

Scientific Foundations Committee

November 2, 2012

7:30 – 9:00 am, B-646 Mayo

In Attendance: S Allen, L Anderson, A Belzowski, B Benson, A Blaes, K Brooks, B Caldwell, J Chipman, B Clarke, S Davenport, A Edverson, T Fehrenkamp, G Filice, S Gladding, G Giesler, C Hegarty, S Katz, M Kim, K Lee, E Maddy, A Meyer, B Murray, J Norrander, D Powell, D Power, L Schimmenti, P Southern, D Thompson, T Thompson, K Watson, D Wangensteen, K Wickman, M Woods

Absent: M Becker, J Eck, R Kempainen, A Minenko, C Niewoehner, M Sanders, D Satin, T Weinhaus

Joint Meeting

SFC & CEC Meeting

Student Assessment Committee

Dr. Brad Benson, Chair of the Student Assessment Committee (SAC), reported on the Committee's new work to identify what practices are key to determining how to prepare medical students to become good physicians. At the national level this work is in progress by the Pediatric Milestone Group and his participation and understanding of their work is reflected in SAC discussions, which are centered on the continuum and linkage between UME and GME. SAC's process will include first steps that focus on the following:

- Independent analysis of depth and breadth of current UME assessment
- Identification of key sub-competencies to target for Milestone assessment in UME
- Mapping to current UMN competencies
- Mapping to assessment in current UMN curriculum

Dr. Benson noted in medical School it needs to be determined what tasks are the clinical faculty good at measuring, in the non-clinical setting what are faculty good at assessing and what are the entire faculty good at assessing. SAC members determined professionalism and teamwork are areas where the School can provide deep assessment. This involves looking at tasks and mapping them back to the competencies. The process leads to the ability to confirm that someone can do that task well.

An added focus of the Pediatrics Milestone Group included the milestones approach that each of the subspecialties use as part of the ACGME accreditation system. There were about 8 examples of milestones based approaches. What they ended up with in terms of their approach was a milestone for an Entrustable Professional Activity assessment. One reason for taking the Pediatric approach is that the group in terms of primary principles looked at the continuum as one of the key points in developing the milestones.

- Milestone-based assessment that connects to the continuum of medical education
- ACGME is driving Milestone/EPA assessment approach

Dr. Benson noted the work is to identify specific EPA's that we can pilot and then initiate some pilot assessments. To this point "professionalism" has been identified as one area of SAC's focus for developing EPA's around. The next phase will be the assessment mapping and the professional faculty development and those things that will be required to develop silos of assessment expertise throughout the curriculum.

Dr. Benson asked members of SFC and CEC for questions and comments; some are included below:

- AAMC small group has begun working on transition competencies for medical students
- important to define levels to establish point of "entrustable" to be capable of care
- determine how it will be assessed to be certain the individual has achieved a specific level
- For assessment, once it is determined skills/abilities students need to achieve at levels
 - 1) create the vignette and create the video
 - 2) use random videos

- 3)faculty review and determine what level the sample vignette is representing
- important to think of what transitional EPAs are important for medical students (existing EPAs developed for resident readiness)
- large shift for those currently using existing assessments
- milestone use empowers learner self-assessment
- need for portfolio assessment
- may not be necessary for entire milestone to be seen by every preceptor/clerkship evaluator
- possible for milestone to be part of end of rotation assessment
- high priority to complete the assessment map
- determine deep and current assessments of entire curriculum
- milestones focus on weak areas for struggling learners; where they've been; where they are and where they need to be

Areas where basic science courses have the ability to assess students are teamwork and professionalism (aspects of communication, professional identity development, etc.). Multiple and overlapping assessments are needed across all 4 years, to be able to see the level of professionalism across all aspects of their performance and in small groups where red flags can be identified early. Immediate advantages include providing a sense of context and purpose in the way material is presented. With defined goals students take on a responsibility to measure themselves from the beginning of year-1 to determine how they are progressing.

