Preceptor Workshop: Overview

Clinical preceptors provide the WOCNEP student with the clinical experiences necessary to complete their education. **Clinical preceptorship is the MOST important component of the program,** because it is in clinical that the student has the opportunity to apply the theory that has been taught in the classroom.

We recognize that the preceptor role is a difficult and challenging role, for two major reasons: 1.) you are balancing a myriad of other responsibilities along with the responsibilities associated with being a clinical preceptor; and 2.) every student is different, both in terms of background, experience, and level of understanding, and in terms of personality and learning style.

During this workshop, we will review the qualifications and responsibilities of the clinical preceptor, to include your responsibilities for assessment and documentation of the student’s clinical performance. We will also discuss common challenges encountered in the clinical settings, and possible solutions.
Clinical Preceptor Workshop:

OBJECTIVES:

1. List the educational and experiential requirements for a WOCN-approved preceptor.
2. List at least 4 characteristics of adult learners and the implications for you as a preceptor.
3. Identify major preceptor responsibilities to include: assessment of student needs; orientation to facility and preceptor; assistance in reviewing patient record and identifying care needs; assistance in providing care and education; assessment of clinical performance and feedback to student; documentation of student performance.
4. Describe guidelines for evaluation of student performance, with particular attention to “borderline” student.
5. Discuss common preceptor “challenges” and possible solutions.
6. Identify indications for Emory WOCNEP notification.
Section 1: Overview of Preceptor Role

The WOC clinical preceptor assists the student to bridge the gap between classroom and clinical, and assesses the student’s readiness for independent clinical practice.

Education is based on the principles of adult learning, which are listed below:

1. Adults must be **ready to learn**
2. Adults need to learn **at their own pace**
3. Adults have **unlimited potential for growth and development**
4. Adults typically learn best when they are able to move from **simple to complex**
5. Learning involves moving from **dependency** on the preceptor to increasing **autonomy**, but at different rates for different people.
6. **The learning environment is ideally characterized by physical comfort, mutual respect and trust,** and acceptance of differences
7. **Learning must be based on learners’ needs** – preceptors help learners to diagnose the gap between what they already know and what they NEED to know
8. Adults are motivated by the “**need to know**”, i.e., they are most “ready to learn” when there is an **immediate identified need**.
9. Adults **must be responsible for their own learning** and must **take an active role** in the learning process.
10. **Adult education should foster critical thinking.** Posing and solving problems are key strategies for promoting critical thinking.
11. Learning is enhanced by **repetition** and by **active involvement/DOING**.
12. Stress can negatively impact the ability to learn.
13. Feedback (both positive and constructive criticism) are **critical** to learning.

Adult education implies that the nurse seeking WOC nursing education is autonomous, self-directed, and able to actively participate in planning their educational experiences. The WOC nurse student comes with life experience and an established professional/social role (in a variety of practice settings). This means that you may be working with students who have a very different background; it also means that the student may be learning in an unfamiliar (and very stressful!) environment.

**Major Goals:**

--Promote critical thinking

--Minimize stress

--Encourage (require?) active participation!
2. Preceptor Requirements and Compensation

Preceptors must meet criteria determined by the WOCN Accreditation Board. These requirements are as follows:

1.) Current licensure as an RN
2.) Baccalaureate Degree
3.) Current Board Certification in area in which precepting (CWOCN, CWON, CWCN, COCN, CCCN)
4.) 1 year of full-time experience following certification (in area for which precepting)
5.) Caseload sufficient to provide at least 6 – 8 learning experiences/day (3 -4 in home care. (Must update statistics yearly, providing us with the following data: average 
   # of visits/day; average % of time spent in wound care, ostomy care, continence care
6.) Previous experience as a preceptor or completion of a preceptor workshop

Compensation:

Compensation is determined by the agency; if the agency charges for preceptorship, this information should be provided to the student when she/he first inquires about preceptorship. The student will pay the agency directly. Fees for preceptorship typically range from $50.00 - $100.00/day.
3. Clinical Requirements for Students

Students completing the full-scope program (Wound Ostomy Continence Nursing) are required to obtain at least 120 hours of clinical preceptorship; each student is also required to obtain at least 30 hours of clinical experience in each area of the scope of practice (i.e., 30 hours in wound care, 30 hours in ostomy care, 30 hours in continence care). In the area of wound care, students are expected to obtain experience with trunk wounds/dehisced incisions AND with differential assessment and management of lower extremity wounds. In the area of continence care, students are expected to obtain experience both in the areas of skin care and containment and in the area of restorative therapy Students also need experience related to professional practice/role implementation issues: exposure to record-keeping systems, role justification strategies, staff development strategies, strategies for communicating effectively with administration and physicians, etc.

Students completing a specialty course are required to complete 40 clinical hours; these hours should include experience in the clinical area and should also include professional practice/role implementation experiences.

The Emory WOCNEP requires students taking dual scope or full scope programs to precept with at least 2 different clinicians in order to gain exposure to different patient populations and different clinician “styles”. Onsite students typically have 3 – 4 clinical rotations/preceptors in order to provide experience in each of the required areas.

It is the student’s responsibility to maintain a record of their clinical hours and experiences; as the preceptor, you will be asked to verify the experiences provided during your preceptorship, to validate the student’s level of involvement/competence, and to critically assess the student’s ability to meet baseline practice objectives.
SECTION 4: PRIMARY PRECEPTOR RESPONSIBILITIES

The preceptor's role is to provide the clinical experiences that relate to the WOCNEP curriculum. You will be guiding the adult learner through the clinical experiences, focusing on the requirements of the program as well as the WOC student's personal goals. Your major responsibilities will be to foster critical thinking skills and to provide evaluation of the student's clinical competence.

This section will outline specific preceptor responsibilities in greater detail.

A. Orientation of the WOC Student

1. Orientation to the facility/agency:

   The student will need directions to the facility and the time you expect her/him to arrive. You should provide brief information about the layout of the building (include where to leave personal belongings, location of rest-rooms, etc.). Also orient the student to supplies, patient records, and educational materials.

2. Orientation of the student to your role and work style.

   Provide the student with an overview of your role; explain the breakdown between time spent in the clinician/consultant role, time spent in staff development, and time spent in other activities (such as committee activities, etc.)
   Explain how you get referrals, and how you determine your level of involvement with various patients (e.g., how do you determine when you will provide direct care and education and when you will provide consultation only?)
   Also explain how you communicate your care plan to the physician and the staff (standardized protocols? MD orders?)
   It is also helpful to explain to the student how you generally structure your day, whether you document following each patient visit or at the end of the day, how you maintain statistical data, etc.

   Orientation to the student/preceptor relationship:
   Discuss with the student how you will work together. You will need to establish guidelines for when you will provide care, and when the student will provide care.
   It is very helpful to establish cues that both you and the student can use to indicate that you should "take over" and provide the care or education.
It is also important to reinforce that preceptorship is a learning experience, not just a demonstration of acquired skill, that questions are appropriate and expected, and that the student should ask for assistance whenever she/he is unsure. (However, students should be encouraged to use their own resources, such as their pocket guides, and not to rely solely on you to explain things and fill in gaps. They should use their pocket guides for a review of what to assess, what to teach, what to do, and what to document – they should use YOU to validate and “stretch” their critical thinking skills. (What did I miss? What else could I have done? etc/ You should also provide the student with guidelines regarding when and where to ask questions (e.g., most preceptors instruct the student to hold questions until they are out of the patient situation.)

B. Assessment of Student's Strengths/Needs.

One of your most important responsibilities prior to beginning clinical rounds is assessment of the student's strengths, past experiences, learning style, and identified needs. It is helpful to ask the student about her/his previous work experience, practice settings, and experience gained during other clinical rotations. You will also want to ask about the student's usual learning style; however, you will need to emphasize to all students the importance of strictly limiting observational experiences and maximizing their participative learning experiences. (It is normal for students to express a preference for observational learning; however, we have found that observational experiences are generally not as helpful. The exceptions to this general rule are patient teaching situations where knowledge of agency and/or clinician procedures is critical; e.g., you may need to handle parts of the preop teaching and limit the student's involvement to explanations regarding the planned procedure and management of the ostomy.)

It is also helpful to assess the student's level of anxiety and to provide reassurance that such anxiety is normal, and that you will be there to assist the student. When possible, you should select relevant clinical experiences based on the student's needs. For example, has the student had limited experience with patient teaching? If so, you will want to include the student in any patient teaching experiences that are available.
C. Assistance in assessment of the patient record/determination of patient needs.

1. Determination of need:
   Assist the student in the assessment of the patient record. In the absence of a record, you should provide as much patient history as possible. (Note: If you are very busy, it is appropriate to orient the student to the medical record, and to allow the student to review the relevant components of the record while you are carrying out other activities. You can then ask the student to summarize the patient’s history and to describe the patient’s current status and care needs.)

2. Determination of the planned intervention:
   Once the record has been reviewed, you will need to assist the student to formulate an appropriate plan for intervention/management. Encourage the student to apply principles learned in the classroom to the particular patient situation. This is an excellent opportunity to foster critical thinking; strategies you can use include asking the student to identify what she/he thinks should be done, and to explain the rationale. Another helpful strategy, especially when a care plan has already been established, is to ask the student to identify the principles underlying the care and to identify other ways in which those principles could be operationalized. For example, if you have a patient who wishes to irrigate his colostomy you could ask the student to determine whether or not the patient is a candidate for irrigation, and to identify the factors she/he needs to consider in making that determination. You could then review with her/him the principles of the procedure, the equipment required, the steps of the procedure, and the potential problems (and solutions).

For a wound care patient, you could ask the student to identify probable etiologic factors, strategies/options for correcting those etiologic factors, the patient’s systemic status in relation to ability to heal (and implications for intervention), key wound characteristics, principles upon which topical therapy should be based, and dressing options.

If the student selects an appropriate dressing, you could reinforce that selection and then ask the student to identify at least one additional dressing that would be appropriate for that wound.

If the student selects a less than optimal dressing, you could ask the student to explain her/his rationale and could then help her/him to identify a better choice.

For a patient with incontinence, you could ask the student to identify reversible factors that might be impacting on the patient’s continence status; you could then ask the student to identify strategies for managing those reversible factors.
You could also assist the student to identify the type of bowel/bladder dysfunction with which the patient presents, and treatment options.

Throughout the pre-intervention discussion, your goals are as follows:
--to determine the student's knowledge base and comfort level;
--to stimulate and foster critical thinking;
--to assist the student in formulating appropriate goals and an appropriate treatment plan

You will also want to clearly establish the role each of you will play prior to entering the patient care situation.

D. Introduction of the WOC Nurse student:
The student should be introduced as an RN now specializing in this field. Other credentials may be used as deemed appropriate. Remember that these are adult learners who come with professional experience in nursing—it is demeaning to them to be introduced simply as a "student", and it also interferes with the student's ability to establish credibility with the patient.

E. Guidance and assistance to the student while in the patient care situation.

-- The preceptor and student should determine respective roles prior to beginning the patient care, based on the student's amount of experience and comfort level/learning style; the student may be the primary caregiver with the preceptor serving as "backup", the preceptor and student may work together, or the preceptor may take the primary caregiver role with the student observing and assisting.

-- The student should be reminded to use patient appropriate language, and to be aware of and responsive to patient cues.

-- If the student is managing the situation the preceptor should try not to intervene. If assistance is needed, it should be provided in a tactful manner. For example, the preceptor could say something like "Here, I can help with this..." (and this can be the preceptor's "cue" to the student that she/he needs assistance), or the preceptor can say "Let me clarify what we are saying here..." (in the case of a patient teaching situation where the student is having difficulty or giving less than clear and accurate information). If at all possible, corrections should be made in a tactful way that does not compromise the student's credibility with the patient and that protects the student's dignity.

-- The preceptor should assist the student with focus and provide direction in how and when to exit.
Home healthcare: the student is reminded that the approach here is more holistic, and that the intervention may involve areas outside the WOC scope of practice.

F. Feedback, Followup, and Support of Critical Thinking

Immediately after the intervention, the preceptor should provide feedback. The student should be able to provide a rationale for their interventions and the planned follow-up. As the preceptor, you will need to reinforce all positive behaviors and appropriate interventions/rationale, and you will also need to correct any misconceptions and to fill in any "blanks" in the student's assessment, treatment plan, and rationale.

Another critical "followup" factor is to assist the student to identify other treatment options, which requires the student to apply the operational principles in a variety of ways. For example, you could say: What if these products were not available? How else could you manage this ostomy/wound? Or you might pose different followup questions and hypothetical situations: What if we come back in two days and we find that the skin surrounding the wound is macerated? How would you modify the treatment? What if the physician challenges your treatment plan? How would you respond?

One challenge for students is to differentiate between a treatment option that is "sub-optimal" (e.g., damp to damp gauze as a wound dressing) and a treatment option that is incorrect and potentially harmful to the patient (e.g., packing a granulating wound with gauze saturated with Betadine scrub).

One challenge for preceptors is to be able to acknowledge other products and treatment approaches as valid; we all develop our practice "preferences", and we sometimes fail to differentiate between clinical decisions based on "best evidence" and clinical decisions based on practice preferences. As a preceptor, you are constantly challenged to identify the rationale and the principles underlying your care decisions, and to "think outside of your box". Preceptorship can be a wonderful growth experience and can tremendously strengthen your own clinical practice!

Try to remember to "think out loud" --it is extremely helpful for students to hear your assessment and your rationale! (We encourage students to "pick your brain" and to ASK you what you "see", think, anticipate, etc.-but it is even better if you can remember to offer this information routinely.)
Nowicki points out in her book "Mentoring the Stars" that it is sometimes difficult for an expert clinician to be an effective preceptor/mentor, because it is difficult for them to break their analysis and planning down into simple "data bites" and "thinking steps.' We believe this—and we think the ability to go back and analyze your decision-making process is one of the greatest skills a preceptor can acquire! (It is also very helpful to remember when YOU were challenged by all of the things that you now do “automatically"—it helps you to remain empathetic with students!)

