

## ***Scientific Foundations Committee***

*March 7, 2014*

*7:30 – 9:00 am, B-646 Mayo*

***In Attendance:*** R Amado, L Anderson, J Chipman, B Clarke, M Hertz, S van den Hoogenhof, R Kempainen, C Niewoehner, L Schimmenti, P Southern, D Thompson, H Thompson, D Wangensteen, K Watson, B Woods

***Guest:*** Barbara Blacklock, Dimple Patel

***Absent:*** S Allen, E Coleman, G Filice, G Giesler, S Katz, M Klimstra, A Minenko, J Nixon, J Norrander, D Powell, M Ramey, M Sanders, D Satin, K Setterholm, T Weinhaus, K Wickman, M Woods-CEC

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### **Minutes**

Minutes for the February 7, 2014 meeting were approved with no changes or additions.

### **Announcements/Updates**

#### Annual Best Practices Day

Course Directors were reminded that Best Practice will be held on Thursday, May 8<sup>th</sup> (the day before Commencement) and is scheduled from 10:00 a.m. to 4:00 p.m. The call for proposals is out and the web site where proposals can be submitted is open. Anyone interested in presenting, Dr. van den Hoogenhof encouraged them to submit their ideas.

#### Milestone II Exam

Year-2 Integration Milestone is on track, the team has spent time at the Duluth Campus to gain consensus, and the rating tool has been tweaked based upon feedback from TC and Duluth faculty. The schedules are posted and students are selecting their dates and times for the examination. The SimPortal rater training is schedule for next week and SimPortal will also be moved to the Duluth campus in April using the same technicians, to ensure the assessment is standardized. There will be comparison to look at the validity and once that has been established, student performance across the two campuses will take place. The Integration Milestone will provide the opportunity to determine how well students are learning topics across courses and disciplines. Also how well they are applying that knowledge to clinical principles. Dr. Chipman again asked Committee members for ideas to assess integration for the end of year-1.

### **Annual Course Review**

#### Human Behavior

Dr. Rick Amado, the new course director for the Human Behavior course, gave an overview of the course. He utilized a number of different lecturers with expertise in their field to present some portions of course content. Feedback from students regarding the psychotropic pharmacology identified that it was redundant and it was eliminated. A quiz is given after each topic so students can self asses how well they understand the material and their own progress. There is a final exam at the end of the course. Topics for this year will include the Foundations, a section on language development, autism and adherence.

Dr. Amado has developed a module on aggression, which will be implemented when Library resources are available. Two different sessions on aging are included; psychological disorders in aging and physical aging. Topics also include drug and alcohol abuse, general mental health issues, disabilities, and pain. All lecturers have a common component, which is a bio/psycho/social analysis of the topic they are presenting in each lecture to address integration across the content and disciplines.

Committee members asked for information regarding student feedback on the course content and structure. Dr. Amado reported the following:

- students liked the flexibility of the course, that meant as they moved forward
- content was being developed as the course continued and students provided feedback

- he and faculty were made adjustments to topics during the course
- instructor evaluations all came back indicating all as above average.
- faculty are from a varied background; University faculty, experts in the field, researchers and clinicians
- course is lecture based, approximately 50% of students attend and the others stream the lectures
- for the alcohol abuse topic there are individuals in recovery and a clinician presents
- a mother with mental health issues and her son who is 17 years of age; spoke about their experiences.

Dr. Chipman pointed out that often assistance or guidance from SFC members or Medical Education administration is available. Students are notified of scheduled guest speakers, but are not required to attend those lectures. Dr. Amado noted there has been discussion about attendance, SFC members report using Black Bag to track attendance, students sign-in when physically present. It's an honors system as part of professionalism, students are told in advance (on the syllabus) when the guests are scheduled so they can plan for those lectures. Generally faculty members feel it's an expression of appreciation for speakers (patients and clinicians), they should have an appropriate audience of a particular size attending. He reported there is a session on adherence; but the topic isn't dealt as how students should address it but is more for their exposure to the topic. Dr. Thompson noted this is a key skill set for students to recognize. Dr. Chipman spoke about using Black Bag as a tool to review where and when topics of psychiatry are presented in other courses to help the process of integration across other disciplines. Dr. Amado has been especially aware in trying to weed out redundancy but he also needs to understand if his course is too isolated. He would greatly appreciate knowing how to clearly understand those connections across the curriculum.