Some feedback included the following:

- Be aware in some instances there is risk the milestones become the main focus of the learner in what they aspire to learn.
- The size and scope of UMMS may be a challenge in terms of implementation and should be part of the discussion from the beginning.
- how to communicate the importance of this method of evaluation to all who will
- evaluators will assess what they know, essential tasks of the profession
- residents will be evaluated on the same system of assessment
- Across the continuum, achieving the score of 5 on the milestone assessment should be the goal all physicians strive for by the end of their practice
- Create communications (milestone language) and tools with language that preceptors, residents and all physicians feel comfortable using. Use focus groups as tools are developed.

MSPE

This is the Medical Student Performance Evaluation (formerly Dean's Letter), includes a compilation of information gathered through all four years of medical school. It's used as primarily as part of the medical student application for residency. It is generated from the end of the Year-3 through the beginning of Fall of Year-4, with participation of the student in putting it together. The deadline for submission is October 1st, which is new in 2012; previously it was due on November 1st. Faculty advisors are the authors of the Summary portion of the MSPE and the introductory portion is created by the medical student with feedback from the faculty advisor. The middle section (greater percentage) of the document is comprised of their academic history, comments from rotations written by residents and preceptors and the clerkship grades. The final part is an appendix for the grade breakdown for Year 1 & 2 courses and the primary clerkships for that class. The MSPE template has been established by AAMC.

A key focus is to provide transparency of the students' strengths and weaknesses. Because of the change in the due date which means fewer clerkship grades and evaluations are available, the affect for how the MSPE is used in the residency selection for students, will be observed. There is only a two week window for use of the MSPE by residency program directors. Dr. Woods noted that as assessments change and allow for providing better information on students, what appears in the MSPE may change as well. Assessment does drive motivators both as learners and as faculty, and as changes in assessment influence what the MSPE includes there will be discussions for how the performance information may appear and/or change in the evaluation. If it's important

enough to be assessed and important enough to establish milestones, it's important enough to be shared with resident program directors. Resident program directors do question why when someone doesn't pass a required clerkship there isn't an explanation for why they failed. The advisors are the student advocates and the summary is where any explanation of failures will appear. UMMS does not rank students other than the AOA induction. Resident program directors would appreciate ranking as a basic piece of information and allow them to dig a little deeper during the interview process. Many clerkship directors spoke in favor of standardized language and ranking across medical schools to aid in understanding performance and academic progress.

Scientific Foundations Committee

Minutes

Approved October 5, 2012 Minutes for Scientific Foundations Committee

Black Bag Update

Dr. Woods reported that Black Bag seems to be going well and she reiterated to course directors to use the comments and/or report a problem or functional issues to your course manager, to help alert Brad Clarke, Dr. Woods and/or Mark Hilliard know when you encounter issues so concerns can be addressed. She noted that development of other areas is beginning; the competency mapping of years 3 and 4 courses. Years 1 and 2 is in the data base, but hasn't moved forward because functionality has been the priority. Technical aspect of the system will continue to be maintained. Students cannot search within the documents and PowerPoint at this time; it will be made available to students.

Annual Course Report

Pharmacology

Dr. Kevin Wickman noted the first half of the course is structured around fundamentals of pharmacology and most of those sessions are taught by two clinicians. The second half is centered primarily around drug categories and provides an opportunity highlight fundamentals which are taught in the first half.

What is going well includes a group of five faculty who are well received and have been a long standing group in this course. Organization of the course and the Moodle site has been received positively by students. An area of concern is the on-line quiz; they appreciate the chance to assess themselves. It's on-line and closed book; and has caused frustration for students. Feedback from students has been mixed regarding the structure of the quiz. Dr. Wickman feels it's important to continue the same structure. But he isn't comfortable with the student complaints regarding their perception of cheating on the quiz. ExamSoft has been purchased for trial in an effort to give more flexibility for use of online quizzes, etc.

Honors grades did help to raise the level of performance and 21% of the class achieved honors but the competitive mindset of students and their attitudes was a negative change. Clicker technology was very frustrating and is being replaced by a new system and course managers.

Best Practices

Dr. Wickman noted that for Pharmacology student emails and inquiries are generally answered very quickly. There is a function through Black Bag or through the full class email system to send responses to student questions to everyone in the class, course managers are available to help director course directors to when that can be done. Student feedback asked if it was possible to have an upper limit set for the number of slides that can be used in a lecture, there is a specific course session that was out of the ordinary and that issue is being addressed.

Next SFC Meeting: December 7, 2012