G. Completion of Clinical Checklist and Evaluation Form.

1. Clinical Checklist -- see attached.
   Each student should bring her/his clinical checklist to clinical. The student is asked to note and date each observed/performed "skill"; you are then expected to initial and date the appropriate column to reflect the student's level of competence.

2. Evaluation Form - Mastery of Clinical Objectives.
   Each preceptor is to complete this form. For each objective, please rate the student's performance as "satisfactory", "needs improvement", or "unsatisfactory". The narrative form should be used to explain unsatisfactory practice or areas for improvement.
   * Narrative documentation is optional if performance is satisfactory.

   **Note:** Should you assess a student's performance as being unsatisfactory or needing improvement, you **must notify the Emory WOCNEP.**

H. Communication with WOCNEP Faculty.
   We encourage communication with the Emory University WOCNEP faculty. Specifically the faculty would like to hear from you in any of the following instances:
   1. You identify a conflict between clinical practice and classroom content
   2. You feel that the curriculum needs to be expanded or revised.
   **3. MOST IMPORTANT!** When you have concerns about student progress. It is imperative that you contact WOCNEP faculty if

   a. Student practice is "not safe" (e.g., poor infection control; poor debridement technique; application of compression therapy without ruling out ischemia, uncompensated CHF, and active thrombus, etc.)
b. Student cannot provide appropriate rationale for her/his interventions.
c. Student is not displaying minimal competence by the last week of clinical

I. Documentation Issues

There are many styles of documentation, and each facility and agency has their own requirements. Our priority is for students to be able to identify the factors to be documented, as opposed to building mastery in a specific style of documentation. You may therefore choose either to have the student identify critical elements to be documented or you may choose to have the student actually complete the documentation.

Style of documentation: orient the student to the requirements of your facility1 agency. If you will be documenting, have the student relay the critical points to be covered. Again, we are looking for critical thinking skills, including appropriate assessment, planning, intervention and evaluation.

Legal requirements.
In the event that the student will be documenting, he/she should sign Mary Smith, RN, WOC Nurse Student. You should co-sign the note.
SECTION 5

STUDENT PREPARATION FOR CLINICAL

Prior to beginning clinical, all students must complete the theoretical component of the course, which includes examinations on each module and a cumulative final exam. In addition, students complete a number of simulations labs on critical skills (e.g., stoma site selection, pouching techniques, debridement, vascular assessment, compression wrap application, etc.)

Students must also pass a clinical competency test prior to beginning clinical; the competency guidelines used as a basis for this exam are included in this packet.

Before beginning the initial clinical rotation students are given a copy of the clinical checklist and the evaluation form that will be completed by the preceptors. Students are also provided with copies of the evaluation forms they will use to evaluate each clinical preceptor and clinical site.

Students are also instructed in appropriate dress code, and equipment to bring to the clinical site.

SECTION 6

CHALLENGES IN PRECEPTORSHIP

One of the greatest challenges in serving as a clinical preceptor is dealing with the unexpected. This section will deal with some common problems and possible solutions.

A. Low Patient Census or Unscheduled Meetings
The most important reason for clinical placement is to provide the student with "hands on" clinical experiences. However, sometimes low patient census and unexpected meetings will interfere. The following are some solutions that can be utilized for these times:

-- Try to schedule the student to spend time in some clinically relevant area: e.g. observe bowel, bladder or plastic surgery; or schedule time in the vascular lab or the urodynamics lab.

-- Provide clinical simulations for the student, e.g. have them perform ABI, apply a compression wrap, or role play pre-op teaching.
-- Have the student perform risk assessments on a select group of patients using a research-based risk assessment tool and discuss prevention protocols based on risk status.

-- Use clinical slides to have the student do clinical assessment and decision-making; have the student review and critique educational material.

-- In certain facilities there is a treatment nurse to do routine dressing changes. The student may spend time with the staff member, then discuss with the preceptor the wound assessment, rationale for the prescribed treatment, and alternatives to the prescribed treatment.

B. Emergencies -- preceptor unavailable.

-- Notify the student if you wish her/him to reschedule.

-- When possible, you should try to make alternate arrangements for the student (e.g., if 2-3 preceptors are working together try to have the student go with the other preceptor for the day. Consider another staff member in the department.

C. Personality Conflicts
The ability to deal with many personalities is part of being a successful WOC nurse. However, there are times that personality conflicts may interfere with the learning experience. In the event of this occurrence, we would suggest that you first discuss the difficulty openly with the student and try to identify ways to manage the conflict. In the event that you are unable to resolve the situation, please notify the WOCNEP faculty. Situations will be handled on an individual basis. The WOCNEP faculty encourages communication, will maintain confidentiality, and in all events will attempt a workable solution.

D. Unprofessional Behavior
Occasionally, students will discuss other preceptors, faculty, students or patients with the preceptor.

1. Clinical Situations
Sometimes a student will have a question about how another preceptor handled a given situation. You should answer objectively, provide a rationale if you understand the management, and encourage the student to contact the involved preceptor or WOCNEP faculty if you do not understand the rationale.
It may be helpful to remind the student that there are many ways to achieve the same outcome as long as the principles of care are followed. Conflicts between didactic and clinical should be brought to the attention of the WOCNEP faculty.

2. Non-clinical Situations
The clinical preceptor should remind the student that non-clinical discussion of other students, preceptors, faculty is unprofessional. If this continues to be a problem please notify the WOCNEP faculty.

E. Student Not Progressing at Expected Rate
Clinical preceptors should relay any concerns about student progress to the WOCNEP faculty. Early identification of problem areas will enable the WOCNEP faculty to work with the student to best achieve clinical goals. You are encouraged to provide prompt feedback to the student regarding any areas of concern, to review the clinical objectives and established competencies with the student, and to assist the student to identify strategies for strengthening her/his clinical performance.
(For example, it may be helpful for the student to focus her/his clinical preparation time on specific areas prior to each day; i.e., if the preceptor anticipates that a new postop patient will be ready for instruction in self-care, the student should come to clinical prepared to do the teaching. Similarly, if the preceptor knows that there will be a large number of wound patients, the student should focus her/his pre-clinical review on wound assessment and principles of wound management.)

Note: Many preceptors find it very easy to tell a student she/he is doing well, but very difficult to identify areas of weakness or unsatisfactory performance. It is helpful to remember that you and the student have a common goal: to assure that she/he is ready for independent practice at the conclusion of the preceptorship.
It is also helpful to focus on the problem areas and to avoid making the student the problem. A simple "roadmap" for discussing unsatisfactory performance is as follows:
"I want to talk with you about some problems I have identified in your approach to (wound assessment, ostomy patient teaching, etc.) I know that you and I have the same goal, and that is to assure that you are ready for independent practice in this area. I want to hear how you feel about this, and I want us to talk about ways we can strengthen your performance in this area."

Please notify the WOCNEP any time you have concerns about student performance; we will work with you and the student to assure that clinical objectives are met!
SECTION 7

EVALUATION OF THE PRECEPTOR

We have a comprehensive evaluation process for our program, which includes evaluation of preceptors and clinical sites. The evaluation process is as follows:
--The student is asked to complete a clinical rotation evaluation form for each clinical site/major preceptor. Students are encouraged to identify strengths of the rotation and the preceptor, and also to identify any factors that could be strengthened.
--WOCNEP faculty review the evaluations and send you a copy of all of your evaluations. You will need to review the evaluations and identify ways in which you are effective, and any areas in which you might improve your precepting skills.

Note: Just as it is frequently difficult for students to hear negative feedback, it is usually difficult for us as preceptors to get what we perceive as a "negative" evaluation. Should this happen, you will need to take some time to get past your initial "emotional" response, and then you will need to objectively evaluate the comments to determine which ones are valid and which ones are related to factors outside your control and/or the student's own stress level. (For example, students may be anxious to get in as many learning experiences as possible and may be critical of the lack of certain learning experiences, which is clearly out of your control.) Again, please feel free to contact the WOCNEP faculty to discuss any areas of concern. Our goal is to support you as a preceptor and to help you provide the best learning experiences possible.

--We strongly support continued professional growth for our clinical preceptors. We cannot overemphasize the importance of remaining clinically current, reading your journals, attending conferences, and continuing to develop your role and your practice! (This is another advantage to clinical preceptorship; it helps you to remain current. Many preceptors routinely ask students: "So what did you learn about this?" as a means of testing the currency of their own practice.)
SECTION 8: EVALUATION OF THE PROGRAM

We are continually striving to improve the quality of our educational program. Therefore, you will be asked to give us feedback on the student’s preparation for clinical, and on any suggestions you have for program improvement. Please be candid! !

Summary
In conclusion, the preceptor role is a challenging, exciting, sometimes difficult, and absolutely pivotal role. Serving as a preceptor should support you in maintaining a practice that is based on "best current evidence" and also provides you with the opportunity to support and share in the growth of our specialty. Key responsibilities include student support, promotion of critical thinking, and evaluation of student competence. As WOCNEP faculty, we are tremendously appreciative of your contribution to our program, and we are always here to assist you in any way possible. We look forward to working with you!
Exercises*

1. Following is a list of key characteristics of adult learners. For each of these characteristics, please identify at least two implications for you as a preceptor (i.e., ways in which you can maximize learning based on the specific learning characteristic):
   * Adult learners need to master critical thinking.
   * Much significant learning is acquired through DOING.
   * Stress reduces the ability to learn
   * Adult education must be learner-centered.

2. Outline key factors/information to be included in your orientation of the student.

3. Describe at least two strategies you can use to promote critical thinking on the part of the student.

4. List at least 1 advantage and 1 disadvantage to the preceptor role.

5. You are the preceptor for a full-scope WOC nursing student. The faculty report that the student did well on all exams; however, in the clinical situation, the student appears anxious and is unable to accurately complete wound assessment or ostomy patient education. She is able to perform the technical procedures such as pouch application, dressing application, and application of compression wraps. What strategies might you use to assist this student?

6. You are working with a WOC nursing student who is technically competent and who is able to correctly answer your questions re: care priorities, potential complications, and the principles of care. However, you note that the student spends minimal time relating to the patient, seems to be very task-oriented, and is unresponsive to patients' verbal and nonverbal cues of anxiety, depression, etc. Outline the approach you would use to address these concerns with the student and to strengthen the student's interpersonal skills.

7. How should you introduce the WOC nursing student?

8. Identify at least two situations in which you should contact the WOCNEP faculty.

9. Which of the following best describes the clinical requirements for a full-scope student? (10 pts)
   a. 120 hrs. total; at least 30 hrs. in each clinical area
   b. 100 hrs. total; at least 24 hrs. in each clinical area
   c. 240 hrs. total with documented experience in all areas of the scope of practice
   d. 120 hrs. total with documented experience in all areas of the scope of practice

Preceptor Student
Appendix 2: COMPETENCY TESTING GUIDELINES

Wound Competencies:

• Assessment and Management Trunk Wound
• Assessment and Management Leg Ulcer
• Compression Therapy
• Debridement

Ostomy Competencies:

• Stoma Site Marking
• Technique for Pattern Construction/Pouch Application
• Ileostomy Lavage or Colostomy Irrigation
• Catheterization of Urinary Stoma or Continent Diversion
• Preop and Postop Teaching for Standard and Continent Diversions
ASSESSMENT AND MANAGEMENT TRUNK WOUND

• Identifies probable etiologic factors based on wound location, wound depth and contours, and patient status; identifies implications for management

  -- Pressure: full-thickness lesion located over bony prominence, typically in patient who is relatively immobile
  Management: appropriate support surface (mid level if 2 or more intact surfaces; high level if <2 intact surfaces or very high risk patient); repositioning schedule

  -- Pressure/Shear: full-thickness lesion located over bony prominence with irregular contours; sinus tracts and undermining common; typically seen in patient who is relatively immobile and exposed to shear (sliding)
  Management: appropriate support surface (see guidelines above) with low shear surface; repositioning schedule

  -- Friction: partial thickness or shallow full-thickness lesion located on fleshy prominences in patient exposed to sliding, scrubbing, or rubbing
  Management: measures to reduce sliding/eliminate scrubbing

• Identifies systemic factors that may affect healing (and appropriate interventions)
  to include:

  -- Nutrition: considers present and usual weight; lab values; presence/absence of granulation tissue in wound bed; present calorie and protein intake compared to calculated protein and calorie needs; need for glutamine/L-arginine, Vitamin C, zinc, MVI
--Hyperglycemia: identifies need for tight glucose control in diabetic patient

--Steroids: identifies critical level in terms of compromised healing (>30 mg/day) 

and possible intervention (topical administration of Vitamin A)

• Performs comprehensive wound assessment and identifies implications for topical therapy:

  --Location

  --Dimensions and depth (length: 12 – 6 o’clock; width: 9 – 3 o’clock; greatest depth)

  --Undermining and sinus tracts (to include location and depth)

  --Status of wound bed and stage of wound healing

  --Status of wound edges (open vs closed)

  --Status of surrounding tissues (erythema, induration, maceration, denudation, etc.)