Suggested a methods and tools to integrate a topic across the courses as follows:

- link coverage of the topic (psychotropic pharmaco) with what is presented in neuroscience (for example)
- possibly use the slides from the other course as a reminder for where they first learned it
- how the application is similar and/or different in Human Behavior
- Black Bag allows content searching by topic which then shows where in curriculum it appears
- A step to identify what occurs in your course content (by topic), search Black Bag for the content and find where else it appears in other courses/lectures
- All other course material is available in Black Bag

Dr. Chipman thanked Dr. Amado for stepping in on short notice to direct the course during the 2012-13 academic year. Dr. Amado noted he has enjoyed the opportunity to teach Human Behavior and his main goal at this time is to refine the course for the 2013-14 schedule.

#### Remediation/Pre-matriculation Course

Dr. Chipman reported this is a discussion around concerns related to more students being identified as at risk for failure and deceleration, which is increasing when compared to historical data. Around these issues the discussion will address the topic of some possible plans and solutions for remediation. The background has been discussed in the past as more students are struggling and failing courses. Data is being collected to try to identify why this is occurring and to begin an on-going discussion to identify solutions. Last month in the conversation about Biochemistry and Genetics it was reiterated that biochemistry isn't a requirement for admission to UMMS. There has been contemplation whether this may be a potential cause for some students' difficulties.

There are four prongs being considered

- Admissions and the admissions process—
- Remediation for students who fail, how to assist those who fail to become successful, and criteria for guiding and decisions for dismissal
- COSSS – how can they respond, should they have greater power, changes in COSSS structure
- Pre-matriculation possibilities

A suggested solution could be a pre-matriculation plan, which would possibly occur either before or after acceptance. Duluth currently has a process to identify students who are possibly at risk and they require these individuals to attend a 6-week session during the summer before they matriculate to get them ready before they

start medical school, providing them a better understanding of what the pace and volume of learning can be and establish a sense of how science supports areas of learning. Possibilities might include the follow models:

- A pre-matriculation process requiring a post-bachelor education in efforts to comply with and fulfill the pre-requisites for admission; providing a tacit acceptance medical school if level of performance meets a specific standard.
- Is this model supported by course directors
- Should this be established a requirement with appropriate implementation for specific performance standards.
- What course/content is required and for whom
- What are the triggers for who should be admitted with this caveat
- Are there volunteers would want to work with a task force to address these and other issues and concerns.

The new Director of Learner Development will oversee the process of exploring the issues and possibilities. Dr. Chapman asked SFC members for question, feedback and questions.

- Is there data for the Duluth program; how many do well and if they are given the choice do they say no? Dr. Chipman noted they have information but haven't compiled in a way that is easily evaluated Dr. Wittmers from Duluth has reported there are some numbers available. The program is voluntary, recent experience indicates that those who participate are performing better than those who chose not to participate.
- programs exist that are designed specifically to aid students with the pre-medical school prep
- A contrast would provide a separate a course for students already accepted into the School, have completed our School's pre-requisites, in a pre-med program as an undergraduate or post-bachelor, but are determined to be at risk. The individual is invited to participate in a program taking place ahead of our School's start for entering yr-1 (format to be determined) to bring them an opportunity to improve study skills, volume of material (overwhelms often), process of learning.
- Objective – to allow UMMS to attract a more diverse student body than we have now? This concept does help to address improving students' skills they struggle, there are a number of students who meet pre-requisites but struggle to perform academically. Non-science majors, educationally disadvantaged students and those who have been out of post-secondary education for more than a year and learning disabilities.
- Concern was as expressed related to the lack of information /data to understand what predicts which students are at risk. Establishing a task force without adequate information to develop a plan seems premature. If there are a wide variety of issues that cause students to be at risk, would it be possible to design one course that could respond to those at risk issues.
- Other risk factors include:
  - lack of access to education
  - lack of biochemistry or biology as undergraduate students
  - time spent outside of college
  - MCAT score of less 27
- Develop a more focused pre-matriculation course directed toward helping students understand the difference in Medical School in the pace of learning and volume of material covered. Framing it as an "if you want to do better" course would require putting in place a proven curriculum to meet the goals for improved performance.
- Duluth does have success with their program, it was suggested that a task force could begin their process of fact finding through discussion with Duluth.
- The purpose of establishing a new effort to identify those at risk is to prevent failures; it is important to discover what problems current students are encountering that have contributed to their struggle.
- Identifying those at risk early to help avoid the performance break down.
- Possibly a pre-matriculation course or 1:1 evaluation that everyone has to help in identifying those at risk.
- strengthen the orientation events
- add weekly scheduled group sessions for MS1, designed to help identify those who are struggling

