



UGME Curriculum Renewal 2022

Report | Phase II

Entrustable Professional Activity Achievement Course Working group

*University of Ottawa, Faculty of Medicine
Undergraduate Medical Education*

Committee Co-Chairs:
Michel Shamy & Michelle Mullen

Report submitted May 16, 2022

Part 1: Introduction

Background

The implementation of a competency-based medical education model for undergraduate medical education was proposed as one of the ten recommendations in the Future of Medical Education in Canada – A Collective Vision for MD Education report published in 2010. (1) Among the rationale for transitioning to competency-based medical education was the need to “define a set of core competencies required of the undifferentiated physician who is graduating as an MD and entering a residency program” (page 29). In addition, the report highlighted the need for a medical education system to be “sufficiently flexible to accommodate students’ specific learning styles, interests and rates of learning” (page 29).

A competency-based approach was intended to enable curriculum designers to define core learning outcomes and the competences required of each graduate and ensure all graduates have had sufficient learning experiences to demonstrate these core clinical competences and essential skills prior to graduation.

In 2016 the Association of Faculties of Medicine of Canada (AFMC) EPA working group proposed twelve core entrustable professional activities required of all medical students prior to entering residency training (2). These core activities were “considered necessary” and were recommended to be “integrated within the body of required knowledge, skills and behaviours expected at the end of medical school” (page 4).

Introduction

With the launch of the curriculum renewal project in September 2019, one of the three strategic priorities identified during phase 1 of the curriculum renewal project was competency-based medical education. To implement this strategic priority within the MD Program in the Faculty of Medicine at the University of Ottawa the Entrustable Professional Activities (EPA) Implementation Working Group recommended the MD Program.

“Create a longitudinal EPA Achievement Course within the MD Program for implementation in September 2022” (3)

Based on that recommendation the following description for an EPA Achievement course was developed.

MED 4303 Entrustable Professional Activity Achievement Course

The Entrustable Professional Activity (EPA) Achievement Course is a mandatory longitudinal course that is integrated across all four years of the undergraduate medical education program. The EPA Achievement Course is designed to provide educational sessions and practical opportunities aligned with the theory, purpose and intended outcomes of competency-based medical education. The course, in conjunction with other learning activities in the MD Program, will enable students to acquire the knowledge, skills, attitudes and competencies, in a graduated fashion, that are required to demonstrate, under indirect supervision, the professional behaviours expected by the end of their 4-year program and to successfully transition to residency training. The first year will introduce competency-based education; year 2 will focus on foundational skills and professional activities; year 3 will focus on the repeated application and integration of competencies across multiple patient interactions and year 4 will focus on consolidation. The EPA achievement course supports the integration of the Canadian national EPAs within the MD Program's curriculum and assessment strategies.

Course Component: Lectures; discussion groups, seminars, tutorials, work term.

Prerequisites: CLI3102, CLI3101, CLI3104, CLI3106, CLI3107, CLI3108, CLI3109, CLI3110

This description was discussed and supported by the Undergraduate Curriculum Committee on November 26, 2022, approved by Faculty Council on December 7, 2021, and by the Senate on February 3, 2022.

EPA Achievement Course working group

An EPA Achievement Course working group was formed in November 2021 with a mandate to design a longitudinal course on competency-based medical education over the 4 years of the MD Program including a description of the:

- course content that will be taught in each year of the MD Program;
- expected behaviours to be achieved at each stage of learning;
- learning objectives proposed for each formal session;
- educational design strategies required to effectively teach the course content; and
- the assessment strategies required to assess the curriculum's impact on student achievement of curriculum's objectives.

Specific recommendations for how the EPA Achievement Course can be effectively integrated within a longitudinal integrated (spiral) curriculum and the EPA review processes used by the UGME Competence Committee were encouraged.

Working Group Process

The working group began by using Menti to develop a word cloud to identify the key concepts for inclusion in a purpose statement and a goals statement for the new course. The words or phrases proposed by working group members were adapted into statements that were reviewed and modified at subsequent working group meetings. The working group members approved the following two statements.

