Residents *teaching* Students

Department of Family Medicine & Community Health

David Power, MD, MPH
Joseph J. Brocato, PhD
Erik J. Solberg, MA, MEd

University of Minnesota
Driven to Discover℠

All residents are teachers

At some point, all FM residents—especially 2nd and 3rd years-- teach medical students in clinic and / or in hospital.

All residents are teachers, continued

Even though all residents are teachers...

...Residents don't always receive adequate instruction in how to effectively teach or give feedback.

Presentation Goals

1. Describe the **challenges** and **rewards** of teaching students in clinic?
2. Review the Course Objectives of the 2 required courses most commonly taught in our clinics:
   - **Essentials of Clinical Medicine (ECM)**
   - **Family Medicine Clerkship (FMC)**
3. Present a model of **Clinical Precepting**
4. Suggest **2 strategies** to increase effectiveness
5. Respond to Any **Questions / Comments**

What challenges have you experienced with teaching students in clinic?

- Too many competing demands
- Some students too inexperienced
- No time for teaching
- Some patients don't like to see students
- Students slow me down
- Some students not interested
- No training in how to teach

What are the rewards of teaching students in clinic?

- Impacting a student's education
- Less professional burnout [over time]
- Increased Job Satisfaction
- Enhanced personal clinical knowledge base
- Increase in board scores!
- Meeting the ACGME General Competencies
- Recruitment
- Many patients admire / appreciate it

Essentials of Clinical Medicine (ECM):

- All Year 1 or 2 Medical Students (165 / yr.)
- Each student spends one ½ day in clinic over 8-10 weeks
- Offered in Family Medicine or Medicine or Pediatrics
- Students have just learned basic H&P skills

ECM goals:

- Practice performing a Focused History
- Practice performing a Focused Exam
- Complete course requirements, such as accompany a patient from clinic entry through entire visit through exiting clinic
  - Students do not have EMR access

ECM Observations

- One of student's first experiences in clinic
- Students need clear instruction / direction
- MS1/2s take much longer than MS3/4s!

Family Medicine Clerkship (FMC)

- ALL Year 3 & 4 Medical students (except RPAP) – [180 per year]
- 4week required clerkship in Family Medicine
- UCAM: up to 12 per year – 12 weeks in FM
- MetroPAP: 2 students x 9 months, Broadway
- 3-4 days per week in clinic
- 1st Mon & all Weds spent in small group at U or in independent learning
- Final Friday exam at U of M

FMC Goals:

- Students are the First MD-equivalent to Encounter the patient at least 50% of the time
- Student functions as a 'sub-intern':
- Takes relevant History
- Performs relevant Physical (but not elements that need physician confirmation nor elements that will distress a patient – e.g. child ear exam, adult genital exam)

Student functions as a 'sub-intern':

- Student summarizes H&P findings and presents a working 'Assessment' and management 'Plan'
- Both physician and student return to finish visit with patient
- Student adapts to clinic environment and functions effectively in a time efficient manner

FMC Emphasizes:

- Management of Common Outpatient Problems
- DM, HTN, Osteoporosis…
- Health Care Maintenance / Prevention
- Immunizations, Lipids…
- Small group workshops on:
- Above: plus Asthma, Musculoskeletal exam, Process of Care, EBM

Students' Clinical Skills

- Medical School wants to ensure that all graduates complete important skills:
  - students carry a list of required skills

- Those skills to be encountered in FMC include:
- PAP smear
- Telephone Medicine
- WCC, CPE and others

FMC Evaluation

- A single faculty evaluator is linked with each student in clinic: in some clinics always the same faculty; in some - not
- This faculty person is responsible for any issues that occur with that student and will be the student's evaluator

FMC Evaluation, continued

- Students should spend 14 full days in clinic /4 weeks
- Students are allowed to miss 2 full days per 4 weeks for legitimate reasons: beyond that needs discussion
- Clinic evaluations account for 50% of course grade
- Usual grades: 25% ‘H’; 55% ‘E’; 20% ‘S’ <5% ‘I’

Some Caveats:

- Some patients don't want to see a student
- Arrange for other activities

- There can be quite a difference in content knowledge and performance between an Early MS3 and a late MS4

- ~50% of MN students are not entering Primary Care but all must take FMC

The Microskills Model [aka The 1-Minute Preceptor]

- A 5 step process of clinical teaching
- Often used in Faculty – Resident precepting
- Readily applicable to Clinical Precepting
- Originated in the business literature

Neher, J.O., Gordon, K.C., Meyer, B., and Stevens, N.
"A Five Step Microskills Model of Clinical Teaching"
J Am Board of Family Practice 5:419-424, 1992.

The Microskills Model—Five Steps

1. Get a commitment
2. Probe for Supporting Evidence
3. Teach General Rules
4. Reinforce what was done right
5. Correct Mistakes

Step 1: Get a Commitment

- After presenting the facts of a case to you, the learner may stop and wait for your response.
- Instead of telling them the answer, ask them to state what he or she thinks about the issues presented by the data.

Step 1. Get a Commitment, continued

- **Examples—**
  - What do you think is going on with the patient?
  - How can you tie all of this together?
  - What do you think we need to accomplish during today's clinic visit?
  - What do you think we need to do next?

Step 2. Probe for Supporting Evidence

- After committing him or herself on the presenting problem, the learner may look to you to either confirm or refute the opinion.

- Before doing that, ask the learner for evidence that he or she feels supports the opinion.

Step 2. Probe for Supporting Evidence, continued

- An alternative approach is to ask the presenter to expand the differential diagnosis of the patient's presenting complaint, physical findings, or data.

