

Clinical Teaching: Preparing Your Office

This outline was compiled from the references listed below this section.

Integrating learners into a busy office practice is challenging. This section addresses some practical tips to prepare yourself and your office for the presence of a learner.

Prepare Your Office

- Colleagues and staff need to be aware that a learner will be in your office. They also should be informed of the learner's goals. Staff may be able to prepare patients to interact with the learner.
- Ask staff to help orient the learner
 - Tour of the office
 - Introduce key people within the office
- Provide your learner with a small workspace
- Some physicians may find it helpful to alter their schedule (e.g., the wave schedule) when a learner is present
 - Wave scheduling allows the physician to see the normal number of patients
 - Make sure to inform patients who will have "double visits"
 - An example of a wave schedule:
 - (Adapted from Alguire, P., et al. (2001). Teaching in your office; a guide to instructing medical students and residents. American College of Physicians. Philadelphia, Pennsylvania.)

Time	Original Physician Schedule	Physician Wave Schedule	Learner Wave Schedule
9:00-9:20	Patient 1	Patient 2	Patient 1
9:20-9:40	Patient 2	Patient 1	Patient 1
9:40-10:00	Patient 3	Patient 3	Writes Notes
10:00-10:20	Patient 4	Patient 5	Patient 4
10:20-10:40	Patient 5	Patient 4	Patient 4
10:40-11:00	Patient 6	Patient 6	Writes Notes

Prepare Your Patients

- Notify patients beforehand that a learner will be in your office
 - Suggestions:
 - Ask staff to notify patients when they make their appointments or when they arrive in the office
 - Post a sign in the office or on the door announcing the presence of a learner
- Ask for the patient's permission to involve the learner before the learner enters the room
- Introduce the learner formally to the patient and explain that the learner is a part of your team
- Thank the patient at the end of the visit

Prepare Yourself

- Review the objectives of the course/rotation
- Be familiar with the level of learner and her/his previous experience
- Book time for student orientation, mid-session feedback, and final evaluation
- Get to know your learner as an individual; express interest in his/her development

Questions to Ask Yourself

- How can the learner be welcomed into my office?
- What does the learner need to know about my office?
- What changes need to be made to my office and who can arrange that?
- Does a colleague have special knowledge they may want to share with the learner?
- Are there activities that a staff member or colleague might want to take the learner to?

References

- Clinical Teaching Techniques, Medical Education
 - <http://medicaleducation.wetpaint.com/page/Preparing+Staff+and+Colleagues>
- Integrating the Learner Into the Busy Office Practice, MAHEC Office of Regional Primary Care Education
 - <http://www.oucom.ohiou.edu/fd/monographs/busyoffice.htm>
- Practical Professor, The Alberta Rural Physician Action Plan
 - http://www.practicalprof.ab.ca/preparing_to_teach/preparing_your_office.html
- Setting Expectations, MAHEC Office of Regional Primary Care Education
 - <http://www.oucom.ohiou.edu/fd/monographs/setting.htm>

Clinical Teaching: Being an Effective Clinical Teacher

This outline was compiled from the resources listed below this section.

This section below addresses the characteristics of quality clinical teachers. Taking the time to set expectations and give feedback to your learner makes the experience more meaningful. Finally, some well known teaching strategies, such as the one-minute preceptor model, are described.

Effective Clinical Teachers

- Provide opportunities for learners to participate
- Are enthusiastic about both their clinical and teaching roles
- Motivate the learner
- Teach specific skills

- Delegate specific tasks to the learner
- Answer questions posed by the learner
- Observe the learner
- Provide feedback
- Provide support

Setting Expectations and Assessing the Learner's Needs

- Develop an educational plan with your learner
- Clarify what the school/course, the learner, and you have set as expectations
 - In order to set well defined expectations you will need to have a basic understanding of the learners abilities and skills
 - Comfort zone
 - What skills/management/etc does the learner feel comfortable with
 - Where do they feel they need the most help
 - The evaluation form can also clarify what the school/courses expectations of performance
- Setting solid expectations provides the necessary framework for giving feedback and evaluation

Observation and Feedback*

- Observe the learner's performance as much as possible
 - Direct observation will allow for specific feedback and guidance
- Feedback should be: specific, timely and often

*For more detailed information on how to give feedback see the "effective feedback" guide

Teaching Techniques

- Ask questions
 - What does the learner know?
 - Knowledge based questions- determine level of knowledge and stimulate recall of previous learned material
 - "Tell me four categories of antihypertensive medication you know."
 - "What are the most common causes of community-acquired pneumonia?"
 - How does the learner use their knowledge?
 - Application or integration questions stimulate application of knowledge
 - "What antihypertensive agents might be optimal for a patient who also has migraine headaches?"
 - "What complaints might a patient with a URI develop to make us worry they now have community-acquired pneumonia?"
 - How does the learner solve a problem?