The purpose statement for the EPA Achievement Course:

“The EPA Achievement Course will provide the foundation for learners to develop their professional identity as competent, reflective, and lifelong learners. This longitudinal curriculum will provide students with knowledge, skills, and abilities to utilize feedback from their patient experiences, peers, residents, faculty members and health professionals to continuously improve. This longitudinal curriculum will support students to celebrate successes, identify and address areas for improvement and contribute to student achievement of the program objectives of the MD Program”.

The goals statement for the EPA Achievement Course

At the end of the EPA Achievement Course students will be able to:

- Consistently demonstrate the professional behaviours described in each entrustable professional activity through their involvement in the MD program;
- Develop and implement a lifelong learning plan;
- Set goals to guide continuous growth and improvement across all competency domains; and
- Enter residency training with confidence in their ability to practice professionally.

Following the formation of these two statements the working group members completed a review of the descriptions of each EPAs developed by the EPA Implementation Working Group (4) and identified which EPAs would be introduced in year 1, 2, 3 and 4.

Finally, the working group members reviewed and refined a draft set of learning objectives proposed for each year of the course, proposed options for the development of an educational

design strategy to effectively teach the course and strategies for assessment and integration within the design of the future spiral curriculum.

Part 2: Curriculum Purpose and goal

Description of the EPA Achievement Course

Year 1

In year 1, this course will introduce students to foundational and theoretical concepts on competency-based education (4 – 7) including an introduction to what is an EPA (8 -11), why they are important, and describe the multiple sources of performance data and feedback students can use to continuously improve their knowledge, skills, attitudes and competencies in order to achieve the program objectives and competencies of our MD Program. Students will receive a summary and feedback from UGME Competence Committee members twice per year and will be supported by ePortfolio coaches. This course aligns with and supports all mandatory 1000 level courses.

The members of the working group made the following recommendations related to the content that should be included in year 1 of the EPA Achievement Course.

Recommendation 1: Focus the content of year 1 of the EPA Achievement Course on foundational and theoretical components of competency-based medical education and the knowledge, skills and behaviours required to demonstrate the professional tasks described for EPAs 1 to 6.

Teaching the foundational and theoretical components relevant to competency-based medical education will provide students with a framework in which to understand how the curriculum and its assessment strategies will contribute to their ability to demonstrate the professional tasks for each EPA by the end of medical school. Focusing initially on EPAs 1 to 6 aligns well with multiple educational processes that are the focus of year 1.

Recommendation 2: Provide students with information related to the goals, structure and processes developed for students to achieve the expectations of the EPA Achievement Course.

The new lecture on the EPA Achievement Course added to the Introduction to the Professions Unit in September 2022 will introduce the EPA Achievement course goals, structure and processes that will support students to successfully meet the expectations of the EPA Achievement Course by the end of year 4 of the MD Program.

Recommendation 3: Enable students to identify their personal learning style(s) and acquire the ability to utilize multiple sources of feedback to create, implement and monitor professional learning goals to continuously improve their knowledge, skills, and attitudes.

The new EPA Achievement Course will include educational strategies that enable students to identify their personal learning style(s) and include evidence about the processes physicians use to become effective lifelong learners (12). Students will be introduced the importance of receiving data and feedback from multiple sources to enable them to identifying areas for improvement that cannot be easily or accurately self-identified (13). The creation of a UGME Learning Plan will serve as a tool to support the development and monitoring of learning goals linked to individual EPAs.

Learning Objectives for Year 1

Based on the above recommendations, the members of the working group made the following recommendations related to the learning objectives for inclusion in year 1 of the EPA Achievement Course:

Recommendation 4:

At the end of year 1 of the EPA Achievement Course students will be able to:

