11-17-2020

2020 November 17 - Medical Student Education Committee Minutes

Medical Student Education Committee, East Tennessee State University

QUILLEN COLLEGE of MEDICINE
EAST TENNESSEE STATE UNIVERSITY

The Medical Student Education Committee (MSEC) of the Quillen College of Medicine met on Tuesday, November 17, 2020, via Zoom meeting.

Attendance

Faculty Members	Ex Officio Non-Voting Member
Ivy Click, EdD, Chair	Ken Olive, MD, EAD
Caroline Abercrombie, MD	
Martha Bird, MD	Academic Affairs Staff
Thomas Ecay, PhD	Mariela McCandless, MPH
Russell Hayman, PhD	Skylar Moore, HCMC, BSPH
Paul Monaco, PhD	Dakotah Phillips, BSPH
Jason Moore, MD	Aneida Skeens, BSIS, CAP-OM
Mitch Robinson, PhD	
Antonio Rusinol, PhD	Subcommittee Chairs
Robert Schoborg, PhD	Robert Acuff, PhD
Manar Jbara, MD	
	Guests
Student Members	Lorena Burton, CAP
Sarah Allen Ray, M3	Cathy Peeples, MPH
R J Black, M2	David Taylor, M4
Andrew Hicks, M1	Brian Cross, PHARMD, BCACP, CDE
Ex Officio Voting Members	
Rachel Walden, MLIS	

Meeting Minutes

1. Approve: Minutes from November 3, 2020 Meeting.

Dr. Click opened the meeting at 3:30 p.m. and asked for comments/updates to the November 3, 2020 meeting minutes, which were distributed with the MSEC meeting reminder.

Dr. Rusinol made a motion to accept the November 3, 2020 Minutes as presented. Dr. Monaco seconded the motion. MSEC approved the motion.

The MSEC minutes for November 3, 2020 were shared with MSEC Members via Microsoft Teams document storage.

Announcements:

- New MSEC Member – Dr. Manar Jbara will be filling the vacant faculty slot on the MSEC Committee.
- Faculty Development – Resident Remediation session presented by Dr. Mike Ostapchuk and Dr. Diana Heiman is scheduled for November 18, 2020 at 3:30 p.m.

2. **Update/Approval:** OB/GYN procedure list correction

In August of 2019, student observance of episiotomies and hysterectomies were removed from the required procedure list for OB/GYN and made optional as not all students have the opportunity to observe these procedures. These procedures were mistakenly left on the required procedure list that was brought before MSEC for approval for 2020-2021 and were not noticed until after the required list had been approved. MSEC needs to re-approve that episiotomies and hysterectomies will remain as optional procedures for OB/GYN. It was noted that fewer of these procedures were being done and there is a debate about the use of them so the procedure should remain optional. Simulations were also suggested as an alternative for students who were unable to have the opportunity to observe a live procedure.

Dr. Monaco made a motion to re-approve removal of observance of episiotomy and hysterectomy OB/GYN procedures from the required procedure list and make them optional as presented. Dr. Moore seconded the motion. MSEC discussed and approved the motion.

The presented OB/GYN Procedures 2020-2021 document is shared with MSEC Members via Microsoft Teams document storage.

3. **Report:** M1M2 Review - Subcommittee 2019-2020 Reports
   - M2 – Doctoring II

Dr. Acuff presented the 2019-2020 Administrative Review of Doctoring II.

Objectives: This is a 10-credit-hour year long course that emphasizes integration, review, and application of basic science pathophysiology through an introduction to clinical medicine. The course involves multiple components that~~e~~ help to integrate basic science knowledge and teach students how to use that knowledge to treat patients. These multiple components make it difficult to review the course as the components must be looked at individually.