Step 2. Probe for Supporting Evidence, continued

- **Examples:**
  - I am interested in how you came to that diagnosis.
  - What were the major findings that led to your conclusion?
  - What other things did you consider regarding the patient's abdominal pain?
  - What else might be causing the elevated LFT's?
  - Do any further questions come to mind?

Step 2. Probe for Supporting Evidence, continued

- **Avoid the following:**
  - List all of the possible causes of LLQ abdominal pain.
  - I don't believe this is consistent with acute pancreatitis. Don't you have any other ideas?
  - What was their last creatinine?
  - What if, rather than being a white Minnesotan, this patient instead had just immigrated from Somalia? (read my mind questions)

Step 3. Teach General Rules

- At the time of Precepting or at a later time
- You have ascertained from what the learner revealed that there is a knowledge gap (and that you can fill it!).
- Provide general rules or concepts targeted to the learner's level.

Step 3. Teach General Rules, continued

- **Example:**
  - Patients with strong symptoms such as dysuria, frequency and urgency, without vaginal symptoms are so likely to have a UTI that they should be treated even if they have a normal UA.
- **Avoid** statements like**:**
  - I always use Cipro
  - The last time I saw this condition...

Step 4. Reinforce what was done right

- The learner may or may not realize that their plan of action was effective and will have a positive impact.
- Focus on the specific deed and the effect it had.

Step 4. Reinforce what was done right, continued

- **Example:**
  - You considered the cost of the medication and the schedule of dosing in your selection of an antibiotic and checked on the patient's Medication Allergies. That was really excellent.

- **Avoid** statements like**:**
  - Good job!.

Step 5. Correct Mistakes

- In the case where the learner's work has demonstrated mistakes, this needs to be discussed as soon as possible.

  --What went wrong and why

  --How to avoid or correct the error in the future
- Best to share feedback directly with learner

Step 5. Correct Mistakes, continued

- Example
  - You may be right to attribute this patient's confusion to the UTI. However, given the history of a recent fall in a patient on Warfarin, a head CT really should be done to rule out bleed or subdural hematoma.
- Avoid statements like:
  - Why didn't you mention the need for a head CT?!
  - I wouldn't want to go to you as my dermatologist!

In summary, the 5 Steps

1. Get a commitment
2. Probe for Supporting Evidence
3. Teach General Rules
4. Reinforce what was done right
5. Correct Mistakes

Two Useful Strategies

- 'Priming' the student
- Teaching in the Presence of the Patient [TIPP]

Priming:

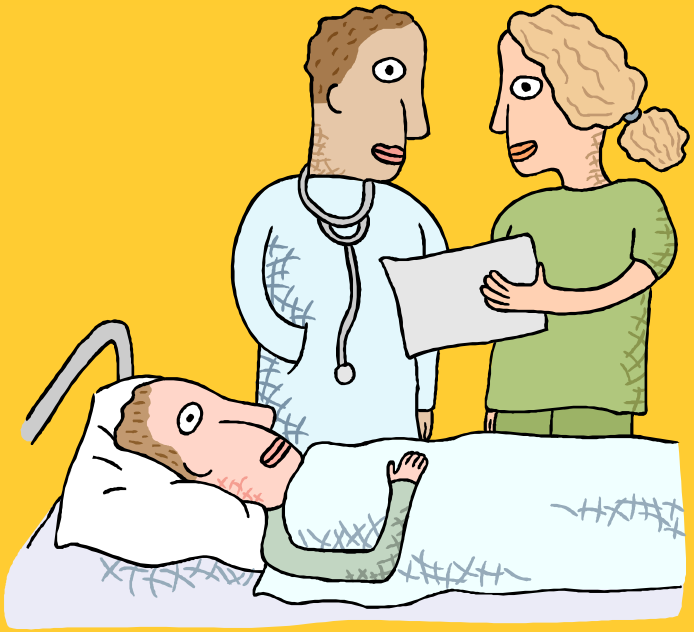
- Orienting the Learner to Patient and Tasks immediately before entering patient room
- A mini-orientation with each new provider each new clinic half-day –including clarifying Year of medical student

Priming, continued

- Define the tasks the learner should complete, including the time frame
- Indicate how & when preceptor will reconnect with student (I'll come in the room in 10 minutes..)
- Review patient history and any patient-specific details
- Describe the 'product' resulting from this contact: such as oral presentation / chart note…

Adapted from Heidenreich et al, Pediatrics 2000

Teaching In the Patient's Presence (TIPP)



TIPP is:

- Have the student present in the exam room with the patient listening
- Doctor and student can then continue history taking, confirm exam findings and move on to management plan with patient

TIPP: Advantages

- Increases time efficiency
- Patients can see you are talking about THEM!
- May reassure patients that student is accurately reporting information and findings
- Increases contact time between Preceptor and Patient
- Often reduces need for preceptor to repeat history-taking

TIPP: Challenges

- Patient interruptions
- Some students do not like
- Some physicians do not like!
- Some information better shared outside room
- Presentations may be less prepared / fluent
- Sometimes 'damage control' needed for student comments

TIPP: Practical Strategies

- **Prime** *before* entering room
- Preceptor maintains *control*
  - Roles & rules
  - Keeping time
- Maintain *focus*
  - Primary: patient care
  - Secondary: student learning
- Maintain *respect*
  - Patient
  - Learner

What we just reviewed!:

1. The rewards and challenges of teaching students in clinic
2. The Course Objectives of the two required courses most commonly taught in our residency clinics:
   - -Essentials of Clinical Medicine
   - -Family Medicine Clerkship
3. One model of Clinical Precepting
4. 2 Strategies to improve teaching

Conclusion

- Thank you! And...Happy Precepting!
- Questions?:
  - power007@umn.edu
  - broca003@umn.edu
  - solb0117@umn.edu