

Education Council (EC) Meeting Minute August 19, 2014

| <b>EC members present:</b> |                     | <b>EC members not attending:</b> |
|----------------------------|---------------------|----------------------------------|
| L Anderson                 | D Patel             | L Carson                         |
| J Andrews                  | A Pereira           | J Clinton                        |
| J Beattie                  | D Power             | K Crossley                       |
| K Brooks                   | M Rosenberg         | G Jacobs                         |
| J Chipman                  | L Schimmenti        | J Miller                         |
| R Cormier                  | A Severson          | T Stillman                       |
| S Hansen                   | Y Shimizu           | G Trachte                        |
| A Johns                    | S Slattery          | G Vercellotti                    |
| S Katz (Metzger)           | S van den Hoogenhof | G Trachte                        |
| Z Lauer                    | K Watson            | G Vercellotti                    |
| M Kim                      | A Weiers            |                                  |
| R Michaels                 | M Woods             |                                  |
| W Miller                   | B Yueh              |                                  |
| J Nixon                    |                     |                                  |
| J Pacala                   |                     |                                  |

Minutes

Minutes for the June 17, 2014 were approved without changes or additions.

Information

The new Assistant Dean for Clinical Education, Dr. Anne Pereira spoke about her experiences at HCMC as the Residency Program Director in the Department of Medicine, her work with the Committee On Student Scholastic Standing and other areas of medical education.

Dean Jackson will attend the Education Council meeting on September 16<sup>th</sup> and will share his thoughts on medical education.

Updates

Searches

During July, the search committee for the Department of Medicine Chair position, brought four candidates to campus for second interviews and have given the Dean a ranked list for their preferred choice. Dean Jackson indicated his goal is to have the new Chair in place by January of 2015.

Dr. Mark Rosenberg reported on the Regional Campus Dean search and noted there have been three finalists who have interviewed. The Search Committee will meet this week to make recommendations to Dean Jackson. Possibly two will be invited back for a second interview. The exit interviews with the interviewees went very well, all were very impressed with the Duluth campus, the hospitality and the logistics. Dr. Rosenberg noted Dr. Alan Johns is serving as the interim Regional Campus Dean and is doing a great job.

PGY-1 Survey

Dr. Watson reported that the chart (SEE MEETING MATERIALS) represents PGY-1 survey results for the Class of 2013, this data will be in the State of the Curriculum report. Overall the students graduating in 2013 were rated slightly better prepared and slightly more likely to have been selected again than the class of 2012, but are slightly less likely to be rated in the top 1/3 of residents. Fewer students ranked in the lower 1/3 of the class of residents and just 1% of students were underprepared. In the rating for the likelihood of students being selected again, the numbers went up to 98.1% from last year's at 94%.

In this survey set, for the first time the residency program directors were asked to rate our students on the ACGME Competencies. The data shows that the highest rated competencies among our students were professionalism, interpersonal communication and patient care. Reference to competencies will be used in the future to gather this data over time. Anecdotally there seems to be an increase in issues and concerns surfacing

with regard to professionalism. The issues are distributed across all four years but are more often found in the first two years and the Peer Review Committee has been very effective. With more recognized in year 1 and year 2, it's apparent that the issues are being identified much earlier.

All medical schools use this survey mechanism, but each school has latitude to decide how to do it. Dr. Watson noted at our School, it's been revised over time. In the PGY-1 discussion earlier this past spring, this group voted that 100% of our students should be rated in the top third of those medical students completing their intern year. The survey was sent to 220 residency program directors, with 53% of them completed and returned. Dr. Watson reported the results will be split out to show a comparison between those students who matriculated in Duluth. Today's materials are preliminary to the State of the Curriculum report, which is presented annually in December.

### Entering Class of 2018

Dimple Patel, Associate Dean for Admissions briefly summarized Admission's work in preparation for the beginning of the Fall semester for the new entering class.

- Interviewed 562 candidates
- 271 individual offers were made
- Final class of 161 slots, average is 24
- 53 students (31%) identified as multi-cultural
- 32 are under-represented in medicine (19%)
- 10 matriculates were MN Future Doc participants
- Average MCAT score is 32 and GPA 3.7, which is consistent over the last few years
- 25% of incoming class have a physician parent
- 75 individual undergraduate institutions represented, 72% came from out of state institutions
- 28% came from Minnesota colleges and universities
- 47 academic majors represented and 16 advanced degree holders
- University of MN-TC graduates makeup the greatest share of matriculates, then Wisconsin, Gustavus, St. Olan and Carlton College.
- The Duluth campus has an incoming class of 60 students, five of them are American Indian. Their MCAT scores and GPAs have remained very consistent of the years.

