

## Foundations of Emergency Medicine

### Foundations III: Guided Small Group Experience

## Session 21: “Residents as Teachers”

### Unit: Non-Clinical Skills

#### ❖ Agenda and Learning Objectives

- Case Part I – Identifying the needs of the learner, setting expectations and orienting them to the clinical environment (10 minutes)
  - Define the challenges of teaching in the emergency department, including time pressures and dealing with learners at multiple stages of training and/or with different backgrounds.
  - Discuss techniques for orienting both yourself and the learner to the clinical environment and for assessing the needs of the learner in order to be able to teach effectively and efficiently.
- Case Part II – One Minute Preceptor/Micro-skills Approach (20 minutes)
  - Review this established technique for clinical teaching and discuss how it can be utilized for learners at a variety of stages.
    - Provide an example using the same clinical presentation (DKA, PE) when teaching a medical student vs. a more experienced resident.
- Case Part III – Effective Feedback (10 minutes)
  - Discuss approaches deliver meaningful, constructive and formative feedback.
  - Review techniques for dealing with challenging (resistant or disengaged learners)
- Case Concludes (10 min)
  - Review Session Teaching Points
  - Get each participant to consent to using at least one of these teaching/feedback techniques on their next clinical shift.

#### ❖ Note to Facilitators

*This session focuses on important educational paradigm of residents as teachers in the emergency department setting. It creates a context for the discussion by acknowledging the unique challenges posed by the emergency department environment over-layed with the fact that residents are often subject to significant time pressures and competing demands during clinical work. It will discuss techniques for orienting learners, providing effective and clinically relevant education and giving meaningful and actionable feedback. The residents will be asked to review the article “1 minute preceptor” (<https://paeaonline.org/wp-content/uploads/2017/02/One-Minute-Preceptor.pdf>). If you are not familiar with this teaching model, it will be beneficial for you to review this article prior to the session. You may also want to print out a few copies to share during the session.*

### ❖ Case Begins – Learner Orientation (10 min)

*A senior resident has just finished taking sign out at the start of a busy swing shift. In addition to receiving multiple patients who will require follow-up and reassessment before making a final disposition, there are multiple unseen patients who have just been placed in rooms. As the senior resident you are responsible for maintaining flow and throughput for your section of the ED. On your team for the day is an intern off-service rotator from the Internal Medicine Residency Program at your institution as well as 4th year medical student.*

*As you finish sign out, you quickly introduce yourself to this new resident, who lets you know that this is their first week but that they've already worked "a couple of shifts" over the last few days. You note they sign up for a patient with abdominal pain. You then ask the medical student if they are comfortable seeing patients on their own, and they tell you that they are.*

*You proceed to go see the patients you received in sign out, as well as a patient with chest pain and another with dizziness. Upon returning to your workstation 20 minutes later, you find the off-service intern reading through their patient's electronic chart, but see no orders have been placed. When you inquire about whether there's anything you can help with regarding how to order test/which tests we often order in the ED, the off-service rotator cheerfully thanks you and says that they will let you know once they've had a chance to interview and examine the patient. You ask the medical student if they are ready to present a patient and they tell you that they weren't sure who they should sign up for, but would be happy to go see one of the unseen patients pending your approval.*

### ❖ Discussion Questions with Teaching Points

- **Are there any issues that need to be addressed related to the off-service resident's clinical performance? What about the medical student?**
  - Clearly there are concerns about the pace and timing of the way that this rotator is approaching patient care → additionally the medical student has not yet seen a patient, though it is unclear whether it is due to lack of initiative or because they were unclear whether they had permission to do so.
  - Although time-pressure is increasingly common across almost every clinical setting, in the emergency department these pressures are uniquely heightened by the constant and unpredictable patient volume as well as the high level of patient acuity.
  - For rotators who are unfamiliar with this environment, it can be difficult to get a sense of the expected pacing and workflow, especially if there are multiple teams/sections/units within the department that are responsible for providing patient care.
- **What approach would you take now in addressing the situation with this rotator? In retrospect, what would be the ideal timing for any discussion or intervention?**

- This is a prime example of how orienting yourself to a junior resident or student, and them to your clinical setting can prove invaluable.
- In a busy environment it is easy to skip this step and operate under the assumption that the person already understands the system and what is expected of them, however this often leads to confusion and increases misunderstandings and inefficiency.
  - Level of training and experience, previous clinical
  - Experiences and their special interests.
  - What areas of medicine do they find difficult or confusing?
  - What skills do they want to practice?
  - Identify 1 specific item that they would like to work on and/or would like feedback on at the end of the shift.
- Once you've obtained this basic information, communicating expectations becomes much more straightforward

#### ❖ Case Part I Continues

*After your initial chat, you learn that in his first few shifts, no one had ever discussed Emergency Department workflow or expectations with the Internal Medicine rotator. He was more concerned about not making a mistake and having reviewed all potentially relevant information both before seeing the patient and before presenting the case. Likewise, in previous shifts, the senior resident or attending had simply invited the medical student to follow them as they saw patients during a busy shift or had specifically told them to go into a room to see a patient.*

- **Why is expectation setting important specifically in the Emergency Department?**
  - Focusing on a specifically identified area for observation/improvement/feedback can help give structure to the shift, motivate the learner and can help you as a senior resident better frame your expectations for their performance.

