The Medical Student Education Committee (MSEC) of the Quillen College of Medicine met on Tuesday, November 3, 2020, via Zoom meeting.

Attendance (remove any not present)

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<tr>
<th>Faculty Members</th>
<th>Ex Officio Non-Voting Member</th>
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<tbody>
<tr>
<td>Ivy Click, EdD, Chair</td>
<td>Ken Olive, MD, EAD</td>
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<td>Caroline Abercrombie, MD</td>
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<td>Martha Bird, MD</td>
<td>Academic Affairs Staff</td>
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<tr>
<td>Thomas Ecay, PhD</td>
<td>Mariela McCandless, MPH</td>
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<td>Russell Hayman, PhD</td>
<td>Skylar Moore, HCMC, BSPH</td>
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<td>Jon Jones, MD</td>
<td>Dakotah Phillips, BSPH</td>
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<td>Paul Monaco, PhD</td>
<td>Aneida Skeens, BSIS, CAP-OM</td>
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<td>Jason Moore, MD</td>
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<td>Mitch Robinson, PhD</td>
<td>Subcommittee Chairs</td>
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<td>Antonio Rusinol, PhD</td>
<td>Robert Acuff, PhD</td>
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<tr>
<th>Student Members</th>
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<td>Erin Lutz Bailey, M4</td>
<td>Lorena Burton, CAP</td>
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<td>R J Black, M2</td>
<td>Theo Hagg, MD, PhD</td>
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<td>Andrew Hicks, M1</td>
<td>Cathy Peeples, MPH</td>
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<td>James Sheffey, MD</td>
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<td>Ex Officio Voting Members</td>
<td>Tory Street, AD</td>
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<td>Tom Kwasigroch, PhD</td>
<td>David Taylor, M4</td>
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<td>Rachel Walden, MLIS</td>
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Meeting Minutes

1. Approve: Minutes from October 20, 2020 Meeting.

Dr. Click opened the meeting at 3:30 p.m. and asked for comments/updates to the October 20, 2020 meeting minutes, which were distributed with the MSEC meeting reminder.

Dr. Rusinol made a motion to accept the October 20, 2020 minutes as presented. Dr. Monaco seconded the motion. MSEC approved the motion.
The MSEC minutes for October 20, 2020 were shared with MSEC Members via Microsoft Teams document storage.

Announcements:

- Upcoming faculty development session November 18 at 4:00 p.m. on “Resident Remediation” by Drs. Diana Heiman and Mike Ostapchuk.
- A link on the Academic Affairs homepage in the sidebar tab under “Faculty Development and Resources” lists upcoming presentations as well as previous presentations with links to resources. The most recent session presented by Dr. Rob Schoborg will be available as soon as CME sends the recording.
- The Curriculum Transformation Steering Committee homepage has been updated. This link is also available on the Academic Affairs homepage in the sidebar tab under “Curriculum Transformation”. The page contains a news and events tab and upcoming events such as town hall meetings or anything related to that will be placed on that page.

2. Discussion: Review of criteria for requirement of CQI Plan

At the October 20, 2020 meeting during the discussion of course/clerkship review rubrics the discussion regarding when to require CQI plans was deferred to the present meeting.

The following suggestions were made for criteria to trigger the recommendation of a CQI Plan:

- Any item on the course/clerkship rubric is below expectations.
- Three or more items on the course/clerkship rubric are below expectations.
- A course/clerkship is repeatedly below expectations on a specific item.
- A course/clerkship does not implement recommended changes from prior year (and has no explanation).

It was noted that there were 17 items on the rubric to give a perspective for determining how many items rating below expectations would trigger the recommendation of a CQI plan. It was discussed that using only one item rating below expectations would set a lower bar than we would like and we would not want to require a CQI plan for a course that otherwise had very strong performance, but slipped on one item. It was suggested that there be a failsafe mechanism to trigger recommendation of a CQI plan for something completely unexpected that the criteria do not pick up on. Comments were also made about classifying the criteria as guidelines to use and not necessarily a piece of a policy. It was suggested that the criteria for items rating below expectations could be two items from the same element or three items total. It was further suggested that the M1-M2 and M3-M4 review subcommittees review the criteria and make recommendations to MSEC that the course/clerkship complete a CQI plan. However, the decision to require the course/clerkship to complete a CQI plan remains with MSEC. It was noted that MSEC would be the failsafe mentioned previously as a report could come to MSEC that does not meet
the criteria but has an obvious problem and MSEC could still determine the course/clerkship needs to complete a CQI plan. A suggestion was made that the report contain a comment box for the subcommittee to explain what criteria items were used to make their recommendation and it was determined that the review subcommittee could use the space on the form entitled “Issues Requiring MSEC Action” to include a narrative that a CQI plan was recommended based on the following listed criteria.

