

## Appendix 1: Survey Questionnaire

1. A pre-meeting self-assessment form was provided to me for my midclerkship feedback session.
  - a. True
  - b. False
2. I have received useful and actionable feedback during my clinical rotation.
  - a. Strongly Agree
  - b. Agree
  - c. Neutral
  - d. Disagree
  - e. Strongly Disagree
3. Feedback was given in an active conversation between myself and supervising faculty and/or residents.
  - a. Strongly Agree
  - b. Agree
  - c. Neutral
  - d. Disagree
  - e. Strongly Disagree
4. My feedback session began with the opportunity for me to provide self-assessment of my performance.
  - a. Strongly Agree
  - b. Agree
  - c. Neutral
  - d. Disagree
  - e. Strongly Disagree
5. The feedback I obtained was constructive and helpful, not punitive:
  - a. Strongly Agree
  - b. Agree
  - c. Neutral
  - d. Disagree
  - e. Strongly Disagree
6. The feedback I obtained helped me to target areas of improvement for the remainder of my rotation:
  - a. Strongly Agree
  - b. Agree
  - c. Neutral
  - d. Disagree
  - e. Strongly Disagree
7. Feedback was obtained from the following individuals:
  - a. Supervising resident
  - b. Junior resident
  - c. Faculty/Attending
  - d. Both
  - ~~d.~~e. Neither

8. I felt the overall quality of feedback I obtained from my supervising resident/junior resident/attending was:

1	2	3	4	5	6	7	8	9	10
Poor: Feedback was overly general or inactionable			Neutral			Excellent: Feedback was specific and productive			

- a. Not Applicable
9. My ability to apply feedback from my supervising resident/junior resident/attending to yield substantive change in my performance or behaviors was?

1	2	3	4	5	6	7	8	9	10
Poor: Feedback was overly general or inactionable			Neutral			Excellent: Feedback was specific and productive			

- a. Not Applicable
- Please comment on specific actions or changes you have made in response to feedback obtained.

- a. Free Text
- In what ways could feedback you have obtained be more actionable and productive?

- a. Free Text

## **Appendix 2. Focus Group Sample Script**

Moderator interview to study the opportunities and challenges towards ensuring effective medical student feedback in Neurology clerkships.

### Introduction:

Thank you for taking the time to participate in this focus group. I am conducting these discussions as part of a qualitative research project to better understand medical student feedback in Neurology clerkships. This is the second phase of a project which initiated by collecting qualitative survey data from students before and after implementation of a novel learner-directed feedback form. These discussions are being held with various stakeholders from the feedback process. I am hopeful that these interviews will inform improvements to the feedback system to ensure students consistently receive effective and actionable feedback in their Neurology clerkship to promote professional development.

This interview should not take more than 30 minutes. Please remember that all information shared will be confidential and only reported in aggregate. Your name will not appear in any report of the results. To allow for appropriate analysis, I would like to ask if everyone is okay with this discussion being privately recorded. Further transcripts will be fully deidentified prior to any review or analysis being performed. [If yes, move forward] – Please let me know if at any time you do not feel comfortable answering a question. Thank you again for your participation.

### Interview Questions:

- 1) Please describe your current experience with medical student feedback?
- 2) What impressions do you have of the overall feedback structure in the Neurology clerkship?
- 3) How do medical students typically obtain feedback? How does this occur within the Neurology Clerkship?
- 4) When does feedback typically happen in the clerkship?
- 5) Who typically initiates the feedback session? Is feedback a scheduled part of the clerkship or does it require separate planning?
- 6) (For Students) Consider the last time you received feedback, how did that experience go? Do you feel it was effective? Why or why not?
- 7) (For Residents/Attendings) Consider the last time you received feedback, how did that experience go? Do you feel it was effective? Why or why not?
- 8) What other challenges have you noticed regarding the feedback structure or delivery?
- 9) Are these issues specific to Neurology education? Why or why not?
- 10) What factors of Neurology as a field may influence the ability to give effective feedback?

In the initial phase of this study, we identified that students felt feedback from residents was more effective and of higher quality than feedback from attendings.

- 11) Is this finding surprising to you? Why or why not?
- 12) What differences have you noticed between feedback given by residents and feedback given by attendings?
- 13) What factors impact the ability of residents or attendings to optimal give feedback.
- 14) Do you feel this is similar in other specialties? How might Neurology be impacted by these challenges to effective feedback?

Concluding Script:

Thank you again for sharing your experience and insight towards improving medical student feedback in Neurology. It was a pleasure learning from your experience. As mentioned before, everything you have said will remain confidential and only be reported in aggregate. I expect the be finished with focus groups and analysis in the coming months and will share the results with you when I am finished. Do you have any further questions for me before we conclude?

### Appendix 3. Coding Guide

Abbreviation	Code	Definition/Explanation	Example
<b>First- Level (Descriptive) Codes</b>			
Time	Time Constraint – challenge	Significant barrier to effective feedback	Busy, not enough time, lack of time to dedicate, brief
Specific	Specific or not generalized – goal	Necessary to achieve effective feedback	More specific, concrete, focused
Progress	Progression – goal	Longitudinal system of feedback.	Longitudinal feedback, progression, over time
Opportunity	Opportunities for feedback – challenge	Moments for feedback to be given effectively.	Small moments, Opportunities for feedback
Directed	Student-directed – goal	Agency of who initiates feedback.	Student-led, driven by the student
Training	Training to give feedback – challenge	Barrier based on educator knowledge of how to give feedback.	Faculty development, how to teach, how to give feedback
Standard	Standardized format – goal	Optimized feedback structure to be utilized.	Standardized methodology/ format, structured feedback system
Intimidate	Feeling of learner being intimidated – challenge	Sense of fear for learner which may limit feedback	Intimidating, scary, anxious, empower (antonym)
Coach	Coaching student through skill development – goal	Role of educator in providing feedback	Coaching, mentoring
Prioritize	Prioritize effective feedback – goal	Setting aside attention to give effective feedback	Priority, dedication, incentivization
<b>Second Level (Analytic) Codes</b>			
Attention	Dedicated attention on providing feedback to students	Allowing stakeholders to focus on optimizing feedback	Creating opportunities, driving conversation, make time for students, incentivize
Relationship	Relationship between educator and learner	Needed for optimal educational alliance and effective communication.	Coaching, longitudinal relationship, intimidate, empower, student driven
Expectation	Expectation of feedback	Learners expect to receive feedback. Educators expect to give feedback.	Opportunities for feedback, training for structured and standardized approaches to feedback