  --Exudate: volume, color, odor

  --Stage (pressure ulcer only)

  --Pain (characteristics, severity, exacerbating and relieving factors)

Topical Therapy:

--Identifies need for debridement if wound necrotic

--Identifies need for culture if wound bed viable and S/S infection present

--Identifies need for antimicrobial dressing if S/S critical colonization

--Identifies need for AgNO3 cauterization if wound edges closed and wound granulating

--Identifies appropriate dressing options (general category and at least one appropriate option): absorptive filler + cover vs. hydrating filler + cover vs. absorptive cover vs. hydrating cover

--Identifies need for protection of surrounding skin (and appropriate option)
ASSESSMENT AND MANAGEMENT OF LEG ULCER

Identifies probable etiologic factors based on: patient history, leg appearance, wound location, wound characteristics, circulatory status, sensorimotor status, and pain pattern

• Performs comprehensive circulatory assessment to include:

  -- Color of feet and legs/impact of elevation and dependency
  -- Presence or absence of hair on feet and legs
  -- Palpation of pulses: dorsalis pedis and posterior tibial
  -- Assessment of capillary refill and venous filling time
  -- Temperature of feet and legs
  -- Determination of ABI: Places pt supine for 10 min prior to ABI

    Checks brachial systolic pressure in both arms using
    Doppler stethoscope
    Locates DP and PT pulses and obtains systolic
    pressures using Doppler stethoscope (should obtain
    2 pedal pressures for each foot/leg)
    Correctly calculates ABI using highest of 2 brachial
    pressures and highest of 2 pedal pressures (for the specific
    leg) and the following formula: Highest pedal pressure
    $\div$ highest brachial pressure
Correctly interprets ABI values/implications for care:

--0.9 – 1.3: Normal

--0.8 – 0.9: Mild PAD but patient eligible for full compression if needed (venous ulcer, etc.)

--0.5 – 0.8: Moderately severe PAD: if compression needed, must use modified compression

--<0.5: Severe PAD; vascular consult indicated

--> 1.3: Calcification/ABI invalid: need vascular studies

--Edema

• Performs sensorimotor assessment to include:

--Assessment of sensory function using monofilaments

--Assessment of vibratory function using tuning fork

--Assessment of gait and balance

--Assessment of footwear to include wear patterns

--Assessment for foot deformities/plantar surface callouses

• Performs comprehensive wound assessment to include:

--Location

--Dimensions (length: 12 – 6 o’clock; width: 9 – 3 o’clock; greatest depth)

--Status of wound base (granulating, clean but not granulating, necrotic)

--Status of wound edges (open vs closed)

--Undermining or sinus tract formation (location and depth)

--Exudate: volume, color, odor
--Status of surrounding tissue (any abnormalities)

--Pain assessment

*Determine probable etiology of wound based on wound characteristics, circulatory status, sensorimotor status, pain status.*

**Establishes appropriate management plan based on wound status and etiologic factors:**

- **Venous:** compression therapy and/or elevation unless contraindicated
  - absorptive dressing
  - protection surrounding skin
  - monitoring for infection (to include critical colonization)
  - management venous dermatitis (if indicated)

- **Arterial:** dependent or neutral position
  - vascular consult if appropriate (consider patient’s overall prognosis, severity of arterial compromise)
  - measures to enhance perfusion (avoidance cold, constrictive garments, nicotine, and caffeine; adequate hydration)
  - nonadherent nonocclusive dressing if open lesion; if wound necrotic and noninfected—paint with Betadine + dry dressing or open to air; if wound necrotic and infected—prompt MD consult
  - maintenance high index of suspicion for wound infection

- **Neuropathic:** offloading
  - tight glucose control
  - debridement if indicated/aggressive infection control
  - paring of corns and callouses
  - careful assessment for occult signs of infection
  - dressing selection dependent on depth and volume of exudates
WOUND CULTURE

• Flushes wound with Normal Saline
• Identifies 1-square cm area of wound bed that is viable
• Moists swab with sterile saline and swabs 1 sq cm area of viable tissue with enough force to produce exudate
• Places in culture tube and send to lab

COMPRESSION THERAPY

• Rules out contraindications to compression therapy
  -- Uncompensated congestive heart failure (rales, rhonchi, difficulty breathing)
  -- Lower extremity arterial disease (ABI< 0.6)
    Note: ABI 0.5 – 0.8 (should use reduced level of compression therapy if sustained compression wraps used; OK to use intermittent pneumatic compression devices with mixed arterial and venous disease)

• Unna’s Boot
  -- Assesses, cleans, and dresses ulcer appropriately
  -- Applies paste gauze with 75 – 80% overlap and slight tension; clips or pleats gauze to create smooth “boot”; applies from toes to 1” below knee
  -- Applies Coban outer layer with 50% overlap and 50% stretch
  -- Provides appropriate instruction to patient/caregiver re: care of boot and sx of circulatory compromise and the appropriate action
• **Layered Sustained Compression Wraps (e.g., Profore)**

  -- Assesses, cleans, and dresses ulcer appropriately

  -- Applies layer 1 (padding layer) from toes to 1” below knees in spiral fashion
    with 50% overlap

  -- Applies layer 2 in spiral fashion with 50% overlap and secures with tape

  -- Applies layer 3 using figure 8 application from toes to 1” below knee, with
    50% overlap and 50% stretch

  -- Applies layer 4 using spiral technique with 50% stretch and 50% overlap.

  -- Provides appropriate patient/caregiver education re: care of boot, signs of
    circulatory compromise, and appropriate action

• **Layered Sustained Compression Wrap (e.g., 3M Coban)**

  -- Assesses, cleans, and dresses ulcer appropriately

  -- Applies layer 1 foam side to skin with minimal tension; begins wrap at 5th metatarsal
    head; leaves heel open; applies in spiral fashion up leg ending 1” below knee. (Cuts
    off any excess material)

  -- Applies layer 2 at **full tension** and about 50% overlap; begins at 5th metatarsal head;
    applies in figure of eight fashion until heel completely covered with at least a double
    layer; then continues up leg to 1” below knee.

  -- Provides appropriate patient/caregiver education regarding care of wrap, signs of
    circulatory compromise; appropriate action
DEBRIDEMENT

• Determines goal for wound management (healing vs maintenance). If ulcer is on ischemic extremity and non-infected or if patient is terminal, maintenance is appropriate goal.

• Identifies appropriate options for debridement of the specific wound and assessment parameters/contraindications for each:

  -- Autolysis: Must ensure adequate WBC counts

  Dry wounds need a dressing that will “trap” exudate (e.g., transparent adhesive dressing) or a thin layer of gel + a moisture retentive dressing

  Exudative wounds need dressings that absorb exudate while maintaining a layer of wound fluid at the wound surface (e.g., calcium alginate or hydrofiber)

  -- Enzymatic: Must get MD order

  Dry wound with adherent eschar: must “crosshatch” eschar with blade or needle or apply enzyme to wound periphery where eschar meets viable tissue

  Must follow manufacturer’s guidelines for cover dressing

  -- Chemical (Dakin’s): Must identify methods to protect periwound skin

    (Most appropriate for wounds with combination of necrotic tissue and heavy bacterial loads)
--CSWD:

Pre-procedure:

• Assures coverage by state nurse practice act
• Assures institutional coverage
• Obtains MD order
• Assesses pt to rule out contraindications to CSWD (clotting disorders, systemic infection, untreated cellulitis, densely adherent eschar, ischemia)

During procedure:

• Preps area with antiseptic
• Utilizes sterile instruments/sterile technique
• Holds avascular tissue taut to identify interface between vascular & avascular tissue
• Uses pressure and AgNo3 to control any minor bleeding
OSTOMY COMPETENCIES

STOMA SITE MARKING

• Identifies preferred quadrant based on planned ostomy
• Explains procedure to patient and provides for privacy/drapes accordingly
• Identifies rectus muscle and marks as needed
• If desired site in lower quadrants: selects tentative site using “triangle” method
  If desired site in upper quadrants: selects tentative site within borders of rectus muscle and away from waistline and ribcage
• Evaluates tentative site with patient in lying, sitting, twisting, and standing positions to assure that it meets the following criteria: within rectus muscle; within patient’s visual field; on flat pouching surface.
• Modifies original site as indicated; marks with indelible marker

Note: For continent diversion, site should be medial to iliac crest and over lower quadrant

POUCH SIZING AND APPLICATION

• Makes and labels pattern for irregular wound/stoma; uses stoma measuring guide for round stoma
• Selects appropriate pouching system based on type of ostomy and abdominal contours
  --Flexible pouching system for stoma in deep crease
  --Convex pouching system for retracted stoma or stoma in a “valley”
  --Flat rigid pouching system for flat pouching surface
• Correctly sizes opening in pouch to clear wound or stoma:
  -- 1/8 - 1/4” clearance for flush stoma or wound (1/8” if convex system used; ¼” if flat system used)
  -- 1/16 – 1/8” clearance for protruding stoma
  -- OK to cut wide around urinary stoma (if needed)
• Prepares peristomal/periwound skin appropriately
  -- cleans with warm water; pats dry
  -- applies sealant to peristomal skin if indicated
  -- applies paste to pouch/skin junction if needed (flat paste for flush stoma; ring of paste for protruding stoma)
  -- initiates crusting procedure for any peristomal denudation
• Centers and applies pouch/attaches closure if needed

**ILEOSTOMY LAVAGE**

• Identifies indications for ileostomy lavage (suspected food blockage)
• Assesses patient for abdominal distention, bowel sounds, appearance of stoma, characteristics of output, foods and medications taken over past 12 hours
• Performs gentle digital examination of stoma
• Explains lavage procedure and applies irrigation sleeve
• Inserts lubricated 14 – 16 Fr Catheter through stoma till blockage reached*;
  instills 30 – 50 cc N/S (forcefully); removes catheter and allows for returns
• Repeats above step till blockage relieved
• Monitors patient status; requests analgesia, antiemetics, and IV fluids as needed
* If able to pass catheter >6 inches, verbalizes probability that blockage is not related to food
COLOSTOMY IRRIGATION

• Explains principles and procedure to patient; removes old pouch; positions patient upright in bed or on commode; attaches irrigation sleeve (with tail in commode or with tail clipped if patient in bed)
• Fills bag with 500 – 1000 cc lukewarm water
• Opens clamp and flushes tubing to remove air
• Performs gentle digital exam to determine direction of bowel
• Lubricates and inserts cone tip into stoma
• Holds cone tip snugly in place and opens clip to allow water to flow in steadily
• Clamps tubing, removes cone tip, and instructs patient to deep breathe if cramping occurs
• Discontinues irrigation when patient feels “full”
• Allows 30 – 45 minutes for returns; then rinses/removes sleeve, cleans skin, and reapplies pouch

CATHETERIZATION URINARY STOMA FOR SPECIMEN

• Identifies indications for sterile vs clean specimen
• For sterile specimen:
  -- Sets up sterile tray/field and applies sterile gloves
  -- Wets cotton balls with antiseptic solution; squeezes excess solution from cotton balls and then preps stoma x 3
  -- Removes any antiseptic solution with dry cotton ball and allows urine to flow over stoma
  -- Selects and lubricates appropriate catheter (usually 14 – 16 Fr)
--Inserts catheter to just past fascia level
--Obtains urine specimen in sterile container

**CATHETERIZATION OF CONTINENT URINARY OR Fecal DIVERSION**

- Identifies appropriate catheter size based on type of diversion (14 – 16 Fr for urinary and 22 – 34 Fr for fecal)
- Inserts lubricated catheter into stoma and advances catheter through continence mechanism using steady pressure and slight twisting motion
- Drains and irrigates reservoir (irrigation is done with lukewarm tap water till returns are clear—usually done once or twice daily—controversial)
- Identifies two strategies for dealing with difficult intubation (change position, try smaller catheter, try instilling air or water while advancing catheter, wait 10 minutes and try again, don’t let pouch overfill)

**PREOP AND POSTOP INSTRUCTION FOR ILEOSTOMY PT**

**Preop**

- Assesses patient’s current knowledge level/past experience with ostomies/specific concerns
- Clarifies planned surgical procedure to include: reason for ileostomy; specific surgical procedure to be performed; creation of abdominal opening for elimination of stool; expected changes in bowel function and management (no change in ability to digest nutrients, unpredictable elimination of mushy stool requiring pouching at all times)
Postop

• Instructs patient in pouch emptying and pouch change procedure

• Instructs patient in peristomal skin care (barrier wafer and paste to provide complete protection from stool; prompt pouch change for any leaking, burning, or itching; “crusting” for any skin damage; WOC nurse as resource for severe or unresponsive skin problems)

• Explains normal output: initially high volume output followed by thick mushy stool with enzymes that are very damaging to skin (must protect all skin at all times)

• Explains measures for gas and odor control: large amount of gas normal early postop due to bowel prep—will resolve within 1 – 2 weeks; elimination of straws, chewing gum, carbonation helpful in reducing gas early postop; “muffling” technique (arm or hand over stoma); option for pouch with flatus filter

• Teaches patient measures to prevent food blockage (omit foods high in insoluble fiber till stoma swelling resolved; add foods high in insoluble fiber one at a time in small amounts; chew foods thoroughly; monitor response)

• Teaches patient how to recognize and respond to food blockage (no output + cramping pain and nausea = complete blockage; liquid output with foul odor + cramping = partial blockage; notify MD or WOC nurse + warm bath and peristomal massage (and change pouch if stoma swollen) = management measures to be undertaken by patient; NPO for S/S complete blockage—liquids but no solids for partial blockage.)

• Teach patient how to prevent fluid-electrolyte imbalance: increase daily fluid intake by 2 – 3 glasses (30 cc/Kg body wt/day + 2 – 3 glasses); increase fluid
intake during episodes of increased sweating or diarrhea; use sports drinks and broth and tomato juice/V-8 juice as replacement fluids; notify MD immediately for S/S electrolyte imbalance or inability to replace fluids due to nausea or vomiting

• Teach patient about medication modifications: no large pills; no time-released medications; no enteric coated pills; importance of notifying MD and pharmacist of ileostomy

PREOP AND POSTOP INSTRUCTION FOR TRANSVERSE COLOSTOMY PATIENT

Preop

• Assesses patient’s current knowledge level/past experience with ostomies/specific concerns

• Clarifies planned surgical procedure to include: reason for colostomy; specific surgical procedure to be performed (abdomen opened and loop of transverse colon pulled through opening; bowel then opened and everted to allow stool to pass through opening)

Postop

• Instructs patient in pouch emptying and pouch change procedure (including selection of appropriate pouching system for fecal output)

• Instructs patient in peristomal skin care: skin barrier and paste to protect peristomal skin; cleansing of peristomal skin with lukewarm water; PRN pouch change for leaking, burning, or itching; “crusting” procedure for any skin damage; WOC
nurse as resource for severe or nonresponsive skin problems

• Explains normal output for this type of ostomy: soft stool; output after meals and at other unpredictable times; potential for residual enzymes that may be damaging to skin; stool frequently malodorous due to large numbers of bacteria in transverse colon; large amount of flatus normal.

