

The One Minute Preceptor: 5 Microskills for One-On-One Teaching

Acknowledgements

This monograph was developed by the MAHEC Office of Regional Primary Care Education, Asheville, North Carolina. It was developed with support from a HRSA Family Medicine Training Grant and the resulting materials are public domain.

Introduction

Health care providers face many challenges in the day to day pursuit of their careers, and those who choose to teach health professions students face the further challenge of efficiently and effectively providing teaching to these learners. No matter what type of learner – resident, medical student, physicians assistant or nurse practitioner – and no matter what their level of skill or training, the challenge of integrating teaching into your day to day routine remains. Fortunately tools and techniques have been developed to assist the preceptor. A tested and valuable approach is the One-Minute Preceptor.

Initially introduced as the “Five-Step ‘Microskills’ Model of Clinical Teaching” (Neher, Gordon, Meyer, & Stevens, 1992), the One Minute Preceptor strategy has been taught and tested across the nation (Irby 1997a, 1997b; STFM, 1993) and has been welcomed by busy preceptors. The dissemination of this technique has been allowed and encouraged, and we are pleased to be able to present it to you as part of our Preceptor Development Program.

At the end of this module you will be able to:

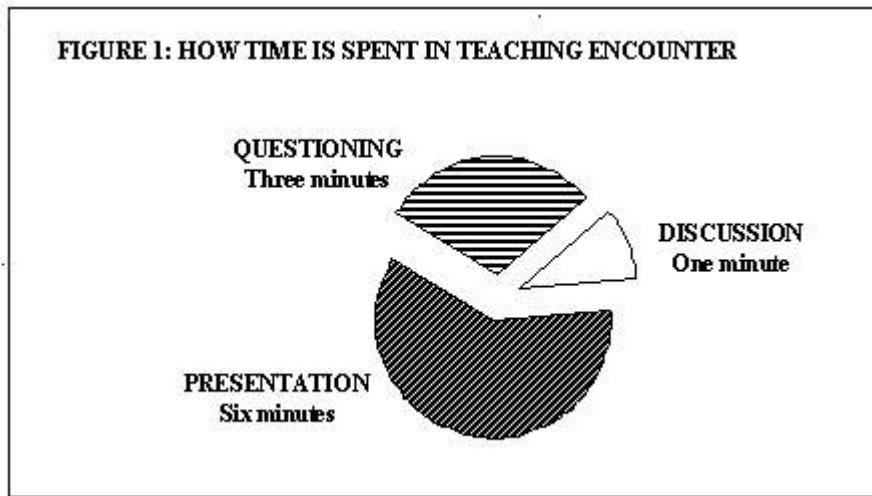
1. List the Steps of the One-Minute Preceptor model of clinical teaching.
2. Explain how each step fosters effective and efficient teaching.
3. Demonstrate understanding of the One-Minute Preceptor on a sample student presentation.
4. Integrate the One-Minute Preceptor model into your clinical teaching.

Making the Most of Teaching Time

Much of clinical teaching involves the learner interviewing and examining a patient, and then presenting the information to the preceptor. This strategy is common both in the office and hospital setting. Studies have indicated that on average, these interactions take approximately 10 minutes and the time is divided into several different activities. (See Figure 1.) Much of the time is taken up by the presentation of the patient by the learner. Additional time is spent in questioning and clarifying the content of the

presentation. As a result only about one minute of time is actually spent in discussion and teaching.

The One-Minute Preceptor approach allows the preceptor to take full advantage of the entire encounter in order to maximize the time available for teaching. The teaching encounter will still take longer than a minute but the time spent is more efficiently used and the teaching effectiveness is optimized.



The Method

The One-Minute Preceptor method consists of a number of skills that are employed in a stepwise fashion at the end of the learner's presentation. (See Table 1.) Each step is an individual teaching technique or tool, but when combined they form one integrated strategy for instruction in the health care setting.

Table 1: The One-Minute Preceptor Method

1. Get a Commitment
2. Probe for Supporting Evidence
3. Reinforce What Was Done Well
4. Give Guidance About Errors and Omissions
5. Teach a General Principle
6. Conclusion

An Example:

Let us look at a sample presentation in order to help illustrate the steps of the One-Minute Preceptor model and their practical application.

You are working with student from a physician's assistant program who is in your office for their final six-week preceptorship before graduation. The student has just finished seeing a patient and is presenting to you in your office while the patient waits in the exam room.

Student: Hi...I just saw Mrs. Winkler. She is a 67-year-old woman who comes in today with a complaint of fever, cough and shortness of breath. As you may know, she has a 30-pack year smoking history and carries the diagnosis of mild COPD.