1. Describe the theoretical concepts and educational rationale for Competency-Based Medical Education in Undergraduate Medical Education.
2. Explain the structure and intended purpose for the development of EPAs in medical education and for health care practice.
3. Discuss the knowledge, skills and behaviours included in the description of EPA 1 to 6.
4. Describe how EPAs 1 to 6 are integrated within and supported by the curriculum's design and the assessment strategies utilized in year 1.
5. Explain the concept of entrustment and how entrustment decisions differ from traditional work-based assessment strategies.
6. Explain how learning contexts can serve as an opportunity to be proactive in demonstrating and receiving feedback on performing an EPA under direct supervision.
7. Utilize the UGME Learning Plan record professional learning goals stimulated by participation in case-based learning, clinical skills training, simulation-based education, or patient encounters in a variety of clinical learning environments.
8. Demonstrate the ability to analyze and utilize feedback from multiple sources to identify, develop, modify, and monitor professional learning goals.
9. Describe their individual learning style and the importance of experiential learning in health care in achieving clinical success in the demonstration of EPAs over time.
10. Differentiate between the professional behaviours expected to be demonstrated from the knowledge, skills and abilities required to consistently perform each EPA.
11. Describe the role and function of the Undergraduate Medical Education Competence Committee.

12. Set a plan to acquire the knowledge, skills, attitudes, and behaviours expected by the end of year 2 of the MD Program for EPAs 1 to 6 to demonstrate the following professional tasks:
- Obtain an organized comprehensive patient interview.
 - Perform each component of the physical examination in an organized and logical sequence;
 - Utilize clinical reasoning and problem-solving skills to formulate a minimum of 2-3 diagnostic hypotheses based on the history and physical examination;
 - Document and communicate recommendations for investigations;
 - Describe and communicate the clinical implications from the results of investigations;
 - Formulate and present a basic management plan;
 - Present a summary of the patient's clinical presentation and document the treatment plan.

YEAR 2

In year 2, this course will continue the introduction of language and core concepts associated with EPAs and provide students with multiple opportunities for graduated patient care responsibilities under direct supervision to facilitate their transition to clinical learning environments in years 3 and 4. Students will apply their knowledge, skills, attitudes, and competencies while being observed by clinical preceptors performing individual EPAs. The course will provide a forum for students to discuss how to use performance data and feedback they have received to set a plan to continuously improve and receive feedback on their individualized learning plans. Students will continue to receive feedback from competence committee members twice per year and ongoing support from ePortfolio coaches. This course aligns with and supports all mandatory 2000 level courses.

The members of the working group made the following recommendations related to the content that should be included in year 2 of the EPA Achievement Course.

Recommendation 5: Provide educational sessions on the knowledge, skills and behaviours required to demonstrate the professional tasks described for EPAs 7 to 12.

In year two of the EPA Achievement Course, the education process will build upon the knowledge skills and attitudes required to demonstrate the professional tasks of EPAs 1 to 6 with the knowledge, skills and attitudes required to demonstrate, under direct supervision, the professional behaviours described for EPAs 7 to 12.

Learning Objectives for Year 2

The members of the working group made the following recommendations related to the learning objectives for year 2.

Recommendation 6:

At the end of year 2 of the EPA Achievement Course students will be able to:

1. Describe the key professional tasks expected for EPA 7 to 12 by the end of year 2 of the MD Program.
2. Explain the role for faculty in observing, coaching and providing feedback based on observing students perform professional tasks aligned to individual EPAs
3. Develop strategies to engage Faculty in directly observing professional tasks associated with an EPA and receive timely feedback.
4. Utilize ePortfolio group meetings to develop and share learning posts about their growth in knowledge and application of the foundational concepts of EPAs.
5. Explain the importance of truthfulness, professionalism, and discernment in knowing one's limits, as they participate in learning activities in a variety of clinical settings.
6. Utilize the EPA descriptions and the curriculum mapping tools to set a plan to acquire the knowledge, skills, attitudes, and behaviours required to perform the following professional tasks:
 - Demonstrate respect for patients' privacy and confidentiality when communicating orally or in writing patient information required for an efficient transition of care.
 - Perform basic life support skills.
 - Initiate discussions on emotionally charged topics with standardized or simulated patients.
 - Perform appropriate hand washing technique and the putting on and removal of personal protective equipment.
 - Disclose an error or near miss to a standardized patient.
 - Communicate the indications, contraindications, risks, and benefits of performing each step of selected procedures in a simulated setting.
 - Discuss behavioural risk factor modification and health promotion strategies with standardized patients.

