Precepting 101

A Conversation on Resident Teaching

WCRGME

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Byron Crouse, MD

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What are your goals for this session

Objectives

- Review requirements involved with precepting residents
- Identify barriers to teaching in the clinical setting
- Identify opportunities to improve management of clinical and educational activities
- Understand evidence-based skills to enhance clinical education
- Understand roles preceptors play in providing feedback to and evaluation of residents

What is a Preceptor?

“Rules” of the Road

- Supervision
- Work hours
- Billing (for another session)

Supervision

Requirements from Accreditation Council of Graduate Medical Education (ACGME)

- Residency Program must demonstrate that there is appropriate supervision of all residents caring for patients
  - May range from supervising faculty physically present to a post-hoc review of the patient care delivered by the resident with feedback

Levels of Supervision

- Direct Supervision
- Indirect Supervision
  - With direct supervision IMMEDIATELY available
  - With direct supervision available
- Oversight

Resident Responsibility and Independence

- Progressive authority and responsibility is assigned by the Program Director and Faculty
- Residents also responsible for knowing the scope of their authority to act with conditional independence (ie when to ask for help)

Graduated Resident Supervision Grid for Community Preceptors

Post Graduate Year (PGY)	Procedure supervision requirements	Patient Care Supervision Requirements
PGY-1 (intern) First 6 months	Faculty must be physically present for procedure	Direct
PGY-1 (intern) Second 6 months	Faculty must be physically present for procedure	Indirect with Supervision *Immediately* Available
R2 Resident	Faculty must be physically present for procedure	Indirect with Supervision Available
R3 Resident	Faculty must be physically present for procedure	Indirect with Supervision Available

Documentation

Minimal Documentation Requirements

- Date of Service
- Teaching Physician Signature
- Service Provided
- Participation of the Teaching Physician in Providing the Service
- Whether the Teaching Physician was Physically Present

Resident Duty Hours

- Duty hours must be limited to **80 hours per week, averaged over a 4-week period**, inclusive of all in-house call activities and all moonlighting.
- Residents must be scheduled for a minimum of **one day free of duty every week** (when averaged over a 4-week period).

Maximum Duty Period Length

- Duty periods of **PGY-1 residents** must not exceed **16 hours** in duration.
- Duty periods of **PGY-2/3 residents** may be scheduled to a maximum of **24 hours** of continuous duty in the hospital.
- **PGY-2/3 residents** may remain on-site for up to **an additional 4 hours to accomplish tasks related to effective transitions of care.** Residents must not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.

Minimum Time Off between Scheduled Duty Periods

- **PGY-1** Residents **<u>should</u> have 10 hours, and <u>must</u> have 8 hours**, free of duty between scheduled duty periods.
- **PGY-2/3** residents **<u>should</u> have 10 hours, and <u>must</u> have 8 hours**, free of duty between scheduled duty periods. They **<u>must</u>** have at least **14 hours free of duty after 24 hours of in-house duty**.

Fatigue in Residency Education

- Sleep disruption
- Sleep disorders
- Masquerading Conditions
  - Anxiety, depression, stress, burnout, medical conditions, medications or substance use

Myths

- I only need 5 hours of sleep
  - Most need 8 hours of sleep
  - Individuals are not able to accurately judge themselves
- I've learned to not need as much sleep
  - We do not 'adapt', optimal performance and consistent performance suffer
- If I just get through the night, I am fine in the morning
  - Lowest alertness 6am-11am after being up during night

Consequences of Chronic Sleep

- ABFM in-training exam negatively correlated with pre-test sleep amounts
- Surgery residents reported 20% more errors and 14% more time to do simulated laparoscopy post call
- Medicine residents found less efficient and less accurate in ECG interpretation when sleep deprived
- Safety – more BBP exposures, more reported near-crashes while driving
- Education – decreased satisfaction with teaching and motivation
- Psychomotor function after 24 hours without sleep equivalent to blood alcohol level of 0.08%