• Explains measures for gas and odor control: large amount of gas normal early postop due to bowel prep—will resolve within 1 – 2 weeks; discussion gas-producing foods and “lag time”; “muffling” technique (arm or hand over stoma); option for pouch with flatus filter

• Explains management of diarrhea: increased fluid intake; bland diet; OTC antidiarrheals OK

PREOP AND POSTOP INSTRUCTION FOR DESCENDING OR SIGMOID COLOSTOMY

Preop

• Assesses patient’s current knowledge level and past experience with ostomies/specific concerns

• Clarifies planned surgical procedure to include:

  -- reason for colostomy

  -- surgical procedure to be performed and results (creation of abdominal opening for elimination of stool and gas)

  -- options for management (odorproof pouch versus routine irrigation if patient meets irrigation criteria)

• For male patient undergoing narrow A-P resection for benign disease: potential for short-term sexual dysfunction (erectile/ejaculatory dysfunction); longterm
dysfunction very unlikely; no effect on sensation/orgasm

• For male patient undergoing wide A-P resection for malignant disease:
  probability short-term sexual dysfunction (erectile/ejaculatory dysfunction);
  possibility long-term dysfunction; no effect on sensation/orgasm

Postop

• Instructs patient in pouch emptying and pouch change procedure
• Instructs patient in peristomal skin care: barrier wafer to provide protection
  from stool; routine pouch change 1 – 2 x/week & PRN for burning or itching;
  “crusting” procedure for skin damage; WOC nurse as resource for severe or
  nonresponsive skin problems
• Dietary modifications: no absolute contraindications; importance adequate
  fiber and fluid intake to prevent constipation; identification gas-forming foods
  and options for management (omission versus “timed” intake based on 4 – 6
  hr lag time between consumption and flatulence). Explain large amts flatus
  normal early postop due to bowel prep; explain this will resolve within 1 – 2
  weeks. Explain option for use of pouch with flatus filter; teach patient
  how to “muffle” using arm or hand against stoma.
• Odor control options: room sprays when pouch emptied and/or pouch deodorants
  and/or oral deodorants such as Derifil (Devrom not usually used due to
  thickening effect)
• Prevention and management of constipation: fluids and fiber on daily basis;
  prompt recognition and intervention for constipation (hard stool, cramping, dis-
  tention—managed with oral laxatives or irrigation); modification of diet
  to prevent recurrent constipation
• Option for irrigation (if patient a candidate)

-- Determine patient's candidacy (fairly regular bowel patterns preop; no peristomal hernia or prolapse; not receiving XRT or chemo)

-- Assess patient's interest in management by irrigation

-- Explain principles (enema given through stoma on routine basis to stimulate bowel emptying—takes about an hour—provides continence between irrigations)

**PREOP AND POSTOP INSTRUCTION FOR ILEAL CONDUIT PT**

**Preop**

• Assesses patient’s current knowledge level/past experience with ostomies/specific concerns

• Clarifies planned surgical procedure to include: reason for ileal conduit; specific surgical procedure to be performed (removal of small portion of ileum; bowel reconnected so no change in bowel function; one end of ileum closed and other end brought to abdominal wall; ureters connected to ileal segment so urine flows from kidneys through ureters and out of body through ileal segment and stoma)

• For male patient undergoing cystoprostatectomy: explains loss of ejaculatory function; if nerve-sparing procedure done, explains temporary loss of erectile fx but expected recovery of erectile function over next 6 – 12 months (not guaranteed); explains no loss of sensation or potential for orgasm

**Postop**

• Instructs patient in pouch emptying and pouch change procedure (including selection of appropriate pouch with antireflux valve and spout)
• Instructs patient in peristomal skin care: cleansing with warm water; selection of pouch with barrier that is resistant to urine; instruction in PRN pouch change for problems with leaking, burning, or itching; “crusting” for any skin damage; WOC nurse as resource for severe or nonresponsive skin problems
• Explains normal output for ileal conduit: clear urine with mucus shreds; no significant odor
• Explains signs of urinary tract infection: cloudy urine; hematuria; malodorous urine; fever or flank pain
• Teaches patient self-care strategies to prevent infection: adequate fluid intake (30 cc/Kg body weight)—at least 50% of fluids should be water-based; alcoholic drinks cannot be “counted” toward fluid intake; importance of sipping fluids throughout day to provide constant flow of urine
• Explains options for night-time management: use of night drainage system vs getting up at night to empty pouch (if night drainage system chosen, must explain how to use night drainage system and how to clean it)

PREOP AND POSTOP INSTRUCTION FOR CONTINENT URINARY DIVERSION PATIENT

Preop
• Assesses patients’ current knowledge of the procedure and any specific concerns
• Clarifies surgical procedure to assure informed consent: explains/clarifies reservoir construction, placement of abdominal stoma, and longterm requirement for stomal catheterization to drain reservoir multiple times each day
• Explains all of the following: basics of surgical procedure, reason for bowel prep, no change in GI tract function, stoma, purpose of postop tubes and drains,
reservoir catheter to protect nipple valve and new anastomotic lines, ureteral stents to maintain patency of ureters and protect anastomotic lines

• Assures understanding of management principles and commitment to catheterization schedule and longterm followup

• Male patient undergoing cystoprostatectomy: potential for sexual dysfunction to include: loss of ejaculatory function; temporary loss of erectile function, with gradual recovery of function over 6 – 12 months postop (if nerve-sparing procedure done)—no guarantees that erectile function will be restored; no loss of sensation or orgasm

**Postop**

• Instruction in intermittent intubation: initially Q 1 – 2 hours—interval advanced by 1 hr each week until Q 4 hr schedule is established; then Q 4 hrs + HS and immediately upon awakening; many patients needs to catheterize once during night.

  -- Explains sterile technique is not needed; this is clean procedure that can be performed in any public restroom

  -- Explains catheterization is not uncomfortable because there are no nerve endings in stoma

  -- Emphasizes importance of “PRN” catheterizations for sensation of fullness and

    **strongly emphasizes importance of catheterizing on schedule**

• Instructs patient on reservoir irrigation (if applicable): explains need to irrigate till clear 1 – 2 x daily (with tap water or saline)

• Instructs patient in catheter care: wash with soap and water before each use; if unable to wash catheter after each use, can use “Two-Baggie” system (place several clean catheters in “clean” baggie; after catheter is used, place it in “dirty baggie”—then clean catheters at end of day)
• Emphasizes the following elements of self-care:

-- Must carry catheter at all times

-- Management difficult intubation (try again in 10 – 15 minutes; try different position or smaller catheter; try instilling air or water while advancing catheter; don’t let reservoir overfill)

-- Importance adequate fluid intake evenly spaced throughout day

-- Importance MedicAlert bracelet

-- S/S pouchitis and UTI: Pouchitis (itching or burning in pouch; increased mucus production; possible bleeding; “urgency/feelings of fullness” at low volumes); UTI (cloudy malodorous urine; malaise; flank pain)

-- Stomal/peristomal skin care (protection with absorptive pad)

PREOP AND POSTOP TEACHING FOR ILEAL ANAL ANASTOMOSIS (2 STAGE PROCEDURE)

Preop

• Assesses patient’s current knowledge regarding procedure and any specific concerns

• Clarifies surgical procedure to assure informed consent (basic overview of surgical procedure to include removal of colon, creation of reservoir, need for temporary ileostomy, and planned takedown)

• Assures understanding of temporary ileostomy and need for pouch

• Explains potential for diarrhea and possible leakage for 1st few months following ileostomy takedown (not an issue after Stage 1 but is an issue after Stage 2)

• Explains that ileal-anal reservoir procedure precludes anal intercourse
Postop Stage 1 of 2-Stage Procedure

• Instructs patient in ileostomy management to include pouch emptying, pouch change procedure, dietary modifications, measures to control gas, prevention and management food blockage, medication restrictions, prevention fluid-electrolyte imbalance, etc (see competency on postop teaching for ileostomy patient)
• Instructs patient in sphincter exercises to be initiated after ileal anal suture line healed
• Explains importance of perianal skin care (use of moisturizer-moisture barrier combination to protect against enzymatic mucus)

Postop Stage 2 of 2-Stage Procedure

• Instructs patient in measures to reduce diarrhea and stool frequency: low roughage, low fat diet; bulking agents; purposeful delay in defecation to “stretch” reservoir (use of pelvic muscle contractions and deep breathing to delay defecation); antidiarrheal medications
• Instructs patient in measures to prevent skin breakdown: moisture barrier ointments + perianal absorptive pads + cotton underwear + unscented white toilet paper
• Explains signs and symptoms of potential complications: pouchitis (fecal frequency and urgency, itching and burning in reservoir, cramping, increased mucus production, bleeding)
CONTINENCE COMPETENCIES

Instruction in Pelvic Muscle Exercises

• Determines patient’s candidacy: cognitively intact and able to voluntarily contract pelvic muscles; diagnosis of overactive bladder/urge incontinence and/or stress incontinence related to urethral hypermobility (patient with severe stress incontinence related to intrinsic sphincter deficiency usually not a candidate)

• Explains rationale for pelvic muscle exercises: repetitive contractions improve strength of contraction and ability to “hold” the contraction, which improves the ability to control urinary elimination

• Assists patient to accurately identify and isolate pelvic muscles via one of the following:
  -- Placement of 1 – 2 gloved fingers in vagina or 1 gloved finger in anal canal with other hand on abdominal wall; instruction to patient to “tighten and lift as if trying to interrupt urinary stream or trying NOT to pass gas”; verbal feedback to patient regarding ability to correctly tighten and lift without contracting abdominal or gluteal muscles
  -- Assessment of patient’s ability to use pelvic muscles to interrupt or reduce urinary stream
  -- Biofeedback assessment of pelvic muscle contraction and accessory muscle recruitment

• Establishes appropriate exercise program for patient based on current functional status and providing for strengthening of both fast twitch fibers (“contract as
hard as you can and quickly relax”) and slow twitch fibers (“contract and hold for as long as you can”)

Repetitions per day: 30 – 50 (patient with very weak muscles should begin with fewer repetitions)

Goal for endurance should be based on current ability to hold contraction

• Instructs patient in KNACK (purposeful contraction of pelvic muscles prior to activities causing increase in abdominal pressure, e.g., coughing)

• Modifies program appropriately:
  For patient who has significant problems with identification and isolation of pelvic muscles, consider biofeedback OR recommend use of quadriceps exercises (abduction and adduction against resistance) OR consider use of e stim or magnetic innervation

Instruction in Bladder Control/Urge Inhibition Strategies

• Determines patient’s candidacy: cognitively intact and motivated to improve bladder control

• Explains basis of program to patient (use of specific strategies to control urinary urgency and prevent leakage)

• Instructs patient in “Freeze-Squeeze-Breathe” sequence of interventions in response to sudden urgency
--Stand still or sit down; do not attempt to run to bathroom

--Contract the pelvic muscles (either do 1 strong contraction held for 10 seconds
or do 3 brief limited contractions – contract/release; contract/release; contract/
release)

--Focus on deep breathing for 20 – 30 seconds

Repeat pelvic muscle contractions alternating with deep breathing until urgency
is controlled.

• Once urgency is controlled, instruct patient to walk slowly to bathroom.

Note: If patient is on bladder retraining program, instruct patient to use distraction
to delay voiding till next scheduled time.

**Instruction in Bladder Retraining Program**

• Determines patient’s candidacy: cognitively intact and motivated to improve
  bladder control; able to use urge inhibition strategies to control urgency

• Correct reversible factors (e.g., elimination of irritants, tx constipation, correction
  atrophic urethritis, etc.)

• Have patient complete bladder chart to determine current voiding interval

• Instruct patient to void “by the clock”, not by “urge”: base initial schedule on
  current voiding interval. Instruct patient to use urge inhibition strategies to
control urgency and distraction to delay voiding till next scheduled time to void. (May help to use kitchen timer to prevent urgency secondary to “clock-watching”)

• Increase voiding interval by 15 minutes each week.