Year 3

In year 3, this course will leverage the immersion of students within multiple clinical learning environments where patient care is central to the achievement of the knowledge, skills,

attitudes, and professional behaviours required to achieve each EPA. Application of Kolb's experiential learning cycle (14) will be reinforced focusing on concrete experiences, reflective observation, abstract conceptualization and active experimentation or application under direct or indirect supervision. The student will receive direct and timely feedback on their progress towards the goal of demonstrating each EPA consistently under indirect supervision on a graduated basis. Student performance of EPAs will contribute to their successful completion of individual 3rd year core clerkship rotations and provide students with data to track their progress towards with the ultimate outcome of successfully performing each EPA under indirect supervision. Students will receive feedback from competence committee members twice per year and ongoing support from ePortfolio coaches and rotational directors. This course aligns with and supports all mandatory 3000 level courses.

The members of the working group made the following recommendations related to the content that should be included in year 3 of the EPA Achievement Course.

Recommendation 7:

At the end of year 3 of the EPA Achievement Course students will be able to:

- Explain the relationship between clinical learning activities and EPA assessments during third-year core activities.
- Demonstrate the ability to ask for and apply constructive feedback to set goals to enhance their ability to consistently perform each EPA.
- Describe the benefits for performing an EPA multiple times under varied and increasingly complex circumstances with feedback from multiple supervisors.
- Debrief clinical situations that require further reflective observation and abstract conceptualization with Faculty members and ePortfolio coaches.
- Adapt individual learning plans to address areas for improvement.
- Share professional goals with rotation directors and faculty members to facilitate their support and coaching.
- Use the curriculum mapping tools to set a plan to acquire the knowledge, skills, attitudes, and professional behaviours expected to demonstrate the professional tasks described for each EPA by the end of year 4.

Year 4

In year 4, this course will provide students with the opportunities to consolidate, enhance and refine the knowledge, skills, attitudes, and competencies required to consistently perform each EPA under indirect supervision. Students will be able to use multiple self-directed electives and mandatory courses to continue to enhance their performance of each EPA in alignment with

their future career goals. Students will receive feedback from competency committee members twice per year and support from ePortfolio coaches, mentors, and clerkship directors to ensure they have successfully demonstrated each EPA and achieved the program objectives and competencies of the MD Program.

The members of the working group made the following recommendations related to the content that should be included in year 4 of the EPA Achievement Course.

Recommendation 8:

At the end of year 4 of the EPA Achievement Course students will be able to:

- Utilize multiple clinical learning activities to consistently demonstrate the professional tasks described for each EPA.
- Verify their achievement of the level of entrustment required to enter residency training during the Transition to Residency course.

B. Educational Design Strategies

The members of the EPA Achievement Course working group made the following recommendations related to the educational design for the EPA Achievement Course.

Recommendation 9: Explore strategies to integrate the content of the EPA Achievement Course with the goals and expectations of the ePortfolio program.

The EPA Achievement Course goals align well with the purpose for the ePortfolio program. The initial implementation of the EPA Achievement Course will include an expanded role for ePortfolio coaches in providing feedback to student posts on their progress to demonstrating the expected professional tasks under indirect supervision by the end of year 4. Expanding the role for ePortfolio coaches will be supported through a faculty development program.

Recommendation 10: Explore strategies to integrate the content of the EPA Achievement Course with the longitudinal leadership curriculum.

The expanded longitudinal leadership curriculum will include educational sessions on the importance of self-reflection and receiving feedback and goals setting in year 1. (15). Given the critical role of reflection in how data on performance of an EPA is received, analyzed and responded to, there is a unique opportunity for the EPA Achievement Course to collaborate with the Leadership longitudinal curriculum in providing joint sessions on these topics.

Recommendation 11: Focus the educational design on interactive learning strategies utilizing both large and small group discussions to facilitate the ability of students to engage in meaningful discussions about their growth in knowledge and application of the foundational concepts of each EPA.

