Examining the Perceptions of Nursing Students and Preceptors using the Dedication Education Unit Model for Clinical Experience

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3/13/20
Introduction
· Definition of DEU
  – Purpose

· History
  – Multiple models

· EMMC model in partnership
  UMaine
  School of Nursing
Dedication Education Unit Model

Clinical Faculty Coordinator

Clinical Educator

Nursing Manager Team

DUE Preceptor

DEU Preceptor

DEU Preceptor

DEU Preceptor

Nursing Student

Nursing Student

Nursing Student

Nursing Student

Nursing Student

Nursing Student

Nursing Student

Nursing Student

Proposed Dedicated Education Unit
Eastern Maine Medical Center
Grant 4 Cardiac

Northern Light Health
Implementation
Where to Start?

 Modify with Insert > Header & Footer
The VARK Questionnaire – English Version (version 3)

How Do I Learn Best?

This questionnaire aims to find out something about your preferences for the way you work with information. You will have a preferred learning style and one part of that learning style is your preference for the intake and output of ideas and information.

Choose the answer which best explains your preference and circle the letter next to it. Please circle more than one if a single answer does not match your perception.

Leave blank any question which does not apply, but try to give an answer for at least 10 of the 13 questions

When you have completed the questionnaire, use the marking guide to find your score for each of the categories, Visual, Aural, Read/Write and Kinesthetic. Then, to calculate your preference, use the Scoring sheet (available in the “advice to teachers” section of the VARK web site).

1. You are about to give directions to a person who is standing with you.
   She is staying in a hotel in town and wants to visit your house later.
   She has a rental car. I would:
   a. draw a map on paper
   b. tell her the directions
   c. write down the directions (without a map)
   d. collect her from the hotel in my car

2. You are not sure whether a word should be spelled ‘dependent’ or ‘dependant’. I would:
   a. look it up in the dictionary.
   b. see the word in my mind and choose by the way it looks
   c. sound it out in my mind.
   d. write both versions down on paper and choose one.
Content covering:

- Interventional Cardiology
- Heart Failure
- Arrhythmias & Treatment Modalities
- Cardiac Surgery
Concept Maps

- Patient Diagnosis
- Signs & Symptoms
- Possible Cause or Comorbidities
- Psychosocial
- Laboratory
- Procedures
- Imaging
- Nursing Care
- Prevention
- Medications
- Diet
- Transition to
- PT/OT/Speech
- Pt. Education
Common Diagnoses on the Cardiac Telemetry Unit

You should have an understanding of the pathophysiology of the diagnoses listed below. Complete a concept map for each diagnosis listed below. Think about how your patient might present to you. What physical assessment findings might you expect to find? What co-morbidities might you need to consider when caring for your patient? What procedures or interventions might your patient require?

Acute Coronary Syndrome
- Stable Angina
- Unstable Angina
- Non ST Elevation Myocardial Infarction (NSTEMI)
- STEMI

Heart Failure
- Right-sided versus left-sided
- Preserved EF
- Reduced EF

Arrhythmias
- Atrial fibrillation
- Atrial Flutter
- AV Blocks

Syncope

Hypertension
Common Procedures & Interventions on the Cardiac Telemetry Unit

You should have a working knowledge of each one of these tests, procedures or interventions. Consider is it invasive or non-invasive. Does this test, procedure or intervention require consent? Does this require a pre-procedure preparation, dietary restrictions, activity restrictions, and or a change in medication orders.

EKG

Echocardiogram

Cardiac Nuclear Stress Test (MIBI)

Transesophageal Echocardiogram (TEE)

Cardioversion

Diagnostic Heart Catheterization

Percutaneous Coronary Intervention (PCI)

Pacemaker/AICD Placement

Coronary Artery Bypass Grafting

Trans-femoral Aortic Valve Replacement (TAVR)
Common Medications Administered on the Cardiac Telemetry Unit

Complete a medication card for all of the medications listed below. Include the classification, the method of action, desired effects, possible adverse reactions, possible drug interactions, precautions and contraindications. What assessment data is significant to have prior to administration? What procedures and/or interventions will this patient be having and is this medication supposed to be administered or is it to be held? Always ask yourself, is it safe to give this medication at this time given?

