

UC DAVIS HEALTH | SCHOOL OF MEDICINE

# I-EXPLORE CURRICULUM

CLERKSHIP  
CONFERENCE

## Incorporating Learners into Clinical Practice

Presenters

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# Learning Objectives



After completing this session, participants should be able to:

1. Use the “**RIME**” model to employ teaching techniques that target their learners expected level of development.
2. Use the “**One-Minute Precepting**” method to save time and enhance feedback based on a targeted assessment of the learner’s process in a single clinical encounter.
3. Apply the “One-Minute Precepting” method based on a targeted assessment of the trainee’s performance in a **high acuity inpatient clinical setting**
4. Apply the “One-Minute Precepting” method based on a targeted assessment of the trainee’s performance in a **procedural/OR environment**



# Disclosures of Conflict of Interest

The presenters have no actual or potential conflicts of interest to report pursuant to the information in this program/presentation

# Teaching Challenges

- A minute to reflect:

1. In what clinical setting are you most likely to work with trainees (clinic, ED, hospital, ICU, operating room, etc.)?
2. What kinds of learners do you typically work with (medical students, nursing students, residents, fellows etc.)?
3. What are your biggest challenges in working with learners?



RIME level	Description	Case Presentation by RIME level
Observer	Bystander	“Ms XX is a 23-year-old female. The nurse reports she is complaining of burning on urination.”
Reporter	“What” is wrong	“ . . . and the patient reports dysuria, hematuria, and pyuria for 3 days. She denies nausea/vomiting, fevers/chills, or flank pain. Her vital signs are stable, and her physical exam is normal. She has no abdominal tenderness or flank tenderness. Her urine dip is notable for positive nitrites, blood, and leukocyte esterase.”
Interpreter	“Why” is it wrong	“ . . . Based on her symptoms and abnormal urine dip, I believe she has a urinary tract infection. Other possibilities might include bacterial vaginosis, vaginal candidiasis, or an STD.”
Manager	“How” to address the problem	“ . . . I’ll complete the workup by sending her urine for microscopic examination and culture. I’ll also perform a vaginal exam and obtain specimens for KOH/wet prep, and GC/chlamydia. I plan to treat with drug XX for 3 days.”
Educator	Able to teach others	“This case meets the criteria for a simple UTI, and the latest research indicates that for cases of simple UTI, drug XX is more cost-effective and efficacious than drug YY.”



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Educator	Able to teach others	“This case meets the criteria for a simple UTI, and the latest research indicates that for cases of simple UTI, drug XX is more cost-effective and efficacious than drug YY.”

# Five Microskills for Clinical Teaching (AKA “One Minute Preceptor”)

- Teaching model initially developed for use in the outpatient setting
- 5 steps
  - Get a commitment
  - Probe for supporting evidence
  - Teach general rules
  - Reinforce what was done right
  - Correct mistakes

# One-Minute Preceptor: The Evidence

- Increase in feedback in ambulatory encounters
- One Minute Preceptor (OMP) vs Traditional
  - Preceptors who viewed the OMP model were equally or better able to correctly diagnose the patients' medical conditions compared to the traditional model
  - Faculty better able to assess student skills
  - Students preferred OMP model for quality of teaching it provides (UCSF and UCI)

# OMP: Step 1 – Get a Commitment



- Get a commitment from the learner:
  - Depending on the type of visit, can be a diagnosis, differential diagnosis, whether chronic diseases are adequately managed, whether screening is up to date, etc.
  - You may need to coax them:
    - “What do you think is going on?”
    - “How would you manage this?”
    - “What treatment would you like to give?”

# OMP: Step 2 -- Probe



- Probe for supporting evidence
  - “What led you to that conclusion?”
    - Ask the learner for evidence that supports their conclusion
    - Don’t agree or disagree with the learner at this point
    - Ask questions to understand their thought process and clinical reasoning
      - “What findings led you to this diagnosis?”
      - “Why did you choose this medication as opposed to another?”

# OMP: Step 3 – Teach General Rules



- “When faced with similar scenarios, consider doing this...”
  - Provide general rules/concepts that are targeted to the learner’s level of understanding and can be applied to future cases
  - If no new information to be added, can instead provide positive reinforcement
- Examples:
  - “It is best to listen to a baby’s heart and lungs first and save the more invasive ear and throat exams for the end.”
  - “Patients with alcohol use disorder presenting with respiratory symptoms are at increased risk for serious pneumonia due to impaired immune responses and increased aspiration risk.”