The inclusion of small group learning sessions will be a challenge for the 2022-23 academic year given the need to integrate this new course within the existing and approved curriculum structure. Options to facilitate small group interactive learning can include discussion on foundational concepts and strategies within ePortfolio group meetings and the use of various bimodal learning strategies like team-based learning.

Recommendation 12: Collaborate with directors, content experts and clinical supervisors to identify and explicitly integrate foundational knowledge, skills, and attitudes within formal and informal educational sessions to facilitate the demonstration of professional behaviours expressed in each EPA.

The curriculum must enable and facilitate the students' abilities to perform professional activities in order that they may be entrusted with patient care responsibilities. The EPAs collectively describe a national performance standard that can be used to align teaching and assessment strategies with EPA achievement. This new course will serve as an integrator of curriculum content and promote opportunities to enhance horizontal and vertical integration of the curriculum to ensure the content taught and the educational strategies embraced will facilitate EPA achievement.

C. Assessment Strategies

The phase 1 curriculum renewal report from the Entrustable Professional Activities (EPA) Implementation Working Group proposed a few core principles to establish, monitor and evaluate an EPA implementation plan. The core principles relevant to assessment included the following:

- Each EPA must be observed, and entrustment decisions (16 - 19) determined as part of a revised approach to assessment within the Faculty of Medicine's UGME program;
- Create a longitudinal view of student performance, monitoring progress throughout each stage of a student's development;
- Gather evidence using multiple methods and sources of data;
- Ensure there is a process to provide feedback on what tasks were performed well, what tasks need further enhancement or what tasks were not performed; and

- Allocate summative decisions related to entrustment decisions to a committee responsible to perform this function (20).

With that background, the members of the EPA Achievement Course working group made the following recommendations related to the assessment strategies for the EPA Achievement Course.

Recommendation 13: Create an interactive, point of contact EPA assessment tool with a selected entrustment scale for each EPA to facilitate direct observation.

The new EPA Achievement Course will develop an evaluation form for each EPA that will be captured and summarized in a student dashboard in Elentra. The EPA assessment forms will enable observation of students performing professional tasks and provide an opportunity for faculty or residents to provide oral and written feedback to help students understand areas of achievement and focus on areas for further improvement. Each student will be empowered to engage in the assessment process, which will contribute to a 'growth' mindset and promoting increasing autonomy to motivate students to request observation and feedback on specific EPAs. The EPA assessment forms will utilize the modified Ottawa entrustment scale or O-score. (21)

Recommendation 14: Review and explicitly link EPA language to existing formative and summative assessment strategies throughout the UGME curriculum.

The use of modified O-score scale can be added to existing formative and summative assessment strategies including but not limited to OSCEs, Multi-source feedback evaluations, clinical rotation evaluations and simulation-based assessments including procedural skills.

Recommendation 15: Create an EPA Student Dashboard in Elentra to facilitate the ability of students, UGME competence committee members and others to review the status of individual EPAs and monitor achievement of the EPAs over time.

The development of a student dashboard will leverage the process used to create a dashboard for residents enrolled in competency-based residency training programs. Elentra will serve as the platform by which individual EPA assessment forms will be captured. Other relevant EPA data sources must similarly be integrated in an effective and seamless manner to facilitate the review by each UGME Competence Committee member. The creation of a student dashboard (22) must be in place by September 2022 to capture EPA data from case-based learning, clinical skills training, OSCEs and community electives.

Recommendation 16: Develop a UGME Competence Committee for each student cohort with responsibilities to review and provide recommendations for improvement to each student twice per year.

A UGME Competence Committee (20) will be formed with the responsibility to review, summarize, and provide feedback to each student twice per year. There will be one UGME Competence Committee for each cohort of students. The UGME Competence Committees will require an approved "term of reference".

Recommendation 17: Each UGME Competence Committee member should be responsible to review and monitor 8 students a minimum of twice per year from the beginning to the end of the MD Program.

Each competence Committee member will be assigned 8 students to review, summarize and provide feedback to twice per year. Like ePortfolio, each competence committee member will follow the assigned students throughout the entire MD Program. Each competence committee member will be provided with a faculty development program to facilitate a shared mental model that will contribute to consistency in the review and feedback process. The training and development of competence committee members will be critical to the consistency of the process to review of multiple sources of data across multiple competency domains and determine when EPAs have been achieved.