<table>
<thead>
<tr>
<th>Aspirin</th>
<th>Plavix (clopidogrel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coumadin (warfarin)</td>
<td>Heparin</td>
</tr>
<tr>
<td>Lovenox (enoxaparin)</td>
<td>Morphine</td>
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<tr>
<td>Nitroglycerin</td>
<td>Lopressor (metoprolol)</td>
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<tr>
<td>Betapace (sotalol)</td>
<td>Tikosyn (dofetilide)</td>
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<tr>
<td>Cardizem</td>
<td>Amiodarone (cordarone)</td>
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<td>Captopril</td>
<td>Lisinopril</td>
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<td>Lasix (furosemide)</td>
<td>Lipitor (Atorvastatin)</td>
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<tr>
<td>Spironolactone</td>
<td>Potassium Chloride</td>
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<tr>
<td>Magnesium IV</td>
<td>Eliquis</td>
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<td>Xerelta</td>
<td>Brilinta</td>
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## Policies & Procedures

<table>
<thead>
<tr>
<th>PCD/DD #</th>
<th>Subject</th>
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<tbody>
<tr>
<td>PCD 02</td>
<td>MEDICAL SURGICAL</td>
</tr>
<tr>
<td>PCD 03</td>
<td>Nursing Process and Critical Thinking (Min. Documentation Guidelines)</td>
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<tr>
<td>PCD 15-003</td>
<td>IV Policy (Peripherals) and Attachment A</td>
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<tr>
<td>PCD 16-01</td>
<td>Central Access Device</td>
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<td>PCD 16-06</td>
<td>Central Access Device Restoration of Patency</td>
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<tr>
<td>PCD 16-08</td>
<td>Central Access Device Blood Draw</td>
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<tr>
<td>PCD 16-701</td>
<td>Patient care of Total Parenteral Nutrition</td>
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<td>PCD 16-902</td>
<td>Implanted Central Access Device (Port-A-Cath) Access, De-access and Maintenance</td>
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<td>PCD 18-009</td>
<td>Prevention of Catheter Associated Urinary Tract Infections</td>
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<td>PCD 32</td>
<td>Oxygen Therapy</td>
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<tr>
<td>PCD 33-003</td>
<td>Controlled Substance</td>
</tr>
<tr>
<td>PCD 35</td>
<td>Medication Administration and Management</td>
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<td>PCD 38-005</td>
<td>Pain Assessment and Management</td>
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<tr>
<td>PCD 39-004</td>
<td>Staples and Suture Removal</td>
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<td>PCD 39-006</td>
<td>Negative Pressure Wound Therapy Care</td>
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<td>PCD 39-007</td>
<td>Skin and Pressure Wound Assessment and Management</td>
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<tr>
<td>PCD 39-008</td>
<td>Intentionally Retained Packing Items</td>
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<td>PCD 39-001</td>
<td>Bloodless Program</td>
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<td>PCD 39-003</td>
<td>Blood Products Transfusion</td>
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<tr>
<td>PCD 39-004</td>
<td>Suspected Transfusion Reactions</td>
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<tr>
<td>PCD 39-005</td>
<td>Massive Transfusion Protocol</td>
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<td>PCD 48-008</td>
<td>Potassium Protocol: IV Adult Medical Surgical/Cardiac Telemetry (non-critical care setting)</td>
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<td>PCD 48-002</td>
<td>Potassium Protocol Oral</td>
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<td>PCD 48-005</td>
<td>IV Magnesium Adult Protocol</td>
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<td>PCD 48-009</td>
<td>Insulin Post-Op Protocol</td>
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<td>PCD 48-011</td>
<td>Heparin Monitoring Using Anticoagulation and Heparin Calculator</td>
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<td>PCD 48-014</td>
<td>Heparin Conversion From Oral Factor Xa Inhibitors</td>
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<tr>
<td>PCD 08-002</td>
<td>Fall Prevention Protocol</td>
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<td>DD 13-03</td>
<td>CARDIAC TELEMETRY SPECIFIC</td>
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<tr>
<td>DD 15-03</td>
<td>Telemetry Admission Policy</td>
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<td>Cardiac Physical Assessment</td>
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<td>PCD 08-12</td>
<td>Telemetry Monitoring in the Acute Care Setting</td>
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<td>DD 12-06</td>
<td>Transcutaneous Pacemaker</td>
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<td>DD 12-01</td>
<td>Temporary DDD Epicardial Pacing</td>
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<td>DD 12-02</td>
<td>Nursing Care of the Patient with an ICD Implanted</td>
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<td>Transvenous Pacing: Insertion &amp; Care</td>
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<td>DD 12-09</td>
<td>Pre-Cardiac Pacemaker-ICD-Ablation Nursing Care Protocol</td>
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<td>DD 12-10</td>
<td>Post Cardiac Pacemaker-ICD-Ablation Nursing Care Protocol</td>
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<tr>
<td>DD 12-11</td>
<td>Nursing Care of the Patient with a LifeVest</td>
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<tr>
<td>DD 13-03</td>
<td>Cardiac Device (ICD &amp; Pacemaker) Teaching Guidelines</td>
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<td>DD 13-14</td>
<td>Heart Failure Teaching Guidelines</td>
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<td>DD 10-14</td>
<td>Aspiration of Pericardial Catheters</td>
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<td>DD 5-04</td>
<td>Aspirin Desensitization</td>
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<td>DD 1.01</td>
<td>Defibrillation</td>
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<tr>
<td>DD 1.02</td>
<td>Synchronized Cardioversion</td>
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<td>DD 11-05</td>
<td>Cardiac Surgery Preoperative Teaching Guidelines</td>
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<tr>
<td>DD 10-06</td>
<td>Mediastinal Chest Tubes</td>
</tr>
<tr>
<td>DD 10-12</td>
<td>Incisional and Site Dressing Protocol</td>
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<tr>
<td>DD 10-13</td>
<td>Care of the Cardiac Surgical Patient Guidelines for Managing and Reporting Changes in Patient Condition</td>
</tr>
<tr>
<td>DD 13-06</td>
<td>Cardiac Surgery Postoperative Teaching Guidelines</td>
</tr>
<tr>
<td>DD 10-10</td>
<td>Atrial Fibrillation (A-Fib) Orders for Cardiac Surgery Patients</td>
</tr>
<tr>
<td>DD 1.03</td>
<td>Assisting with Opening a Chest in the CSU or GSC Unit</td>
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<tr>
<td>DD 16-07</td>
<td>Evacuation Plan in the Case of a Unit Based Disaster 4 Cardiac</td>
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<tr>
<td>DD 16-11</td>
<td>P6 Cardiac Evacuation Plan in the Case of Unit Based Disaster Incident</td>
</tr>
<tr>
<td>PCD 08-003</td>
<td>Postmortem Care</td>
</tr>
</tbody>
</table>
Ø Role and Responsibilities of the Preceptor
  ➢ Post-it game

