“Bringing it” to the Bedside: Innovative Strategies for Teaching on Rounds

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Potential Conflicts of Interest

None relevant to this presentation

“I did not have improper relations with that company.”
Goals

• List barriers to effective round-based / bedside teaching
• Describe components of preparation for teaching rounds
• Explain elements of a successful “teaching script”
• Use methods to improve the quality of bedside teaching
Model for creativity in teaching

Whitman and Schwenk, “Residents as Teachers,” 2005

History of Teaching Rounds

• 1964 – 75% of teaching at the bedside

• 2009 – 17% of teaching at the bedside
  • PE – 38% of the subset

• Why?

Crumlish, Journ Hosp Med, 2009
Reichsman, Journ Med Ed, 1964
Common Barriers

• Why we don’t teach on rounds
  – Poor timing
  – Limited confidence
  – Varied levels of learners
  – Concern for the patient

Preparing isn’t cheating.

“The key element to conducting effective rounds”

Ramani, S, Medical Teacher 2003
Preparation Strategies

• Trainee-specific

• Disease- and patient-specific

• Mental preparation

Trainee-Specific Preparation
Expectations

• What are yours?
  – Roles and expectations for each level of learner
  – Ground rules

• What are theirs?

General principles about “what learners want”

• Medical students
  – Knowledge and experience that is quickly applicable
    • “Pearls”
  – Responsibility and access

• Interns
  – Efficiency
  – Focused, practical rounds
  – Major differential dx

• Residents / Fellows
  – Opportunities to teach and manage
  – Dedicated time with the faculty
Setting expectations: Patient presentations

• The oral presentation must be **brief**
  – Chief complaint: Should have all relevant facts
  – HPI: Key details
  – PE: Vitals and key findings
  – Labs: Only important results
  – A/P: Emphasize your leading diagnostic choices and what questions you have

McGee, S, JAMA 2014

Disease- and Patient-Specific Preparation
Teaching Scripts

• Memorized mini-lectures on narrow topics
  – Predicting prognosis in pneumonia
  – Differentiating types of shock

Elements of a Good “Teaching Script”

• Frequently encountered concepts
• Areas where most lack confidence
• “Bread and butter” points that are often forgotten
• Points that can be made to various levels
• Preparation
• “Bite-sized” teaching points
Building a “teaching script”

• What specifically do I want to teach?
  – Is it high-yield?
  – Will there be a clinical opportunity to use this over-and-over?
• What are the current skill levels of my learners?
• What is the content I want to cover in…
  – 3 minutes?
  – 5 minutes?
  – 7 minutes?

Preparation schedule

6:30 a.m.: Reviewing EMR, four patients on your census (new or prior patients). Working diagnoses:
  a) ADHF with electrolyte disturbances,
  b) CAP with SIRS,
  c) hepatic encephalopathy,
  d) Chest pain in woman with no prior cardiac hx
Identify teaching points

7:00 a.m.: Think about teaching scripts.

What teaching points would you like to make at the bedside? What details would you need to prepare before rounds? Can you repeat this?

Plan in advance

a) ADHF with electrolyte disturbances
   - examining the apex
b) CAP with SIRS,
   - auscultating each lobe of lung
c) hepatic encephalopathy
   - asterixis pathophysiology
Fill in the gaps

- **7:00 - 7:30:** Look at resources to fill in gaps. (i.e. JAMA Rational Clinical Exam, Art and Science of Bedside Diagnosis, etc.)
- Refresh yourself on prior scripts if you have them.
- Practice the timing, determine length

Mental Preparation for Multilevel Teaching
High-Yield Multilevel Teaching Techniques

• Targeting
  – Aim questions of different levels at specific team members

• Broadening
  – Change the specifics of a given case to make it more challenging or interesting


High-Yield Multilevel Teaching Techniques

• Novelty
  – Offer newly published data

• Up the Ladder
  – Ask the same question multiple times

Moderate-Yield Multilevel Teaching Technique

• Student as Teacher
  – Have a more senior learner train a more junior one

• The educational prescription


Low-Yield Multilevel Teaching Technique

• Teaching to the Top (or the Bottom)

No-Yield Teaching Techniques

• Pimping
  • "Proper pimping inculcates the intern with a profound and abiding respect for his attending... While ridding [him] of needless self-esteem."

  – Arcane points of history
  – Teleology and metaphysics
  – Exceedingly broad questions
  – Eponyms
  – Technical points of laboratory research

Brancati, FL, JAMA, 1989
The Hallway

• Strong negative associations between hallway time and teacher ratings
  – Distractions
  – Public places
    • Patient privacy and house staff embarrassment
  – Why stand when you can sit?

Schor and Grayson, AAMC, 1984

The Bedside: The Real Deal

• Trainees learn best from our patients
• You actually have to go to the bedside!
• Your teaching evals will go up
At the bedside

- Have the housestaff do most of the talking to the patient
  - Refer all questions to the learners, making corrections when necessary
    - Exception: medical students -- modeling more critical for this group
  - Keep all learners engaged using one or more of the aforementioned techniques
    - Work to prevent dominance by a minority of players

Champion interesting physical findings

- Demonstrating clinical skills can only be done at the bedside!
“Bring It” Tip

• Evidence-based teaching at the bedside is a HIT
• Review: Likelihood ratios, sensitivities and specificities for findings
• Excellent for higher level learners but also relevant for junior learners

In the Conference Room

• Focus on clinical problem solving
  – Expanded differential
  – What if scenarios
• Think out loud
Do’s

- “Based on the history, what diagnoses are you considering?”
  - “What findings will you be looking for on physical examination?”
- “Given the physical findings, how is your differential diagnosis altered?”
- “What possible laboratory tests might you consider in this situation?”
  - “What would you do if your test of choice were unavailable?”
- “What are the critical factors to monitor in the next 6/24 hours?”

Whitman and Schwenk, “Residents as Teachers,” 2005

Don’ts

- Ask the housestaff impossible, “what am I thinking” questions
- Ask questions designed to show how smart you are
- Do anything in front of a patient to potentially embarrass the providing MD
- Ask a junior learner a question after a senior learner has missed it (even if they know it, it shows up the senior)
Take home points

• Preparing isn’t cheating
• Set expectations
• “Plan it and can it”
  – Build an arsenal of teaching scripts
• Find a way to go to the bedside
  – Repetition builds confidence
• There is always time to teach

Thank you.