Curriculum Renovation Working Group EPC summary report presented August 6, 2018

**Background:** Medical education is continuously changing in order to meet the needs of our healthcare system and learners, and to incorporate advances in educational practice. Though incremental change occurs as part of our routine course review, increasingly students and faculty identified opportunities for broader innovation such as more experiential learning, improved training in and utilization of technology and interprofessional education. Our last major curriculum redesign to our current Learning-centered Integrated Curriculum (LInC) was fully implemented in 2016 and our 5-year review was completed in a similar time-frame. Both recognized the accomplishments of LInC and acknowledged the value and need for ongoing quality improvement.

In support of this perspective, the Associate and Assistant Deans for UME created a document defining the rationale for engaging in curriculum renovation (attachment 1) and presented it to the Education Policy Committee on Monday August 2, 2018. The proposal for curriculum renovation recognizes ongoing reimagining of what and how we teach, stepping beyond the current structures while maintaining the elements that function well. Building on this framework, the EPC charged the ADUME with convening a working group to explore this need and if in agreement, to propose a roadmap for curriculum renovation.

## Working group membership:

Melissa Fischer, MD, MEd; Michael Fahey, MD; Mara Epstein, ScD; Patricia Seymour, MD; Dawn (Ty) Fraga, PhD Eric Mick, PhD Ashton Gunn, MEd Gail March Cohen, PhD Meghan Reynolds, MS 4 Patricia Lanzillotti Jessica Kilham
Adam Kellogg, MD
Rebecca Blanchard, PhD
Jennifer Bram, MD
Luu Ireland, MD
Erin McMaster, MD
Vijay Vanguri, MD
Helen Lyon, MD
Alexander Miller, MS 4

### Process:

# 1. Meetings and activities

- a. April 11:
  - i. Reviewed rationale for curriculum renovation as presented to EPC
  - ii. Shared reasons for wanting to participate in this working group.
- b. Interim work:
  - i. Created cross-chart to see where member-initiated topics aligned with original rationale and highlight new perspectives. (attachment 2)
  - ii. Charged members with review and consideration of whether or not this justified curriculum renovation, and how to create a road map if it did
- c. April 27
  - i. Reviewed rationale and agreed that curriculum renovation is important and timely
  - ii. Discussed LInC process and models for future curriculum renovation
  - iii. Charged librarian member to perform a literature search and members to select and review papers of interest to present at next meeting

### d. Interim work:

- i. Members selected and reviewed papers addressing
  - 1. Process and outcomes of other curriculum redesigns (comprehensive, staged, topic-focused)
  - 2. 3 year MD programs
  - 3. Utilizing IT to support medical education transformation
  - 4. Cognitive load, competency and curriculum
  - 5. Professional identity formation
  - 6. Step 1 timing

### e. May 17

- i. Discussed selected curriculum redesign papers and identified a need for defining and measuring outcomes; librarian to complete a second related literature search
- ii. Committee agreed that we should recommend curriculum renovation
- iii. All members to contribute to a drafted recommendation

### f. Interim work

i. Reviewed and revised summary of work and draft proposal to EPC Rules committee

### Recommendations

- 1. Our SOM curriculum should be renovated to enhance engaged learning which provides value to learners and faculty and improves the culture and environment for learning.
  - a. Priority areas: teaching methods, volume of material, contemporary topics (e.g. social determinants of health, third science, professional identity formation, resilience), context, coherent design, incorporation of student-identified tools, reconsideration of the final year
  - b. Tips: technology should be incorporated during development phase; we should link to available literature; prioritize process
- 2. <u>Targeted change in parallel with new program development will allow for both ongoing quality</u> improvement and innovation
  - a. Identify pathways that focus on priorities and from which components can be scaled for broader implementation
    - i. Priority area: 3 year MD track
    - ii. Longitudinal parallel pathways (modeled similar to global health, rural health scholars, CTRP)
  - b. Select key courses for piloting and broader implementation of innovation (eg. SDOH, OSD, Capstone, DSF underway), opportunities with flow in the CCE year and AS redesign
  - c. Develop standards that support consistency for student learning and assessment (eg. Balance of teaching and assessment methods, consecutive hours, case integration, small group/interactive learning), set faculty expectations and allow for appropriate individualization
  - d. Revise calendar for consistency and to support interprofessional experiences, engaged learning (e.g. Simulation, community-based learning), time for independent learning, self-care
  - e. Consider moving Step 1 after clerkships as newer data suggest this may decrease student stress without compromising performance
  - f. Incorporate technology effectively for active learning, to address schedule conflicts and meet needs and expectations of current learners

- 3. <u>State-of-the-art curriculum requires dedicated faculty development, educational design and technology resources and administrative support</u>
  - a. In order to train faculty and assist development and maintenance of a state-of-the-art curriculum, we need a comprehensive and well-supported faculty-learning center with technology resources, educational design advising, and administrative support.
- 4. Student assessment should bridge content and process
  - a. Include discipline-specific, integrative and competency-based measures
- 5. <u>Innovation in education requires considering the full pathway from UME to practice.</u>
  - a. Adopt precision-learning modalities that are individualized and progressive
  - b. Create new partnerships with GME so that curriculum threads tie longitudinally to professional standards (in support of 3 year track, professionalism and patient care)
- 6. <u>Outcomes of curriculum renovation must be personalized to specific UMMS objectives, be objectively measured and shared to understand impact and guide ongoing improvement</u>

### Next steps

- 1. Present to EPC and/or Dean for full consideration
- 2. Create leadership structure and teams for incremental renovation and program addition including
  - a. Faculty
  - b. Students
  - c. CAA knowledgeable regarding student performance, trends and needs
  - d. Community representatives: GSN, GSBS, GME, UMMHC, partners
  - e. Educational leadership
  - f. Librarian
  - g. Administrative staff
  - h. Academic technologies
  - i. other
- 3. Define timeline, desired outcomes and process