For the under-represented in medicine, last year matriculates were at about 10% and this year at about 19%. During recruitment of the class there was a great deal more communication this year and scholarships were a little higher. Minority Affairs and faculty added more outreach activity. The Minnesota Future Docs program has been strong and the lower numbers of the students matriculating was related to the admissions process. Duluth offered many more positions to under-represented in medicine applicants, but the numbers who matriculate at Duluth are affected by the greater scholarship funding elsewhere and the competition for these individuals at the national level.

### **Discussion**

#### Data Integration

Dr. Rosenberg noted collaborative use of data is a major priority for UMSOM and will become more so as we strive for quality improvement. Currently data collected stretches from admission data to national data for the Match, to residency data, to name a few sources. Determining how all areas can be brought together to inform the administration across a variety of decisions and to have those decisions be data driven is a focus. A consideration is whether data can be used to attempt to project performance once graduates leave and go in to practice. We have made a commitment to move this forward but it isn't easy, it isn't cheap, there are many stakeholders and what's important to one group may not be important to the other. Input into what is important is needed in pulling it all together and to get it done right. Dr. Rosenberg believes this is very important and stated that it's a high priority for UMSOM to be data driven. Dr. Wes Miller noted this will be very complicated to get all of these data sets integrated to share information. Prioritization is an important task for the Education Council, that is to help clarify what to focus on, considering what outcomes we want to achieve and with input from the student perspective. The Education's role is important in deciding what should be prioritized.

Dr. Watson provided background and spoke about our program's preparation for the LCME site visit, which required the School to gather a range of information. It took a great deal of effort to track down the information and to use the right information to develop the reports. There was course data, student performance data and data related to course performance, to name some areas. The LCME experience led to the decision to better understand how to approach the use of the data being collected. Expertise was found through the AHC's staff person Barbara Smith, a data analyst. She is highly skilled in her abilities to understand data and how to pull the information together. Our initial objectives in 2012 were for educational improvement. One goal is to understand trends and predictors for student performance and outcomes over time; to see how these might predict performance in the future. It was also necessary to be certain this was a secure and appropriate access point for all of the data and to work toward reducing cost and eliminate redundancies in across operations and administration. Some areas of action were as follows:

- approximately 40 staff worked together to identify key metrics, measurements
- how measurements were being obtained and further analysis of those data
- technical team planned to develop an integration interface that had pre-formed reports and ad hoc reports
- deliveries were a dashboard, canned reports, the ability to query and export raw data
- documentation was required, making it very time consuming.

Since 2012 there has been investment in the area of data management and the greatest share has been done by the AHC IT under our direction. Barbara Smith reports to administration on a regular basis. She and her team have interviewed stake holders and conducted analyses and identified the key metrics to support those goals and strategy. Their work determined we had 70 data sources for student performance across both campuses. Working with the stake holders we are working to find an intuitive means to measure and to deliver these data.

The work that's on-going now is to develop a data interface, sort of a dashboard where these reports would be available. Initially, these are questions that have come up since December and for EC members these questions may lead to areas not yet identified; examples are:

- How do pre-matriculation factors predict performance in year one?
- How do any of the year-1 milestones in both professional and academic development (exams) predict clerkship performance?
- What other factors might contribute to success or failure in year 3 and 4 clerkships? (data for COSSS use)
- Questions related to the Match, requires a greater set of data that would relate back to pre—matriculation information, not currently available.
- Long term outcomes of the Year 1 and 2 curriculum change and what impact that might have?

Student questions include:

- What are the areas/activities that enhance their ability to compete in residency programs they select, i.e. academic performance, experiences students have had outside the actual curriculum and courses?
- Is the advisement for what to focus on during medical school data driven, sound advice, is it consistent?
- For students who successfully Matched, what were the things they had accomplished to be competitive?
- Students have different perceptions and questions about the importance of performance in year 1 and 2 curriculum, the importance of honors and AOA membership?

Dr. Watson noted it's important to recognize that broader consideration will go individual students and courses but also include LCME. There are data sets that currently exist, but not necessarily available for comprehensive analysis. They may have variations within the data sets, but some preliminary correlations are possible. Areas that are more difficult involve GME and performance in clinical practice; an area that is much more readily tracked by the program on the Duluth campus. The ability to find answers to these questions is an aspect of this on-going project. EC members agreed doing well in year 1 and 2 courses is necessary to achieve membership in AOA and residency programs do. More attention is paid to board scores and clerkship performance and research does have an impact. Dr. Johns pointed out areas of concern related to security of private data and what purpose the data will serve? Appropriate criteria for how data is used and for who is appropriate to have access and oversight by a set of select individuals is part of the development planned as early initiatives. Any scholarly use of the data would require a formal IRB evaluation.