Recommendation 18: Share student progress on EPA achievement with clinical skills course directors, transition to clerkship leads, rotation clerkship directors, and transition to residency leads to provide the educational support to enable students to progress in their demonstration of each EPA across multiple clinical contexts.

Sharing of progress of each cohort towards the achievement of each EPA is strongly encouraged to provide directors, leads and other content experts with information they can use to support and provide timely feedback students who are struggling to perform an EPA. Sharing of cohort data will be equally important to modifications that are required to the design and content of the curriculum and the process of assessment.

Recommendation 19: EPA comments should not appear on the learners Medical Students Performance report (MSPR).

Comments received during the formative EPAs may help inform the clinical skills directors, pre-clerkship directors, clerkship directors, and rotation directors, in conjunction with activity or

rotation-specific summative assessments and feedback from the clinical supervising team to formulate the end-of activity or rotation summative assessment.

Recommendation 20: Consistent achievement of level 4 of the modified O-score for EPAs 1 to 6 is expected to graduate from the MD Program.

The EPA Implementation Working Group report during phase 1, curriculum renewal, recommended the establishment of a policy that consistent achievement at level 4 of the modified O-score for EPAs 1 to 6 would be an expectation for graduation from the MD Program. The expectation that all students aim to achieve level 4 for EPAs 7 to 12 was promoted but not required for graduation. The recommendation is based on two assumptions: the content aligned to EPAs 1 to 6 is foundational to entering residency training and 2) failure to meet the standard established for EPAs 1 to 6 would have the potential of undermining the provision of safe, high-quality health care to patients.

Recommendation 21: The Student Assessment and Faculty Evaluation Committee and the Student Promotions Executive Committee should be tasked with establishing the minimum number of EPA assessments expected of each student to successfully demonstrate achievement of each EPA.

Given that consequential decisions must be based on adequate data that is reliable and valid, defining the minimal number of EPA assessments required to form a summative decision is required. (23) The evaluation expertise of members of the SAFE and SPECS will be asked to come to a decision on the minimal number and scope of observations required to base decisions on achievement of each EPA.

D. Implementation Strategies

The integration of the EPA Achievement Course within a longitudinal, competency-based, integrated curriculum is an opportunity to align the content of this course with other courses (for example the ePortfolio program) or longitudinal curriculum (for example the Leadership curriculum). The integration of multiple, varied sources of assessment data will require a technological infrastructure that will facilitate a view of student progress towards the achievement of each EPA. To facilitate the implementation of the EPA Achievement Course in September 2022 the members of the EPA Achievement Course working group made the following recommendations related to implementation.

Recommendation 22: Expand the role of ePortfolio coaches to provide students with coaching opportunities regarding the feedback the learner receives on their progress on demonstrating the professional tasks expected for each EPA by the end of year 4 of the MD Program.

The ePortfolio program requires students to describe an experience, reflect on what they learned from that experience and consider any changes they are contemplating in the future. Students currently align the posts they record in their ePortfolio to a one or more MD Program curriculum objectives under a specific role. Given the significant alignment between the national EPAs and the UGME program objectives there is a unique opportunity to utilize the experience and expertise of ePortfolio coaches to provide feedback to students on their achievement of the EPAs as well as the MD Program objectives without changing the foundational purpose, design or outcomes established for the ePortfolio course.

Recommendation 23: Provide each student with an UGME Learning Plan to facilitate their ability to set professional goals throughout the MD Program.

The requirements for the creation of a UGME Learning Plan were developed and a proposal describing the initiative and the business case was submitted to Med Tech for their consideration in early May 2022. The UGME Learning Plan will provide students with a tool to align the development of a learning goal with an EPA. The tool will ask students to describe the learning goal; document the plan they will pursue to complete the goal; the anticipated challenges or barriers, the timeline for goal completion and the criteria the student will use to determine the success of the learning goal. The proposal will need to be presented to the UGME IT steering committee for approval.