Warning Signs of Sleepiness

- Falling asleep in rounds
- Inattention to details
- Increased tolerance to risk
- Decreased cognitive function
- Irritability
- Difficulty focusing on activities
- Lack of caring

Naps and Recovery from Sleep Loss

- 1-2 hours nap before prolonged shift can help
- 15-30 minute naps every 3 hours can be helpful
- An early nap if more helpful than waiting for fatigue
- Longer naps (>30 minutes) may produce sleep inertia
- Usually takes two nights to recover from on-call sleep loss

Summary

- Fatigue is an impairment similar to alcohol or drugs
- Drowsiness, sleepiness and fatigue can not be eliminated but can be managed
- Recognition and use of alertness management strategies can help
- If a resident demonstrates symptoms of excessive sleepiness or fatigue, this may interfere with patient safety or resident health and faculty intervention may be needed

Let the Fun Begin: Residents in your Clinic

- What are the top 2 concerns you have about embarking on resident education in your clinic setting?
- What teaching style or teaching skills will you utilize in precepting residents

Preparation

- **Environment**
  - Staff, scheduling, learning space, patient assignment, contact options: pager/cell phone/etc
- **Teacher**
  - Who, when, where, schedule and known changes from normal routine(vacation, meetings)
  - Understanding of the curriculum goals and objectives – both Residency and Resident along with expectations
- **Learner**
  - Background, prior rotations, personal expectations, schedule, special needs, course/physician expectations

Clinic Cooperation

- Team Huddles
- Scheduling
- Communication with patients
- Cooperative learning
- Colleague cooperation

One Minute Precepting (OMP)

A clinical teaching and patient care supervision model

- Originally called “Five-Step ‘Microskills’ Model of Clinical Teaching”
- Developed by Neher, Gordon, Meyer, & Stevens in 1992
- Often presented with 6 steps

1. Get a commitment

Ask the learner an appropriate question:

- “What do you think is going on with this patient?”
- “What other diagnoses would you consider in this setting?”
- “What laboratory tests do you think you should get?”
- “How do you want to treat this patient?”
- “Do you think this patient needs to be hospitalized?”
- “Based on the history you obtained, what parts of the physical are most critical?”

- Idea: Get a commitment from the learner–get *them* to verbally commit to an aspect of the case. *Don't teach by telling them! Ask!*
  - If the answer is correct, you can reinforce a positive skill.
  - If the response is incorrect, an important teaching opportunity has occurred.
- The goal is to gain insight into the learner's thinking. This is your needs assessment– you learn about the learner and the patient.

2. Probe for supporting evidence

Ask a question that seeks to understand the rationale for their earlier response:

- "What factors 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?"

Resist the urge to pass immediate judgment on the earlier response. This is still data gathering.

Why?

It is important to determine the learner has an adequate basis for their answer and to inquire about their reasoning process.

3. Teach a general rule

One key task for the learner is to use information and data gained from one learning situation and to generalize it to other situations. Step back to the bigger issue.

- The teacher might say: “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.”

There is usually not time for major teaching. In this way, *some* teaching is provided.

4. Reinforce positive behaviors

Comment on specific valuable behaviors.

- "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."

5. Give Guidance about Errors and Omissions

Tell learners what areas need improvement. Identify specific behaviors that could be improved.

- "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."

6. Conclude with a Plan

End the teaching interaction by defining what the roles of the learner and the teacher will be in the next events.

- Preceptor may observe while the learner performs the physical or reviews the treatment plan with the patient
- Preceptor may go in and confirm the physical findings
- Preceptor may explain what the next steps will be to facilitate the care of the patient and the functioning of the learner.
  - "OK, now we'll go back in the room and I'll repeat the lung exam and observe you talking to the patient. Then you can 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 discuss uour final decision about the need for hospitalization and your treatment plan."

