Assessment

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Introduction & Background

Assessment is the process of gathering and analyzing information in order to measure a physician's competence or performance, and compare it to defined criteria. Our review of PGME assessment policies identified that they are guided by four underlying principles:

- Fairness: assessment must be fair, equitable, timely and unbiased
- Transparency: expectations are clearly articulated between the resident and program, at the program outset and as policies are revised. This includes the clear identification of the processes and steps that are undertaken when it is determined that a resident is not progressing as expected
- Open communication: there must be open, ongoing and timely communication between trainees and supervisors
- Mutual accountability: progress through training is a joint responsibility of both the resident and the program; as such, residents are not passive recipients of the assessment process, but should be active participants in their own acquisition of competence.

In the application of these principles to current PGME policies, there is a focus on the processes to be followed. There is guidance regarding assessment methods and frequency, usually linked to distinct rotations. There are processes for the collection and sharing of assessment information. There are definitions for satisfactory or unsatisfactory performance, and descriptions of the sequelae of unsatisfactory performance (see Remediation Communique). Across Canadian universities, these processes are varied and distinct, highly dependent on local context; this Communique therefore does not provide

specific guidance on assessment processes, recognizing that individual universities will need to adapt to their own circumstances.

As one of the core components of CBME, assessment practices are intended to support and document the progressive development of competencies. In CBD, there is a distinction between these two aims of assessment. Assessment for learning is formative, continuous, constructive and "low stakes"; its overall purpose is to guide and improve the learner's performance. Assessment for progression also provides guidance to improve learner performance, but integrates multiple sources of information and provides intermittent, summative decisions that compare performance to the expectations for progression. Assessment for certification describes the final summative decision that identifies that performance meets the national standards for certification; that competence has been demonstrated.

CBD also incorporates the principles of programmatic assessment (Schuwirth and Van der Vleuten, 2011). A program of assessment is an arrangement of individual methods of assessment, each purposefully chosen for their alignment with desired outcomes. Individual data points provide feedback to the learner. Multiple data points from diverse sources and methods are aggregated to make decisions about progress.

Process/Procedure/Methods

Unlike previous reviews performed by the CBD Policy Working Group, data extraction for this topic had already been completed by Laura McEwan of Queen's University. The Working Group used that information as a basis for its discussions, adding a review of the assessment policies at two universities (Dalhousie University and University of Calgary) which had been updated since the time of that initial environmental scan.

The CBD Policy Working Group followed the other pre-defined steps to establish questions and considerations for the transition to CBME training practices. For a detailed description of the CBD Policy Working Group processes and procedures, please refer to the Methods section on page [**X**] within the Introduction.

Data extraction

The template headings used to extract data from University policies are:
- Rotation attendance requirement
- Satisfactory Assessment
- Less-than satisfactory
- Role of Residency Training Committee (RTC)
- Promotion
- Other

Key terms and definitions

Key terms	Other key terms currently in use	Definition
Rotation	Block Training experience Learning experience Program element	An experience in a particular environment or set of environments selected/ designed to support the learner's achievement of competencies
Satisfactory assessment	Pass/Fail Satisfactory/Unsatisfactory Incomplete Borderline	Decisions about a learner's standing/progress in training based on assessment information and completion of required rotations
Educational Handover	Forward feeding Forwarding of assessment information	A process by which information about a trainee's performance is shared with future supervisors to facilitate guidance and progress
Learning Plan	Structured learning component	An educational plan intended to address identified areas for improvement. The trainee is given the opportunity to review and discuss a learning plan with their Program Director.
Enhanced learning opportunities		A modification to the usual course of training to allow for accelerated progress and/or individualized training for residents who are may or may not be progressing as expected.
Competence Committee	Residency Program Committee (RPC) Residency evaluation/ assessment subcommittee Resident Progress Committee	Body responsible for reviewing residents' readiness for increasing professional responsibility , promotion and transition to practice
Academic Advisor	Advisor, Educational Advisor, Resident Advisor Other associated terms: Mentor, coach, primary preceptor or supervisor	A faculty member who establishes a longitudinal relationship with a resident for the purpose of monitoring and advising with regards to educational progress. Academic advisors are not required in CBD, but programs may choose to apply this approach

Considerations and Recommendations for Post-Graduate Education Faculties

Through the analysis of existing PGME policies, assessment-specific themes, including terminology, progress decision processes, organizational infrastructure and appeals processes that would be impacted by the change to CBME were identified. These themes, as discussed and outlined below, were considered in the context of the change to CBME and the resulting considerations and recommendations are provided to support future policy adaptation work at individual faculties.