Recommendation 24: Develop a curriculum map tool strategy that describes how each EPA is mapped to the overall objectives for the MD Program and individual learning activities within the MD Program.

The creation of multiple curriculum maps will enable students to understand how the curriculum and its individual courses will facilitate their acquisition of the knowledge, skills and attitudes required to consistently demonstrate the professional tasks described for each EPA. Elentra currently provides a mapping of each EPA with the UGME program objectives. Further mapping strategies – by unit, spiral or year will facilitate student understanding of how the curriculum is structured to facilitate EPA achievement.

Recommendation 25: Develop a repository of resources linked to the curriculum mapping strategy that provides students and faculty with additional evidence-based resources for learners to review to support their progression towards achieving each EPA.

Given that faculty or residents will be directly observing students perform specific professional tasks if a student is struggling with execution of the established tasks the EPA assessment tool should propose additional resources for the student to review prior to their next attempt. The resources within the repository could focus on knowledge, skill or attitudinal objectives included in that EPA. The repository would provide an additional innovative strategy to provide students with the support they require to be successful in demonstrating each EPA by the end of year 4.

Recommendation 26: Develop faculty development programs to facilitate the transition to competency-based medical education within the UGME Faculty Development Program to support the cultural shift required to enhance direct observation of students throughout the 4 years of the program.

In collaboration with the UGME Faculty Development Program working group and the director, Competency-based Medical Education a series of faculty development initiatives have been identified to support the implementation of the national EPAs.

Recommendation 27: Establish a collaborative framework of students, faculty leadership, the director CBME, and UGME competence committee members to support the implementation of the EPA program.

Given that competences will serve as a framework for how we approach decisions related to curriculum design, development, implementation and assessment, the initial stages of implementation will require a meaningful collaboration between students, faculty leaders, educators, and assessors with the UGME Competence Committee members. (24-25).

Conclusion

Course is a key strategy in supporting students to achieve the knowledge, skills, attitudes, and behaviours they require to consistently perform the professional tasks expected to enter residency training programs. Although the EPAs describe important outcomes for the MD Program's curriculum, the course is focused not just on the mechanics of how each task is performed but, on the professionalism, humility, and self-awareness of students in knowing when they are at their limits when performing a specific task. This course will contribute to our student's professional identify formation and contribute to the description established for graduates of the MD Program as "empathic, caring, resilient physicians, who partner with patients, families, caregivers and interprofessional team members in providing and advocating for evidence-informed, equitable, and culturally safe health care.

Reference

1. AFMC. *The Future of Medical Education in Canada (FMEC): A Collective Vision for MD Education*. https://www.afmc.ca/wp-content/uploads/2022/10/2010-FMEC-MD_EN.pdf
2. AFMC. *AFMC Entrustable Professional Activities for the Transition from Medical School to Residency*. September 2016. https://www.afmc.ca/wp-content/uploads/2022/10/AFMC_Entrustable-Professional-Activities_EN_Final.pdf
3. UGME Curriculum Renewal 2021: Entrustable Professional Activities (EPA) Implementation Working Group Report Phase 1 Curriculum Renewal 2021
4. Frank, J. R., Snell, L. S., Cate, O. T., Holmboe, E. S., Carraccio, C., Swing, S. R., ... & Harris, K. A. (2010). Competency-based medical education: theory to practice. *Medical teacher*, 32(8), 638-645.
5. Lucey, C. R., Thibault, G. E., & Ten Cate, O. (2018). Competency-based, time-variable education in the health professions: crossroads. *Academic Medicine*, 93(35), S1-S5.
6. Morcke, A. M., Dornan, T., & Eika, B. (2013). Outcome (competency) based education: an exploration of its origins, theoretical basis, and empirical evidence. *Advances in Health Sciences Education*, 18(4), 851-863.
7. Veale, P., Busche, K., Touchie, C., Coderre, S., & McLaughlin, K. (2019). Choosing our own pathway to competency-based undergraduate medical education. *Academic Medicine*, 94(1), 25-30.
8. Ten Cate, O., & Taylor, D. R. (2021). The recommended description of an entrustable professional activity: AMEE Guide No. 140. *Medical Teacher*, 43(10), 1106-1114
9. Bramley A, McKenna L. Entrustable professional activities in entry-level health professional education: A scoping review. *Medical Education* 2021:00: 1-22.
10. Myer E, Chen HC, Uijtdehaage S, Durning S, Maggio L. Scoping Review of Entrustable Professional Activities in Undergraduate Medical Education. *Acad Med* 94, No 7 July 2019, 1040 – 1049.
11. Murray K, Lane J, Carraccio C, Glasgow T, Long M, West D, O'Connor M, Hobday P, Schwartz A, Englander R. Crossing the Gap: Using Competency-based Assessment to Determine whether learners are ready for the Undergraduate-to-Graduate transition. *Acad Med* 94, No 3, March 2019, 338 – 345.
12. Kaufman, D. M. (2018). Teaching and learning in medical education: how theory can inform practice. *Understanding medical education: evidence, theory, and practice*, 37-69.

