

Supplemental Digital Appendix 1: Student Survey

This survey aims to understand your perspectives on being asked questions that “probe” medical knowledge and concepts, from now on referred to as “PROBING QUESTIONS.” Examples of these questions include:

- “In this patient with heart failure and kidney disease, why do we hesitate to give furosemide?”
- “What is your reasoning for ordering a CT scan?”
- “How can you determine heart axis on an ECG?”

This survey does NOT refer to “work-flow” questions. Examples of these questions include:

- “Has the sodium level changed since yesterday?”
- “What time is the patient’s CT scan?”
- “Have we obtained an ECG for this patient?”

This survey is in regards to your clinical trunk INPATIENT internal medicine rotations.

1. How many probing questions, on average, are you asked by the attending per day while on Internal Medicine Inpatient service?
 - 0, 1-2, 3-5, 6-10, >10
2. Probing questions from attendings are a valuable component of my education.
 - Strongly disagree (1), Somewhat disagree (2), Neither agree nor disagree (3), Somewhat agree (4), Strongly Agree (5)
3. I would have preferred to been asked more probing questions from attendings while I was rotating on Internal Medicine inpatient service.

4. I would have rather been asked too many probing questions than no probing questions at all on Internal Medicine INPATIENT service.
5. If I answer a probing question incorrectly or do not know the answer, I am less likely to volunteer more answers during the rest of the encounter.
6. If I answer a probing question incorrectly or do not know the answer, I want the attending to stop asking me questions for the rest of the encounter.
7. When I don't know or provide the wrong answer to a probing question from the attending, I feel humiliated.
8. Attendings ask me probing questions to humiliate me.
9. Attendings ask me probing questions to assess for teaching opportunities (ie, find knowledge gaps to teach about).
10. I am comfortable admitting I do not know the answer to a probing question.
11. I am comfortable asking an attending to rephrase a poorly-worded probing question.
12. I prefer attendings who challenge me by increasing the difficulty of probing questions.
13. My attending's evaluation of me is primarily based on my ability to correctly answer probing questions.
14. If an attending asks me probing questions, I will give them a low score on their evaluation.
15. If clinical trunk rotations were graded PASS/FAIL (rather than Honors, High Pass, Pass, Fail), I would want to be asked more probing questions from attendings.
16. What INPATIENT internal medicine services (aside from the VA) did you rotate on during Clinical Trunk? (may choose more than one)
 - Cardiology, GI/Liver, Heme/Onc, UM Gen Med

17. What grade did you receive on Clinical Trunk Internal Medicine rotation?

- Fail, Pass, High Pass, Honors

18. What was your Step 1 score? (OPTIONAL)

- <190, 190-200, 201-210, 211-220, 221-230, 231-240 , 241-250, 251-260, 261-270, >270

19. Additional thoughts or comments on the use of probing questions in medical education:

Supplemental Digital Appendix 2: Faculty Survey

This survey aims to understand your perspectives on asking students questions that “probe” medical knowledge and concepts, from now on referred to as “PROBING QUESTIONS.”

Examples of these questions include:

- “In this patient with heart failure and kidney disease, why do we hesitate to give furosemide?”
- “What is your reasoning for ordering a CT scan?”
- “How can you determine heart axis on an ECG?”

This survey does NOT refer to “work-flow” questions. Examples of these questions include:

- “Has the sodium level changed since yesterday?”
- “What time is the patient’s CT scan?”
- “Have we obtained an ECG for this patient?”

This survey is in regards to INPATIENT internal medicine services.

1. How many probing questions, on average, do you direct towards medical students per day while attending on Internal Medicine Inpatient service?
 - 0, 1-2, 3-5, 6-10, 11-20, >20
2. Probing questions are a valuable component of medical student education.
 - Strongly disagree (1), Somewhat disagree (2), Neither agree nor disagree (3), Somewhat agree (4), Strongly Agree (5)
3. MEDICAL STUDENTS think probing questions are a valuable component of their education.

4. Medical students want to be asked more probing questions than they are currently being asked while rotating on Internal Medicine Inpatient service.
5. Medical students would rather be asked too many probing questions than no questions at all.
6. If a student incorrectly answers or doesn't know the answer to a probing question, they want me to stop asking them questions for the remainder of the encounter.
7. Medical students feel humiliated when they don't know or provide the incorrect answer to a probing question.
8. I know how to ask probing questions in a way that a student will not feel humiliated.
9. If students are answering my probing questions CORRECTLY, they prefer to be challenged with increasingly more difficult questions.
10. I ask students probing questions to assess for teaching opportunities (ie, find knowledge gaps to teach about).
11. My formal evaluation of medical students (ie, written evaluation) is primarily based on their ability to correctly answer probing questions.
12. It is difficult to evaluate a medical student's competency without asking probing questions.
13. If I ask medical students probing questions, they will give me a low score on their formal evaluation of me (ie, written evaluation).
14. If medical students did not formally evaluate me (ie, written evaluation), I would ask them more probing questions.
15. I would welcome instruction on how to ask probing questions so that they could be optimally received by students.

16. How many weeks per year do you attend Inpatient?

- <2, 2-4, 4-8, 8-12, >12

17. What INPATIENT internal medicine services do you attend? (may choose more than one)

- Cardiology, GI/Liver, Heme/Onc, UM Gen Med, VA Gen Med, Other

18. What is your age?

- <30, 31-35, 36-40, 41-45, 46-50, 51-60, >60

19. What is your gender?

- Male, Female, Other

20. How many years have you been an attending physician?

- <5, 5-10, 11-20, >20

21. What is your faculty rank?

- Instructor/Lecturer, Assistant Professor, Associate Professor, Professor

22. Additional thoughts or comments on the use of probing questions in medical education: