

Competency Based Medical Education Implementation Map

This implementation map attempts to break down selected pillars of competency based medical education (CBME) into domains with staged steps to assist with implementing key aspects of CBME. Under each domain, resource links are provided for further guidance. As a starting exercise, reflect on the current status of your program within the domains and use the implementation map to plan out the next steps to move your program towards the advanced stages of adopting the CBME framework.

Pillar: Programmatic Assessment

Domain	Novice	Intermediate	Advanced
<p>COMPETENCY BASED ASSESSMENT SYSTEM</p> <p>Resources: ACGME Assessment Guidebook STFM Assessment Tools and Strategies Outcome Assessment Starter Pack</p>	<p><i>Gather information from faculty and residents about effectiveness of current assessment tools</i></p> <p><i>Initiate a gap analysis of current assessment system used to evaluate residents on Core Outcomes (current assessments, additional assessments needed to cover outcomes)</i></p> <p><i>Create a needs assessment of faculty skills around assessment, feedback and coaching</i></p> <p><i>Create a needs assessment of residents to identify areas necessary for MAL skills related to accepting feedback</i></p>	<p><i>Develop/Update assessment tools to include competency language, entrustment scales and eliminate ineffective assessments</i></p> <p><i>Create a system of assessments that includes multiple assessments by multiple assessors that aligns with the curriculum, outcomes, and is informative to the CCC</i></p> <p><i>Implement faculty development sessions for assessment skills based on needs, (ex: narrative assessments)</i></p> <p><i>Implement resident sessions on master adaptive learner and accepting feedback skills</i></p>	<p><i>Create a plan for implementation of more challenging assessment tools (such as patient feedback, near peer, etc)</i></p> <p><i>Implement a process to review the assessment system for continued improvement</i></p> <p><i>Incorporate ongoing faculty development including peer observation and feedback to ensure continued growth and maintenance of assessment skills</i></p> <p><i>Incorporate ongoing resident development in MAL and feedback skills, including identifying a resident CBME lead to be involved in the assessment system</i></p>
<p>DIRECT OBSERVATION</p> <p>Resources: STFM CBME Task Force Direct Observation App</p>	<p><i>Evaluate strategies for implementing direct observation into the curriculum and assessment system with faculty and residents</i></p>	<p><i>Implement the direct observation assessment/app in multiple settings with multiple faculty.</i></p>	<p><i>Incorporate data from direct observations into the system of assessment and CCC reporting</i></p>
<p>CLINICAL COMPETENCY COMMITTEE</p>	<p><i>Review current CCC procedures and evaluation system for Core Outcomes and matriculation</i></p>	<p><i>Create and implement a summative reporting system to track resident competency and independence towards each core outcome that is completed at least every 6 months</i></p>	<p><i>Review CCC summative reporting system for continuing education and improvement</i></p>

Pillar: Resident Co-Production

Domain	<i>Novice</i>	<i>Intermediate</i>	<i>Advanced</i>
RESIDENT ENGAGEMENT Resources: ABFM Core Outcomes	<p><i>Introduce the CBME framework and core outcomes during resident education sessions</i></p>	<p><i>Create pathway for residents to give feedback of faculty teaching and areas of potential growth</i></p>	<p><i>Incorporate a CBME resident liaison/committee into program CBME education, curricular development, assessment systems, and review processes</i></p>
INDIVIDUAL LEARNING PLANS Resources: STFM CBME ILP's Family Medicine Requirements for ILP's Individualized Learning Plans	<p><i>Create/Adopt an ILP template through co-production to incorporate ABFP core outcomes, SMARTIE goals, and reflective practice</i></p> <p><i>Implement faculty and resident education focused on the ILP template, recommendations for its utility, and its importance in residency education and CBME</i></p>	<p><i>Develop ILP goals that utilize electives to progress beyond competency to mastery of a skill set</i></p> <p><i>Create curricular space for advisor/resident collaborative review and updating of ILP goals & objectives quarterly</i></p>	<p><i>Utilize ILPs to foster development of master adaptive life-long learning, leadership, and professionalism skills</i></p> <p><i>Incorporate ILP SMARTIE goals and reflections into the CCC summative reporting system</i></p>
RESIDENT PORTFOLIOS Resources: Portfolio Approach Portfolio for Assessment	<p><i>Establish a resident portfolio (assessment collection system) tailored to the ABFM Core Outcomes for each learner that is readily accessible to both resident and faculty advisor/coach</i></p> <p><i>Implement faculty and resident education on the purpose of the resident portfolio, its components, and the utility of the portfolio as a source for summative feedback</i></p>	<p><i>Create a defined mentoring/coaching process to guide residents in compiling portfolio data with protected time for collaboration.</i></p> <p><i>Provide faculty advisors/coaches and residents with guidelines on how to incorporate the resident portfolio data into their ILP discussions and collaboration</i></p>	<p><i>Implement curricular time for residents to collaborate and update their portfolios with assessments, including reflective self assessments</i></p> <p><i>Incorporate the resident portfolio into the CCC summative reporting system</i></p>

