella Stoeckel for all of your hard work in bringing this project to an end with me. I am also thankful for all the facilitators of each class that assisted me along the way. My mentor at the research facility, Dr. Janet Followell, you always took the time to listen, made helpful suggestions, and read all of my research. To the Director of Nursing, it was your conversation that started it all. You always stopped to ask how the project was progressing. To the faculty that participated in this research, I will always be grateful. You have a special place in my heart.