**Instruction in Prompted Voiding/Scheduled Voiding**

• Determines patient candidacy for program

  Prompted Voiding: ability to accurately report continence status (wet vs dry);
  ability to follow simple instructions; ambulatory with assistance

  Scheduled Voiding/Habit Training: patient who is unable to accurately report continence status but who *can* follow simple instructions; ambulatory with assistance

• Conducts 2 - 3-day bladder chart/toileting trial to determine current voiding interval

  Bladder chart only: Place patient in absorptive products; check Q 1 hr and record wet vs dry; record fluid intake (type and amount)

  Combination bladder chart/toileting trial: Toilet patient Q 2 hrs and record voluntary voids and episodes of leakage + fluid intake for at least 48 – 72 hours

• Evaluates bladder chart to assure voiding interval of at least 2 hours: if pt voiding more often than Q 2 hours, determine cause and correct (irritants, constipation, atrophic urethritis causing overactive bladder vs retention and incomplete emptying)
For patient with persistent frequency following correction reversible factors (no retention), consider trial of anticholinergics

• For patient with voiding interval of at least 2 hrs:
  Prompt or toilet on schedule: record successful voids vs leakage episodes
  Supplement with appropriate absorptive products

**Instruction in Clean Intermittent Catheterization**

• Determines patient candidacy for program: patient with incomplete bladder emptying who is cognitively intact and motivated/willing to perform CIC: sufficient mobility and dexterity to access urethral and control catheter insertion

• Establishes schedule for catheterization based on available data regarding functional bladder capacity (bladder chart or urodynamic studies) and patterns of fluid intake (fluid intake history vs record of fluid intake)
  Usual frequency: Q 3 – 4 hours; increased frequency needed during periods of increased fluid intake or following diuretic
  Note: Will need to “tweak” schedule based on records (volume of urine obtained during catheterization and episodes of leakage)

• Teaches patient positioning guidelines/tips for locating urethral opening
  Males: hold penis straight up or at right angle to body (non-dominant hand)
  Females: separate labia with non-dominant hand; use dominant hand to identify
urethral opening by touch (visualization typically needed initially but should learn to locate by touch)

• Teaches patient clean technique for catheterization
  Wash catheter with soap and water (or use catheter that has been previously cleansed and stored in Zip-Lock container)
  Wash hands with soap and water or use waterless hand cleanser or disposable antibacterial wipes to cleanse hands
  Lubricate catheter with water-soluble lubricant (females – lubricate distal end of catheter; males – place “mound” of lubricant at urethral opening so that catheter picks up lubricant during insertion)
  Insert catheter till urine begins to flow – withdraws catheter gradually when urine flow ceases

• Teaches patient care of equipment (washing with antibacterial soap and water; thorough rinsing; dry storage; replacement when catheter becomes brittle, etc.)
  Note patients with 2 UTIs in one year candidates for single-use catheters

• Teaches patient to maintain records of time catheterization performed/
  volume of urine obtained; episodes of leakage; time, type, & amt of fluid intake;
  uses records to help patient “fine-tune” schedule for catheterization

• Instructs patient in importance adequate fluid intake and regularly spaced fluids;
  instructs patient in prompt recognition early indicators UTI (new onset leakage, etc.) and appropriate response (notification health care provider)
Management Patient with Indwelling Urethral Catheter

• Assures patient need/candidacy for indwelling catheter: incomplete bladder emptying or reflex incontinence in patient who is not candidate for CIC; patient with trunk ulcer in whom healing is compromised by urinary incontinence; patient who is terminally ill for comfort; homebound patient whose caregiver is unable to manage his/her incontinence in any other way

• Assures correct catheter selection
  -- Smallest effective catheter size (usually 14 – 16 French) with smallest effective balloon correctly inflated (usually 5 cc balloon inflated with 10 cc water; 30-cc balloon indicated ONLY when bladder neck has been destroyed and 5-cc balloon is insufficient to provide catheter retention)
  -- For patient with chronic problems with catheter obstruction: consider use of silicone catheter
  -- Acute care: consider use of catheter impregnated with antimicrobial

• Assures catheter stabilization with catheter strap or adhesive stabilizing device

• Encourages adequate fluid intake to reduce risk of ascending bacteriuria
• Instructs caregivers in importance of careful technique when emptying drainage bag: use of gloves and patient-specific graduate container that is used only for urine; careful technique to avoid contact between drainage spout and graduate cylinder; use of alcohol wipe to cleanse spout before replacement in securing chamber.

• Correctly problem-solves for leakage around patent catheter (bladder spasms): assesses for constipation, concentrated urine, large catheter or large balloon, unstabilized catheter, evidence of UTI and intervenes appropriately (bowel program, increased fluid intake, insertion of smaller catheter with smaller balloon; catheter stabilization; insertion of new catheter and specimen sent for C & S).

  Does not recommend/initiate placement of larger catheter or larger balloon.

• Recommends routine catheter irrigation ONLY for patient with chronic problems with catheter obstruction: recommends QOD gravity instillations of Renacidin 50 cc x 2
Management Reversible Factors Contributing to Urinary Incontinence

• Delirium (reversible alternation in mental status): assesses for causative factors (infection, medications, electrolyte abnormalities – esp in elderly) and intervenes appropriately
• Infection/Irritants: screens for UTI (UA) – if UA positive, sends specimen for C & S and assures appropriate tx; screens for irritants (caffeine, aspartame, alcohol, tobacco, etc.) and counsels patient regarding reduction of irritants
• Atrophic urethritis/vaginitis: screens for prominent urethra (urethral caruncle) or atrophic vaginal mucosa (pale, smooth, dry); recommends/obtains Rx for topical estrogen (intravaginal for pt with vaginal sx or who needs pessary; periurethral for pt with symptomatic urethritis but no vaginal sx and for whom pessary not indicated/planned)
• Pharmaceutical: screens for meds contributing to leakage in pt presenting with overactive bladder, stress incontinence, functional incontinence (alcohol, diuretics, alpha adrenergic antagonists); screens for meds contributing to retention in patient with incomplete emptying (meds with anticholinergic component; alpha adrenergic agonists); collaborates with prescribing provider to modify meds when indicated
• Psychological: screens for evidence of depression and refers any pt with evidence of clinical depression to appropriate health care provider for medications/counseling
• Excessive urine production: determines causative factors (diuretics, excess fluid intake, etc) and counsels patient accordingly
• Restricted mobility: assesses gait, ambulatory stability, footwear, use of ambulatory aids, distance to BR; intervenes appropriately to assure safety and improve ability to get to BR in timely manner

• Stool impaction/chronic constipation: assesses pt for usual bowel pattern and evidence of retained stool (dullness to percussion all quadrants, etc.); initiates colonic cleansing program and bowel program

**Colonic Cleansing Program**

• Explains purpose of program to patient (need to cleanse colon of retained stool to reduce pressure on bladder and improve bladder function)

• Offers patient options for colonic cleansing:

  -- For patient with compromised sensorimotor function, best option is usually “bottom up” followed by “top down” on day when patient can stay at home

  Example: Dulcolax Suppository or Fleets Enema followed by Fleets Phospho Soda or other osmotic laxative

  Repeat till stool mushy (cleanout usually complete within 2 days)

  -- For patient with intact sensorimotor function but impacted stool in rectum:

  Removal impacted stool followed by cleansing enema (Fleets) followed by oral laxative such as Fleets Phospho Soda or other osmotic agent; instructs patient to repeat laxative till stool mushy

  -- For patient with intact sensorimotor function and no impacted stool:
Take oral laxative nightly till stool mushy (may use “usual” laxative or may take any osmotic agent, e.g., Fleets Phospho Soda or Milk of Magnesia or Mag Citrate or Lactulose, etc.)

• Places patient on program to assure adequate fiber and fluid intake and to prevent recurrence of “loaded colon”

  Fiber: 20 – 30 gm/day (dietary modifications vs power pudding vs fiber supplements)

  Fluid: approximately 30 cc/Kg body wt/day (based on normal weight; translates into 8 – 10 8-oz glasses per day for adults)

  Oral laxative or suppository/enema PRN (e.g., when pt has not had bowel movement for 2 days)

  Laxative Hierarchy

  Level One: Fiber supplements/bulking agents

    Add bulk to stool and hold water; help to normalize stool consistency and contribute to normal bowel function

    Adequate fiber critical to overall health; not really a laxative

  Options: Dietary modifications (give pt a list of high fiber foods, e.g.: flaxseed, FiberOne cereal, prunes, etc)

    Power pudding (1 cup unprocessed bran + 1 cup applesauce + ¼ cup prune juice): 1-2 tbsp/day initial dose + adequate fluids; titrate
to desired results)

Fiber supplements (FiberSure, Metamucil, Citrucel, etc.): follow manuf guidelines for recommended initial dose; titrate daily dose to desired results; assure adequate fluid intake)

Note: Citrucel less likely to cause increased gas

Level Two: Osmotic agents

Work by pulling fluid into colon, which softens stool and distends bowel, resulting in increased peristaltic activity

Safe for repetitive and long-term use (if needed)

Options: Milk of Magnesia, Fleets Phospho Soda, Magnesium Citrate,

Lactulose, Sorbitol, Miralax, etc.

Considerations: Consider cardiac and renal status before recommending saline-based agents

Level Three: Stimulant agents (Dulcolax and Senna)

Work by stimulating peristaltic activity; currently recommended primarily for PRN use
**Stimulated Defecation**

- Determines candidacy for program: patient with significant sensorimotor dysfunction or dementia leading to inability to recognize rectal distention and/or effectively control stool elimination

  **Note:** Patient with dementia and patient who is unable to perform the procedure will need caregiver assistance

- Initiates colonic cleansing (if needed) and program to establish normal stool consistency (goal is stool that is formed and bulky but not hard)

- Establishes appropriate schedule (daily or QOD, same time of day)

- Selects appropriate peristaltic stimulus: suppository versus mini-enema versus low-volume tap water enema given with retention balloon

- Instructs patient/caregivers in appropriate administration of stimulant agent
EMORY UNIVERSITY WOUND OSTOMY & CONTINENCE
NURSING EDUCATION PROGRAM

STUDENT CLINICAL CHECKLIST & EVALUATION FORM

Directions: The student should make a notation of the date she/he observed or performed a particular clinical skill. The preceptor will then initial and date the appropriate column to reflect the student’s level of competence.

At the end of each rotation, the preceptor should complete the clinical evaluation component of the form.

NOTE: All preceptors who sign the clinical checklist and evaluation form need to sign the attached signature form.
SIGNATURE PAGE:

<table>
<thead>
<tr>
<th>Initials</th>
<th>Printed Name AND Signature</th>
<th>Agency</th>
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Clinical Log, Checklist, and Evaluation Form

Student Name:________________________________________________________

Clinical Sites:     Clinical Site     Dates of Preceptorship
____________________________________________________________________
____________________________________________________________________
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Clinical Caseload/Experiences (Total)

<table>
<thead>
<tr>
<th>Type of Patient/Learning Experience</th>
<th>Number of Visits/Learning Experiences</th>
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</thead>
<tbody>
<tr>
<td>Standard Diversions (Fecal or Urinary)</td>
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<tr>
<td>Continent Diversions (Fecal or Urinary)</td>
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<tr>
<td>Chronic Wound Management (Pressure Ulcers, Leg Ulcers, Etc)</td>
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<tr>
<td>Management Draining Wounds/Fistulas</td>
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<tr>
<td>Foot and Nail Care</td>
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<tr>
<td>Percutaneous Tube Management</td>
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<tr>
<td>Assessment/Mgmt Urinary or Fecal Incontinence</td>
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<tr>
<td>Other (Specify)</td>
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</table>

Indicate experiences by “hash marks”; on attached checklist, make a notation of the date you observed or performed a specific procedure. The preceptor will initial and date the column indicating your level of independence. All forms must be turned in prior to course completion.
<table>
<thead>
<tr>
<th>Student Name: ______________________________</th>
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<thead>
<tr>
<th></th>
<th>Student Notation Date</th>
<th>Preceptor Evaluation Level of Competence</th>
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<tbody>
<tr>
<td></td>
<td>Date skill performed</td>
<td>Identifies principles Did not perform procedure Date/Initial</td>
</tr>
<tr>
<td>1. WOUND MANAGEMENT</td>
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<tr>
<td>1.1 Risk Assessment</td>
<td></td>
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<tr>
<td>Identifies risk factors for skin breakdown and recommends appropriate preventive measures</td>
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<tr>
<td>1.2 Selection/Recommendations Regarding Support Surfaces</td>
<td></td>
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<tr>
<td>Identifies need for high level vs mid level surface based on patient assessment</td>
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<tr>
<td>1.3 Assessment &amp; Documentation of Wound Status</td>
<td></td>
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<tr>
<td>Accurately assesses wound status including all critical parameters</td>
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<tr>
<td>1.4 Differential assessment of lower extremity ulcers</td>
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<tr>
<td>Accurately assesses vascular and sensorimotor status</td>
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<td>--Monofilament Testing</td>
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<tr>
<td>Determines probable etiology and formulates appropriate management plan</td>
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<tr>
<td>Provides appropriate education and referrals</td>
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<tr>
<td>1.5 Development of Comprehensive Wound Mgmt Plan</td>
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<tr>
<td>Identifies etiologic factors and corrective measures</td>
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<tr>
<td>Identifies and addresses systemic factors that impact on wound healing</td>
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</table>

Student Name: ______________________________
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<thead>
<tr>
<th>1. WOUND MANAGEMENT Cont’d</th>
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<td>1.5 Wd Mgmt Plan Cont’d</td>
<td>Date skill performed</td>
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<td>1.6 Primary Topical Tx</td>
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<td>Identifies principles</td>
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<td>• Wd cleansing</td>
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<td>• Pulsed lavage</td>
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<td>• Selection and application</td>
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<td>with mod-heavy exudate</td>
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<td>• Selection and application</td>
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<td>1.7 Selection &amp; Application</td>
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<td>Active Wd Therapies</td>
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<tr>
<td>• Identifies indications &amp;</td>
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<td>makes appropriate recom.</td>
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<td>• Growth factor therapy</td>
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<td>• Electrical stimulation</td>
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<td>• NPWT</td>
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<td>• Human Skin Equivalents</td>
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<td>• Hyperbaric Oxygen Tx</td>
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<tr>
<td>• Other</td>
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## I. WOUND MANAGEMENT

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### 1.8 Conservative Bedside Debridement

- Identifies indications & precautions
- Performs procedure with correct technique

### 1.9 AgNO3 cauterization hypertrophic tissue or closed wound edges

(recognizes need and performs correctly)

### 1.10 Selection/application compression therapy

- Identifies indications & contraindications
- Selects and applies compression therapy appropriately
- Unna’s Boot
- Layered wraps
- Modified compression
- Stockings
- Other

### 1.11 Implementation Off-loading Devices

- Recognizes need for offloading
- Selects appropriate device based on assessment data
- Provides appropriate education to pt/family
| Student Name: ______________________________________ |

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<th>I. WOUND MANAGEMENT Cont’d</th>
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<td>1.12 Fistula Management</td>
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<tr>
<td>• Develops and implements mgmt plan based on wd assessment/type of output</td>
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<td>• Trough Procedure</td>
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<td>1.13 Foot and Nail Care</td>
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<tr>
<td>• Performs complete assessment to include perfusion, sensorimotor status, status of skin and nails, footwear</td>
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<tr>
<td>• Thins nails, pares corns &amp; callouses, manages ingrown nails correctly</td>
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<td>• Provides appropriate education and referrals</td>
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<td>1.14 Percutaneous Tube Management</td>
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<tr>
<td>• Provides appropriate stabilization/skin care</td>
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<td>• Implements program to contain drainage if needed</td>
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<tr>
<td>2. OSTOMY/CONTINENT DIVERSION MGMT</td>
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<tr>
<td>2.1 Preop Counseling</td>
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<tr>
<td>• Provides appropriate explanation of planned procedure and impact on fecal/urinary elimination and sexual function (if applicable)</td>
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<tr>
<td>• Responds appropriately to pt’s concerns/questions</td>
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### 2. OSTMOMY MGMT Cont’d

