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Feature Editor

*Editor's Note:* In this month's column, Michael Grover, DO, assistant professor in the Department of Family Medicine at Loma Linda University in Loma Linda, Calif, describes a process to improve our students' ability to learn.

I welcome your comments about this feature, which is also published on the STFM Web site at [www.stfm.org](http://www.stfm.org). I also encourage all predoctoral directors to make copies of this feature and distribute it to their preceptors (with the appropriate *Family Medicine* citation). Send your submissions to Paul Paulman, MD, University of Nebraska Medical Center, Department of Family Medicine, 983075 Nebraska Medical Center, Omaha, NE 68198-3075. 402-559-6818. Fax: 402-559-6501. [ppaulman@unmc.edu](mailto:ppaulman@unmc.edu). Submissions should be no longer than 3–4 double-spaced pages. References can be used but are not required. Count each table or figure as one page of text.

## Priming Students for Effective Clinical Teaching

Michael Grover, DO

The variety and complexity of the patients who medical students encounter in the ambulatory setting can be overwhelming. Many students lack the requisite experience to recognize common patterns of symptoms and disease or to set clinical priorities for visits.<sup>1,2</sup> Many family physicians who provide students with experiences in the office find it difficult to balance the competing agendas of providing quality patient care and quality teaching. To be effective teachers, physicians must possess a strong foundation of knowledge and be clinically competent, and they must also

provide instruction in a learner-centered manner.<sup>3</sup> One way to accomplish this is by setting clear and realistic expectations based on the learner's level of experience through priming.<sup>4</sup>

Priming is defined as orienting learners to the patient and the task that will be requested of them just prior to entering the patient's room.<sup>5</sup>

Priming is intended to focus the encounter, allowing teacher and learner to set mutually agreeable patient care and learning agendas. Priming takes place in advance of the patient care interaction to set expectations and allow the student to reflect on the set agenda. This advance organization method helps provide direction for the visit and creates a foundation from which students can build confidence in their clinical skills. Teaching physicians can demonstrate their commitment to teaching and guide

learning from clinical experience through this process.

### Priming the Student for Observation

Even when students do not see patients independently, observing the interactions and behaviors of the physician with the patient can provide great insights about appropriate clinical care. Learners can be alerted in advance to the task that the preceptor will demonstrate, the specific steps that are involved, and the expected effects the task will have on the care of the patient.<sup>1,5-7</sup>

During this process of reflective modeling, the preceptor must be explicit regarding what is being modeled. One would review what is to be done, how to do it, and its implications for patient care. After this activated demonstration, students should have an opportunity to articulate their observations to

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review the skill. Students can then practice and eventually demonstrate the mastery of these clinical skills themselves. An example:

Mr Lee is a patient who is presenting because of stomach pain. I am going to examine him today to help rule out causes of an acute abdomen. I want you to focus on the order in which I progress my examination, from inspection to auscultation and then to palpation and percussion. It is especially important to have patients relax during palpation of the abdomen. Try to note the things that I do to try to put him at ease. After we are done, I will ask you what you observed about how one can reassure patients during an abdominal examination.

#### Priming Students for Their Direct Care of Patients

Reviewing the clinic schedule with the student will identify specific patient care issues appropriate to meet the needs of the learner. Carefully choose patients to be seen by the student. Those who communicate well, who may have prototypical presentations of common diseases, and who are not overly complex are important, especially for students with limited experience.<sup>7</sup> The attending physician can briefly discuss the patient's history and the presenting problem. Then, the specific task for the learner to complete is reviewed. Finally, one sets clear expectations about how the learner will report findings back to the teacher.<sup>8</sup> An example might be:

Mrs Jones is a 65-year-old patient who is coming in for a checkup about her hypertension. I would like you to focus on obtaining a limited history, paying particular attention to exertional chest pain, shortness of breath, swelling, or other symptoms associated with complications of high blood pres-

sure like angina and congestive heart failure. I'd then like you to complete a brief, focused physical examination to look for signs of these complications, especially looking for JVD, an S3, pulmonary rales, decreased peripheral pulses, or edema. I will meet you in 15 minutes, when you'll discuss your findings in a 2-3 minute presentation.

#### Priming the Patient for the Student's Education

Another priming option is to discuss the role of the learner with patients prior to their interactions with students. Clarifying the educational agenda for students with patients can provide focus and encourages them to feel that they are our partners in the education of medical students. Some patients may be able to provide the necessary history more readily and efficiently once prompted to do so. Each patient can be reassured that the attending physician will address the patient's agenda after the student has finished the assigned task. An example:

Mrs Smith, I'd like to introduce Mary, who is a third-year medical student here this month on her family practice rotation. I have asked her to discuss your asthma symptoms with you today. I know that you probably have other questions and concerns for us today too, which I will be sure to address with you before you leave. Mary will focus primarily on your asthma to learn about this common medical problem. I will return in 10 minutes, and she will review her findings for both of us.

Priming is a strategy that can help teachers avoid some of the frequent pitfalls of precepting, such as not discussing mutual expectations, overwhelming students by trying to teach too much, or failing to assess the knowledge base of each student.<sup>9</sup> While no controlled trials

have been conducted, it has been proposed that priming not only increases students' satisfaction and perceived teaching effectiveness of the attending physician but may also allow for more efficient provision of care in the office.<sup>5,8</sup> By providing guidance to both the learner and the patient, preceptors can focus the encounter and limit the time needed to accomplish the educational plan. While teaching students will always require an investment of time, priming can be a teaching method used in the ambulatory setting that will help us become more effective and efficient clinical teachers.

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