Supplemental Digital Appendix 1

A Novel Medical Student Inquiry Behavior Assessment Tool, Represented in E*Value,[a] Utilized for Faculty Assessment and Student Self-Assessment of First-Year Medical Students in the Core Inquiry Curriculum, UCSF School of Medicine, 2016-2017

Goal: This tool is designed to capture the development of students' inquiry skills that they are learning and practicing through the Core Inquiry Curriculum. Many students will not demonstrate these behaviors when they start the Core Inquiry Curriculum. Students will learn to demonstrate the inquiry behaviors described in this assessment tool during the Core Inquiry Curriculum. Rating students based on the behaviors observed will be most helpful to guide students' learning, rather than rating students at the highest level prematurely.

Expected Student Performance: The expectation for early 1st year students (IDS 121A, B) is that they will achieve scores of 1 or 2 on the items, with occasional students scoring in the 3 range on the items. The minimum expected score is no more than 2 items rated as level of 1.

For 1st year students in the 2nd half of the year (IDS 121C, D), the minimum satisfactory performance is: all items scored at a level 2 or above, with at least 1 item at a level 3.

For 2nd year students (IDS 122 A, B), the minimum satisfactory performance is: all items scored at a level 2 or above, with at least 2 items at a level 3.

Students scoring below these minimum expectations will be required to meet with the Core Inquiry Curriculum director and coach for additional support and remediation.

Does the student select relevant questions to pursue? *(Question 1 of 6 - Mandatory)*

○ Appears to have difficulty recognizing the relevant questions; Spends time looking up irrelevant issues or does not seem to pursue any questions.	○ Questions chosen to pursue are at times too simple or too complex for the time allowed, or tangential to the group's focus.	○ Questions chosen to pursue are of appropriate scope and focus.

Does the student justify explanations with evidence? *(Question 2 of 6 - Mandatory)*

○ States facts or opinions without citing supporting evidence. Does not analyze level of evidence.	○ Identifies relevant evidence to support explanations offered. Comments on level of evidence referenced (RCT, observational study, expert opinion).	○ Identifies relevant evidence to support explanations offered and critiques this evidence. Comments on level of evidence referenced (RCT, observational study, expert opinion).

Does the student critically evaluate his/her explanation in light of alternative possibilities? *(Question 3 of 6 - Mandatory)*

○ Generally seems satisfied with a single explanation.	○ Sometimes displays consideration of multiple possible explanations.	○ Invites and explores other possibilities through open discussion.

Does the student allow for the possibility that own knowledge may not be completely correct? *(Question 4 of 6 - Mandatory)*

☐ Requires guidance to recognize the limits of own knowledge. May appear overconfident.	☐ Knows the limits of own knowledge. Appropriately confident. Learns actively from peers and instructors.	☐ Knows the limits of own knowledge and takes actions to fill own knowledge gaps.

Does the student collaborate well with peers? *(Question 5 of 6 - Mandatory)*

☐ Dominates group, interrupts others, or is minimally participatory in group activities.	☐ Assists others in the group or shows openness to assistance or advice from others.	☐ Actively contributes to creating a collaborative, safe learning environment.

Please provide comments about this student's performance – at least one specific reinforcing comment and one next step for this student's growth. *(Question 6 of 6 - Mandatory)*

Abbreviation: UCSF indicates University of California, San Francisco; early 1st year, quarters 1 and 2; IDS, interdepartmental studies; RCT, randomized controlled trial.
[a]Fall 2016 Version, MedHub, Minneapolis, Minnesota.