Teaching Medicine Series

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Teaching in Your Office
A Guide to Instructing Medical Students and Residents, Second Edition

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Ways to Be More Efficient When Teaching

This chapter presents eight strategies that can be used to become more efficient or to make up lost time in the office, namely:

- The Focused Half Day
- Presenting in the Room
- Collaborative Examinations
- Active Observation
- Dual Teaching
- Service-Based Education
- Just-in-Time Learning
- Self-Directed (Independent) Learning

The Focused Half Day
The focused half day is a useful and efficient teaching strategy suggested by Taylor and colleagues at the Medical College of Ohio (1). This method has its greatest value when precepting clinically inexperienced learners. You and the learner begin by reviewing the patient schedule,
either the night before or at the very beginning of the session. You use this opportunity to review the reason for each patient’s visit. After the entire list is reviewed, you and the learner pick a “teaching issue” for the day and select a limited number of patients that address the teaching issue. The patient schedule becomes the “table of contents” for that day’s learning. The theme of the teaching issue can be disease based (for example, diabetes), a procedural skill (taking blood pressures), related to the history (taking a sexual history) or the physical examination (liver palpation). Learners are given time before seeing the selected patients to prepare for the encounter by reviewing the patient’s chart or reading about the selected teaching issue for that day. This specific activity of preparation and reflection gives the learner a meaningful task while you are pursuing other office-related activities, reducing the learner’s “down-time” that learners often complain about.

Early experience with the focused half day model is positive (1). First-year students report that this organizing strategy is extremely beneficial, and preceptors found it helpful and practical. Preceptors commented that it helped them know “where students were coming from,” and enhanced their confidence as teachers.

Presenting in the Room
Traditionally, learners report their findings to the teacher outside of the examination room. If you use this model, the next step involves returning to the room to verify the history and physical examination and to plan the care for the patient. A time-saving step would be to have the learner present the patient’s case in the examining room in front of the patient. Due to concerns of patient acceptance, preceptors have not adopted this technique universally. However, studies of in-the-room presentations by residents and students in both the in-patient and ambulatory setting show that patients actually approve of and prefer this strategy. Patients report that, with “bedside” presentations (in this case, inside the examination room), doctors spent more time with them and offered better explanations of their prob-
lems. Such presentations did not provoke worry, and patients were satisfied with the overall process (2-5). Patients with in-room presentations by medical students were more likely to report that the student was a greater contribution to the patient's satisfaction (5). It is important, however, that the learner alert you of any potentially sensitive issues or serious diagnoses being considered before making the presentation. As always, these issues must be handled with care and sensitivity. The learners must be told this and be aware of the power of their words.

When using in-the-room presentations, take time to introduce the concept to the patient (6). You may begin by saying, “I hope it is all right if the student/resident tells me what you have been talking about. It is my job not to interrupt. When she/he finishes, I will ask you if anything was missed or if you have something to add and then we will talk about what to do.” This useful statement accomplishes a number of important tasks. First, it asks permission to proceed, sets the expectation of not interrupting, and tells the patient they will have a chance to add information or clarify points. You may also want to give the patient permission to interrupt if you say something they don’t understand. You can tell the patient that “doctors have been trained to communicate with each other in medical terms and may mistakenly fall back into this habit, but we do not mean to exclude you from the conversation.” By stating this to the patient, you concurrently reassure the patient and remind the learner not to use jargon.

Despite high patient acceptance and the obvious time-saving benefits for you, not all learners are comfortable presenting in the room (3,4), and they may have to be convinced of its value. Interestingly, students who are consistently asked to present in the room report a small preference for in-room presentations, compared to students who do not routinely present in the room, suggesting that frequent use decreases learner apprehension (5). Some of the benefits of presenting in the room include the following:

- It saves time
- Patients perceive in-the-room presentations as being more confidential than “hallway talk”
- Patients are not waiting alone for the doctors
- Patients prefer to hear what is being said about them
- Learners tend to make more concise presentations
- Patients can verify information
- Patients can correct misinformation
- It increases the preceptor’s “face-to-face” time with the patient
- The preceptor can immediately collect additional information that flows naturally from the learner’s presentation
- Patients feel they are part of the process
- It helps maintain compliance with the Health Care Financing Administration (HCFA) regulations on billing for services that need to be performed personally by the physician

Despite the enthusiasm of most patients and preceptors about in-the-room presentations, not all discussion between the preceptor and learner should be in front of the patient. Analyzing the learner’s thought processes or discussing the differential diagnosis are more suited for private conversations, particularly if they are likely to include entities that are emotionally charged. Discussions of pathophysiology or debates about the literature are best reserved for out-of-room presentations.