# OMP: Step 4 – Positive Reinforcement



- Reinforce what was done right
  - “You did an excellent job supporting your assessment or acute otitis media with the relevant physical exam findings”
  - “Great job thinking to measure jugular venous pressure in this patient with possible CHF exacerbation”
- Comments should focus on specific behaviors rather than general praise

# OMP: Step 5 – Constructive Feedback



- Correct mistakes
  - “Next time this happens, try this...”
  - Aim to allow the learner to review their performer first.
  - In general, save constructive feedback for when there is adequate time to have a discussion about it (e.g. end of clinic session).

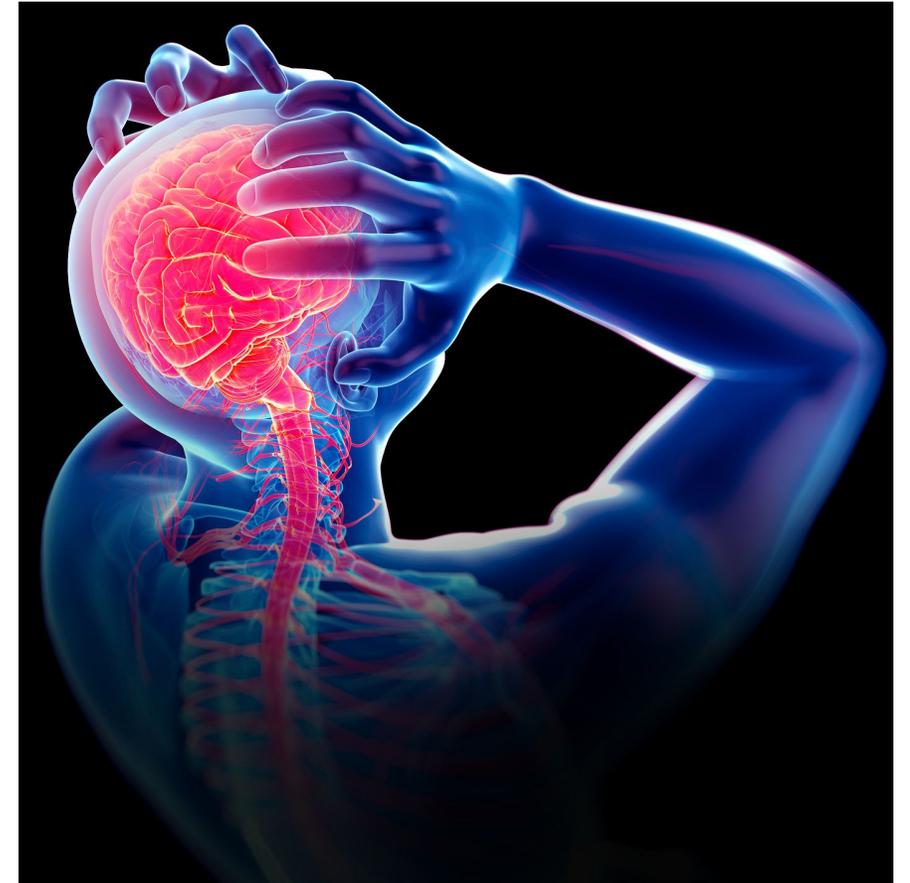


 Apply the “One-Minute Precepting” method in a high acuity clinical setting

- “A.P.T. Right and Wrong”
- Ask Probe Teach Reinforce right Correct wrong
- *“It’s always APT to teach right and wrong”*

# Headache

- 40-year-old woman presents to the emergency department with a severe HA
- Afebrile
- GSC 15, awake, alert, oriented x4
- No weakness or sensory deficit



# One minute preceptor - high acuity setting

1. “*What do you think is the diagnosis?*” [**Assess understanding**]

-- Migraine

2. “*What led you to that conclusion?*” [**Clinical reason skills**]

-- Headache with no altered mental status or fever...

“*What other headache types did you consider before settling on this diagnosis?*” [**Probe**]

3. “*Headache Red Flags Symptoms include....*” [**Teach evidence-based pearls**]

# One minute preceptor - high acuity setting

4. *“It’s very good that you performed a general and neurological exam in a patient with a headache to determine that they were afebrile and that the mental status was normal.”* [**Reinforce right**]

5. *“Headache history should include acuity of onset and risk factors for secondary headache syndromes. You didn’t include a pupillary exam. This patient has right 3<sup>rd</sup> nerve palsy with a nonreactive pupil.*

*Patients with a headache and a focal neurological deficit need brain imaging to look for an aneurysm. If that doesn’t reveal subarachnoid blood, they may also need a lumbar puncture to evaluate for xanthochromia and test for infectious causes of meningitis.”* [**Correct wrong**]

# Clinical outcomes

- Link discussion to good clinical outcomes for patients
  - *"Considering the red flags that may indicate a secondary headache syndrome is important.*
  - *In the case of SAH, rebleeding from aneurysm re-rupture is often lethal. Tight blood pressure control (SBP < 140-160) and treatment of the aneurysm within 24 hours is recommended to improve survival."*
- The OMP teaching method may facilitate incorporating medical students into the care of high acuity patients in a meaningfully and efficient way.