#### ❖ Case Part II – One Minute Preceptor/Micro-skills (20 min)

*You are a senior resident working with a fourth-year medical student interested in Emergency Medicine. They see the following patient and are ready to present them to you.*

*Patient is a 35-year-old male with IDDM diagnosed in childhood, present to the emergency department for somnolence, diffuse abdominal pain with nausea and vomiting, these symptoms were preceded by fever and cough.*

*Vitals: T 39.2 HR 118 RR 28. BP 95/65 O2 91% on RA*

*The patient's roommate is present and reports that the fever started 3 days ago and was followed by a cough productive of yellow sputum. 2 days ago the patient developed*

*problems tolerating oral intake, food and liquid, without vomiting. On examination the patient is somnolent but arousable to painful stimuli, he can tell you his name and answer simple questions, knows he is in the hospital but is not oriented to specific place or time. Patient is tachypneic with deep and rapid respirations and crackles in right lower lung field. Mucous membranes are dry with cracked lips, poor skin turgor. His nurse performs a fingerstick blood glucose comes back as "High" just as you are ready to leave the room.*

*Your fourth-year medical students comes out of the room and presents all the relevant information listed in the above HPI, but then basically stops presenting once they have finished describing the physical exam.*

#### ❖ Discussion Questions with Teaching Points

- **What are the steps of the one-minute preceptor?**
  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
- **Let's practice this in pairs with one resident acting as the senior resident and the other acting as the medical student. An example interaction is below. Spend about 5 minutes doing this and then re-group to discuss what went well, what was difficult and concerns about implementing this model on shift.**
  - **Get a Commitment**

"What do you think is going on with this patient?"

    - I'm not sure, I think they've got an infection, maybe a pneumonia

"What other diagnoses would you consider in this setting?"

    - Their blood sugar was high, maybe this could be DKA

"What laboratory tests do you think we should get?"

    - We should a basic metabolic panel and probably a chest x-ray

"How do you think we should treat this patient?"

    - They will need insulin for their blood sugar and maybe some antibiotics

"Do you think this patient needs to be hospitalized?"

    - Yes, we should definitely admit them
  - **Probe for Supporting Evidence**

"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?”

- Reinforce what was done well  
“You did a very nice job presenting a complete history and physical exam in this case”
  - Give Guidance About Errors and Omissions  
“In the future, it will help your teachers teach you more effectively if you really commit to a differential diagnosis and management plan. I know it’s scary to go out on a limb but I promise you will learn more”
  - Teach a General Principle  
“In a diabetic, it is always important to consider if you think the patient is in DKA”
  - Conclusion  
“What did you learn from this patient encounter?”
- **What if your learner is an intern? How would your conversation change?**
- The interaction will be similar but tailored to the learning needs of the learner level → this is the take home point about this structure, it can be adapted to any learner level and ensures you are teaching to the appropriate level (ie not teaching something the learner already knows or something way over their learning level)

❖ **Case Part III – Feedback and Challenging Learners (10 min)**

*After giving sign out to the incoming team, you are preparing to discharge one patient, reassess several others and then call report to the admitting team if possible for a few of the patients you have just signed out. Before you begin your shift wrap up, the medical student comes up to with an evaluation form and asks if you have any feedback.*

❖ **Discussion Questions with Learning Points**

- **What does the literature say about perceptions of both learners and preceptors in terms of feedback?**
  - Teachers often overestimate the amount of teaching and feedback performed in a given shift.
  - There is a common perception that feedback should only be given at the completion of a shift and that giving useful, quality feedback takes a significant amount of time.
  - Unsurprisingly, learners feel that they do not get enough feedback.
    - One commonly cited issue is the difficulty of setting aside time for feedback, especially in the clinical setting.
    - Second, learners may need clear “signposting” that they are receiving feedback, otherwise they may fail to recognize it as such, even if the preceptor has taken the time to give structured feedback.