Follow up: Follow up to previous year's review included student issues with the consistency in the grading of the H&Ps and SOAP notes. The review subcommittee feels that the various components of the course need to be considered as this creates over 500 H&P and SOAP notes that must be graded, requiring multiple graders. It has been suggested that M4

students might be able to help with grading H&Ps and SOAP notes, but this would take some work regarding implementation and it is not clear that the M4s have the time and training needed. Another option might be to allow M2s to grade each other's H&Ps. This might be done in a blinded fashion with the writer's name removed with 2-3 students grading each, which would allow students to learn from their peers. Once the grading was done faculty could review the results and comment. It was noted that this concern was addressed in Dr. Amadio's course CQI plan for this year.

Outcomes: 55 students had final grades of 90% to 98%, 19 students had final grades ranging from 81.6% to 89.99% and 1 student had a final grade average below 70%, the average grade was 91%.

Strengths: The strengths of the course were the simulation labs, the small group activities and personalized feedback, and the skin workshop. The study guides and quizzes, and Integrated Grand Rounds got high marks as well.

Weaknesses: One complaint by students was paragraph responses on the midterm exam instead of more Step 1 designed multiple-choice questions. Another complaint was the H&Ps do not clearly line up with what the students would be expected to write in the clinics and students suggested gradually changing the H&P formatting over the year, making the initial few H&Ps more detailed and the last few more realistic with the clinics and for the Step 1 exam. There seems to be a dichotomy between the generalist track and the rural track in which the rural track is evaluating lower than the generalist track but the majority of the activity is the same for both settings so the reason for this is unclear.

Recommendations to the clerkship director:

- Consider using more formative quizzes to aid student learning and count formative quizzes and exams as only a small fraction of the grade, such as 10% instead of 20% as was used this year.

Recommendations for MSEC:

- The multiple components in Doctoring ~~2~~ II make it difficult to review. Students like some components more than others. However, evaluating how well the learning objectives are accomplished is not easy because there are no external measures, such as shelf exams. A lot of clinical faculty effort goes into delivering this course and the faculty are to be commended for their hard work.
- It appeared that there were differences in the experiences between the Generalist and Rural Tracks, although they should be very similar, just delivered in different settings. The subcommittee recommends investigating the cause of this difference.
    - The main difference between the content delivered to generalist and rural track students was that rural track students did not individually participate in the standardized patient encounters and write their own SOAP notes, they interviewed a standardized patient as a group and did not write a SOAP note.

- MSEC discussed that rural track students and generalist track students get the exact same experience on some components such as Health Care Systems, Pain, Patient Safety, Human Sexuality, and Integrated Grand Rounds but there could be some carryover of student dissatisfaction with other aspects of the course.
- It was also suggested that this group of rural track students just rate lower than the generalist track students. It was pointed out that the number of rural track students, around 16, was very small in comparison to the generalist track students, around 58 or 60, and a couple of very low ratings could pull down the entire mean, skewing the results.
- It was noted that this is for the 2019-2020 academic year and in general the Rural Track students had complained about organization and communication, which could have translated into Doctoring II.

Looking at the overall scores instead of the individual sessions, it is clear from year to year that there is a difference in ratings between the Rural Track and the Generalist Track. It was suggested that MSEC make a recommendation to the rural track faculty and administration to address these issues as the rural track is at a major transition point with both the Director of the rural track program, Dr. Florence, and the rural track program coordinator, Carolyn Sliger, retiring in the near future. With the personnel changes, it would be good to have this issue front and center for the new people to address as the rural track program is autonomous enough that the Doctoring II course director has limited authority over what happens when the students are out in the rural communities. Dr. Amadio has tried to better align the rural track and generalist track experiences and has tried to ensure that even if the experiences are not the same on a daily basis, the topics being discussed daily were the same.

Dr. Abercrombie made a motion that MSEC make a recommendation to the Rural Track program director to investigate and address the trend of lower evaluation ratings and possible causes such as communication, organization and lack of training ~~and~~ in documentation for Rural Track students in Doctoring II components. Dr. Rusinol seconded the motion. MSEC discussed and approved the motion.