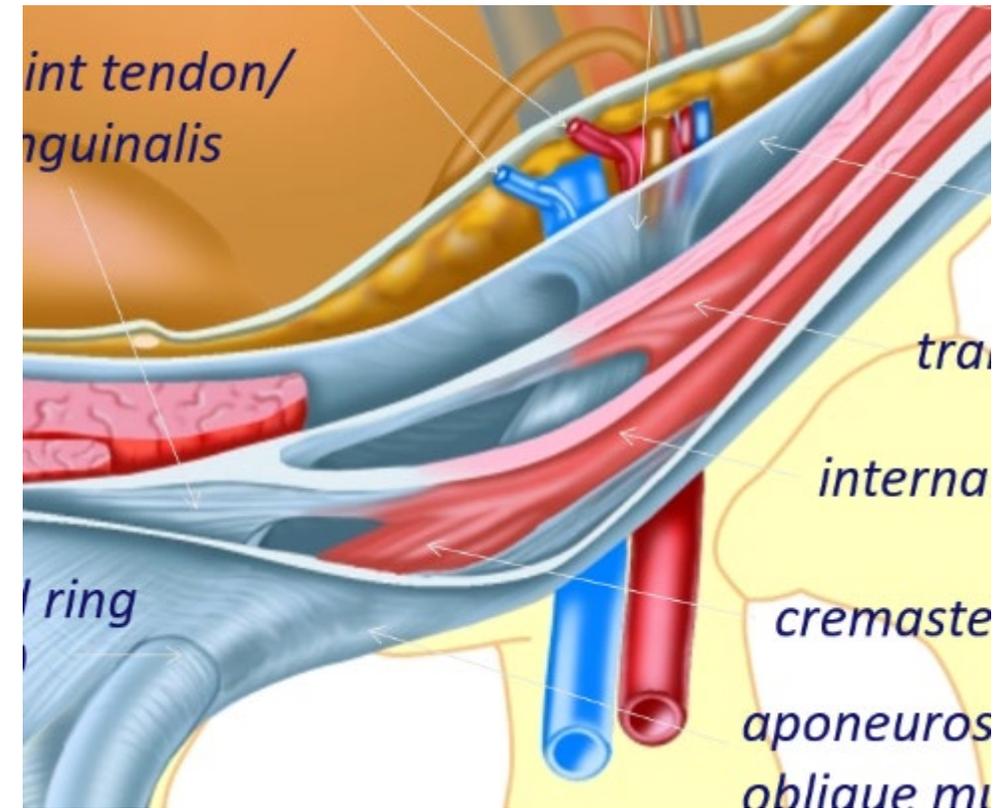


## Using the “One-Minute Precepting” method in an OR/Procedure setting

- **RIME**
  - Reporter\*
  - Interpreter\*
  - **Manager**
  - **Educator**
- **One Minute Preceptor**
  - Ask – Probe – Teach
  - Reinforce Right
  - Correct Wrong