Dimple Patel has been considering questions related to use of the data warehouse with the admission process. Questions include the following:

- Is there a correlation between the MCAT score and the Step 1 score?
- How do multiple MCAT scores factor into this?
- Do students who take biochemistry prior to medical school achieve a significantly higher grade in the medical school biochemistry course compared to those who do not?
- Is there correlation between the number of years out of school (meaning out of the classroom with no academic exposure) prior to medical school and performance in the first two years?
- Is there a difference between non-science majors and basic science majors in their performance in the first two years?
- Is there a correlation between tier one, two, three, four undergraduate school graduate and performance in the first two years (Admissions Committee members discuss whether it matters where you went to school)?
- Do the MCAT GPA and BCPM GPA (basic science GPA) and performance in the first 2 years predict level of achievement on Step 1?
- What predicts someone going into academic medicine, especially with a career in research?
- Do social determinants and demographics help to predict who is likely to practice medicine in areas of need, who would be likely to choose academics and/or engage in research as a career?
- Evaluate psychological or personality profile for such traits as resiliency (average on academics but strong trait in resilience)?
- Is it possible to measure grit/resiliency (ability to stay on task) in medical students and is there an effect on their performance?
- Which of the questions are seen as priorities to be at the front of the line for data integration?
- Is there a method to establish a set of “risk factors” that occur for Yr-1 students and if an applicant has some or all of those risk factors, matriculation may be affected.
- How should the data be used? For feedback to the Admissions Committee and the scholastic standing committees, and to the course directors and advisors?

Dr. David Ashe presented at Grand Rounds and discussed how the quality of care that is present when medical students and residents are in training directly influences the quality of care they provide when training is complete. If learning takes place in a good quality care environment, the trainee provides that higher quality of care when practicing and improves over time. If training is done where quality of care is poor, the trainee provides poorer quality of care and the care they provide diminishes over time. It's a very strong indicator and does provide a metric to measure outcomes. He also demonstrated that there are measurable gains in the quality of care provided over the course of a career, that never diminish. Good people tend to get better and stay that way. His methods hold the possibility (on a smaller scale) to look at the results.

Dr. Stephen Katz (Chair, Scientific Foundations Committee) spoke about the frustration course directors and advisors experience in trying to figure out what works for struggling students, to find options and alternatives in their medical education experience that will aid them in being successful. His response to the question about priorities is to get the data integrated for the “low hanging fruit”, which may be the easiest to tackle. This may not directly answer the questions posed today, but rather than spending a great deal of time working out the hardest first, work to answer questions to help individuals now. As a course director he sees the spread between the top performing 20% and the students performing at the level of the bottom 20%. He feels strongly there is data being collected that if it were integrated would make a difference in the distance between the two groups. Dr. Katz feels it would be optimum if he could understand what those students need. If the data were available several questions may be answered:

- Predictors that can be teased out for used to guide individuals
- Priority to identify who has taken biochemistry, genetics or organic chemistry during pre-med to help determine ways to improve and/or to broaden knowledge base through added interactions.
- Use data in both directions, to improve the educational experience and the opportunities for academic success.

The advantage of having a true data warehouse is it can answer questions that are not yet identified. The structure of a database is a big factor in the short-term and in the long-run and that it's flexible and nimble. Once the outcomes are known, an added consideration is understanding early-on what the resulting action might be.

Dr. Miller reiterated based upon the robust findings of Dr. Ashe's research, it will be important to understand that the environment of the teaching institution has a high level impact upon those who are trained there and is a major factor in educating and producing really good doctors. The best doctors are people who have come up in a very high quality environment and he asked can this be used as a method in some way to assess the environment here where clinical teaching is taking place. The correlation between clinical environment and how good the physicians are when they have completed their training is an important question to ask. We may not currently have a way to do that assessment, but perhaps an interface with UMP, Health Partners, the VA, and at HCMC; would help to learn how we teach our students in the clinical setting. Areas for improvement may be in PBLI and systems which may be true across the country. Dr. Miller asked could our School excel by identifying and addressing where the environment is strong and where the clinical environment needs to be improved. If Council members have questions for consideration and want to add them to the list, please contact Dr. Kathleen Watson at [drwatson@umn.edu](mailto:drwatson@umn.edu).

**Next Meeting, September 16, 2014  
4-5:30 B646 Mayo**