- Reasoning or problem-solving questions stimulate reasoning and higher order thinking. Questions are often asked as a case scenario and can be introduced with the prefix, “what if”
 - “Mr. Brown is coming in for a routine blood pressure check. He’s 55 and takes chlorthalidone and lisinopril. If his blood pressure is 138/88, what should we do at this visit? What if he tells us he’s developed a cough since we started his ACE –inhibitor?”
- Priming
 - Before entering the patient room give the learner patient-specific information along with directing the learner to perform specific tasks
 - Priming helps the learner focus on relevant information
 - “Ms. A is a woman with diabetes and hypertension who is coming in today with chest pain. I’d like you to spend about 15 minutes taking the history and physical. Before you’ve even seen Ms. A, what is your differential diagnosis and what questions will you focus on?”
- Teach Procedural Skills

(Adapted From Teaching Skills for Community Based Preceptors, University of British Columbia, Office for Faculty Development)

 - The preceptor should identify the steps before starting to teach the procedure
 - Cognitive
 - Explain why and when the procedure is done
 - Demonstrate the procedure with a step by step talk-aloud description
 - The learner should repeat the steps of the procedure aloud
 - Guided Practice
 - Review the procedure
 - Have the student observe the procedure
 - Allow the learner to practice the procedure
 - Provide guidance and feedback to the learner
 - Independent Practice
 - Provide opportunities for the learner to practice the procedure
 - Encourage the learner to self-assess themselves
 - Be supportive to the learner

The One Minute Preceptor

(Adapted From The One Minute Preceptor: 5 Microskills for One-on-One Teaching, MAHEC Office of Regional Primary Care Education)

- The One Minute Preceptor is a method for clinical teaching. It is a step by step of pre-determined strategies that could be used after a learner’s presentation. Although there are multiple steps this process should not take very long.
 - Step 1: Get a Commitment

- Get the learner to verbally commit to an aspect of the case.
 - Possible questions:
 - “What do you think is going on with patient?”
 - “What other diagnoses would you consider?”
 - “What lab tests should we order?”
 - “How do you think we should treat this patient?”
- Step 2: Probe for Supporting Evidence
 - Explore the basis of their answer. Determine if it was a “lucky guess” or a well-reasoned response. Resist the urge to immediately confirm or disagree with the learner. Ask a question that seeks to understand the rationale for their opinion.
 - Possible questions:
 - “What factors in the history or physical support your diagnosis?”
 - “Why would you choose this type of treatment for the patient?”
- Step 3: Reinforce What Was Done Well
 - The learner must be informed on what they did well. Simple statements such as “that was good” are not acceptable. Feedback should include specific behaviors, knowledge or attitudes.
 - “Your presentation was very well organized. You had all of the necessary elements. You first stated the chief complaint but then followed it by giving a detailed history of present illness. You also included other pertinent medical history.”
- Step 4: Give Guidance About Errors and Omissions
 - It is also important for the learner to know where they need to improve. Comments should be specific and include how the behavior could be improved later.
 - “I noticed you used some jargon when you told the patient she might have “GERD.” Sometimes patients don’t understand acronyms but feel afraid to ask. The term “acid reflux” is easier for patients to understand.”
 - There should be a balance between positive and constructive criticism.
- Step 5: Teach a General Principle
 - The learner should be able to take information learned and apply it to other settings. Sometimes the learner has a tendency to over generalize or an inability to identify general principles. Take a moment to briefly teach a medical fact, general rules, concepts, considerations and target them to the learner’s level of understanding.
 - “We gave this patient omeprazole for her acid reflux. If she had had red flags, such as older age, GI bleeding, or dysphagia, she would also need an endoscopy for her symptoms to assess for a malignancy.”
- Step 6: Conclusion

- End the teaching interaction and set expectations for the next event. Explain to the learner what the next steps will be and their role.
 - “Since this is the last patient you will see today, I’d like you to write up the progress note on this patient and include a summary of the American Gastroenterological Association guidelines for management of new onset gastroesophageal reflux disease. You can turn this in to me tomorrow morning.”

References

- Grover, M. (2002). Priming Students for Effective Clinical Teaching. *Family Medicine*, 34(6), 419-20.
- Preceptor Development Program, University of Virginia’s Family Medicine Clerkship Preceptor Development Program
 - <http://www.med-ed.virginia.edu/courses/fm/precept/index.htm>
- Teaching Skills for Community Based Preceptors, University of British Columbia, Office For Faculty Development
 - http://www.med.ubc.ca/_shared/assets/Teaching_Booklet_MedEdPortal_June_2006_4560.pdf
- The One Minute Preceptor: 5 Microskills for One-on-one Teaching, MAHEC Office of Regional Primary Care Education
 - <http://www.oucom.ohiou.edu/fd/monographs/microskills.htm>