Dr. Hayman made a motion to set the criteria for recommending a CQI plan as two items in one element or three items total on the Course or Clerkship Review Report Rubric are below expectation, or not implementing recommended changes from prior year with no explanation for triggering a recommendation from the M1-M2 or M3-M4 review subcommittee to MSEC that a CQI plan be completed with MSEC making the final determination to accept or reject the review subcommittee’s recommendation. Dr. Rusinol seconded the motion. MSEC discussed and approved the motion.

3. Discussion: Curriculum Transformation Steering Committee (CTSC) Update

Dr. Click presented an aggregated list of the responses received from each group assembled during the breakout session at the retreat meeting on October 20, 2020. The first question was to review the concepts around the curriculum framework and list what you liked about the proposal. The second question was whether or not we should engage an outside consultant to support the transformation. The responses and subsequent discussion during today’s meeting are listed below:

1. Review the Curriculum Framework Concepts on the document provided, focusing on the structure.

   a. What is appealing about this proposal?

   - Guiding principles aligned with mission.
   - New curriculum management system (CMS) - very enthusiastic!
   - Learning communities with dedicated librarians.
   - Learning communities = big structural improvement, help build relationships
   - Better clinical faculty/basic faculty communication, interaction, and cooperation (dyads) = good for students too
   - Pairing clinical with basic science.
   - Active learning emphasis.
   - Assessments driving design of sessions
   - Preclinical years: Broken into sections (foundational medicine). With foundation you’re able to introduce subsequent courses.
   - Foundation material block seems important.
   - Organ systems curriculum makes logical sense; many schools are headed that way and students seem happy with it. A majority of schools do this single-pass style curriculum.
     - The Biomedical Sciences Faculty has discussed a systems-based single pass curriculum. This would be different than a “double-pass” or spiral type
approach where normal systems are reviewed and then revisited with pathological or abnormal or disease systems. This single-pass curriculum could have a foundations block in the beginning with some of the basic information being reiterated in the organ system with a capstone at the end to test some content together. It would be more of a single pass with reinforcement. It was pointed out referencing the document of example Foundations courses provided by Dr. Click that some of those schools used advanced topics at the end instead of a capstone so that is something to think about as well. CTSC proposed recommendations support more of a single-pass curriculum.

- A systems-based curriculum would be easier to deliver in a more integrated manner.
- Journal club is good
- Keystone course at end of clerkship phase seems beneficial. Ability to reinforce central concepts in this type of course.
  - This Keystone course would take place at the end of the pre-clerkship phase. It would not be replacing the Keystone course occurring at the end of the fourth year, it would be in addition to that Keystone course.
- Vertical integration: having M1s and M2s having more clinical responsibilities during “pre-clinical phase”.
  - Clinical years need more basic science integration and there needs to be an intentional integration of basic science into the clerkship curriculum.
- Like theory of increased vertical integration
- Shorter (18.5 months); 2nd year students finished by mid-Feb and start clerkships in April.

b. What concerns do you have?

Faculty:
- How will faculty be assigned?
- Faculty willing to be leaders of learning communities, courses
- Use of community preceptors is tenuous and needs a lot of buy-in and maybe money.
- Gravity and time of what these changes mean to each faculty.

Content/Instruction
- How the increased clinical experiences in pre-clerkship looks
  - How is this different than Doctoring I? Increased clinical experience would be a half day every other week in the clinical environment. In Doctoring I, students have preceptorships but those are limited to what they can do. We do not currently have the resources for an increased clinical experience. We would need a dedicated staff position to get clinical placements for the students.
- How to ensure content coverage when change occurs
- There is a risk of too much compression of basic science content in the preclinical curriculum.
- How long should it be and what should be included in a foundations course?
Journal club is difficult to implement/access - needs to have over-arching goals for facilitators to use - what should students get out of it?

Is there evidence that students who go through TBL classes perform as well on national exams?
  - There is quite a bit of literature that shows improvement of in-house exam scores and knowledge scores in a variety of different health professions and other sciences but there is less on national exams.