Ø Working with Students
  ➢ Student Nurses-Medication Administration Policy
  ➢ Teaching/Learning Agreement
  ➢ Understanding learning styles
  ➢ Communication techniques
Creating a Safe Learning Environment: Understanding the Student Skillset, Learning Style, & Competence Level

TEACHING/LEARNING AGREEMENT

All DEU members are required to enter into a Learning Contract. The purpose of a Teaching/Learning Agreement is to ensure the DEU preceptor and student are aware of the responsibilities and commitment (both personal and professional) associated with their relationship and that this relationship is recognized. It is suggested that two copies are made and that both are signed. The DEU preceptor and the student then both have a copy. It is your joint responsibility to sign the Teaching/Learning Agreement.

DEU Preceptor

Learning Contract between student and DEU preceptor

I, __________________________ (Preceptor) agree to provide preceptorship to __________________________ (Student) on G4C/Acadia ______ commencing on ____________ and finishing on ____________.

As a Preceptor I will provide the following:

• Sharing and role modeling of my clinical expertise and skills
• Conduct myself in a professional manner at all times
• An understanding of the requirements of the program
• Facilitation of learning experiences for the student
• Opportunities for self-directed learning for the student
• Encouragement and support for the student to identify their own learning needs and the resources available
• A colleague to provide support if I am unavailable
• Regular feedback to progress in meeting competencies
• Assessment of clinical competencies
• I will be involved in the following activities to support my role as a Preceptor:
  • Participation in training workshops
  • Taking responsibility to seek assistance when encountering problems/conflicts
  • Keeping the clinical area informed in relation to the DEU program.