Terminology related to Assessment

Rationale for Change
Current policies employ language that refers to specific weaknesses, deficiencies, borderline performance and assessment decisions that are satisfactory, unsatisfactory or represent failure. When there are concerns about performance, the trainee may be referred to as a resident in difficulty. In CBME, an approach of mastery learning is applied to individual performance with a focus on progression towards competence. The language currently in use is not consistent with this approach. At present, the terminology related to assessment is often perceived as adding a negative context to learning that should instead reflect a supportive, learner-centered approach.

Another example of this negative context is the proscription or limitation of "forward feeding" to subsequent supervisors (see definitions). This is perceived as being aligned with the principle of fairness, but may be contradictory to the principles of transparency, open communication and mutual accountability.

Current policies emphasize the in-training evaluation report (ITER) as an assessment method. In programmatic assessment, many methods of assessment may be used. In particular, CBD has removed the need to complete rotations as required in the Specific Training Requirements (STR); this requirement has been replaced by the need to document attainment of specific competencies, typically via achievement of Entrustable Professional Activities (EPAs) as documented in a portfolio. CBD has also removed the final in training evaluation (FITER) as a requirement for certification; instead, certification is based on completion of the national examination and all elements of the portfolio.

Considerations and Recommendations
Alternative terminology is proposed, so as to be consistent with competency based approaches and reflect learner centered education. This includes:
a) To reflect a learner's competency attainment, language such as 'in progress' or 'achieved' is suggested (e.g. communication skills are in progress).
b) To describe progress in training and/or progression decisions, suggested language includes: learning trajectory, entrustment, or progressing as expected/not progressing as expected/failing to progress.

c) The use of "individualized learning plans" to describe the training experiences that are designed to assist a resident's progress towards competency attainment. (See Remediation Communique for further discussion of this topic)

d) The use of "educational handover" to describe the sharing of a learner's competency attainment with other supervisors. This term alludes to the best practices followed in transitions of care from one provider to another, and emphasizes the principles of open communication and mutual accountability

In addition, it is recommended that universities review the descriptions, nature and breadth of the assessment methods described in assessment policies in the context of programmatic assessment. It is recognized that these terms may persist until all programs and residents have transitioned to CBD.

Terminology related to time based learning experiences

1. Frequency of assessment
Rationale for change
Currently, many policies link a requirement for required frequency and timing of assessment to rotation-based time points (e.g. mid-rotation feedback, evaluations at end of rotation). CBME de-emphasizes time, and instead focuses on ensuring that observation and learner guidance is ongoing.

Considerations and Recommendations
While acknowledging that time-based rotations will continue to be an organizing structure for residency training, it is suggested that policies be modified to emphasize that assessment must be ongoing, with frequent documentation of low-stakes, observations, including in the workplace.

2. "Incomplete" rotations
Rationale for change
In addition, many policies mandate completion of a specified proportion of allocated training time in a rotation. CBME de-emphasizes time, and, in CBD, specific training requirements are no longer described as time-based. Instead progression, promotion and certification in CBD are based on the documentation of discipline specific competencies.

Considerations and Recommendations
As CBME focuses on the demonstration of competence, there may be no significance to an "incomplete" rotation if the competencies have been acquired. There may be a role for guidance regarding minimal time on a rotation in order to ensure patient safety, appropriate supervision, and opportunities for observation and assessment.

Monitoring resident progress

1. Developing a safe culture of assessment
Rationale for change
Current policies identify assessments as satisfactory or unsatisfactory; the underlying assumption is that the majority of assessments are satisfactory and residents progress through training. In CBME, assessment for learning presupposes that there will be frequent observations before the resident has achieved competence, and that these observations will be used to guide further learning.