**2.2 Stoma Site Selection**
- Identifies appropriate site for stoma based on planned procedure, abd contours, rectus muscle
- Marks stoma site with indelible ink/Sharpie

**2.3 Selection, Sizing, and Application Pouching System**
- Selects appropriate pouching system based on type of output, abd contours, and pt dexterity
- Sizes and applies pouch correctly
- Uses sealants, powder, & paste appropriately
- Provides appropriate pt & caregiver education

**2.4 Removal Loop Support**
- Determines readiness for removal loop support
- Removes loop support correctly

**2.5 Colostomy Irrigation**
- Assesses pt’s candidacy & readiness for irrigation
- Performs procedure based on established guidelines (including appropriate equipment and type/vol of solution)
- Provides appropriate education to pt/caregiver
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<td>Performs independently</td>
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<tr>
<td>2.6 Intubation/Irrigation of Continent Diversion</td>
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<td>Identifies principles</td>
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<td>Did not perform procedure</td>
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<td>Performs independently</td>
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<tr>
<td>2.7 Catheterization of Urinary Stoma</td>
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<td>Identifies indications for catheterization as opposed to “clean pouch” collection</td>
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<td></td>
<td>Utilizes sterile technique and appropriate procedure to obtain urine specimen</td>
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<tr>
<td>2.8 Pt/Family Teaching &amp; Counseling</td>
<td></td>
<td>Assesses pt’s and family’s knowledge level &amp; learning style &amp; provides appropriate education in self care</td>
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<tr>
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<td>Provides appropriate education regarding dietary and fluid modifications based on type of diversion</td>
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<td>Provides supportive counseling re: change in body image/adaptation issues</td>
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<td>Provides appropriate information regarding sexual activity/intimacy issues</td>
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<td>Student Name:______________________________</td>
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<td>Preceptor Evaluation Level of Competence</td>
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<td><strong>Student Notation Date</strong></td>
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<th>2. OSTOMY MGMT Cont’d</th>
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<td>Date skill performed</td>
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<thead>
<tr>
<th>2.9 Assessment &amp; Mgmt</th>
<th>Peristomal/Stomal Complications</th>
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<tbody>
<tr>
<td>•Assesses stoma and peristomal skin for evidence of complications</td>
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<tr>
<td>•Performs mini-endoscopy for questionable stoma viability</td>
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<tr>
<td>•Correctly identifies etiology of peristomal or stomal complication and intervenes appropriately</td>
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<tr>
<td>•Provides appropriate education for pt and caregiver</td>
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<td>•Initiates referrals when indicated</td>
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| 2.10 Other |  |  |  |
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<th>3. INCONTINENCE MGMT</th>
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<tbody>
<tr>
<td>3.1 Assessment and Mgmt</td>
<td>Urinary Incontinence</td>
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<tr>
<td>•Utilizes data from focused history and physical and bladder chart to determine etiologic factors and patterns of bladder/sphincter dysfunction</td>
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<tr>
<td>•Utilizes special assessment techniques to evaluate bladder emptying and pelvic muscle strength (bladder scan, uroflow, etc.)</td>
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### 3. INCONTINENCE MGMT Cont’d

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<td>procedure Date/Initial</td>
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|                       | Performs w/guidance   | Performs independently |
|                       | Date/Initial          | Date/Initial          |

#### 3.1 Urinary Incontinence Cont’d

- Identifies reversible factors and initiates corrective care/education
- Identifies primary type of dysfunction and treatment options
- Provides appropriate education:
  - Attention to reversible factors
  - Instruction in CIC
  - Scheduled/Prompted Voiding
  - Urge Inhibition/Bladder Retraining
  - Pelvic Floor Muscle Reeducation
  - Recommendations re: absorptive products and skin care

#### 3.2 Assessment and Mgmt Bowel Dysfunction or Fecal Incontinence

- Utilizes data from focused H & P and bowel chart to determine etiologic factors and patterns dysfunction
- Utilizes special assessment techniques to evaluate ano-rectal function
- Identifies primary type of dysfx & treatment options
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### 3. INCONTINENCE MGMT Cont’d

- Identifies principles
- Did not perform procedure
- Performs w/guidance
- Performs independently

### 3.2 Mgmt Bowel Dysfunction Cont’d

- Provides appropriate education based type of dysfunction:
  - Management Diarrhea or Constipation (correction stool consistency)
  - Bowel Training
  - Stimulated Defecation

- Provides appropriate recommendations re: containment/absorptive products and skin protection

- Makes appropriate recommendations re: options for mgmt high volume liquid stool (pouching, nasal trumpet, internal bowel mgmt system, etc.)

- Other
# MASTERY OF CLINICAL OBJECTIVES

S = Satisfactory (Clearly meets objectives)  
AI = Area for Improvement (Meets objective minimally or intermittently)  
U = Unsatisfactory (Does not meet objective)*

*Narrative documentation required for unsatisfactory ratings

<table>
<thead>
<tr>
<th>Student Name: __________________________________________________________</th>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Rotation 1</th>
<th>Rotation 2</th>
<th>Rotation 3</th>
<th>Rotation 4</th>
<th>Rotation 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Site</strong></td>
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<tr>
<td><strong>Dates</strong></td>
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<table>
<thead>
<tr>
<th><strong>Technical Skills</strong></th>
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</thead>
<tbody>
<tr>
<td>• Demonstrates knowledge of principles involved in patient care situations/procedures</td>
<td></td>
</tr>
<tr>
<td>• Relates classroom content to clinical setting</td>
<td></td>
</tr>
<tr>
<td>• Provides for patient comfort and safety at all times</td>
<td></td>
</tr>
<tr>
<td>• Asks for assistance or input when appropriate</td>
<td></td>
</tr>
<tr>
<td>• Utilizes nursing process to develop, implement, and evaluate care for assigned patients</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Interpersonal Skills</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td>• Demonstrates empathy and active listening skills in interactions with patients and families</td>
<td></td>
</tr>
<tr>
<td>• Facilitates patient and family adaptation by providing supportive counseling, appropriate information, assistance in problem solving, and referrals when indicated</td>
<td></td>
</tr>
<tr>
<td>• Utilizes collaborative communication techniques to interact effectively with other</td>
<td></td>
</tr>
<tr>
<td>Clinical Site</td>
<td>Rotation 1</td>
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<td>-------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>Dates</td>
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<tr>
<td>members of the health care team</td>
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<tr>
<td>• Accepts constructive criticism and uses it to improve practice</td>
<td></td>
</tr>
<tr>
<td>Patient Teaching Skills</td>
<td></td>
</tr>
<tr>
<td>• Assesses pt’s knowledge level, learning style, and learning readiness</td>
<td></td>
</tr>
<tr>
<td>• Provides appropriate education to pt and caregiver based on procedure/clinical problem and current knowledge level/learning readiness</td>
<td></td>
</tr>
<tr>
<td>• Utilizes appropriate teaching learning strategies based on content (e.g., uses demo and return demo for instruction in skill)</td>
<td></td>
</tr>
<tr>
<td>• Determines appropriate discharge and followup plans based on assessment of self care status and available resources</td>
<td></td>
</tr>
<tr>
<td>Documentation Skills</td>
<td></td>
</tr>
<tr>
<td>• Identifies critical data to be included in documentation (to include assessment findings, impression, recommendations, and interventions)</td>
<td></td>
</tr>
<tr>
<td>• Utilizes correct terminology</td>
<td></td>
</tr>
<tr>
<td>• Communicates pertinent assessment information and interventions to nursing/medical staff as appropriate</td>
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</tr>
</tbody>
</table>
Narrative (Required for NI and U ratings; otherwise optional)

Rotation 1:

• Strengths:

• Areas for Improvement:

_____________________                      ___________________________
Preceptor        Student

Rotation 2:

• Strengths:

• Areas for Improvement:

____________________                    _____________________________
Preceptor                                             Student
Rotation 3:

• Strengths:

• Areas for Improvement:

__________________________________________________________________________

Preceptor                                                  Student

Rotation 4:

• Strengths:

• Areas for Improvement:

__________________________________________________________________________

Preceptor                                                  Student
Education Techniques for Lifelong Learning

Principles of Adult Learning

Jannette Collins, MD, MEd

The adult education literature supports the idea that teaching adults should be approached in a different way than teaching children and adolescents (preadults). Many aspects of effective teaching apply to all age groups. However, adults have had more life experiences and in many ways are differently motivated than children. Adults are more self-directed in their learning and have a greater need to know why they should learn something. Self-initiated learning is the most lasting and pervasive. Learning should be applicable to the learner’s work or to other responsibilities valued by the learner. Thus, it is important that the instructor know the learner’s needs and design learning activities that are relevant to those needs. The learner should be actively involved in learning, with the instructor acting as a facilitator. The instructor should recognize that adults have different learning styles and should tailor instruction to the characteristic ways adults prefer to learn. Understanding the principles of adult learning can help teachers become better facilitators of learning.

RSNA, 2004
Introduction
The adult education literature supports the idea that teaching adults should be approached in a different way than teaching children and adolescents (preadults). Many aspects of effective teaching apply to all age groups. However, adults have had more life experiences and in many ways are differently motivated than children. Adults are more self-directed in their learning and have a greater need to know why they should learn something. They have set habits and strong tastes. They may have prejudices, which are detrimental to the learning environment. They want a choice in what they learn. These characteristics of adult learners can be addressed in the learning environment to optimize learning. Understanding the principles of adult learning can help teachers become better facilitators of learning. The importance of these principles is recognized in educational and business settings (1). This article discusses the differences in how adults and preadults learn, the science of adult learning principles, and how these principles can be applied to radiologic education.

Adult versus Child Learners
The assumption that teachers of adults should use a style of teaching different from that used with children is based on “informed professional opinion; philosophical assumptions associated with humanistic psychology and progressive education; and a growing body of research and theory on adult learning, development, and socialization” (2,3). Malcolm Knowles, who is considered the father of adult learning theory (4–6), coined the term andragogy to describe the study of adult learning. He distinguished adult learning from pedagogy, the study of how children learn. Initially, it was thought that pedagogy and andragogy were two distinct processes, but current theory sees the two processes on a continuum, with pedagogy on one end and andragogy on the other. What separates these two processes on the continuum is the quantity and quality of experiences the learners have when they enter the learning experience and the amount of control that the learners have over the learning process and environment (7).

By contrasting andragogy, or learner-centered methods, with pedagogic, or teacher-centered methods, Knowles argued that adults differ from preadults in a number of important ways that affect learning. According to Knowles, the pedagogic model is inappropriate for use with adults. However, since he first proposed the model, Knowles has gradually modified his position regarding the contrast between how preadults learn (pedagogy) and how adults learn (andragogy). According to Feuer and Gebler (3,8), “what he once envisioned as unique characteristics of adult learners, he now sees as innate tendencies of all human beings, tendencies that emerge as people mature.”

Science of Adult Learning
Until recently there has been no effort to test whether teachers actually use a different style when teaching adults. In two different studies (2,9,10), researchers found that teachers believed adults to be significantly more intellectually curious, motivated to learn, willing to take responsibility for their learning, willing to work hard at learning, clear about what they want to learn, and concerned with the practical applications and implications of learning than were children and adolescents. In one of these studies (10), the following groups of teachers were found to be the most flexible and responsive in both adult and preadult classes: less-experienced teachers, female teachers, teachers who taught personal enrichment adult classes, secondary teachers, and teachers who reported high teaching differences between how they taught adults and preadults.

Although teachers perceive adults as being different, these perceptions do not automatically translate into differences in approaches to teaching (3). Perhaps the real issue is not whether learner-centered methods are universally applied by teachers of adults, but rather for what purposes and under what conditions such methods (and others) are most appropriate and effective and in fact are used by teachers (2). The educational approach should be based on the purpose of the teaching-learning situation. The andragogic or learner-centered approach is probably not appropriate in all adult education settings (8). The approach should be based on the goals of the learners, the educational content, and other factors. The concept of adult learning is relatively new, and more research is needed in this area to determine the most effective applications of adult learning principles.

Adult Learning Principles
There are a number of “principles” that have been associated with adult learning (Table 1). Some of these are unique to adult learning and some apply to preadult learning. (As stated, current theory sees the two processes on a continuum with pedagogy on one end and andragogy on the other.)
Table 1
Principles of Adult Learning and Their Application to Radiologic Education

<table>
<thead>
<tr>
<th>Principle</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults have accumulated a foundation of life experiences and knowledge.</td>
<td>Connect life experiences and prior learning to new information.</td>
</tr>
<tr>
<td>Adults are autonomous and self-directed.</td>
<td>Involve participants in the learning process, serving as a facilitator and not just a supplier of facts.</td>
</tr>
<tr>
<td>Adults are goal-oriented.</td>
<td>Create educational programs that are organized with clearly defined elements, clearly showing how the program will help participants reach their goals.</td>
</tr>
<tr>
<td>Adults are relevancy-oriented and practical.</td>
<td>Help learners see a reason for learning something by making it applicable to their work or other responsibilities of value to them.</td>
</tr>
<tr>
<td>Adults (all learners) need to be respected.</td>
<td>Acknowledge the experiences that adult participants bring to the learning environment, allowing for opinions to be voiced freely.</td>
</tr>
<tr>
<td>Adults are motivated to learn by both intrinsic and extrinsic motivation.</td>
<td>Show learners how the learning will benefit them and create a comfortable and appropriately challenging learning environment.</td>
</tr>
<tr>
<td>Adults learn best when they are active participants in the learning process.</td>
<td>Limit lecturing and provide opportunities for sharing of experiences, questions, and exercises that require participants to practice a skill or apply knowledge.</td>
</tr>
<tr>
<td>Not all adults learn the same way.</td>
<td>Accommodate different learning styles by offering a variety of training methods (e.g., group discussion, role-playing, lecturing, case studies, panel/guest expert, games, structured note-taking, individual coaching, demonstration, and variation in media used) and by using visual, auditory, and kinesthetic techniques.</td>
</tr>
<tr>
<td>Adults learn more effectively when given timely and appropriate feedback and reinforcement of learning.</td>
<td>Provide opportunity for feedback from self, peers, and instructor.</td>
</tr>
<tr>
<td>Adults learn better in an environment that is informal and personal.</td>
<td>Promote group interaction.</td>
</tr>
</tbody>
</table>

Adults bring a great deal of background experiences and prior learning to any new learning process. Acknowledging adults' understanding and experiences validates them as competent and capable learners. It is important that the facilitator of adult learning help adult students see the connections between earlier learning experiences and new information. Thus, teachers of adults should begin educational sessions by finding out what the adults already know about the topic. For example, knowing whether or not a group of medical students has an understanding of interstitial lung diseases would be helpful to the radiology teacher who plans to show the students radiologic examples of the diseases. A student with no fundamental knowledge of such diseases, who may be unfamiliar with the disease names, would have no current knowledge to tie the radiologic images to.