Signature: __________________________ Date: __________________________

DEU student

I, __________________________ (student) agree to participate in the preceptorship provided by __________________________ (DEU preceptor) commencing on ____________ and finishing on ____________.

As a student, I agree to take responsibility for the following:

• Negotiate learning contract and time frames with preceptor
• Conduct myself in a professional manner at all times
• Participate in clinical teaching experiences provided
• Develop a plan to meet the required clinical objectives
• Develop a plan to meet the requirements of the clinical competencies
• Acknowledgement of own skills and knowledge level
• Seek out support, information required, and learning opportunities
• Negotiate constructive feedback provide by preceptor
• Increasing responsibility in the role of a Senior Nursing Student preparing for transition to role of RN
• Taking the opportunity provided to develop my nursing skills
• Participating in team meetings
• Seeking and discussing feedback from peers
• Reflecting on my clinical practice and demonstrating self-awareness.

Signature: __________________________
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Creating a Safe Learning Environment: Understanding the Student Skillset, Learning Style, & Competence Level

Maine Nurse Core Competencies
Creating a Safe Learning Environment: Strategies to Improve Critical Thinking, Reasoning, and Judgment

The One Minute Preceptor
The Five Microskills Needed to Precept:

1. Get a commitment
2. Probe for supporting evidence
3. Teach general rules
4. Reinforce what was done right
5. Correct mistakes

Feedforward—Nurturing the Practice of Others

Feedforward is a novel idea that is attributed to author and leadership innovator Marshall Goldsmith (2012). It originated out of his observation that, although feedback is essential to effective teaching, it may not be well presented or well received. Feedforward is predicated on the idea that one cannot change the past but can influence the future. Feedforward offers constructive guidance on how to improve any aspect of an individual’s competence (Bell & Goldsmith, 2013, p. 138).

Feedforward is a process of offering and receiving helpful suggestions. The intent is to provide recommendations that can be used for future implementation. Rather free to ignore what you don’t like or does not make sense to you.” (Bell & Goldsmith, 2013, p. 142).

Feedforward can be provided by anyone who has the desire to be helpful and conversant with the subject matter. It does not require expertise, but a wish to sojourn with an individual on the journey of self-improvement and ultimately self-actualization.

Feedforward can be energizing and rejuvenating to the recipient because it is nonjudgmental. The intent is to optimize an individual’s assets and to convey a sense of commitment to his or her success.

Preceptors can use this positive technique as they guide
Creating a Safe Learning Environment: Feedback vs Feedforward ~ Effective Communication

Difficult Conversations

Everyone dreads having to discuss the issues, problems, or concerns that come up when working with students, new staff, experienced staff or co-workers. Most of the time, the first and hardest step is initiating the conversation.

1. Reflect on the Situation
2. Put emotion aside and state the facts of the situation
3. Describe the impact the situation has
4. Ask the person for ideas to avoid the situation again
5. Be respectful but firm state the expectation and consequences if expectations are not met
- Students were paired with a NT or RN for 2 hours
  - Switched for the next 2 hours

- Verified that each student had computer access

- Preceptors demonstrated remote access to Pyxis

- Students went simulation at UMO
Students and Preceptors discuss:

- Teaching/Learning Agreement
- Casey-Fink Readiness for Practice Survey
- Student learning styles
Pilot Study
• What is the effect on students’ perception of clinical competency level and self-confidence when the DEU model, traditional 8 hour clinical or traditional 12 hour clinical rotations are used for the clinical experience?

• What is the preceptors’ perception of benefits, support, and commitment to the preceptors’ role when participating as a DEU preceptor?
• Convenience sample (n=35) of all second semester junior nursing students enrolled in a level III Adult Health medical/surgical clinical at the University of Maine, School of Nursing.

• The sample for the preceptors (n=6) were the 4 nurses assigned to the preceptor role and 2 alternate nurses assigned as substitute preceptors by the nurse educator for the cardiac unit at Eastern Maine Medical Center.
Instruments

- Casey-Fink Readiness for Practice Survey: consists of three sections, the first section: demographic data and information about clinical experience. Second section: the students’ comfort with performing skills/procedures and the third section: 20 item Likert scale that asks to student to report about comfort/confidence in key practice skills. Cronbach alpha reliability coefficient: 0.69 (Casey, Fink, Jaynes, Campbell, Cook, & Wilson, 2011).