Additional Resources

- Dealing with the Difficult Learning Situation, The Mountain Area Health Education Center Department of Continuing Medical Education and the Office of Regional Primary Care Education Preceptor Development Program
 - http://www.mahec.net/celt/acroread/Difficult_Situation.pdf
- EPIC: The Expert Preceptor Interactive Curriculum, FIPSE project group, Office of Educational Development, University of North Carolina School of Medicine
 - <http://www.med.unc.edu/epic/>
- Faculty Development Modules, University of British Columbia
 - <http://imp.uvic.ca/faculty/FacultyDevt/FDevDocstoUpload.php>
- Preceptor Development Initiative, BC Academic Health Council
 - <http://www.practiceeducation.ca/about.html>
- Setting Expectations, MAHEC Office of Regional Primary Care Education
 - <http://www.oucom.ohiou.edu/fd/monographs/setting.htm>
- Strategies in Clinical Teaching, The University of Kansas School of Medicine
 - <http://wichita.kumc.edu/strategies/busyprac.html>
- The Effective Preceptor, MAHEC Office of Regional Primary Care Education
 - <http://www.oucom.ohiou.edu/fd/monographs/effective.htm>

Suggested Readings

Alguire, P. C., Dewitt, D. E., Pinsky, L. E., & Ferenchick, G. S. (2001). Teaching in your office; a guide to instructing medical students and residents. American College of Physicians. Philadelphia, Pennsylvania.

DaRosa, D. A., Dunnington, G. L., Stearns, J., Ferenchick, G., Bowen, J. L., & Simpson, D. E. (1997). Ambulatory teaching "lite": Less clinic time, more educationally fulfilling. *Academic Medicine*, 72, 358-361.

Ferenchick, G., Simpson, D., Blackman, J., DaRosa, D., & Dunnington, G. (1997). Strategies for efficient and effective teaching in the ambulatory care setting. *Academic Medicine*, 72(4), 277-80.

Gordon, J. (2003). ABC of learning and teaching in medicine: one to one teaching and feedback. *BMJ*, 326, 543-5.

Heidenreich, C., Lye, P., Simpson, D., & Lourich, M. (2000). The search for effective and efficient ambulatory teaching methods through the literature. *Pediatrics*, 105, 231-237.

McLeod, P.J., Steinert, Y., Trudel, J., & Gottesman, R. (2001). Seven Principles for Teaching Procedural and Technical Skills. *Academic Medicine*, 76, 1080.

Neher, J.O., Gordon, K.C., Meyer, B., & Stevens, N. (1992). A five-step "microskills" model of clinical teaching. *J Am Board Family Practice*, 5, 419-24.

Paukert, J.L. & Richards, B.F. (2000). How medical students and residents describe the roles and characteristics of their influential clinical teachers. *Academic Medicine*, 75, 843-5.

Spencer, J. (2003). ABC of learning and teaching in medicine: Learning and teaching in the clinical environment. *BMJ*, 326, 591-594.

Clinical Teaching: Evaluating the Learner

This outline was compiled from the resources listed below this section.

By setting clear goals and expectations, directly observing the learner, and providing ongoing feedback evaluation has been taking place throughout the experience. This section outlines some sources of information and strategies to evaluate your learner.

Summative and Formative Feedback

- Formative Feedback
 - Allows for the learner to make adjustments and improve performance
 - Formal or informal (at the end of a teaching opportunity/on the fly)
 - Given continuously throughout the experience
- Summative Feedback
 - Often used as grading or rating a performance
 - Formal (summary of performance)
 - Given at the end of the experience

Sources of Information for Evaluation

- Learner's presentations
- Observance of learner's performance on tasks (physical exam, interviewing patient, interacting with office staff, etc)
- Review of what was produced by the learner (progress notes, charts, activity log, etc)
- Talking to others who have interacted with the learner (staff, colleagues, patients, etc)

The G-R-A-D-E System of Evaluation

(Adapted from Evaluation: Making it Work, The Mountain Area Health Education Center Department of Continuing Medical Education and the Office of Regional Primary Care Education Preceptor Development Program, 2001)

- G: Get Ready
 - Review the course expectations
 - Review the evaluation form
 - Review your expectations of the learner
- R: Review expectations with the learner
 - Meet with the learner early
 - Determine knowledge and skill level
 - Review the program goals, your goals, and learner's goals
 - Describe the evaluation process
- A: Assess
 - Observe
 - Record
 - Provide regular feedback
 - Have learner self-assess
- D: Discuss assessment at mid-point
 - Set up a formal mid-rotation meeting
 - Learner and preceptor fill out evaluation for in advance
 - Compare the evaluation together
 - Discuss the differences and expectations
- E: End with a "grade"
 - Complete the evaluation in advance

- Schedule time to meet with the learner
- Support evaluation with specific examples

References

- Evaluation: Making it Work, The Mountain Area Health Education Center Department of Continuing Medical Education and the Office of Regional Primary Care Education Preceptor Development Program
 - <http://www.mahec.net/celt/acroread/Evaluation.pdf>
- Feedback, The Mountain Area Health Education Center Department of Continuing Medical Education and the Office of Regional Primary Care Education Preceptor Development Program
 - <http://www.mahec.net/celt/acroread/Feedback.pdf>

April 2010

Created By: Lauren Taylor, MEd

Edited By: Heather Heiman MD, Toshi Uchida MD, and Elizabeth Ryan EdD