There are several effective strategies for assessing prior learning (7). One is the KWL strategy, in which the teacher asks learners (on a handout) what they already KNOW about the topic, what they WANT to learn about the topic, and (at the end of the session) what they did LEARN about the topic. Another strategy is a pre-session quiz about the topic. The quiz can be given several days or weeks before a session or at the beginning of the session. When an audience response system is used to test learner knowledge, both the learners and the instructor can find out what learners already know and whether the information they know is accurate. An additional strategy to assess prior learning allows participants to react, in writing, to statements or questions about the topic at the beginning of the session. A discussion of the responses ensues, allowing the instructor to review them with the group and ask for clarification about what was written. Obtaining this kind of information allows the instructor to facilitate an educational activity that has built-in flexibility, allowing on-the-spot changes to address current needs. The information is useless if it is not used to design an educational program that best meets the needs of the learners.
Knowles (4) promoted the concept of self-directed learning. He felt that adults should create personal learning objectives that would allow them to set individual goals and to practice using the new learning in practical ways. Self-initiated learning is the most lasting and pervasive (11). Learning is most effective when adults can proceed at their own pace, so independent study should be encouraged. Independent study can be facilitated by providing learners with references and handouts. Knowles created the concept of a learning contract, which allows participants to identify and write down personal goals and how they feel that these goals could be met. Instructors can share the intended agenda for the learning experience and ask for input from the learners, asking them what they would like to know about the topic. Their suggestions should not be the sole input into development of objectives and educational content. Learners may be unaware of things that they need to know, and the instructor needs to anticipate this based on experience with other learners at similar levels of development. Formal testing is one way to determine what learners do and do not know.

Adults are goal-oriented. They like to know how the educational activity will help them reach their goals. The facilitator should explicitly state this objective at the beginning of the activity. For example, a learner may attend a lecture on high-resolution computed tomography (CT) of the chest, with a goal to understand the different patterns of disease seen on CT scans. At the beginning of the lecture, the instructor outlines seven patterns that will be discussed and contrasted with each other, making it clear to the learner how the lecture will help him or her understand patterns of disease on CT scans in a way that will be applicable to his or her practice. To fulfill this need of adult learners, instructors should create lectures that are organized with clearly defined elements.

Adults desire course content to be relevant and practical. Learning should be applicable to the learner’s work or other responsibilities valued by the learner. In other words, adults want to know “what’s in it for me” (WIFM). They want content that can be applied to real-life situations. Adults tend to be problem-centered rather than subject-centered learners and learn best through practical applications of what they have learned. To create a problem-centered learning environment, the instructor needs to know what the learner’s needs are and to design learning activities that are relevant to those needs. Early in the learning experi-

ence, there should be an opportunity for the learner to identify his or her specific needs. Techniques that can be used to facilitate making content relevant are use of collaborative, authentic problem-solving activities; anticipating problems in the application of the new ideas to the learner’s setting and offering suggestions; and using stories to link theory to practice.

All learners need to be respected as individuals. Creating respectful learning environments, in which all opinions are valued, helps to alleviate any concerns or discomfort. Adults should participate voluntarily. In a true learning community, all participants, including the instructor, share ideas and learn from each other. The instructor is seen as a facilitator or guide rather than the only one with knowledge. Adults respond positively to comfortable physical environments, frequent breaks, snacks, and opportunities to collaborate with others in the session. Learners respond to personal interaction, such as when the instructor calls the learner by name and listens to the learner’s questions and viewpoints. The instructor should always be courteous and patient, assuring learners that mistakes are part of the learning process, and should encourage learners to support one another in learning endeavors. Learning takes place in an environment that is considered “safe” by the learner, one in which the learner feels he or she can be successful. An example of an unsafe environment is one in which radiology residents are belittled in front of their peers for not knowing a correct answer. Learners appreciate activities that use time effectively and follow a planned schedule. Otherwise, they feel that their time is not considered valuable. An instructor can create a respectful learning environment by considering what he or she would desire as a learner and treating learners in the same way.

Another aspect of adult learning is motivation, which is both intrinsic and extrinsic. At least six factors serve as sources of motivation for adult learning (12): (a) social relationships (making new friends, meeting a need for associations and friendships), (b) external expectations (complying with instructions from someone else, fulfilling the expectations or recommendations of someone with formal authority), (c) social welfare (improving one’s ability to serve mankind, preparing for service to the community, and improving one’s ability to participate in community work), (d) personal advancement (achieving higher status in a job, securing professional advancement, and staying abreast of competitors), (e) escape or stimulation (relieving boredom, providing a break in the routine of home or work, and providing a contrast to other exciting details of life), and (f) cognitive interest (learning for the sake of learning, seeking knowledge for its own sake, and
satisfying an inquiring mind). Successful continuing medical education courses provide opportunities for social relationship, personal advancement, and escape or stimulation.

Unlike children, adults have many responsibilities that they must balance against the demands of learning. Because of these responsibilities, adults have barriers against participating in learning (12). Some of these barriers include lack of time, money, confidence, or interest; lack of information about opportunities to learn; scheduling problems; "red tape"; and problems with child care and transportation. Typical motivations include a requirement for competence or licensing, an expected (or realized) promotion, job enrichment, a need to maintain old skills or learn new ones and adapt to job changes, or the need to comply with company directives. The best way to motivate adult learners is to enhance their reasons for participation and decrease the barriers. Instructors can motivate learners by establishing a friendly, open atmosphere of helpfulness and by setting the degree of difficulty of the learning experience high enough to challenge participants but not so high that they become frustrated by information overload.

Teaching is not something that should be done to the learner. The learner should be actively involved in learning and should be encouraged to be active. He or she should be given an opportunity to practice new behavior in a safe, supporting situation. Active participation engages learners in the learning process and enhances retention of new concepts. Active learning techniques include activities that are student-centered (e.g., not a "talking head" lecture), encourage sharing of experiences and questioning, and weave discussion sections with exercises that require learners to practice a skill or apply knowledge. In his book *Freedom to Learn*, Carl Rogers (13) distinguished two types of learning: cognitive (meaningless) and experiential (significant). Cognitive is seen as academic knowledge, whereas experiential equates to learning by doing. Rogers saw the qualities of experiential learning as personal involvement, self-initiated, evaluated by the learner, and having pervasive effects on the learner.

Transfer of learning is the result of training. It is the ability to use the information taught in the course in a new setting. Positive transference, like positive reinforcement, occurs when the learners use the behavior taught in the course. Negative transference, like negative reinforcement, occurs when the learners no longer do what they are told not to do. Negative transference results in a positive (desired) outcome. Transference is most likely to occur when learners can associate the new information with something that they already know (association), when the information is similar to material that participants already know (similarity), when the learner's degree of original learning was high, and when the information learned contains elements that are extremely beneficial on the job (critical attribute element) (12). Radiology review courses are an example of an educational activity in which learners benefit from new knowledge that is based on and reinforces current knowledge that the learner will apply in practice (clinical practice or in a certification examination).

Not all people learn in the same way. Research shows that there are many different learning styles or characteristic ways that adults prefer to learn. Individual learning styles are influenced by personality, intelligence, education, experiences, culture, and sensory and cognitive preferences. To engage all learners, it is best to vary the methods in which information is communicated. These methods can include small- and large-group discussion, role-playing, lecturing, case studies, games, questioning, and varying technology (e.g., media, video, computer, interactive). Studies reveal that over a period of 3 days, the retention of learning is 10% of what we read, 20% of what we hear, 30% of what we see (demonstration), 50% of what we see and hear (discussion), 70% of what we say (practice), and 90% of what we say as we do (teach others, immediate use). It follows that an effective learning protocol is to watch one (demonstration), do one (practice), and teach one (use new learning).

There are several different "learning intelligences" or ways in which individuals can learn information. Instructors should attempt to include as many of these different intelligences as possible in the design of their educational activities. These intelligences are linguistic (language and words), logical and mathematical (numbers and problems), spatial (perception of objects through senses), kinesthetic (use of body to learn), interpersonal (social skills, working with others), intrapersonal (learn on one's own), musical (learning through music), and naturalistic (learning through the natural world).

Boud and Griffin (14) suggest that we have six learning capabilities comparable to the six strings on a guitar. The six strings are rational (we are the most familiar and have the most experience with this capability, as we assume that learning is a rational, intellectual activity), emotional, relational (learning is enhanced through relationships with others), physical (learning can be enhanced or inhibited by our physical state), metaphoric
Table 2
Questions for Educators Seeking to Apply Adult Learning Principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning is enhanced when it is immediately applicable to real-life contexts.</td>
<td>What are some of the ways you can make training relevant to the learners' practices?</td>
</tr>
<tr>
<td>Learning is enhanced when adults have control or influence over the educational experience.</td>
<td>What are some of the ways you can give participants control over their learning?</td>
</tr>
<tr>
<td>Learning depends on past and current experiences.</td>
<td>What are some of the ways you can use the learners' experiences as a resource for learning?</td>
</tr>
<tr>
<td>Learning depends on active involvement of the learner.</td>
<td>What are some of the ways you can keep learners stimulated and involved?</td>
</tr>
<tr>
<td>Learning depends on a climate of respect and comfort.</td>
<td>What are some of the ways you can create a safe, respectful, comfortable learning atmosphere?</td>
</tr>
<tr>
<td>Learning is enhanced when learners achieve self-direction.</td>
<td>What are some of the ways you can encourage learners to be more self-directed and to continue learning on the job?</td>
</tr>
<tr>
<td>Learning is enhanced when connections are created.</td>
<td>How can you create connections among participants and the workplace?</td>
</tr>
<tr>
<td>Learning is enhanced when learners are successful.</td>
<td>What are some of the ways you can help ensure that learners are successful?</td>
</tr>
<tr>
<td>Learning is facilitated when learners receive feedback.</td>
<td>What are some of the ways you can reinforce learners and facilitate self, peer, or instructor feedback?</td>
</tr>
</tbody>
</table>

Source.—Reference 7.

(learning can be enhanced through symbol, metaphor, intuition), and spiritual (a deep sense of connection with everyone and everything). Learning experiences occur more often when more of the “guitar strings” are activated.

Providing timely feedback leads to successful learning and mastery of content and skills. Sensitive feedback helps learners correct errors and reinforces good behaviors. As the name implies, positive reinforcement is “good” and reinforces “good” (or positive) behavior. Negative reinforcement is useful in trying to change modes of behavior. The result of negative reinforcement is extinction—that is, the instructor uses negative reinforcement until the “bad” behavior disappears or becomes extinct. Instructors need to use reinforcement on a frequent and regular basis early in the process to help learners retain what they have learned. The Accreditation Council for Graduate Medical Education (ACGME) requires that radiology residency programs evaluate residents on a quarterly basis and encourages evaluation after every rotation (15). However, residents can benefit from feedback (formal and informal) on a more frequent basis. More frequent feedback is especially beneficial for first-year radiology residents, who may feel insecure about their role and level of competence. Reassurance from the radiology faculty that these feelings are natural and expected can help to create a safe learning environment, one in which the resident is not hesitant to be an active participant.
Self, peers, and instructor can all provide important feedback. Success in achieving objectives facilitates further learning. Critical reflection is an important element of adult learning programs. It has been suggested that people do not learn from experience, but rather they learn from reflecting on experience (7). Writing reflective journals can be helpful in enabling adults to keep track of changes in their behavior or actions as a result of new learning and to keep track of how those changes affect their practice over time. Journals allow adults to chart their own courses and to be aware of their personal growth and development.

Summary
In general, all theories of adult education are based on valuing the prior learning and experience of adults (11). Adult learning requires building on this prior learning, using methods that treat learners with respect, and recognizing that people have different learning styles and have a variety of responsibilities and time commitments. Effective educators also recognize that adults often learn collectively from each other. The optimal role of the adult learner in the learning situation is that of a self-directed, self-motivated manager of personal learning who collaborates as an active participant in the learning process and who takes responsibility for learning. Educators will be more successful if they understand the basic principles of adult learning and apply these principles in their teaching (Table 2).

References
Promoting Effective Preceptorship Experiences

Olive Yonge • Flo Myrick • Linda Ferguson • Florence Lughana

Preceptors and students alike want and need a positive preceptorship experience. There are some factors, however, that must be considered when arranging such experiences, including sufficient time, workload management, use of space, monetary payment for preceptorship, preparation for the role, the one-to-one relationship, and the learning environment. This article concludes with specific strategies that address these factors.

The first uses a theoretical model, one advocated by the authors, the Preceptor Enabling Model. This model delineates the roles and responsibilities of students, preceptors, staff, and faculty. Preceptors, too, need preparatory workshops, paid time for orientation to the role, evaluation of preceptors, and finally, support.

Every professional discipline relies on its practitioners to teach students. In the health sciences, this form of teaching is called clerkships, internships, or preceptorships. Professionals employed by healthcare agencies are expected to contribute to the socialization, education, and overall development of students. In nursing, registered nurses readily assume this responsibility and function as preceptors. There are, however, factors that affect the effectiveness of the experience. The purpose of this article is to examine those factors and to recommend strategies that would facilitate the work of preceptors. The factors the authors discuss are time, workload management, use of space, monetary payment for preceptorship, preparation for the role, the one-to-one relationship, and the learning environment. This article concludes with strategies by which to address these factors.

Time is universally regarded as the biggest constraint on effective preceptorship. Many preceptors report experiencing competing demands on their time, and preceptoring students often has to give way to the priorities of patient care. Pulsford and associates studied a large number of preceptors who reported problems with finding the time to spend with students. Several suggested they be given time or additional staff coverage to allow for spending more time with students. Others in this same study stated they conducted aspects of the preceptoring role on their own time. These findings support previous research identifying time for undertaking preceptorship activities as being a significant factor. Coates and Gormley asked preceptors, students, and managers about factors enhancing and hindering preceptorship. The majority of respondents indicated lack of time as the main barrier to working as a preceptor. They indicated that patient care has priority over teaching, and in today's busy healthcare system, little time is left for teaching. In addition, the study participants identified the need for protected time for preceptors and students to work together. Nurse managers, concurring with preceptors, suggested preceptors needed to be allocated time in the same way patient care has scheduled time.

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- Flo Myrick, PhD, RN, Associate Professor, University of Alberta.
- Linda Ferguson, MN, RN, University of Saskatchewan.
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Preceptor participants in Cotoretti’s study spoke of the difficulties in finding time to build an effective relationship with students because of their workload. They explained that in busy clinical settings, patient care was given priority over students’ learning, even though they felt guilty at not having time to teach students. This finding relates directly to the next factor, workload.

**Workload**

Staff nurses report they are busy with their current patient care assignments and other responsibilities. Being a preceptor requires extra time and energy, particularly in the beginning phase and the early part of the working phase. Results of a mail survey of 295 preceptors revealed that precepting nursing students can be a stressful experience, with overwork identified as the main source of stress. Preceptorship requires additional time, energy, and patience in an increasingly busy and complex work environment. Preceptors commented on how they had to be on their toes because they constantly felt “responsible for the student’s learning experience.”

Heavy workloads have been and continue to remain a standard feature of clinical nursing. The multiple responsibilities involved in being a preceptor mean preceptors’ energies must be balanced between patient care responsibilities and students’ needs for direction. When these responsibilities conflict, however, priority in most cases is given to patient care, which, as preceptors acknowledge, can lead to a sense of pressure and guilt for being unable to fully meet students’ needs.

The most common sources of stress reported among preceptors related to the added responsibilities and extra time required when units were busy. In situations of increased responsibility, preceptors found that precepting students was quite demanding, time consuming, challenging, and stressful. Students who did not possess the appropriate clinical skills, motivation, or interest in the clinical area contributed negatively to the preceptor’s workload. Furthermore, preceptors who felt coerced into the preceptor role experienced resentment, resulting in a negative preceptorship experience for both the nurse and the student.

**Space**

The provision of teaching space in which preceptors can work with students is also an important consideration, because not all objectives can be achieved at the bedside. Few agencies are designed for the number of learners designated to these clinical areas. Students taught in the traditional manner by a clinical instructor usually have a preconference or postconference in a prebooked room to afford them privacy and confidentiality. Preceptors, on the other hand, do not prebook rooms or require a large room. They do, however, require private space where they can provide students with ongoing verbal feedback. If the feedback is negative, understandably they do not want others to overhear them.

**Payment**

Staff nurses may or may not be paid for the role of preceptor to nursing students. In some agencies, the role of preceptor is seen as part of one’s professional responsibility in the education of students for the profession. In other agencies, employers pay nurses small increases to their hourly rate or a flat amount to assume the role of preceptor. In yet other agencies, the educational institution may pay the preceptor or the healthcare setting or provide specific benefits such as access to a professional development fund to precepting nurses. The issue of payment continues to be a contentious issue in preceptorship. If there is payment, it is viewed as tokenism; nurses may provide one-on-one observational experiences and will not be paid as a preceptor because the observational experience is considered to be an informal teaching arrangement. Nurses preceptor non-nursing students and receive no payment, so they question why there is a discrepancy. These factors contribute to difficulties in attracting and retaining staff nurses as preceptors for students. Although there is no research in this area, in general, preceptors are not paid for precepting.

It is not unusual for learners to finance their education by indirect payment, such as tuition or by direct remuneration to a preceptor via the agency or directly to the agency itself. Payment may thus be viewed as an incentive to the preceptor and a reward for precepting. The actual value of the payment is difficult to assess given the various arrangements and lack of standards in this area. Students too may perceive that because they have paid for this education, they are therefore entitled to a certain level or standard of teaching. Payment, however, can become a contentious issue when students are assigned to multiple preceptors or a nurse other than a preceptor. The issue is the perception of payment: Is it viewed as a bonus or reward or as payment for a service? The amount of payment is also at issue. Currently, educators cannot determine
what constitutes a fair payment and unions have been negotiating what is to be considered a fair and equitable remuneration for the preceptor role.

It is recognized that financial remuneration is only one form of recognition. Numerous other strategies have been used. The authors have written letters of commendation with a copy to the preceptor’s personnel file; given small gifts (preceptors really appreciate pens and pins); sponsored Preceptor Appreciation Workshops, luncheons, and teas; asked preceptors to speak to nursing students; given preceptorship appreciation awards; and changed admission forms to the graduate school to include preceptorship experience as part of the assessment. The authors also observed preceptors becoming mentors to the students, whereby they transform a professional relationship to a personal one after the practicum has ended.

Preparation for the Preceptor Role

Proper preparation of a preceptor is one of the most important factors related to the success of the preceptorship experience, yet most preceptors do not feel adequately prepared for their role, particularly in the areas of teaching and evaluating.\textsuperscript{5,10} Student clinical performance is difficult for preceptors to assess, and most preceptors have little or no experience with this role.\textsuperscript{28} In several cases where preceptors reported they had been adequately prepared for their role but were unable to meet the students’ learning needs, they indicated that the demands of work prevented them from precepting effectively. How nurses are selected and recruited to be preceptors relates to the level of preparation. If preceptors are selected based only on availability and not on interest or abilities, they likely will demonstrate a different level of motivation. Conversely, on the other side of preparation and selection are the preceptors and students who are matched according to learning needs and teaching styles, personality, or educational background. More frequently, however, preceptors are selected for the position solely because of their tenure and experience within the organization.\textsuperscript{13} It is assumed these individuals are perceived as knowledgeable and skilled and are believed to be capable of the additional responsibility to act as a preceptor to the student nurse.

The One-to-One Relationship

The one-to-one relationship between a preceptor and student provides close supervision and immediate feedback concerning performance. It also contributes to the development of the student’s self-confidence\textsuperscript{20} and competence in performing clinical skills and enabling him or her to think critically.\textsuperscript{5,14,15} Findings derived from a study by Nehis et al.\textsuperscript{19} concur with the view that the one-to-one relationship in preceptorship enhances learning. Students describe the one-to-one relationship with the preceptor and use the word \textit{time}; they appreciate the amount of time involved, as well as how this time was spent. They perceived the one-to-one relationship in preceptorship as being crucial to their learning. Students reported that preceptors immediately answered their questions. The students did not have to wait in line to ask a question, as is usually the case in the traditional approach with a faculty-student ratio of 1:10, which, in turn, allows little time for individualized teaching and guidance. These findings appear to support the one-to-one preceptorship relationship in which the individual needs of the learner can be addressed with greater possibilities existing for students to receive immediate feedback\textsuperscript{27} and being facilitated in the different practice experiences.

Positive Learning Environment

The tenor of the learning environment can affect the success of the preceptorship experiences both positively and negatively.\textsuperscript{19} The success of the preceptorship relationship rests largely with the tone set by preceptors and staff.\textsuperscript{22} An environment in which preceptors genuinely value, support, and work with students and staff and accept students as part of the team will contribute significantly to the preceptorship success. Most researchers would agree the most effective learning climate is one that fosters support; is devoid of threat, facilitates openness, inquiry, and trust; and avoids competitive performance judgments.

\textbf{Most researchers would agree the most effective learning climate is one that fosters support; is devoid of threat, facilitates openness, inquiry, and trust; and avoids competitive performance judgments.}
fidence, (2) valuing the students’ responsibility, and (3) needing time together. The participants in the study confirmed that it is crucial for the preceptors to be able to trust the student. The preceptors stated that once they developed this trust, the foundation was created from which they could easily begin to extend the scope of the student's responsibilities. This trust was expressed as a mutual confidence derived out of the time spent working and being together. In addition to the preceptor, staff with whom students interact on a daily basis also play a crucial role in creating a safe environment. The attitudes and behaviors of nurses and their relationship with the preceptor influence how the staff members relate to the students. In learning environments where the preceptor and staff genuinely value the students, reflective practice will be enhanced. Valuing is a characteristic that is shared by preceptors who are effective in enabling students to think critically, a characteristic that is, in turn, reflected in their approachability, openness, and respect for students' perspectives. Particularly significant in the process is the preceptors' recognition that the students wish to be acknowledged and valued as colleagues.

**Strategies**

Thus far, the authors have identified the factors influencing preceptorship experiences. There are, however, strategies that can be used to promote these factors. First, it would be most beneficial to use a theoretical model or guiding framework with which to facilitate the preceptorship experience. The authors recommend the Preceptorship Enabling Model (PEM) derived from the work of Myrick.

It would be most beneficial to use a theoretical model or guiding framework with which to facilitate the preceptorship experience. The authors recommend the Preceptorship Enabling Model (PEM), which is derived from the work of Myrick. The model emanates from research involving preceptors and students. The framework provides parameters within which the preceptorship experience can be planned and implemented. Key features include the orientation of the preceptors, students, and faculty to their specific roles. Also addressed is the role the staff plays on the various units in which the preceptorship occurs. The importance of communication between key players is explored within the context of the preceptorship experience, and suggestions are provided to maximize their potential. Role modeling, guiding, facilitating, and prioritizing are discussed and strategies addressed to promote preceptor enabling of critical thinking. Factors related to ensuring that a climate that is conducive to the teaching/learning experience is also discussed, and ways to ensure that the promotion of safety, trust, and respect are delineated.

Second, research related to the preceptorship experience is essential in developing an understanding of the various complexities that can exist when two people, such as the preceptor and student, work so closely together. Examples of research currently being undertaken by the authors and graduate students include assessing how preceptors teach nursing students practical wisdom, exploring the possibility of an interdisciplinary tool to capture the preceptorship experience among 4 allied healthcare faculties, and to determine the effect on a preceptor of precepting a student who is unsafe. As with the PEM, which is derived from research, the research findings that emanate from the works of other scholars can serve to enhance the preceptorship experience; inform the faculty, student, and preceptor; and provide key insights into the strengths and weaknesses of this approach to clinical teaching. Thus, changes can be developed and additional strategies designed to continue to improve the experience.

Finally, when the preceptorship experience is viewed as more than a professional obligation to be fulfilled by the individual nurse and is considered to be a long-term commitment, the relationship that develops between the preceptor and student can evolve into a mentorship relationship. Such an evolution can only serve to strengthen the profession of nursing itself. It can provide increased potential for

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the recruitment of new staff and create greater cohesion among the nurses themselves. Given the predicted nursing shortages of the near future, such a development may be critical to the profession's survival.

Other strategies that are being explored, implemented, and assessed through research include preparatory workshops that address identified competencies of preceptors. Such workshops are most useful when they derive from the experiences of preceptors and address the issues encountered in these experiences. Rather than expecting preceptors to use their own time for preceptorship preparation, funded workshops would indicate the value that is placed on the role. To acknowledge the expertise of experienced precep-
tors, workshops can be staged to provide preparatory experiences at various levels. Precepting skills acquired through preparatory workshops and developed through experience can also be used in the practice setting to precept orientating nurses or assist nurses in mediating experiences.

Another strategy that has been explored is the employer provision of paid time for the orientation and evaluation of students in precepted experiences. Although this situation is ideal, shortages of nurses on the clinical units makes release of the preceptors difficult, if not impossible. If nurses are using personal time for orientation or for completion of the evaluation process and forms, paid time for such activities acknowledges the value of the preceptors’ contribution to the education of students.

The preceptored learning experience is a triad relationship among preceptor, student, and supervising faculty. In the event preceptors are not supported by faculty, the inhibiting factors in the work setting can seem insurmountable. The role of faculty includes orientating nurses to the role of preceptor, ensuring that preceptors are informed about the nursing program and the learning experiences of students, and supporting preceptors in their teaching roles. When faculty are uncertain of their roles, the preceptor-student relationship suffers. Although practicing nurses are central to the preceptored experience for students, faculty continue to be involved in the experience as advisors, teachers, evaluators, and supporters. Faculty participation in the experience can assist preceptors in addressing some of the inhibiting factors in the clinical practice setting.

## Conclusion

The preceptored learning experience has evolved into a key component of nursing education. It provides an opportunity for future nurses to develop their competence and confidence within the safety of a structured environment under the tutelage of an expert nurse. As with any kind of teaching-learning experience, however, preceptoryship must be continuously evaluated for its effectiveness in achieving its goal. It is a guide for nurses to provide the appropriate and current development of future nurses. That effectiveness is not only contingent on the clinical expertise of the preceptor, but also conditional on how the preceptors are planned, implemented, and guided from a teaching-learning perspective. By working together, the faculty, student, and preceptor can ensure a quality experience. Drawing on research and using a theoretical model can only further serve to enhance the preceptoryship experience.

### References

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