- Tool on Preceptors’ Perceptions of Benefits, Rewards, Supports and Commitment to the Preceptor Role. This questionnaire consists of a demographic sheet and uses a Likert scale to measure perceptions for three different sections: the preceptor’s perception of benefits and reward scale (PPBR), preceptor’s perception of support scale (PPS), and the commitment to the preceptor role scale (CPR). The Cronbach alpha reliability coefficient for the three scales was reported as 0.91 for the PPBR, 0.86 for the PPS and 0.87 for the CPR (Dilbert & Goldberg, 1995).
## Clinical Groups

<table>
<thead>
<tr>
<th>Clinical Group</th>
<th>Setting of Clinical</th>
<th>Sample Size</th>
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</thead>
<tbody>
<tr>
<td>DEU: 12 hour clinical</td>
<td>Cardiac Unit</td>
<td>n=8</td>
</tr>
<tr>
<td>12 hour clinical with clinical instructor present</td>
<td>Cardiac Unit</td>
<td>n=7</td>
</tr>
<tr>
<td>Traditional 8 hour clinical</td>
<td>Cardiac Unit</td>
<td>n=7</td>
</tr>
<tr>
<td>Traditional 8 hour clinical</td>
<td>Surgical Unit</td>
<td>n=6</td>
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<tr>
<td>Traditional 8 hour clinical</td>
<td>Rehabilitation Unit</td>
<td>n=7</td>
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# Preceptor Survey Findings

## Pre-Survey Scores and Post-Survey Scores

<table>
<thead>
<tr>
<th>Sections of the Survey</th>
<th>p Value</th>
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<tbody>
<tr>
<td>Total survey</td>
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<tr>
<td>Part 1: Perception of Benefits and Rewards</td>
<td>p=.242</td>
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<td>Part 2: Perception of Support</td>
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<tr>
<td>Part 3: Commitment to the Preceptor Role</td>
<td>p=.020</td>
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</table>
## Preceptor Survey Findings

<table>
<thead>
<tr>
<th>Survey Section</th>
<th>Question</th>
<th>p Value</th>
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</thead>
<tbody>
<tr>
<td>Part 1 Preceptors Perception of Benefits and Rewards Scale</td>
<td>Q 4: Keep current and remain stimulated in my profession</td>
<td>p=.037</td>
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<tr>
<td>Part 3 Commitment to the Preceptor Role</td>
<td>Q 34: I feel loyalty to the preceptor program</td>
<td>p=.024</td>
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<tr>
<td>Part 3 Commitment to the Preceptor Role</td>
<td>Q 40: Deciding to be a preceptor was not a mistake on my part</td>
<td>p=.039</td>
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</table>
Student Survey Results

Pre-Survey Scores and Post-Survey Scores:
Total group (n=35) mean increased from 58.74 to 65.08 (p=.000)

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Score</th>
<th>p Value</th>
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<tbody>
<tr>
<td>DEU</td>
<td>67.25</td>
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<tr>
<td>Cardiac 12 hours</td>
<td>64.71</td>
<td>.482</td>
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<tr>
<td>Cardiac 8 hours</td>
<td>63.42</td>
<td>.301</td>
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<tr>
<td>Medical/Surgical 8 hours</td>
<td>64.83</td>
<td>.460</td>
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</tbody>
</table>
Student Survey Results

Three Questions were statistically significant when comparing the DEU group with the two or more of the other groups

Question 8: Ethical issues in patient care responsibilities

Question 9: Recognizing significant changes in my patient’s condition

Question 16: Knowing what to do for a dying patient

<table>
<thead>
<tr>
<th>Group</th>
<th>Question 8</th>
<th>Question 9</th>
<th>Question 16</th>
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<tr>
<td>Cardiac 12 hr.</td>
<td>p=.023</td>
<td>p=.113</td>
<td>p=.009</td>
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<tr>
<td>Cardiac 8 hr.</td>
<td>p=.006</td>
<td>p=.004</td>
<td>p=.014</td>
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Limitations

- Small Sample Size
- Convenience Sample
- Single Site
- Pre-test/Post-test design
- Use of different instructors in clinical setting on three different clinical units
References