Pillar: Program Structure and Culture

Domain	Novice	Intermediate	Advanced
CURRICULUM MAPPING Resources: University of Calgary Curriculum Mapping	<p>Map current core and elective learning experiences to the ABFM core outcomes</p> <p>Review curriculum for skill acquisition with progression of resident competence over time</p>	<p>Analyze the curriculum map to identify areas of program strengths and opportunities for improvement</p> <p>Adjust curriculum to ensure for progression of resident competence overtime</p>	<p>Maintain curriculum map with yearly review system</p> <p>Track feasibility for residents to achieve competence</p>
OUTCOME BASED EDUCATION Resources: Tips for Outcome Based Education Outcome Based Education Framework Outcome Based Education Outline	<p>Review current curricular syllabi goals and objectives for core outcomes alignment</p>	<p>Align all curricular syllabi goals and objectives for core outcomes</p>	<p>Regular assessment of curricular syllabi goals and objectives</p>
PROGRAM CULTURE	<p>Define program culture goals, focused on CBME, core outcomes, and resident engagement</p>	<p>Implement yearly program culture goals with residents and faculty</p>	<p>Routinely assess program culture goals</p>
ELECTIVES Resources Curriculum development: a how to primer Family Medicine and Community Health	<p>Review each elective and map out objectives to the ABFM core outcomes and competencies for the struggling and/or advanced learner</p> <p>Engage residents and faculty in education on the purpose of electives and their incorporation into ILPs</p>	<p>Update electives based on resident engagement, learner needs, and program curricular mapping needs</p> <p>Implement a process for residents that reviews ILP SMARTIE goals to guide elective selection</p>	<p>Design new electives with resident input that address curricular or skill acquisition gaps or interests based on community needs</p> <p>Create a review process that evaluates electives and their ability to support resident ILP SMARTIE goals</p>
MASTER ADAPTIVE LEARNER (MAL)	<p>Survey faculty, residents and key clinical staff for their current understanding of the Growth mindset</p> <p>Conduct a faculty, resident and staff development session that covers the concepts of MAL</p> <p>Brainstorm ways to promote independent MAL practice in both faculty and residents, as well as in key program staff</p>	<p>Integrate resident reflection on MAL cycle into resident portfolios and faculty daily work</p> <p>Continue faculty and resident and staff development sessions and include introduction to MAL concepts during intern orientation</p> <p>Develop a system that recognizes and celebrates individual journeys as MAL(s)</p>	<p>Encourage faculty to explicitly model MAL in their own daily work</p> <p>Continue reinforcing MAL concepts through regular faculty, resident and staff workshops/development sessions</p> <p>Implement MAL recognition/celebration program</p>

Pillar: Faculty Development

Domain	Novice	Intermediate	Advanced
<p>CBME CURRICULUM FOR FACULTY</p> <p>Resources: STFM CBME Toolkit</p>	<p><i>Introduce CBME topics at least 2-3 times a year at faculty meetings and retreats</i></p> <p><i>Explore CBME as a concept among faculty</i></p> <p><i>Encourage PD to familiarize themselves with the STFM CBME toolkit and other CBME literature</i></p> <p><i>Create a curriculum for CBME faculty development</i></p> <p><i>Content Focus: CBME Basics and Core Outcomes</i></p>	<p><i>Review CBME topics 3-6 times a year at faculty meetings and retreats</i></p> <p><i>Provide faculty with 1-3 hours a year for CBME faculty development</i></p> <p><i>Encourage APDs and PC to familiarize themselves with the STFM CBME toolkit and other CBME literature</i></p> <p><i>Incorporate the CBME curriculum continuously into faculty development.</i></p> <p><i>Content Focus: Novice Content plus MAL principles and CBME assessments</i></p>	<p><i>Integrate CBME topics at least 6 times a year at faculty meetings and retreats</i></p> <p><i>Provide faculty with >3 hours a year for dedicated CBME faculty development</i></p> <p><i>Encourage most core faculty to familiarize themselves with the STFM CBME toolkit and other CBME literature</i></p> <p><i>Create space for CBME focused faculty projects</i></p> <p><i>Content Focus: Novice and Intermediate Content plus Coaching and Resident Engagement</i></p>
<p>COACHING</p> <p>Resources: Academic Coaching in Medical Education Coaching With the End in Mind: Developing Coaching Skills Toward Meaningful Individual Learning Plans</p>	<p><i>Introduce all faculty to basic coaching concepts, including the differences between coaches, advisors, and mentors</i></p> <p><i>Utilize coaching skills in at least one ILP per resident</i></p>	<p><i>Introduce role-playing and other more advanced coaching skills at faculty development meetings at least twice per year</i></p> <p><i>Incorporate coaching into the semi-annual review and ILP processes</i></p>	<p><i>Create coaching experts using outside resources</i></p> <p><i>Ensure that every resident has a longitudinal coach working with them throughout their training.</i></p>