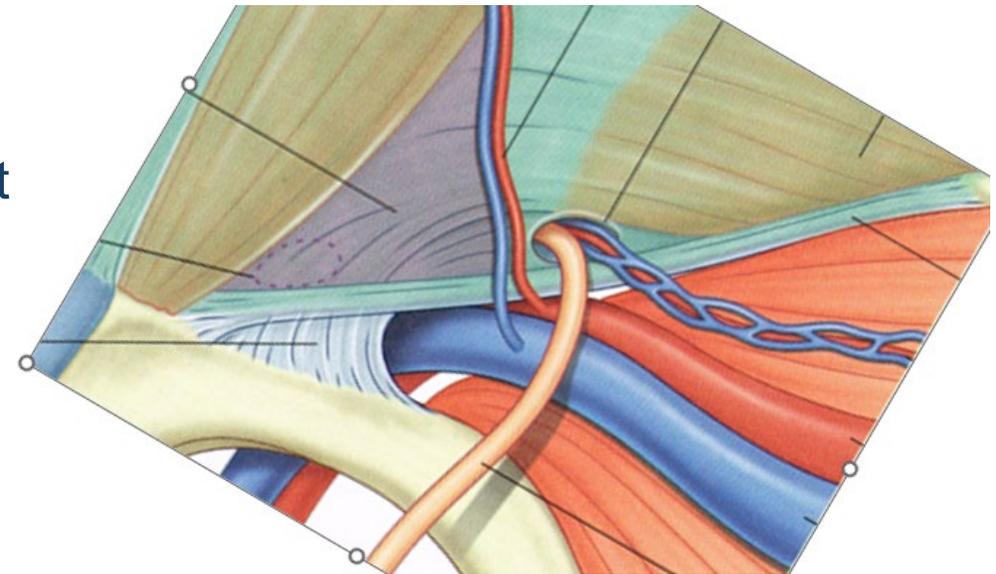
# Example - Groin Hernia

- **Ask** – What type of hernia is this?
- **Probe** – Why do you think this is a ‘direct’ inguinal hernia? Why not an indirect or femoral? Where are the inferior epigastric vessels, can we see them?
- **Teach** – Important anatomy and 3D relationships. Normal and abnormal tissue characteristics/planes. Visual and palpable landmarks. General mesh considerations. Expected outcomes.
- Reinforce Right
- Correct Wrong



# Example - Groin Hernia

- Ask
- Probe
- Teach
- **Reinforce Right** – Correct, direct hernias are medial to the cord structures/inferior epigastric vessels and above the inguinal ligament.
- **Correct Wrong** – This is actually a large indirect hernia because the inferior epigastric vessels are palpable underneath the medial boarder of the hernia.



# One minute preceptor – OR/Procedures

Alternative starting points...

1. Anatomy
2. Pathophysiology – What is a hernia and why do people get them? What are the common risk factors?
3. Procedural – What are the basic steps to an inguinal hernia repair? What are the differences between open and laparoscopic/robotic repairs? What is the same?

# One minute preceptor – OR/Procedures

Important notes –

Clinical correlation is always beneficial. Review expected early and late term outcomes and any implications of operative findings.

Keep in mind that Procedure/Operation specifics can quickly move beyond the broad objectives of medical school training.

# Pitfalls

- Taking over the case
- Asking too many questions
- Not allowing sufficient wait time
- Inappropriately giving lectures
- Asking questions with pre-programmed answers
- Pushing the learner past their ability
- Not giving any feedback

# Where to Find More Information



## More information on this session's topic can be found at:

Aagaard, Eva, Arianne Teherani, and David M. Irby. "Effectiveness of the One-Minute Preceptor Model for Diagnosing the Patient and the Learner: Proof of Concept." *Academic Medicine: Journal of the Association of American Medical Colleges* 79, no. 1 (January 2004): 42–49. <https://doi.org/10.1097/00001888-200401000-00010>.

Gatewood, Elizabeth, and Jennie C. De Gagne. "The One-Minute Preceptor Model: A Systematic Review." *Journal of the American Association of Nurse Practitioners* 31, no. 1 (January 2019): 46–57. <https://doi.org/10.1097/JXX.0000000000000099>.

Neher, Jon O., Katherine C. Gordon, Barbara Meyer, and Nancy Stevens. "A Five-Step 'Microskills' Model Of Clinical Teaching." *The Journal of the American Board of Family Practice* 5, no. 4 (July 1, 1992): 419–24. <https://doi.org/10.3122/jabfm.5.4.419>.

Salerno, Stephen M., Patrick G. O'Malley, Louis N. Pangaro, Gary A. Wheeler, Lisa K. Moores, and Jeffrey L. Jackson. "Faculty Development Seminars Based on the One-Minute Preceptor Improve Feedback in the Ambulatory Setting." *Journal of General Internal Medicine* 17, no. 10 (October 2002): 779–87. <https://doi.org/10.1046/j.1525-1497.2002.11233.x>.

Sepdham, Dan, Manjula Julka, Laura Hofmann, and Alison Dobbie. "Using the RIME Model for Learner Assessment and Feedback." *Family Medicine* 39, no. 3 (March 2007): 161–63.

Teherani, Arianne, Patricia O'Sullivan, Eva M. Aagaard, Elizabeth H. Morrison, and David M. Irby. "Student Perceptions of the One Minute Preceptor and Traditional Preceptor Models." *Medical Teacher* 29, no. 4 (May 2007): 323–27. <https://doi.org/10.1080/01421590701287988>.