- Begin at the point of acceptance, employ a set of questions to eventually, having exposure over the months between can help to provide insight into their specific skills. Gives them exposure to the learning culture, sets the stage for a pre-matriculation course.
- Currently the average MCAT score is averaging somewhere between 30 and 33, those student with 27 as their score are beginning at a disadvantage with relation to other students. There is strong recommendation to not admit anyone who cannot perform successfully. This may mean students will have to take a year to prepare (post-bachelor or pre-med) available at different schools.

## **Disability Services**

Dr. Chipman introduced Barbara Blacklock from the University of Minnesota's Disability Services; provided an overview of their services. Disability Services is part of the Office of Equity and Diversity. Students with disabilities are considered to be part of the diversity on our campus. Their mission is to advance access for everyone when on campus. Their Office works with students, staff, faculty and visitors on campus.

To work with individuals to determine reasonable accommodations they use an interactive process. It begins with students making their needs know and providing medical verification of their condition through current medical documentation from an appropriately licensed professional. If faculty receive a letter from Disability Services and they disagree with the decision of the Disability Services; they are urged to call to discuss their concerns and it important to look at other options. Their goal is to be sure that students who have disabilities have an equal opportunity to both participate in all aspects of learning and an equal opportunity to demonstrate their knowledge and ability in evaluation.

Administrative staff, one set works with students and the other set work with University employees and it includes residents and fellows. There are four auxiliary services that support the work the Office of Disabilities performs. A testing center is available for those students who need extra time on an exam; this must be provided by either the faculty or referred the Testing Center, which is equipped with staff trained as test proctors. There are also staff who convert printed material into electronic material, to serve students who have print based disabilities (reading based learning disability or visual conditions) and to make all the information available is in a format that is accessible to them. The largest set of staff are the sign language interpreters and en-captioners, there are about 22 of those staff. They are providing interpreting and captioning to students, staff and guests to the University. There are 2 staff members who review on-line courses to make sure they are accessible. Proactively faculty can work with these folks to ensure their online format is effective.

Ms. Blacklock provided the standard definition of a disability to help in working with students; medical student tend to have difficulty using "disability" services; they may have a bias toward those Services. She shares with them the definition used by Disability Services is from the Amended version which became effective in 2009. As a result of the Amendments more individuals are protected; this states that a person with a physical, mental or psychological condition that substantially effects one or more major life activities. Beyond walking, breathing, seeing and hearing; the law specifically adds concentration, learning, interacting with others, eating. Anyone significantly impacted in any of area(s) is considered a person with a disability.

In the last five years, the number of medical students working with Disability Services has really been constant. More students have more complicated health issues, but the number has remained about the same. For someone to have had services they have self-reported, provided medical documentation and have been determined to be a person with a disability. What portion of students identify themselves early on as compared to those identified by medical student advisors and/or staff? The numbers of students who are pro-active in requesting services are increasing. Students are reporting that their advisors are encouraging them to use Disability Services. She provided a guide for faculty and advisors to use in their interactions with medical students who are working hard to be successful but may be struggling. The information provides numbers of individuals within the Twin Cities campus who have participated in Disability Services and into what category of disability they fall; 75% fall into categories where individuals have non-apparent conditions. Students have learned their own work-a-rounds to compensate and often these have served the purpose. The

problems surface once in medical school, because of the rigors and volume of learning required.

Their process is used to determine whether the individual is substantially limited in one or more major life activities. They review what is the diagnosis and how are they impacted by this condition. They have been determined to be qualified to be admitted into medical school, sometimes their conditions will change an individual's ability to use those skills and they no longer may be qualified. What is the barrier for their learning and what are the barriers for their demonstrating their knowledge in the evaluation and testing. What might mitigate those accommodations and if these aren't workable Disability Services needs to be aware of those issues and communication is very important in finding what will work. The ultimate goal is to make sure that individual is having meaningful access; Disabilities Services are providing an equal opportunity to be successful. If they succeed or fail, it's important that success is based on their own abilities not on barriers that exist. Would the accommodations compromise any of the essential elements of the curriculum or pose a safety issue? This is an important issue for faculty, advisors and staff to communicate to Disability Services.