Notwithstanding reassurances about the educational value and efficiency of bedside presentations, some learners will be resistant. In these cases, we suggest that you encourage in-room presentations as they are good opportunities to role model clinical skills and to involve patients in the decision-making process. This may be your best opportunity to demonstrate empathy, compassion, and concern and to validate the usefulness of a skillfully taken history and a focused examination. If this strategy works for you, simply make it happen.

**Collaborative Examinations**

Collaborative examinations involve the learner and preceptor seeing the patient simultaneously. This technique is most time efficient when working with students. The student takes the lead in taking the history, with you observing. The student is given a defined amount of time to accomplish the
task. After the student has completed the history, you can ask any additional questions, with the student observing. Then, the student can be assigned certain parts of the examination to be performed under your direct observation, followed by you repeating parts of the examination to verify essential findings. This technique is useful when attempting to gauge a new learner's level of expertise. It also can be used when formally evaluating a learner or simply to save time. Finally, collaborative examinations offer an excellent opportunity to role model clinical skills and, like presenting in the room, help maintain compliance with the HCFA regulations on billing for services that need to be performed personally by the physician.

▶ Active Observation
Active observation is a useful technique for both students and residents when time is a factor or when the complexity of the problem is too sophisticated for the learner (see Summary of Active Observation in Appendix B on page 161). In active observation, the learner is asked to observe you performing a clinical skill. The skill may be communication, interviewing, physical examination, or procedural.

Active Observation Is Not Shadowing
Care must be taken not to transform this exercise into mere “shadowing,” which makes the learner a passive participant. Observation can become an active learning process by “priming” the learner, i.e., describing what will happen, why it needs to happen, and what to look for. Follow up the session with an opportunity for the learner to describe what happened and to practice what was just learned. For active observation to be effective, the following must occur:

- The learner needs to be informed about the rationale for the observation. Example: “This patient is very hostile, and I want you to watch how I manage this situation.”
- The learner should be told what to observe. Example: “Notice how I diffuse his anger by labeling and validating his emotions.”
The learner should be provided with an opportunity to review what was learned after the session. Example: “Tell me what you saw when I interviewed the patient.”

The learner should be observed practicing what was taught and should be provided feedback on his or her performance. In one study of students, 70% responded that active observation was the most important learning event in their ambulatory medicine rotation (7). See Box 6-1 for a summary of the critical elements in active observation.

**Box 6-1. Summary of the Critical Elements in Active Observation**

- Describing the rationale for the observation (“You should watch me do this because...”)
- Declaring what the learner should observe (“Watch how I...”)
- Reviewing what was observed (“What did you see happen in that session?”)
- Allowing the learner an opportunity to practice (“When you see the next patient, I want you to...”)

**Dual Teaching**

Dual teaching is a strategy commonly used by experienced preceptors to improve efficiency (8). Dual teaching means providing health education to a patient simultaneously while teaching or assessing the student. There are a number of variants of the strategy. In the first variant you assume the educator’s role and direct the short, relevant educational message to either the student or the patient. The essential point is that both student and patient are present when the message is delivered and both benefit. In a second variant, the learner takes on the educator’s role and you observe, ready to provide feedback outside of the room at the end of the session. This works particularly well if the learner had previously observed you performing this task. You can assess the learner’s mastery of the content, commu-
nication skills and interpersonal style. Once proficient in this task, the learner can deliver the educational message to the patient alone, freeing you or your office staff for other tasks (see Service-Based Education, below).

**Service-Based Education**

Service-based education can be an effective teaching strategy for students. It consists of identifying tasks that typically are performed by a member of the office staff (or occasionally by you) and training the student to perform those tasks (9). This is not to suggest that service-based education can replace the clinical encounter as the main focus of office-based teaching, rather it is meant to supplement the clinical encounter. The advantages to the learner are 1) the opportunity to gain knowledge about and perform tasks that are often critical to the efficient operation of an office and 2) to develop a sense of being a contributing member of the office team. The benefits to the office can be significant, e.g., a student may be able to “free up” a member of the office staff for a period of time to accomplish other tasks. Some of the tasks that students can perform while in the office setting include the following:

- Counseling and education of patients
- Diabetic foot exams (e.g., using a template)
- Retrieving laboratory or radiology results
- Making follow-up telephone calls
- Triaging patient calls
- Filling out laboratory, radiology, and consultation request forms
- Administering vaccinations
- Conducting patients to the examination room, documenting the reason for the visit, recording vital signs
- Performing electrocardiography and other simple office laboratory tests
- Chart audits for quality improvement
- Answering clinical questions by using databases (e.g., PubMed)
The main idea behind service-based education is not to reduce your office overhead by taking advantage of the student’s services but rather to introduce the student to the tasks, talents, and time necessary to run an office. Some of the tasks (e.g., filing and retrieving charts) may require only an hour or two to accomplish, whereas others (e.g., triaging patient telephone calls) may require several hours of dedicated time to capture the complexity and importance of the task. In any event, service-based education is a supplement to, not a replacement of, clinical encounters and patient-based learning.

❖ Just-in-Time Learning
Between patients, you can quickly review learning issues related to a patient just seen (10). If you have used the Microskills or one of the learner-centered teaching models, you have probably identified a learning need that is suited for practicing evidence-based medicine skills. Ask the learner to formulate a clinical question and, time allowing, look up the answer using your favorite sources of evidence-based information (for example, POEMs, Evidence-Based Medicine for Primary Care and Internal Medicine, ACP Physician Information and Education Resource, the *ACP Journal Club*, or Cochrane Library). Have the learner begin this task as you see the next patient alone, allowing you to catch up in your schedule if you are falling behind. This “catch up” strategy is particularly useful when working with inexperienced learners. This strategy is valuable for the student as well; integrating evidence-based medicine into practice in this fashion is one of the top three factors students associate with effective teaching (11).

❖ Self-Directed (Independent) Learning
When there is a lull in the office (e.g., lunch time, end of the day), ask the learner a few questions that stimulate reflection and promote self-directed learning (12-14) (see Summary of Self-Directed [Independent Learning] in Appendix B on page 162). Such questions might include the following:
• "Based on the patients you saw today, what are your questions?"
• "What did you learn today?"
• "What was the most important thing that happened today?"
• "What is the one thing you would like to learn more about?"
• "What troubled you today?"
• "What might you improve on?"

Considering role modeling this behavior by indicating what you learned today, what questions were generated for you, and how you intend to answer them. By role modeling the behavior, you demonstrate the importance of this approach to continuing education. You also can use this time to ask the learner to participate in some self-directed learning.

The two essential steps in self-directed learning are the identification of the limits of one’s knowledge and skills and the ability to organize resources to learn more (15). Self-directed study engages the learner in critical thinking and hands-on experiences that promote application of book knowledge to "real world" experiences. Self-directed learning also can promote the study of diseases and conditions that the learner is unlikely to see at the office due to case mix and prevalence.

To maximize effectiveness, self-directed learning should be linked to a recently observed patient problem. The opportunity to store knowledge in the context from which it will be retrieved (i.e., case-based learning) aids the learning process (16). Additionally, reading around recently encountered cases is more motivating than asking learners to tackle the textbook chapter by chapter.

Self-directed learning is a reasonable learning goal for either the student or resident. If learning resources are available in the office, learners can be asked to pursue questions that remain unanswered after a patient visit, with the understanding that the information will be conveyed back to you at a later but specifically defined time. For example, a convenient review time might be at the end of the day after all the patients have been seen. Also, asking the learner to pursue unanswered questions through independent reading is a technique that can be used to help you "catch up"
when you are behind in your schedule. While the learner is reading, you can see one or two patients independently.

Box 6-2 summarizes the main components of self-directed learning; this can be used as a checklist when making assignments for learners in the office:

**Box 6-2. Self-Directed Learning**

**Identify the Learner Need**
- After hearing the case presentation (or at the end of the session), either have the student identify his or her learning question or prompt the student by asking “What bothers you most about this case?”

**Make an Assignment**
- The learner is asked to formulate the learning question, research the question, and report back to you.

**Identify resources**
- Potential resources include textbooks, journal articles, consultants, and PubMed and other electronic databases.

**“Close the loop”**
- Have the learner report back to you on what was found, either vocally, in a written outline, or incorporated in a patient write-up or assessment.

The educational prescription is a tool that can help both you and the learner formalize the process of self-directed learning (see Educational Prescription Form in Appendix A on page 131).
REFERENCES


