



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

Sandra Benton MSN, RN, CCRN Betsy Corrigan MSN, RN-BC, PCCN-K Deborah Eremita PhD, RN

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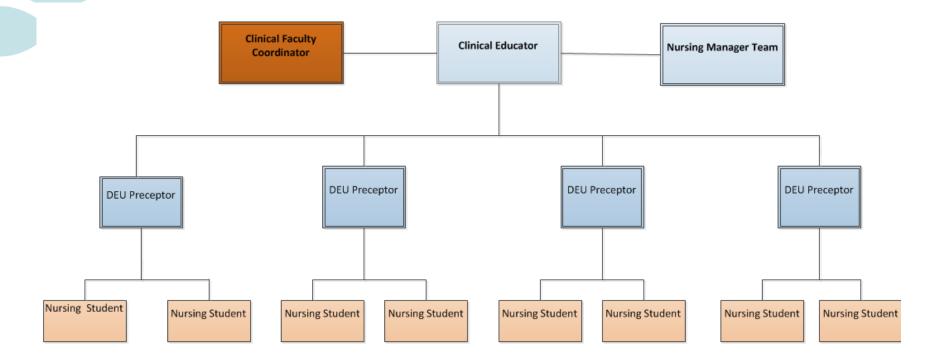
Presentation Objective

At the end of this session, participants will be able to identify and discuss the advantages of using a Dedicated Education Model for clinical experience for both the preceptors and the nursing students.





Dedicated Education Unit Model



Proposed Dedicated Education Unit Eastern Maine Medical Center Grant 4 Cardiac





Implementation





Where to Start?





Students Pre-work Packet

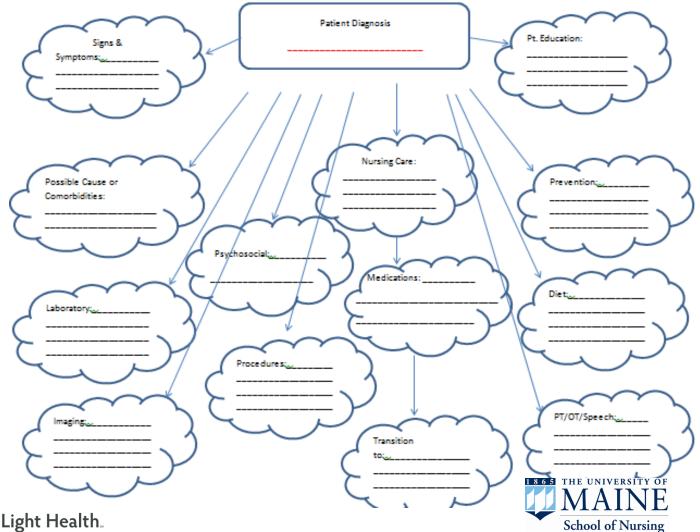
Content covering:

- ✓ Interventional Cardiology
- ✓ Heart Failure
- ✓ Arrhythmias & Treatment Modalities
- ✓ Cardiac Surgery





Concept Maps



Common Diagnoses

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 <u>require</u>.

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

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 <u>orders</u>.

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

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?

Aspirin	Plavix (clopidogrel)
Coumadin (warfarin)	Heparin
Lovenox (enoxaparin)	Morphine
Nitroglycerin	Lopressor (metoprolol)
Betapace(sotalol)	<u> Tikosyn (dofetilide)</u>
Cardizem	Amiodarone (<u>cordarone</u>)
Captopril	Lisinopril
Lasix (furosemide)	Lipitor (Atorvastatin)
Spicolastone	Potassium Chloride
Magnesium IV	Eliquist
Xecelto	Brilinta