Meaningful access includes physical access for some students and informational environment serves to make sure that students have access for learning, both are important. Barbara Blacklock noted on their web site (see last slide) there is a faculty toolkit to provide ideas for how to ensure courses are accessible and includes tools faculty could use to make online resources available to everybody that's taking the class. Disability Services look at the program environment; in the past because of the structure of the curriculum, it has been complicated for medical students to decelerate in relation to a disability. Another important factor is the attitudinal environment; medical students don't want to be perceived as different, don't want to be treated differently and if they need to do their medical education differently they don't want it known. They understand they still need to make the same scores and progress to meet the same outcomes for an M.D.

#### Common Accommodations

Testing is an issue –

- can be based upon the follow someone diagnosed with ADD needs quiet space
- extra time (anxiety or reading based learning disability)
- modified deadlines or attendance variation (often true for students with mental health disabilities – may not be able to follow deadlines, chronic disease (i.e. Crohns)
- physically unable to sit or stand for long periods of time
- extra time – communication issues
- modified structures for sitting, separation from general seating
- accessible parking contracts (reduced rates)

In summary the role of the Disability Services Office is

- to remove barriers to learning so individuals will have equal opportunity
- office is the place on campus where students provide medical documentation and where those are maintained in a confidential manner
- when questions are asked by faculty and/or administrators regarding medical condition, there isn't a reason they need that information. Students understand the information is confidential
- determine the impact of the disability on outcomes students are required to achieve
- determine what level of accommodation is required
- accommodations are communicated in writing (electronic letter).

Faculty can proactively announce to everyone enrolled in their course to contact her/him with any accommodations information as soon as possible. There are also times when the student's condition has changed and/or the accommodations are not effective, Disability services staff make adjustments to ensure the student continues to have access to all aspects of the course.

In many situations a student will continue to need the accommodations when they are ready to take USMLE Step exams and Barbara Blacklock functions as a coach for those situations. Generally students are given the

accommodations, through her role as coach students learn their STEP scores will be asterisked and they should be prepared for a discussion when interviewing for their residency placement. She works with students to prepare for how to have that conversation when being interviewed. Students who commonly don't get accommodations for the STEP exams are those who were diagnosed with Attention Deficit Disorder after the age of ten. USMLE administration usually doesn't grant accommodations to this particular group of students. Her role is to pull the documentation together and to guide them in writing their personal statement, which is about how their condition is negatively affecting them. It is required early in the second semester of year-2, so timing occurs while they are working to function at a high level as a student. Many students minimize how they're being affected, making these statements difficult to write. Her role is to help coach them to be realistic in writing those statements so they can make a case for getting the accommodations. The student has a key role in this process; for K-12 years the school is responsible for establishing the equal access to education. Once an individual reaches college and beyond, they are responsible to make their needs known, at the University of Minnesota they must work with Disability Services.

Barbara Blacklock invited faculty to take time to look at their web site, specifically there is information for faculty and staff in regard to course design. (<https://diversity.umn.edu/disability/>). She also referenced a video at the Medical Education link (<https://www.meded.umn.edu/handbook/resources.php>) which includes informative video, which features guidance and Dr. Kathleen Watson, Associate Dean for Medical Education.

**Question:**

How to handle a student's request for accommodation at the time of an exam (24 hours before) or just before the exam?

**Answer:**

The Office of Disability recommends that students get 1 opportunity to delay taking an exam (a provisional accommodations decision, with a signature by the student who understand this is not official and is limited). After that pass the student must provide the medical documentation to the Office of Disability Services and be evaluated for accommodations on that basis, through Disability Services.

**Question:**

Can this provisional, 1-time pass be tracked somehow so all course directors know if & when that has been granted?

**Answer:**

Brad Clarke does have information for who has asked to postpone an exam, if the request has been made ahead of time.

**Question:**

When anxiety issues arise early in the morning, do we send students to Disability Services or is there a specific place they can go to get attention, with the authority to deal with their issues and then refer them to Disability Services?

**Answer:**

Walk them to Boynton where there is expertise to address the urgent situation and where there is a professional to then make the connection with the Disability Services process with a referral.