She began getting sick about two days ago with what she thought was a cold but by yesterday she had more chest congestion and a temperature of 101 orally. She also noted that she was more winded than usual in her usual activities at home. Yesterday her cough was productive of whitish sputum but by this AM it had become yellow to tan with streaks of blood. She noted chills this AM and her temp was 100.5 and she called to come in. She has noted some increase in her wheezing but denies chest pain, except when she coughs.

"She is on Capoten and HCTZ for high blood pressure, and uses an albuterol inhaler and has been using this about every two hours since last evening. She has no allergies, got a flu shot this year and had the Pneumovax 2 years ago.

"On physical she is working hard at breathing with wheezes heard without a stethoscope. HEENT is basically normal but her lung exam reveals diffuse wheezes expiratory wheezes and decreased breath sounds in the area of the right middle lobe..."
[Student pauses here waiting for your response]

Step One: Get a Commitment

At this point, there are many teaching techniques you could employ, but the One-Minute Preceptor method suggest that you get a commitment from the learner – to get them to verbally commit to an aspect of the case. The act of stating a commitment pushes the learner to move beyond their level of comfort and makes the teaching encounter more active and more personal. This can show respect for the learner and fosters an adult learning style.

In this situation the learner stopped their presentation at the end of the physical exam. An appropriate question from the preceptor might be: "What do you think is going on with this patient?" This approach encourages the learner to further process the information they have gathered. You obtain important information on the learners clinical reasoning ability and the learner is given a higher sense of involvement and responsibility in the care of the patient. If the answer is correct, then there is the opportunity to reinforce a positive skill. If the response is incorrect, an important teaching opportunity has occurred and the impact of the teaching is likely to be greater since the learner has made the commitment.

Not all learners will stop at the same point in their presentation, but the preceptor can still get a commitment. Additional examples include:

“What other diagnoses would you consider in this setting?”

“What laboratory tests do you think we should get?”

“How do you think we should treat this patient?”

“Do you think this patient needs to be hospitalized?”

“Based on the history you obtained, what parts of the physical should we focus on?”

By selecting an appropriate question, the preceptor can take a learner at any stage and encourage them move them further along in their skills and to stretch beyond their current comfort level.

Notice that questions used in getting a commitment do not simply gather further data about the case. The goal is to gain insight into the learner's reasoning. Questioning by the preceptor for specific data reveals the preceptor's thought process – not the learner's. The learner in the example above needs the opportunity to tell you their assessment of the patient data they have collected.

Step Two: Probe for Supporting Evidence

Now that you have a commitment from the learner, it is important to explore what the basis for their opinion was. The educational setting often rewards a lucky guess to the same degree as a well-reasoned, logical answer. In the clinical setting, it is important to determine that there is an adequate basis for the answer and to encourage an appropriate reasoning process. By the same token it is important to identify the “lucky guess” and to demonstrate the use of appropriate supporting evidence.

Once the learner has made their commitment and looks to you for confirmation, you should resist the urge to pass immediate judgement on their response. Instead, ask a question that seeks to understand the rationale for their answer. The question you ask will depend on how they have responded to your request for a commitment:

“What factors in the history and physical support your diagnosis?”

“Why would you choose that particular medication?”

“Why do you feel this patient should be hospitalized?”

“Why do you feel it is important to do that part of the physical in this situation?”

There are significant benefits from using this step at this time. You are able to immediately gauge the strength of the evidence upon which the commitment was made. In addition, any faulty inferences or conclusions are apparent and can be corrected later. This step allows the preceptor to closely observe the vital skill of clinical reasoning and to assist the learner in improving and perfecting that skill. Our learner in the role-play will get a further chance to demonstrate their ability to integrate and use clinical data.

Step Three: Reinforce What Was Done Well

In order for the learner to improve they must be made aware of what they did well. The simple statement “That was a good presentation” is not sufficient. The learner is not sure if their presentation is “good” because they included current medications or because they omitted the vital signs. Comments should include specific behaviors that demonstrated knowledge skills or attitudes valued by the preceptor.

“Your diagnosis of ‘probable pneumonia’ was well supported by your history and physical. You clearly integrated the patient’s history and your physical findings in making that assessment.”

“Your presentation was well organized. You had the chief complaint followed by a detailed history of present illness. You included appropriate additional medical history and medications and finished with a focused physical exam.”

With a few sentences you have reinforced positive behaviors and skills and increased the likelihood that they will be incorporated into further clinical encounters.

Step Four: Give Guidance About Errors and Omissions

Just as it is important for the learner to hear what they have done well, it is important to tell them what areas need improvement. This step also fosters continuing growth and improved performance by identifying areas of relative weakness. In framing comments it is helpful to avoid extreme terms such as ‘bad’ or “poor”. Expression such as “not best” or “it is preferred” may carry less of a negative value judgement while getting the point across. Comments should also be as specific as possible to the situation identifying specific behaviors that could be improved upon in the future.