Implementation

- Not sure how it will work.
- How to implement vertical integration?
- Time to implement active learning-based methodologies.
- The process to implement a new curriculum might be too rushed
  - The question was asked of the Registrar’s Office “How the timeline of Fall of 2022 would intersect with admissions timeline for telling prospective students what kind of curriculum to expect. Tory Street from the Registrar’s Office responded that they usually start recruiting in fall and they have already begun to do virtual campus visits for applicants who will apply in next year’s cycle for the entering Class of 2022. Students in the entering Class of 2021 have already applied. The Registrar’s Office tells people who ask that our curriculum committee is always working on ways to improve what we do and the opportunities we provide to students and leave the answer pretty vague.
- Keeping integrity of mission, responsibilities for community medicine clerkship and rural track curriculum in place with new curriculum
- Fear is that we won’t do it right because of cost
- Implementation and planning. Needing more faculty resources to implement the changes.
- The need for people to implement data/all be on the same page/etc. (mapping)
- Transposing what we envision into reality.
- Bringing in a consultant could compress time. Don’t want to bring in the consultant until we have a clear vision and process.
- Is new CMS good or bad?

c. What additional resources would we need?

- Replace D2L
  - It was suggested that we should not attempt to implement a new curriculum and transition from D2L to something new at the same time.
- Need new GOOD CMS
- **Intuitive** Curriculum Management system--personnel to ensure its run properly.
- IT support
- Making librarians faculty.
- Physicians need help with instructional design (we need our own Amy Johnson)
- Money/incentives to pay community preceptors
- Time protection and/or stipends for faculty
• Basic science faculty whose major role is teaching. Clinical faculty time also devoted to teaching.
• Revise promotion and tenure guidelines for educators
• Extra personnel/faculty/more supported time for existing faculty
• Faculty exchange with institution with similar framework for knowledge transfer during implementation period

2. If available, should we engage an outside consultant to support the transformation?

• Yes, a consultant would help identify questions that we have not thought of
  o A consultant has not been contacted yet but the committee has been asking advice on and obtaining suggestions and recommendations on consultants from other people.
• Depends on consultant.
• Some discussion - yes and no - may help us ID pitfalls before implementation if they have done this recently
• Consultant would be useful if from a similar sized and mission-oriented school and if they have gone through the process.
• Maybe not big company--could be faculty from peer institution-- or cross interaction with peers for our faculty
• Need someone who knows what a lot of schools have done

If so, what support do we need?

• Consultant who has specific experience in the model that we switch to
• Expertise in this type of process
• Perhaps consultant would offer best practices for length of preclinical curriculum and structure of a foundations course.
• Faculty development? YES-- this would be where commercial entity could be used!
• Faculty development – Absolutely – especially for assessment development and for ways to engage students.
• Can help us avoid established constituencies at QCOM
• Mediator in avoiding turf war between disciplines
• Validation from consultant for needing more time if we get in a time crunch on implementation at Fall 2022

An example schematic was shown to hypothetically depict what the academic year course schedule could look like depending on the curriculum chosen. The block lengths depicted are not specific blocks for the courses or clerkships, the blocks were based on an estimation of where breaks fall. The 18-month period for the pre-clerkship phase was questioned and it was explained that meant three semesters and not necessarily 18 months on the calendar because schools do not always run classes over the summer. Defining how many weeks of the preclinical phase of the curriculum would be devoted to the preclinical sciences was discussed. Clinical involvement during the pre-clerkship was also discussed including pairing basic science and clinical faculty for courses.blocks. Some form of the doctoring courses
will also continue and it was also suggested to have pre-clerkship students go into the clinics more frequently. The clerkship length will be impacted by the pre-clerkship length. The determination of course/clerkship length would have to be worked out in the implementation process. How anatomy was taught was also brought up and it was noted that some schools teach anatomy at the beginning similar to what we do and others integrate it throughout the entire pre-clerkship phase or teach it with the organ system.

An additional schematic was shown to hypothetically depict what the academic year course schedule could look like if Step 1 were moved to the dedicated time after the clerkship. This schematic also shows a bit more foundation time to show some of the different options.

A document was also provided that displayed example foundations courses with summaries for other schools and links to their websites. These schools use customized NBME exams for their courses. Some of these schools have more faculty than we do but a lot of them have a small dedicated core group of faculty that teach the pre-clerkship courses and some have two full time primary care clinical people working in the pre-clerkship alongside the basic science faculty.

A lot of time was spent discussing a three-year program including the following questions and corresponding answers:

- **How would a three-year program work with a four-year curriculum?**
  - During a three-year program, students would use some time between years one and two to start clinical experiences they would otherwise do in the clinical year, so if a curriculum were designed with no summer, that would impact the likelihood of implementing a three-year curriculum. Likewise, if a curriculum was implemented that has significant core requirements in the fourth year, that has the potential to impact being able to do a three-year program. A three-year program often has a longitudinal clinical piece during the first two years that contributes to credit for their clinical time making the program possible. A three-year program designed for a subset of the class of students.