One-Minute Preceptor Model

1. Get a commitment (What is going on?)
2. Probe for evidence (Why?)
3. Teach *one* general point
4. Reinforce positive behaviors
5. Correct errors & make recommendations
6. Conclude with a plan

SNAPPS

SNAPPS, a Mnemonic for a Learner-centered Model for Case Presentations to Preceptors in the Outpatient Setting

The learner will:

1. **S**ummarize briefly the history and findings
2. **N**arrow the differential to two or three relevant possibilities
3. **A**nalyze the differential by comparing and contrasting the possibilities
4. **P**robe the preceptor by asking questions about uncertainties, difficulties, or alternative approaches
5. **P**lan management for the patient's medical issues
6. **S**elect a case-related issue for self-directed learning

Blooms Taxonomy

TABLE. **Classification of Questions Based on Bloom's Taxonomy: Definitions and Examples**[a]

Category	Definition	Example
Knowledge	Remembering appropriate information, including specifics, abstractions, and methods	What is your differential diagnosis for chest pain?
Comprehension	The most basic level of understanding, whereby learners know information but have very limited capacity to relate to other information	What is the difference between angina and pleuritic chest pain?
Application	The ability of learners to use abstractions within specific circumstances	What is the clinical significance of exertional chest pain in a 20-year-old woman vs an 80-year-old man?
Analysis	The reduction of information into its essential components, such that the relationship between the components is clear	Why do you believe that your patient has coronary artery disease?
Synthesis	The combination of components to build a whole that was not previously evident	How would you explain the fact that this patient with diabetes and tobacco abuse has experienced worsening exercise tolerance during the past 6 months?
Evaluation	Judgments about the merits of something for a specific intent	Why wouldn't you offer coronary artery bypass surgery to this patient with widely metastatic prostate cancer?

[a] This table was constructed using the classification developed by Bloom et al.[19] The level of sophistication and depth of learner understanding increase with progress from knowledge to evaluation categories. Lower-order questions generally begin with "what," whereas higher-order questions often begin with "how," "why," or "what if." Asking higher-order questions (eg, evaluation) often allows assessment of a learner's entire spectrum of understanding, all the way down to the knowledge category.

RIME

- **R**eporter
  - What is happening
    - Proficient history and exam skills, problem identification, normal vs abnormal
    - *3rd/4th year student*
- **I**nterpreter
  - Why is it happening
    - Create a differential diagnosis, prioritize problems, follow-up tests
    - *4th year student, beginning resident*
- **M**anager
  - What next
    - Selects appropriate diagnostic tests, considers treatment options and customizes treatment based on patient needs
    - *2nd and 3rd year resident*
- **E**ducator
  - Where are the knowledge gaps
    - Plans continuing education, teaches students, peers and faculty
    - *Ideal senior resident*

Precepting Questions Hierarchy

- Basics of a single problem
  - Diagnosis
  - Treatment
- Confounding issues with multiple problems
  - Treatment complexity
  - Drug – Drug interactions
  - Opportunities for single Rx to help several conditions
- "What if" questions
- Observational questions
  - Potential research questions
  - Population health, public health, health systems orientation

Feedback and Evaluation

- Formative evaluation
  - Continuous
  - Focused on behavior
  - Supportive
  - Specific
  - Timely
- Summative evaluation
  - Structured/scheduled
    - Mid rotation and end of rotation
  - Often associated with ‘grade’
  - There should be no ‘surprises’

Preceptor Teaching Tips:

- Be a positive role-model: be enthusiastic and engaged with teaching
- Build a strong relationship with the learner
  - Career goals
  - Strengths/weaknesses
  - Life outside of medicine
- Adjust teaching styles based on competency of learner
- Directly observe learners in different settings
- Ask clinical questions
- Encourage continuity of care
- Provide frequent feedback setting high expectations with specific objectives for improvement
- Promote discussion about learning topics/ readings on patient problems
- Model lifelong learning

Next Steps?

- What needs/topics do you feel are most critical?
  - Feedback
  - Evaluation
  - Working with the difficult resident
  - Quality, Safety and Research

References

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