Examples:

“In your presentation you mentioned a temperature in your history but did not tell me the vitals signs when you began your physical exam. Following standard patterns in

your presentations and note will help avoid omissions and will improve your communication of medical information.”

“I agree that, at some point, complete pulmonary function testing may be helpful, but right now the patient is acutely ill and the results may not reflect her baseline and may be very difficult for her. We could glean some important information with just a peak flow and a pulse oximeter.”

The comments are specific to the situation and also include guidance on alternative actions or behaviors to guide further efforts. In a few sentences an opportunity for behavior change has been identified and an alternative strategy given.

It is important to reflect here that a balance between positive and constructive criticism is important. Some preceptors may focus on the positive, shying away from what may be seen as criticism of the learner. Others may focus nearly exclusively on areas for improvement without reinforcing what is already being done well. As with many things in life, balance and variety are preferable.

Step Five: Teach A General Principle

One of the key but challenging tasks for the learner is to take information and data gained from an individual learning situation and to accurately and correctly generalize it to other situations. There may be a tendency to over generalize – to conclude that all patients in a similar clinical situation may behave in the same way or require the exact same treatment. On the other hand, the learner may be unable to identify an important general principle that can be applied effectively in the future. Brief teaching specifically focused to the encounter can be very effective. Even if you do not have a specific medical fact to share, information on strategies for searching for additional information or facilitating admission to the hospital can be very useful to the learner.

Examples:

“Smokers are more likely than non-smokers to be infected with gram-negative organisms. This is one situation where you may need to broaden your antibiotic coverage to be sure to cover these more resistant organisms.”

- OR -

“Deciding whether someone needs to be treated in the hospital for pneumonia is challenging. Fortunately there are some criteria that have been tested which help...”

- OR -

“In looking for information on what antibiotics to choose for a disease. I have found it more useful to use an up-to-date hand book than a textbook which may be several years out of date.”

Because of time limitations it is not practical to do a major teaching session at that moment, but a statement or two outlining a relevant and practical teaching point can have a significant impact on the learner.

Step Six: Conclusion

Time management is a critical function in clinical teaching. This final step serves the very important function of ending the teaching interaction and defining what the role of the learner will be in the next events. It is sometimes easy for a teaching encounter to last much longer than anticipated with negative effects on the remainder of the patient care schedule. The preceptor must be aware of time and cannot rely on the student to limit or cut off the interaction.

The roles of the learner and preceptor after the teaching encounter may need definition. In some cases you may wish to be the observer while the learner performs the physical or reviews the treatment plan with the patient. In another instance you may wish to go in and confirm physical findings and then review the case with the patient yourself. Explaining to the learner what the next steps will be and what their role is will facilitate the care of the patient and the functioning of the learner.

Example:

“OK, now we'll go back in the room and I'll repeat the lung exam and talk to the patient. After, I'd like you to help the nurse get a peak flow, a pulse ox, and a CBC. When we've gotten all those results, let me know and we can make a final decision about the need for hospitalization and our treatment plan.”

The teaching encounter is smoothly concluded and the roles and expectations for each person are made clear in a way that will facilitate further learning and optimal patient care.

Summary:

You have learned and seen examples of the six steps in The One-Minute Preceptor model. Although it is useful to divide something into discrete steps, it is hard to remember several items in order, especially when you are first using them. To help you with this challenge you will note that the back cover of the book may be cut into several pocket size cards which you may carry with you to help you remember the steps.

The One-Minute Preceptor is a useful combination of proven teaching skills combined to produce a method that is very functional in the clinical setting. It provides the preceptor with a system to provide efficient and effective teaching to the learner around the single patient encounter. It is not intended that this technique should replace existing teaching skills and techniques that already work well for the preceptor or to avoid the need to learn further techniques. It is one approach that can help you in the very challenging work that you do.

References:

Irby, D. (1997, February). The One-Minute Preceptor. Presented at the annual Society of Teachers of Family Medicine Predoctoral meeting, Orlando, FL.

Irby, D. (1997, June). The One-Minute Preceptor: Microskills for Clinical Teaching. Presented at teleconference from East Carolina Univ. School of Medicine, Greenville, NC.

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

Preceptor Development Program. Mountain Area Health Education Center.
http://www.mahec.net/pdp/lessons_learned.aspx?a=9. Accessed electronically on May 6, 2011.

STFM. (1993, February). The One-Minute Preceptor. Presented at the annual Society for the Teachers of Family Medicine Predoctoral meeting, New Orleans, LA.