**Question:**

Can Disability Services staff follow-up with the student?

**Answer:**

With the student's permission a Boynton psychologist will complete the referral template, send it to Disability Services and staff (Barbara Blacklock) will send an email to the student with an offer of assistance and explanation of the process.

**Question:**

To support consistent responses from course directors, when there is a request right before the exam (8:00

p.m. the night before), is it possible to have a policy in place that requires a deadline by which they are required to ask for postponement of the exam?

**Answer:**

The student, who has managed their disability for the majority of their school life, may not come to the realization that they are going to react to the up-coming exam with high anxiety. They may have never failed an exam or this would be just the 2<sup>nd</sup> exam failure for them. The level of their symptoms may be so problematic they cannot cope.

**Question:**

Is it possible these immediate/urgent situations can use policy so course directors are follow a standard procedure?

**Answer:**

A discussion by SFC members may the best way to reach an agreement to handle the late requests for an excused postponement of an exam. Develop a consensus for how to proceed with a standard and appropriate plan of action.

There was discussion for how to move forward with tracking, policy implementation, and professional staff support (Dr. Scott Slattery). Another suggestion was offered, in having a form of documentation with possible reasons listed that will be completed and signed by a student at the time when their issue arises. Then it's possible to have a clear picture of the student's issues for follow-up and tracking. Mary Tate serves on the Disability Services Faculty Advisory Committee for the University, who deal with these concerns campus wide, suggested forwarding documentation of the concerns and solutions from SFC to the Committee will be helpful in their attempts to resolve these same issues across the University. Dr. Chipman recapped the Disabilities discussion noting SFC and UME need to understand the problem more thoroughly before this can be addressed. He suggested bringing these concerns and issues to the Education Steering Committee as the next step for reaching consensus and developing guidelines.

**Honors Grading**

Dane Thompson, MS-2 presented concerns and a proposal submitted by the year-1 class regarding the current Honors Grading process and practices. Initially these concerns have been raised by students who indicate they came to the UMMS because they understood Yr-1 and Yr-2 course were not graded and competition between students wasn't present or encouraged. Students are now aware of the practice of granting Honors for these courses and are concerned that competency isn't the only measure of their performance. He noted that almost all of the year-1 course syllabi have established that there will be Honors grades assigned for a certain percentage of students.

Dr. Niewoehner noted that the current Policy was established as the result of an SFC discussion and as follow-up to the changing curriculum and the change to criterion based assessment and grading. SFC members agree this does contradict the concept of students being evaluated on the merit of their knowledge of course content. The discussion did have the weight of allowing students to distinguish their performance for future use in their residency applications.

Dr. Watson noted that the Honors/Grading Policy was developed (for discussion) by the Education Steering Committee, discussed by the Education Council and supported by course directors through SFC discussion. It was guided in part by LCME requiring the same grading policy across the two campuses and Duluth did include Honors in their grading practices. The major consideration was to promote excellence and secondly to take another step toward competency based education. The conclusion was if criterion referencing was being used, you could have 90% of student achieving honors Successive discussion was about when the standard is set high, student will continue to strive to meet the standard, which has been reported by some course directors. The last reason for making this decision was that residency program directors would value having individual course honors in year-1 and year-2 courses. There wasn't strong evidence for this decision and there continues to be discussion for how to evaluate this practice, at what level it is valuable to continue

the practice and how to assign grades based upon 90% of course content and possible points.

Dane Thompson reported that discussion within Student Council about the question for how to bring understanding of the practice in accordance across the courses. The written Policy and the practices are the main concern and students would like to understand its application better. **The Student Council's question is whether the Committee feels the Policy should be brought into accordance with the way the Honor is carried out or bring Honors into accordance with the way that the Policy is written.** Dr. Hertz noted this also becomes a concern in writing the MSPE letters for the entering fourth year class, especially with regard to statements for what percent of which courses are the Honors granted. Residency program directors do look for ways that medical students have shown performance that distinguishes them from their peers. It was suggested that a consensus exists to establish Honors should be based upon competencies and make it uniform across the entire curriculum, to clarify for students so they know what to expect. It has frequently been a random process for each individual course. Dr. Chipman closed by noting that this will be discussed in the near future to make a determination and to respond to the request submitted by the Student Council to clarify their question (see above in bold).