Dr. Abercrombie made a motion to accept the 2019-2020 Administrative Review of Doctoring II as presented. Dr. Hayman seconded the motion. MSEC discussed and approved the motion.

The presented 2019-2020 Review of Doctoring II document is shared with MSEC Members via Microsoft Teams document storage.

4. **Discussion:** AAMC Upload Status

Aneida Skeens reported that the 2019-2020 New Innovations Curriculum was successfully uploaded to the Association of American Medical Colleges (AAMC) curriculum repository on October 16, 2020. Participation in the annual upload process allows the College of Medicine to request and receive a large variety of curriculum related topic reports from all LCME accredited schools. New Innovations is continuing to work on a scripting solution for the XML file so that information currently in the database will populate into a table to show where the Institutional

Educational Objectives (IEOs) are mapped to course and clerkships down to the session levels. As this table was not available, an excel spreadsheet was used to provide this information manually for the 2019-2020 academic year based on the information provided in the course and clerkship self-studies. It was stated that although some areas only had light coverage, every IEO was covered by at least one course or clerkship. It was noted that the Portfolio requirement was originally intended to provide coverage in areas that were not being covered by the courses or clerkships and this is something that may need to be watched in case additional coverage needs to be added to the Portfolio course. It was further noted that a surprising number of portfolio submissions related to IEO 6.6 (Perform administrative and practice management responsibilities commensurate with ones' role, abilities, and qualifications) came from the Family Medicine Clerkship and perhaps Family Medicine could map to this. Dr. Moore expressed that having students write something up was different than making sure that they were doing it and assessing that they do it correctly, which would be very time consuming with the limited time they had.

It was questioned if there were IEOs being only marginally covered, should those IEOs be dropped or was this still valuable information that graduates should be able to do by the time they graduate and increased exposure was needed. It was considered that there could be areas where the information was being covered but it was not mapped. It was suggested that IEO coverage should be looked at while working on curriculum transformation through the implementation committees.

No action required for this item.

The presented 2019-2020 Institutional Objectives Mapped to Course and Clerkship document is shared with MSEC Members via Microsoft Teams document storage.

5. **Discussion:** NBME Clerkship grades during pandemic

   During the November 3, 2020 meeting it was suggested that a discussion be held during this meeting on the issue of NBME clerkship grades and student failures. A requirement to pass a clerkship is an NBME score at or above the 6th percentile so a score at the 5th percentile or lower~~, that~~ is considered not a passing score and students are allowed to repeat the examination one time. ~~I and i~~f they score above that level on the repeat exam, then they keep the original numeric grade for the NBME but they pass the clerkship. If they do not score above that level then they get a failing grade for the clerkship and are required to repeat the clerkship. One of the concerns is that it seems like there are a significant number of students who are failing clerkship NBME exams. Dr. Bird had concerns about this, because so far, this academic year she has had four students who have received scores below the 5th percentile and that is more for her clerkship than she has seen in previous years for the entire year. Pediatrics has also had more failing scores this year than in the previous years. So far, there have been 16 NBME failures total for all clerkships and we are only halfway through the academic year. This is comparable to the total in previous years for the entire academic year. There are generally more failures in the early part of the year than the latter part as students are learning how the clinical NBME exams are different and there is also an aspect of exam performance that is cumulative in nature for the knowledge

students have gradually accumulated from other clerkships over the course of the year. However, we are certainly at a point that is tracking to be above where it was in the previous two years. Looking at those failures, every student that had a failing clerkship NBME exam is an academically weaker student who would have gotten 70s in pre-clerkship grades or performed on the weaker side on NBME exams during the first two years. Six of these students failing clerkship NBMEs had not taken the Step 1 exam yet due to COVID-19. Normally by this time the vast majority of students have taken Step 1, and in the past students were required to take Step 1 before starting clerkships but that is not feasible this year. This puts those students at a disadvantage because they are worried about studying for Step 1 and studying for clerkship exams and may be spreading their efforts too thin. There are four students who have had two NBME failures and failed the clerkship and that is more than the previous two years. All four of those students have not yet taken Step 1. Two students have failed NBME exams in two different clerkships and one of those two had failed Step 1.

