Teaching With Our Learners' Questions
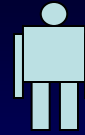
W. Scott Richardson, MD

Mark C. Wilson, MD, MPH

Thomas G. McGinn, MD, MPH
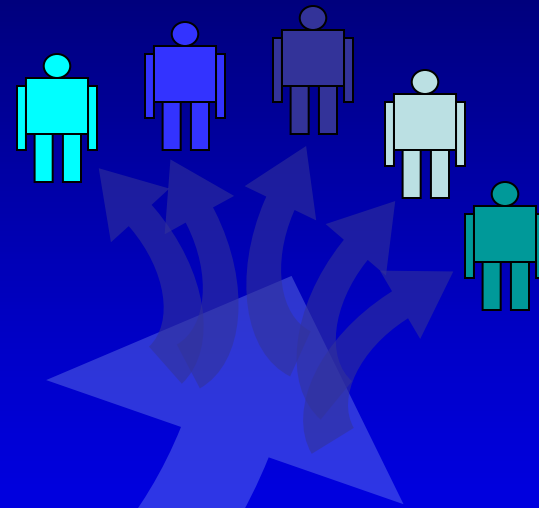
They've just seen a patient:

- **67M, admitted for breathlessness**
- **2 weeks: ↑weight, progressive edema**
- **3 days: fever, cough, purulent sputum**
- **Past: Rheumatoid arthritis, Felty's syndrome, heart failure**
- **Rx: Steroids, furosemide, metoprolol**
- **Exam: lung crackles, splenomegaly**

Now, listen carefully …

Chest Radiograph
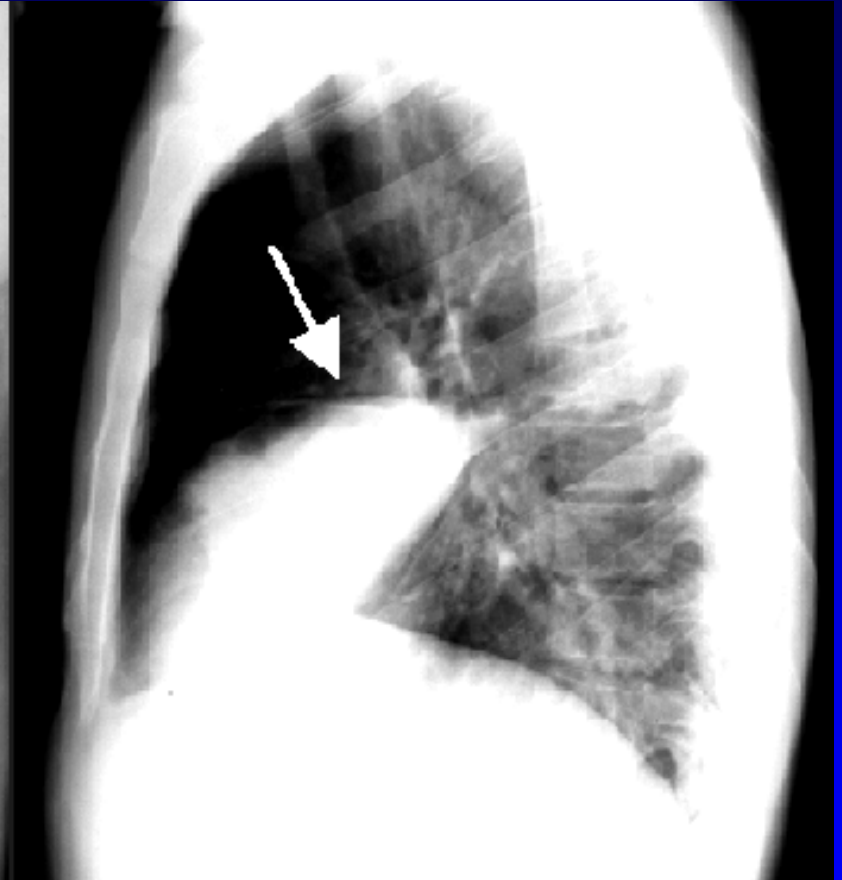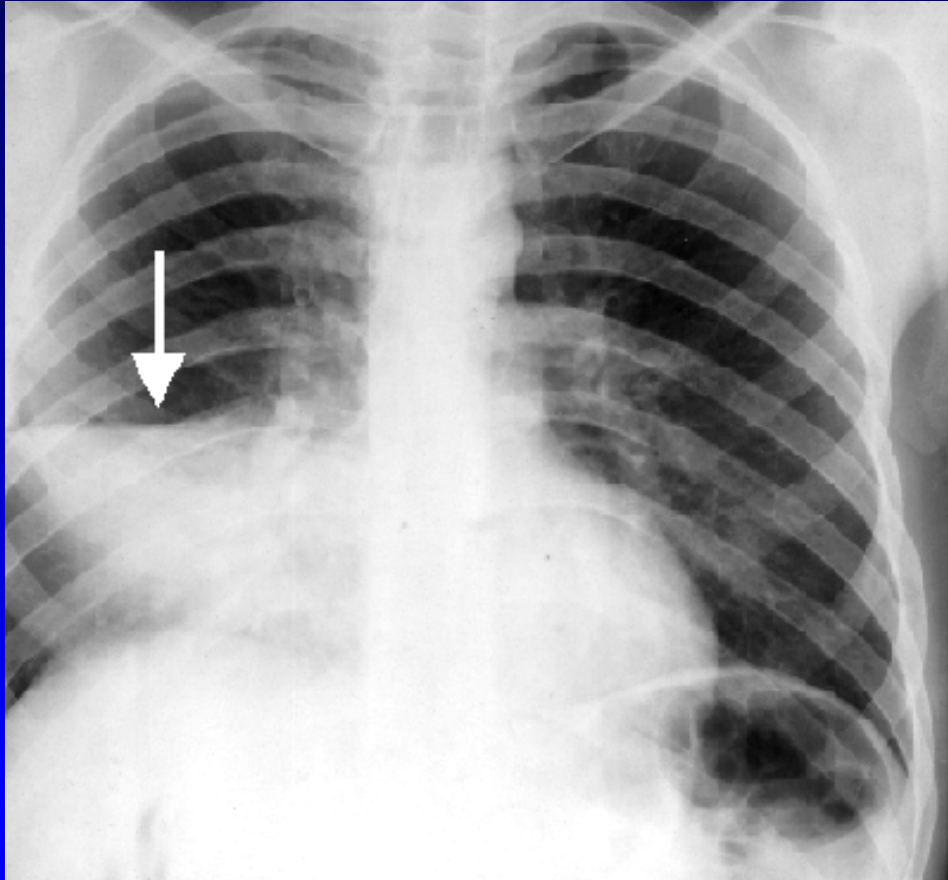
'Hoot Groups' Task

- **Groups of 2 – 3**
- **Discuss what you noticed about this encounter**
- **Be ready to report to group $\geq$ 1 item**
- **Return in 2 minutes**

What you noticed …

- **Senior directing to think, yet didn't give junior time**
- **Force EBM on ACEI**
- **Friendly, yet unfocused**
- **Prompted learner**
- **Missed opportunity**
- **NNT not important**
- **Priorities?**

- **Learner excited about things, but teacher didn't exploit**
- **Teacher did fun parts alone**
- **Too many learning points**
- **Limited time**
- **Learner unfocused, yet may not know**

What was missing?

What was missing?

- **Did the teacher identify the learner's questions?**

- **Did the teacher use the learner's questions in teaching?**

Isn't it all about me?

Why don't we use their Q?

- **Don't know answers**
- **Embarassment?**
- **Prestige, power from knowing things**
- **Learners expect me to pontificate**
- **Forgotten learners view – so basic**
- **Our own agenda dominates**

- **Don't want to lose control**
- **It's all about me**
- **Ain't no time**
- **Have to move quickly**
- **Scary, out of comfort zone**

FAQ: What if I don't know the answer to their questions?

Emotions in Not Knowing

Ready to …	Feeling	Behaviors
Flee	Fear	Leave Invisible
Fight	Anger	Disrupt Undermine
Cry for help	Distress	Stop trying Body stress
Withdraw	Sadness	Inattention Detachment

What can teachers do ... ?

What can teachers do ... ?

- **Acknowledge emotions of not knowing**
- **Minimize hidden curriculum**
- **Help learners build adaptive responses**
  - **Don't hide when you don't know**
  - **Use emotions to help pursue questions**

- **Point out the 'positive' emotions of learning and knowing ...**

Emotions in Knowing

- **Satisfaction**: Self image of "knower" meets reality of "knew this"
- **Curiosity**: the wind in the sails
- **Joy**: knowing and/or learning brings benefits to others
- **"Zero gravity" or "flow"**: when learning engages the mind fully without self consciousness

FAQ: Where do Q come from?

10 Common Questions

- **Clinical findings**
- **Harm/etiology**
- **Differential diagnosis**
- **Manifestations**
- **Diagnostic tests**
- **Prognosis**

- **Therapy**
- **Prevention**
- **Experience, Meaning**
- **Learning**

(Not exhaustive or mutually exclusive)

'Background' Questions

- About the disorder, test, treatment, etc.
- 2 components:

a. Root* + Verb: "What causes …"

b. Condition: "… swine flu?"

- * Who, What, Where, When, Why, How

- 'RVC' = Root, Verb, Condition

'Foreground' Questions

- About patient care decisions and actions
- 4 (or 3) components:

a. patient, problem, or population

b. intervention, exposure, or maneuver

c. comparison (if relevant)

d. clinical outcomes (including time horizon)

'PICO' = Patient, Intervention, Comparison, Outcomes

Background & Foreground

Figure 1.1 Background and foreground questions.
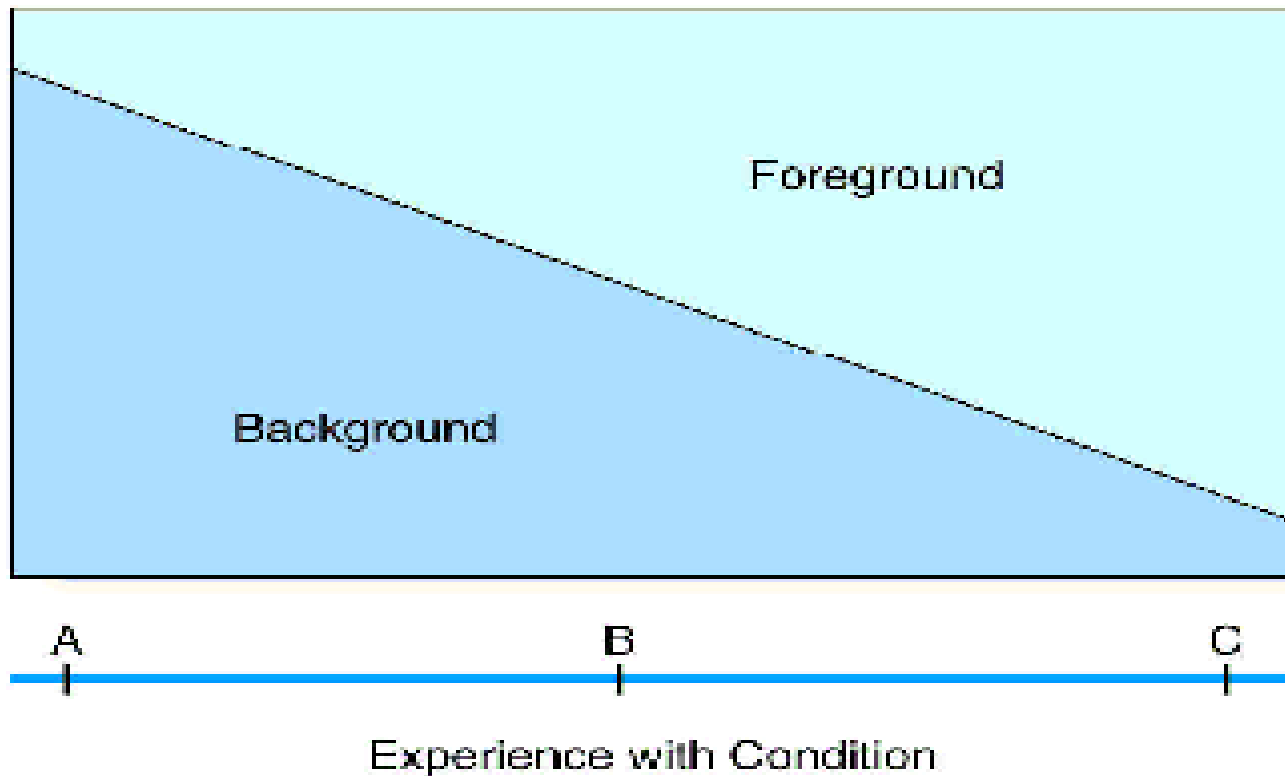
FAQ: How do I recognize Q?

Recognizing Questions

- **Listen with both ears**
- **Diagnose case and self/learner**
- **Compare to inner model – how it should sound**
- **Notice your/learner's cognitive dissonance & other responses**
- **Use map to locate questions**

Now, listen carefully …

'Hoot Groups' Task

- **Groups of 2 – 3**
- **Share questions you recognized**
- **Pick one – best to teach this learner**
- **Be ready to report to the group**
- **Return in 3 minutes**

Questions You Want to Teach

- **How to present**
- **Patient's agenda**
- **Family's agenda**
- **Patient's need**
- **Learner's need**
- **Differential diagnosis of leg pain and swelling**
- **Selecting short list for differential**

- **Long term vs. short term**
- **Examine leg**
- **What you worried about**
- **Teaching where?**
- **Organize, prioritize,**

Selecting Questions

Consider:

- **What is illness?**
- **What is role?**
- **What are learning needs?**
- **What are available resources?**

Of these, select:

- **Most urgent**
- **Most interesting**
- **Most feasible to answer**
- **Most likely to recur**

FAQ: How do I coach on Q?

- **Try building up from 'raw' question to more complete anatomy (rather than tearing their efforts down)**
- **Consider 2 stages:**
- **"Sounds like you're asking a question about … (therapy, prognosis, etc.)"**
- **"What would be the … (missing anatomy) you would want to know?"**

Teaching with Questions

- **Recognize: your learners' questions**
- **Select: which questions to pursue**
- **Guide: how to ask and answer**
- **Assess: how well & what to improve**

FAQ: Why should I bother teaching with learners' questions?

FAQ: Why Bother? 1

- **Respect learners**
- **Relevant to clinical needs**
- **Relevant to learning needs**
- **Improve comprehension**

- **Plan searches**
- **Recognize answers**
- **Awaken curiosity**
- **Have some fun!**

- **Any evidence?**

FAQ: Why Bother? 2

RCT:↑explicitness of questions

Villaneuva et al BMC MI/DM 2001; 1: 4.

RCT:↑frequency of searches

Cabell et al JGIM 2001; 16: 838.

Before-After Trial:↑precision of search

Booth et al Bull MLA 2000; 88: 239.

RCT:↑quality of search, evidence found

Rosenberg J R Coll Phys L 1998; 32: 557.

FAQ: "Got no time …"

- **Sorry, we don't have time to address this one …**

FAQ: "Got no time …"

- **Acknowledge real time limits**
- **Pick one thing to teach, anything, but NOT everything**
- **Get past misperception – time is tight no matter whose question it is**
- **Takes gumption …**
- **Just do it!**

Your Questions about 'Q'?

Thank You!