- “I wanted to give you some feedback about \_\_\_\_” is a clear and direct way to avoid this pitfall.
- **What structure can you use to give constructive feedback?**
  - Ask for a self-evaluation of how the learner felt the shift went.
    - Try and press for some specificity here
    - LISTEN to what they have said
  - Identify and validate things that you observed to have gone well or been done correctly.
    - Again, be specific.
    - If your observations correspond to self-identified areas for feedback make sure to address these.
  - Make clear if there are specific behaviors that you would like the learner to start doing (i.e. going to see a patient in a timely manner with a specific note about how long to review the chart prior to seeing the patient)
    - Similarly, identify and name any behaviors that need stopping or improving
  - Define a specific action that can be performed in the next shift.
    - Avoid subjective suggestions such as “try and be more efficient.”
    - For example, “Sign up for a patient and let me or the staff know you are going to see them. Do a history and physical and try and be back to discuss with me in 10-15 minutes.”
  - Much like the One-Minute Preceptor, try and end with a general rule or “pearl” that the learner can use going forward.
    - Examples would be, “Consider calculating the HEART score for any patient you see presenting with chest pain.”
      - Familiarize the student with any specific resource or clinical decision aid you recommend.
  - Ask the learner to summarize your discussion, including what you thought went well, what might need to be worked on, and importantly, what are they going to take away from this encounter and incorporate into their next shift.
- **What difficult learners have you encountered? What are some strategies you might use to help bridge the teaching gap with these learners?**

#### ❖ **Case Teaching Points Summary**

- Introduction to Transgender Medicine
- Silicone Emboli Syndrome
- Chest Binding and other gender-affirming modifications

## ❖ Facilitator Background Information

There are multiple challenges associated with teaching in the clinical setting and many of these are amplified by the busy and unpredictable environment of the emergency department. There is existing medical education literature to suggest that there is a disconnect between learners and faculty in terms on the issue of perceptions of the amount of teaching and feedback that occurs, with students often remarking that they receive an insufficient amount and preceptors feeling as though they are giving frequent education and feedback. Because of this disconnect, we recommend using a structured and deliberate approach to process of clinical teaching and feedback delivery, both because they can be effective and efficient but also because they allow for “signposting” for the learner, i.e. explicitly telling them at teaching is happening or feedback is being given.

### One Minute Preceptor Approach

This module highlights the One Minute Preceptor as an example of an adaptable and easy to implement approach to clinical teaching. While we acknowledge that there are of course multiple other appropriate approaches to clinical teaching, the One Minute Preceptor technique is well-supported by the literature and has the advantage of allowing the teacher to quickly assess the knowledge base and clinical reasoning skills of the learner and to target their teaching points accordingly. Specifically, the One Minute Preceptor:

- Requires the learner to engage in the teaching, making them attempt to provide an assessment and/or plan.
- The learner’s ability to provide supporting evidence for their assessment allows the preceptor insight into their knowledge base and clinical reasoning.
- The preceptor can then provide *specific, usable* feedback to the learner, related to the clinical topic at hand, but also to aspects of the learner’s presentation or approach to their patient assessment and exam.
- Closing out by giving a general principal ends the interaction on a positive note while also providing the learner with information that will be useful to their practice going forward.

Because time is at a premium in the emergency department and because it’s important not to overload students with too much information at one time, we recommend limiting both the positive reinforcement section and the guidance section of the One Minute Preceptor to one or two specific items.

### Giving Quality Feedback

Delivering quality feedback is a surprisingly challenging endeavor even for motivated teachers. It requires putting the learner into a space where they are engaged and receptive if we hope for them to reflect upon and integrate our feedback in their future practice. It also requires the teacher to understand the level of the learner, their specific needs and to formulate the feedback in a way that is ideally specific and modifiable (i.e. related to a topic that is within the learner’s power to adjust or change). An often cited article by Brach, et al. breaks down key elements of giving feedback that are

largely adaptable to the emergency department environment, though in that case, setting a time and place will require some flexibility, it still provides a good reminder to try and set a time with the student early in the shift and to find a location that allows for at least a small amount of privacy (even if that means just moving slightly away from the main clinical workspace). The relevant table is reproduced below for your review.

### **Principles of Giving Feedback\***

#### *Work as an ally of the student.*

Set a time—major feedback should not take the student by surprise.

Have mutual agreement on time and place.

Solicit feedback of your own performance.

Have the student give an assessment of his or her performance (self feedback) before giving one's opinion.

Use well-defined, mutually-agreed-upon goals as a guide for the student's performance and as the subject of feedback.

#### *Base feedback on observed incidents and on modifiable behaviors.*

Give feedback on specific behaviors, not general performance.

Give feedback on decisions and actions, not on one's interpretations of the student's motives.

Subjective data should be labeled as such.

#### *Give feedback in small, digestible quantities.*

#### *Use language that is non-evaluative and nonjudgmental.*

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\*Adapted from Ende J. Feedback in medical education. JAMA. 1983;250:777–81. Used with permission.

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