Factors discussed were weaker students, students that have not taken Step 1 and are still studying for that, and the current situation that is elevating stress levels for everyone. Clerkship directors also note that clerkships are a week shorter than they have been in the past years and didactics are being done differently and this could be related, although clerkships were shortened a couple of years ago when the calendar was being reset and there was not a fundamentally different performance on the NBME exams at that time. It was reported that there were probably four or five students left to take the Step 1 exam and those students should have Step 1 completed by the end of November. It was suggested that it could be that students were studying more for Step 1 exam than focusing on their clerkships and NBME, however, it was also noted that students were getting more time to study because of limitations on clinical days and weeks due to COVID-19. Given the various factors, it was determined that the data be monitored and brought back to MSEC after a couple more periods for review. It was suggested that students still needing to take Step 1 be encouraged to meet with Dr. Daniels to make sure they are using all of the resources available and are prepared for the exam.

Clerkship NBME grades will be monitored and results brought back to MSEC in February.

The presented NBME-Aquifer Failure Data document is shared with MSEC Members via Microsoft Teams document storage.

6. **Discussion:** Curriculum Content Report (Population-Based Medicine)

Dr. Olive presented a Curriculum Content Report on Population-Based Medicine and pointed out that a fundamentally different approach was taken on this report from previous ones. The College of Medicine IEOs were reviewed to see which ones seemed to pertain to population health and then the 2019-2020 Institutional Objectives Mapped to Course and Clerkship document shown earlier in the meeting was reviewed to see which courses mapped to those objectives. The table shows the QCOM IEO, the curricular year, the course objective and the content. Some of the course objectives were specific enough that content did not need to be described in the content column. The IEOs, curricular year

covering the content and the course objectives covering population-based medicine are shown below.

QCOM IEO	Curricular Year	Course Objective
2.2	M1 M2 M3	ANTY 02, CMM 08, GEN 05 IMM-MV 07 FM 04, RURAL 13, RURAL 03, RURAL 04
2.4	M1 M2 M3	CE&B 02, CE&B 05, CE&B 10, CE & B 12, DOCI, GEN 05, LD 01 IMM-MV 07, PHARM 07 FM 04, RURAL 13, RURAL 03, RURAL 05
2.5	M1 M2	DOCI 08C, DOCI 08D, DOCI 08E, DOCI 08F DOCII 18
3.9	M1 M2 M3	CE&B 01, CE&B 02, CE&B 05, CE&B07, RPCT 1940 08 RPCT 2950 01, RPCT 2950 02 COMMED 08, RURAL 08, PEDS 01, PEDS 14, PSYCH 06
7.2	M3	COMMED 02, COMMED 04, PEDS 14
7.3	M1 M2 M3	DOCI DOCII 21 COMMED 03, RURAL 03, COMMED 04, PEDS 14

Examples given of the population-based medicine content covered were:

- Anatomy covers embryology topic of congenital defect and malformations and interventions at population-based levels such as avoiding alcohol and smoking during pregnancy.
- Cellular and Molecular Medicine covers how diet and nutrition affect biochemical pathways at population-based levels.
- Genetics covers identifying consequences of mutations and genetic variation on health and disease in human populations.
- Microbiology and Immunology covers immunizations.
- Several clerkships, such as Family Medicine and Rural Primary Care Track address population-based health issues like applying principles of epidemiologic sciences to identify health problems, risk facts treatment, strategic resources, and disease prevention and health promotion for patients and populations.
- Pharmacology covers modifying pharmacotherapy and special populations.
- Doctoring I and II have several objectives that apply to psychosocial and cultural influences on health disease care, seeking care, adherence and barriers to and attitudes towards care.