13. van Houten-Schat, M. A., Berkhout, J. J., van Dijk, N., Endedijk, M. D., Jaarsma, A. D. C., & Diemers, A. D. (2018). Self-regulated learning in the clinical context: a systematic review. *Medical education*, 52(10), 1008-1015.
14. Wijnen-Meijer, M., Brandhuber, T., Schneider, A., & Berberat, P. O. (2022). Implementing Kolb's Experiential Learning Cycle by Linking Real Experience, Case-Based Discussion and Simulation. *Journal of Medical Education and Curricular Development*, 9, 23821205221091511
15. Berkhout, J. J., Helmich, E., Teunissen, P. W., van der Vleuten, C. P., & Jaarsma, A. D. C. (2018). Context matters when striving to promote active and lifelong learning in medical education. *Medical education*, 52(1), 34-44.
16. Ten Cate, O., Schwartz, A., & Chen, H. C. (2020). Assessing trainees and making entrustment decisions: on the nature and use of entrustment-supervision scales. *Academic Medicine*, 95(11), 1662-1669
17. Ten Cate, O., Carraccio, C., Damodaran, A., Gofton, W., Hamstra, S. J., Hart, D. E., ... & Schumacher, D. J. (2021). Entrustment decision making: extending Miller's pyramid. *Academic Medicine*, 96(2), 199-204
18. Sapp J, Torre D Larsen K, Holmboe E, Durning S. Trust in Group Decision: A scoping review. *BMC Medical Education* (2019) 9:309. <https://doi.org/10.1186/s12909-019-1726-4>
19. tenCate O et al Entrustment decision Making in Clinical Training. *Acad Med* 2016: 91: 1 – 8
20. Monrad, S. U., Mangrulkar, R. S., Woolliscroft, J. O., Daniel, M. M., Hartley, S. E., Gay, T. L., & Santen, S. A. (2019). Competency committees in undergraduate medical education: approaching tensions using a polarity management framework. *Academic Medicine*, 94(12), 1865-1872
21. Reikman J, Gofton W, Dudek N, Gofton T, Hamstra S. Entrustability scales: Outlining their usefulness for Competency-based Clinical Assessment. *Acad Med* 2016: 91, (2), 1 - 5
22. Shroyer A, Lu W, Chandran L. Drivers of Dashboard Development (3-D): A curricular continuous quality improvement approach. *Acad Med* Vol 91, No 4 April 2016, 517 -521.
23. Murray K, Lane J, Carraccio C Glasgow T, Long M, West D, O'Connor M, Hobday P, Schwartz A Englander R. Crossing the Gap: Using Competency-based Assessment to Determine whether learners are ready for the Undergraduate-to-Graduate transition. *Acad Med* 94, No 3, March 2019, 338 – 345.
24. Bramley A, McKenna L. Entrustable professional activities in entry-level health professional education: A scoping review. *Medical Education* 2021:00: 1-22.

25. Myer E, Chen HC, Uijtdehaage S, Durning S, Maggio L. Scoping Review of Entrustable Professional Activities in Undergraduate Medical Education. *Acad Med* 94, No 7 July 2019, 1040 – 1049.

Appendices: TBD