- **How many of our residency programs were interested in participating in a three-year track program?**
  - Family Medicine, Pediatrics, and Internal Medicine have expressed interest. OB/GYN and Surgery were not interested. It was pointed out that the interest of Family Medicine, Pediatrics and Internal Medicine aligns well with the institution’s mission on emphasis in rural primary care. Student in three-year programs generally attend residency at their home schools and residents are more likely to practice wherever they do residency, so there is a likelihood those students would ultimately stay in this area to practice. A three-year program could potentially reduce tuition costs for students.

- **How would a three-year program accommodate rural track students?**
  - The rural track is probably a natural fit to do a three-year program.
• Would there be prerequisites for experience or advanced training prior to entering medical school to allow students to finish early?
  o Schools take different approaches to this as some schools do require specific criteria before entering into the three-year accelerated program but other schools have an “on-ramp” where these students do not enter into the three-year program but commit to it after the first semester if they meet certain criteria.

• Would there be any ongoing evaluation of students in a three-year track program to ensure the student is progressing well and remains a good candidate to complete a three-year program?
  o Ongoing evaluation would be important and there would also need to be an “off-ramp” so if students are determined not to be a good candidate, were struggling to meet goals, or changed their mind and decided they did not want to do a three-year program, there would be a way to get them back out of a three-year program.

• Other topics discussed included timing of USMLE exam and interviewing for residency.

Additionally, regarding a three-year program, there is a consortium of schools with three-year accelerated track programs that we would join if we were interested in doing this and they have a yearly conference and other materials available. A three-year program is something that would have to be further developed, but the current objective is to not rule out the possibility.

The ETSU Quillen College of Medicine Curriculum Transformation document from October 2020 was also reviewed to show a few additions that had been made to the document such as additional resource information, ITS technological support, protected time for faculty to teach, and revised promotion and tenure guidelines for educators. A section was added for “Notes and Definitions” for reference and data obtained from the AAMC in 2017-2018 and 2018-2019 was added along with links to other resources. Additional information was included in the section for Benefits and Drawbacks of Moving USMLE Step 1. The remainder of the October 2020 document was the same information previously reviewed.

It was discussed that a vote had already been approved to change the curriculum and our next step would be to form implementation groups to begin working on the broad framework. We would need implementation groups for the following:
• Are we going to have foundations?
• Are we going to have an organ systems-based with capstones in the pre-clerkship phase?
• Group or groups to specifically work on the courses or blocks
• Group to determine the order of the courses or blocks
• Group for threads for basic science and clinical, perhaps thread directors
• Group for learning communities if that is adopted
• Group for assessment
• Group for pedagogy instruction

This discussion is relevant to the LCME response due in four weeks. With respect to the single versus double-pass, the CTSC felt strongly that the curriculum should be a single-pass with an introductory course. There is significant concern that a double-pass would not be much different than the current curriculum. It is felt that the students learn better in context. For example, if they have the GI physiology and the microbes that affect the gut and the pathology and the pharmacology delivered in the same timeframe, they learn better with that. MSEC voted on the following general structure items from the CTSC Curriculum Framework Concepts section of their proposal so this information could be included in the LCME response:

• Pre-clerkship will include foundations course, organ-based system courses and a capstone course
• Increased vertical integration in basic sciences and clerkships
• Increase active learning methods
• Goal of implementation for the first year in the Fall of 2022

Dr. Abercrombie made a motion to accept the recommendation for a framework that includes a structure that increases vertical and horizontal integration; instruction that increases active learning; a design that is assessment driven; and a goal for roll out in Fall 2022, using the resources, suggestions, and information collected in the Responses from MSEC Retreat on Curriculum Proposal document as a guide for implementation groups. Dr. Ecay seconded the motion. MSEC discussed and approved the motion.

Dr. Bird asked if NBME scores in the clerkships with students’ postponement of Step 1 could be reviewed as she was concerned about what was happening with students’ scores and an increase in failures that is felt to be related to the students not taking Step 1 yet. Dr. Click said she would put that as an item on the next agenda.

The presented Responses from MSEC Retreat on Curriculum Proposal, ETSU Quillen College of Medicine Curriculum Transformation Proposal 10.03.2020 and Example Schematics 10.30.2020 documents are shared with MSEC Members via Microsoft Teams document storage.

The MSEC meeting adjourned at 6:10 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:
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 – Lg. Auditorium