- Clinical Epidemiology and Biostatistics cover obtaining and utilizing information about individual patients, populations of patients, or communities from which patients are drawn to improve care.
- Rural Track Research and Projects cover a few things that are not part of the generalist track curriculum regarding population-based health.
- Community Medicine, Pediatrics, Doctoring I and Rural Track cover interprofessional topics. Other clerkships have interprofessional content but are not particularly mapped to this objective.

The data gathered for this report is currently in the database for New Innovations but is not readily available to extract as a report. Data can also be searched within New Innovations using keywords, which is the way the data was gathered for curriculum content reports previously. The new approach was tried to show clear linkage between the course objectives and the IEOs, and to provide information on how faculty have access to information about the linkage to course objectives to IEOs. Using keywords to find the course objectives and work backward to the IEOs were also discussed. It was also noted that curriculum content reports were located on the MSEC webpage and if people looked at the content reports and knew other areas of the curriculum where content was covered, that content could be added. A suggested list of topics is also on the web page if anyone is interested in doing a content report.

No action required for this item.

The presented Population-Based Medicine Curriculum Content Report document is shared with MSEC Members via Microsoft Teams document storage.

7. **Discussion:** Curriculum Transformation

Dr. Click led a discussion on ideas for the new curriculum regarding determination of content and sequencing if there are foundations courses and organ system-based courses. The list of suggestions was provided before the meeting and is included below.

1. Foundations course(s) possible content – time to be determined by content
    a. Anatomy – how much
    b. Biochemistry/Genetics – how much
    c. Cell Biology
    d. Pathology – basic mechanisms
    e. Pharmacology - basic principles
    f. Microbiology – basic principles
    g. Biostats/Epi
2. Systems – sequencing and combinations to be determined
    a. Cardio/Pulm/Renal
    b. Host Defense – Inflammatory diseases
    c. GI/Nutrition
    d. Endocrine/Reproductive
    e. Nervous/Behavior

    f. Skin/Musculoskeletal
    g. Blood/heme/lymph
3. Capstone
4. Doctoring course running in parallel – what is included?
    a. Clinical Skills
    b. Communications
    c. Interprofessional education
    d. Health care systems
    e. Ethics
    f. Professionalism
    g. Patient safety/Quality improvement
    h. Journal club

Comments made during the discussion:

- The list of courses shown for the first two years looked like the current content was compressed into one semester. Concern was noted that faculty would end up teaching the same things they are teaching now instead of really combining the courses into a cohesive course as planned.
- Cell Biology is a broad topic course that should be in a foundations course but it is lacking microanatomy or histology, however, basic histology pieces are different than histology of the organ systems so perhaps basic foundational histology or microanatomy content should be added.
- Anatomy, Histology and Pathology could be combined in foundations and Biochemistry, Pharmacology and some aspects of Basic Physiology could also be combined into foundations 2.
- Content would have to be rearranged and we would not be teaching two years of material in a four to six-month period, but some pieces of the material would belong in the foundational content at the beginning and other pieces would belong in the appropriate organ system.
- Adding the capstone and basic science content to the third and fourth years would provide another opportunity to cover some of this content in a different place.
- Every discipline course has introductory material and the foundations courses should put that introductory material together in a coherent way and the rest of the information be taught during the appropriate organ system. That way, each discipline-based course would then be revisited in an organ system in a way that makes sense.
- Look at other schools to see how they have structured their courses and the rationale for certain sequences. Some of the schools the Curriculum Transformation Steering Committee (CTSC) spoke with did not have a logical reason for their sequence as sometimes it was based on when faculty was available to teach. We will have a legacy curriculum and a new curriculum so faculty will not be able to teach the "old" students and the "new" students at exactly the same time, so courses may have to be shifted around to make the schedule work.
- Try to get student impressions from other schools that have transitioned to a new curriculum and get suggestions from our own 3rd and 4th year students to assist with

content suggestions on gaps and redundancies. Having some of our students talk to their peers from other schools is a good idea.