Policies & Procedures

PCD/DD #	Subject
	MEDICAL SURGICAL
PCD 02	Nursing Process and Critical Thinking (Min Documentation Guidelines)
PCD 25-003	IV Policy (Peripheral) and Attachment A
PCD 26-102	Central Access Device
PCD 26-106	Central Access Device Restoration of Patency
PCD 26-301	Central Access Device Blood Draws
PCD 26-701	Patient care of Total Parenteral Nutrition
PCD 26-902	Implanted Central Access Device (Port-A-Cath) Access, De-access and
	Maintenance
PCD 28-009	Prevention of Catheter Associated Urinary Tract Infections
PCD 32	Oxygen Therapy
PCD 35-005	Controlled Substance
PCD 35	Medication Administration and Management
PCD 38-008	Pain Assessment and Management
PCD 39-004	Staples and Suture Removal
PCD 39-006	Negative Pressure Wound Therapy Care
PCD 39-007	Skin and Pressure Ulcer Assessment and Management
PCD 39-008	Intentionally Retained Packing Items
PCD 51-001	Bloodless Program
PCD 51-003	Blood Products Transfusion
PCD 51-004	Suspected Transfusion Reactions
PCD 51-005	Massive Transfusion Protocol
PCD 48.008	Potassium Protocol: IV Adult Medical Surgical/Cardiac Telemetry (non-
	critical care setting)
PCD 48-002	Potassium Protocol Oral
PCD 48-005	IV Magnesium Adult Protocol
PCD 48-009	Insulin Post-Op Protocol
PCD 48-011	Heparin Monitoring Using Anti-Xa and Heparin Calculator
PCD 48-014	Heparin Conversion From Oral Factor 🔏 Inhibitors
PCD 06-002	Fall Prevention Protocol
	CARDIAC TELEMETRY SPECIFIC
DD 15.03	Telemetry Admission Policy
DD 11.05	Cardiac Physical Assessment
PCD 06-12	Telemetry Monitoring in the Acute Care Setting
-	

DD 12-06	Transcutaneous Pacemaker
DD 12.01	Temporary DDD Epicardial Pacing
DD 12.02	Nursing Care of the Patient with an ICD Implanted
DD 12.04	Transvenous Pacing: Insertion & Care
DD 12.09	Pre-Cardiac Pacemaker-ICD-Ablation Nursing Care Protocol
DD 12.10	Post Cardiac Pacemaker-ICD-Ablation Nursing Care Protocol
DD 12.11	Nursing Care of the Patient with a Life Vest
DD 13.03	Cardiac Device (ICD & Pacemaker) Teaching Guidelines
DD 13.14	Heart Failure Teaching Guidelines
DD 10.14	Aspiration of Pericardial Catheters
DD 5-04	Aspirin Desensitization
DD 1.01	Defibrillation
DD 1.02	Synchronized Cardioversion
DD 13.05	Cardiac Surgery Preoperative Teaching Guidelines
DD 10.06	Mediastinal Chest Tubes
DD 10.12	Incisional and Site Dressing Protocol
DD 10.13	Care of the Cardiac Surgical Patient Guidelines for Managing and
	Reporting Changes in Patient Condition
DD 13.06	Cardiac Surgery Postoperative Teaching Guidelines
DD 10-10	Atrial Fibrillation (A-Fib) Orders for Cardiac Surgery Patients
DD 1.03	Assisting with Opening a Chest in the CSU or G\$C Unit
DD 16.07	Evacuation Plan in the Case of a Unit Based Disaster 4 Cardiac
DD 16.11	P6 Cardiac Evacuation Plan in the Case of Unit Based Disaster Incident
PCD 08-003	Postmortem Care



DEU Preceptor Workshop

Role and Responsibilities of the Preceptor Post-it game

- 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 is aware of the responsibilities and commitment (both personal and professional) associated with their relationship and that this relationship is recognize 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

_____(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

l,	(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

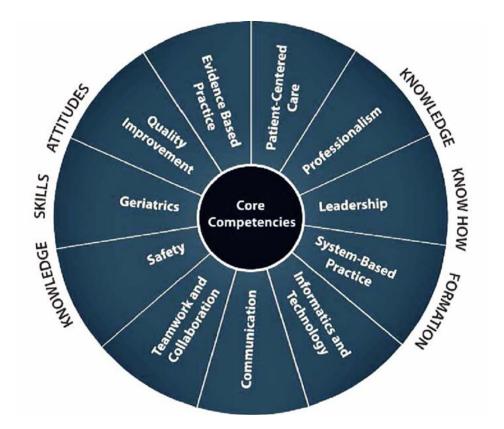
Reflecting on my clinical practice and demonstrating self-awareness.

Signature: _____



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

Questions to Help with Reflective Practice

- 1. Why are you doing it this way? What is the rationale?
- 2. What are your main concerns with this situation?
- 3. How do you know this?
- 4. How can you test the appropriateness of your interventions?
- 5. In your opinion, why is the system set up this way?
- 6. What could go wrong here?
- 7. What makes you think so?
- 8. What evidence supports your conclusion?
- 9. What do you think you should do next?
- 10. What is confusing to you?
- 11. How long can you wait to intervene?
- 12. How will you know when the situation requires additional resources?

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

Neher, J. O., Gordon, K. C., Meyer, B., & Stevens, N. (1992). A five-step "microskills" model of clinical teaching. The Journal of the American Board of Family Practice, 5(4), 419-424.