- Disciplines need to be grouped into courses that make sense and are more useful later on.
- There could be more than one foundations course and it should not be thought of as disciplines but as the foundations of medicine course.
- The logistics of Anatomy dissection will also need to be considered and how to put that together due to the logistics of the cadavers and also teaching physical therapy students and sharing the cadavers. It may not be possible to disperse Anatomy due to other obligations that Anatomy ~~have~~ has in the Division of Health Sciences for other programs and obligations faculty have teaching other courses in addition to Anatomy while also directing other courses due to the dual roles between academic affairs and biomedical sciences.
- One fairly common approach is a structural and perhaps functional foundation, or structural and molecular foundation, where the structural covers basic anatomy to get the anatomy foundation up front.
- Length of foundation blocks were discussed.
- Parallel courses running simultaneously were discussed with one being structural and one being functional, then move on to organ systems and bring in the appropriate components of those foundations courses in the organ systems.
- Courses will not all be the same length as some have much more content than others.
- Host defense and inflammatory diseases should be first in the organ systems because disease processes are distributed through the organ systems and there are many inflammatory pathologic processes that affect those systems. Blood/heme/lymph would also go well with or immediately after host defense if discussing things running through organs.
- Pharmacy went to a more organ systems-based curriculum and the order of their teaching could be looked at to see if there happens to be any overlap for potential alignment with what pharmacy is teaching and what medicine is teaching. Pharmacy taught the cardiovascular system and respiratory system sequentially instead of together. Dr. Cross stated that pharmacy was currently discussing revision and if COM changes their curricula it would be a great time to talk about alignment with pharmacy if possible, when possible.
- Hiring a consultant is still in discussion, and a consultant who has consulted for a school similar to us, is familiar with medical education, or has been through a similar process and has knowledge of the kind of curricula we want to go to is desired. Who the consultant is, is as important as whether or not a consultant should be hired.
- There was discussion of splitting the Biomedical Sciences Department and it will have to be decided who will teach. If junior faculty have a heavy teaching responsibility, it does not leave them time for research or other requirements for promotion and tenure.
- Working on the foundation~~s~~ courses will have to come first so having a foundations implementation group in the near future will be essential. The course directors or someone heavily involved in the course will need to be on the foundations implementation group. A mediator would also be a good idea to have for the foundations group to mediate territorial issues over content.

- Other implementation groups to consider are a learning community group, a group (or groups) for systems, and a third-year basic science group. So much of the process is intertwined that some people could be in multiple groups.

No action required for this item.

The presented Pre-Clerkship Curriculum Sequencing Discussion document is shared with MSEC Members via Microsoft Teams document storage.

The MSEC meeting adjourned at 6:00 p.m.

MSEC Meeting Documents

MSEC Members have access to the meeting documents identified above through the shared Microsoft Teams document storage option made available with their ETSU Email account and login.

If you are unable to access Microsoft Teams MSEC Team please contact: Aneida Skeens at: skeensal@etsu.edu. Telephone contact is: 423-439-6233.

MSEC Meeting Dates 2020-2021:
August 4 – 3:30 – 5:30 pm – Zoom meeting
August 18 – 3:30-6:00 pm – Zoom meeting
September 1 – 3:30 – 5:30 pm – Zoom meeting
September 15 – 3:30-6:00 pm – Zoom meeting
October 6 – 3:30 – 5:30 pm – Zoom meeting
October 20 – **Retreat** – 11:30 am-5:00 pm - Zoom meeting
November 3 – 3:30 – 5:30 pm – Zoom meeting
November 17 – 3:30-6:00 pm - Zoom meeting
December 15 – 3:30-6:00 pm - Zoom meeting
January 19, 2021 **Retreat** – 11:30 am-5:00 pm - TBD
February 16 – 3:30-6:00 pm - TBD
March 16 – 3:30-6:00 pm - TBD
April 20 – 3:30-6:00 pm - TBD
May 18 – 3:30-6:00 pm - TBD
June 15 – **Retreat** 11:30 am-3:00 pm – TBD
June 15 - **Annual Meeting** - 3:30-5:00 pm – TBD