Creating a Safe Learning Environment: Feedback vs Feedforward ~ Effective Communication

Preceptorship

Column Editor: Mary Beth Modic, DNP, RN, CDE

Feedforward—Nurturing the Practice of Others

eedforward 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 is 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.

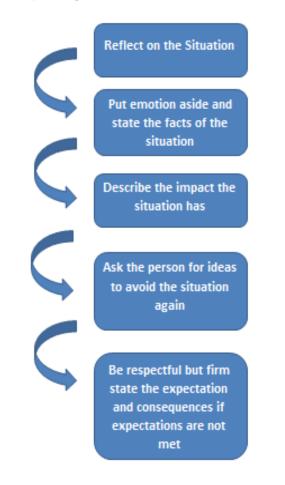
Preceptors can use this positive technique as they guide



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 precepting, students, new staff, experienced staff or co-workers. Most of the time, the first and hardest step is initiating the conversation.







Mocktail Hour

Students and Preceptors discuss:

✓ Teaching/Learning Agreement

- ✓ Casey-Fink Readiness for Practice Survey
- ✓ Student learning styles





Orientation to the Cardiac Telemetry Unit

□ 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



Pilot Study





Research Questions

- 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

Clinical Group	Setting of Clinical	Sample Size
DEU: 12 hour clinical	Cardiac Unit	n=8
12 hour clinical with clinical instructor present	Cardiac Unit	n=7
Traditional 8 hour clinical	Cardiac Unit	n=7
Traditional 8 hour clinical	Surgical Unit	n=6
Traditional 8 hour clinical	Rehabilitation Unit	n=7



Preceptor Survey Findings

Pre-Survey Scores and Post-Survey Scores

Sections of the Survey	p Value
Total survey	p=.391
Part 1: Perception of Benefits and Rewards	p=.242
Part 2: Perception of Support	p=.919
Part 3: Commitment to the Preceptor Role	p=.020



Preceptor Survey Findings

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



Student Survey Results

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

Means for post-test comparing groups to DEU group:

Group	Mean Score	p Value
DEU	67.25	
Cardiac 12 hours	64.71	p=.482
Cardiac 8 hours	63.42	p=.301
Medical/Surgical 8 hours	64.83	p=.460



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.

Group	Question 8	Question 9	Question 16
Cardiac 12 hr.	p=.023	p=.113	p=.009
Cardiac 8 hr.	p=.006	p=.004	p=.014
Med/Surg 8 hr.	p=.047	p=.013	p=.260



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





Questions?





References

- Casey, K., Fink, R., Jaynes, C., Campbell, L., Cook, P., & Wilson, P. (2011). Readiness for practice: The senior practicum experience. *Journal of Nursing Education, 50*(11), 646-652.
- Crawford, R., Jasonsmith, A., Leuchars, D., Naidu, A., Pool, L., Tosswill, L., Trezise, K., & Wordworth, A. (2018). "Feeling part of a team" a mixed method evaluation of a dedicated education unit pilot programme. *Nurse Eduction Today, 68*, 165-171. https://doi.org.10.1016/j.medt.2018.05.023
- Dilbert, C. & Goldenberg, D. (1995). Preceptors' perceptions of benefits, rewards, supports and commitment to the preceptor role. *Journal of Advance Nursing, 21*, 1144-1151.
- Maine Partners in Nursing Education and Practice. (2013). *Maine Nurse Core Competencies: Re-imagine Maine's Nursing Education and Practice.* Retrieved from: https://www.omne.org/wpcontent/uploads/2016/12/ME-RN-Competencies.pdf
- Modic, M. B. (2016). Feedforward-nurturing the practice of others. *Journal of Nursing Professional Development.* Retrieved from <u>https://journals.lww.com/jnsdonline/Fulltext/2016/01000/Feedforward_Nurturing_the_Practice_of_Others.10.aspx</u>
- Neher, J. O., Gordon, K. C., Meyer, B., & Stevens, N. (1992). A five-step "microskills" model of clinical teaching. *The Journal of the American Board of Family Practice*, *5*(4), 419- 424.
- Rusch, L., McCafferty, K., Schoening, A., Hercinger, M., & Manz, J. (2018). Impact of the dedicated education unit teaching model on the perceived competencies and professional attributes of nursing students. *Nurse Education Today, 33*, 90-93 <u>https://doi.org/10.1016/j.nepr.2018.09.002</u>
- VARK Learning Limited. (2019). *The VARH Questionnaire: How do I learn Best?* Retrieved from http://vark-learn.com/the-vark-questionnaire/