Considerations and recommendations
It is suggested that policies be modified to emphasize that assessment must be ongoing, with frequent documentation of observations. It is expected that some observations will identify that the resident has not yet achieved competence and needs further training. It is recommended that the terminology of satisfactory/unsatisfactory, pass/fail etc. be reconsidered (as previously discussed).

2. Rethinking the role of the ITER
Rationale for change
Current policies identify the successful completion of a rotation, as documented in the ITER, as the main form of the monitoring of a resident's progress. In CBME, the program of assessment includes multiple and diverse methods collecting information on a variety of competencies.

Considerations and recommendations
Consideration should be given to the ITER and its role in CBME residency training. With programmatic assessment, the use of multiple methods and an increase in frequency of observation is expected to provide rich, diverse information about resident performance. With that background, the role of the ITER should be reconsidered to identify its ongoing purpose: whether it is a form of collation of information that is collected by other means or adds specific new information to the resident's portfolio. Alternative summary documents such as competence committee summaries and feedback may replace the ITERs as the building blocks of assessment for certification.

3. Maintaining competence
Rationale for change
CBME focuses on the acquisition and documentation of competency attainment; in CBD, this documentation focuses on the achievement of Entrustable Professional Activities. As residents progress through training, they will continue to participate in tasks with which they had previously been entrusted. There may be instances in which a supervisor identifies that a resident's performance indicates that entrustment is no longer appropriate. Similarly, there may be residents who have a leave from training and require reintegration. Current assessment policies do not describe a process for this eventuality.

Considerations and recommendations
Consideration should be given to the potential to withdraw previously entrusted EPAs with guidelines for the process for withdrawal as well as process for individualized learning plans to support re-achievement of the competencies.

Making progress decisions

1. Types of progress decisions
Rationale for change
Currently in PGME, progress though training is measured by the successful completion of rotations, as documented in an ITER. Assessment policies describe the process for these assessments. Residents move from year to year of postgraduate training via the successful completion of the rotations the program has assigned to them in that year. Residency program committees complete a FITER to signal that a resident has successfully completed the specific training requirements of the discipline and are ready for the certification examination and completion of training.

In CBD, specific training requirements are no longer described as time based rotations. Instead, progression, promotion and certification in CBD are based upon the documentation of the discipline specific competencies, which are laid out according to the Competence Continuum.

Considerations and recommendations
Consideration should be given to the types of progress decisions that are required in a CBME program, to ensure that assessment policies provide appropriate guidance. These may include decisions about achievement of competency, EPA achievement, promotion from one stage to another in the Competence Continuum, readiness for the national examination and certification. The need for decisions about rotation completion and year to year promotion may not be required, though may need to be maintained in the short term due to contractual issues (residents may be paid by PGY level), and are within the discretion of the university. FITERs will no longer be provided.

In addition, CBD introduces a new category of progression that identifies those individuals whose acquisition of competencies is accelerated. These individuals may have the opportunity to complete training earlier than expected and/or may have the opportunity to pursue enhanced learning opportunities (see definitions) such as training in advanced skills or individual interests.

2. Basis for progress decisions and requirements for promotion
Rationale for change
Currently, the primary basis for progression through training is the successful completion of required rotations. With programmatic assessment, progress decisions are based on the integration and synthesis of information from multiple assessment methods and sources. In CBD, the basis for progress decisions is collected in the resident's portfolio and includes observations of EPAs as well as other discipline, university and/or program specific requirements.

Considerations and recommendations
To maintain the principles of fairness and transparency, the basis for progress decisions and requirements for promotion must be clearly articulated and shared. In CBD, the national requirements will be shared through the Royal College. Consideration should be given to program and/or university specific requirements.

3. Process for progress decisions
Rationale for change
In CBD, progress decisions are made by the Competence Committee which has a mandate to review residents' readiness for increasing professional responsibility, progress through the continuum, promotion and transition to practice. Royal College accreditation standards require review of resident progress at the end of each stage and at least twice a year.

Considerations and recommendations
See discussion below re the organizational infrastructure and Competence Committees. In addition, consideration should be given to university and/or program specific timing and/or procedures for decision making.

Organizational infrastructure

Rationale for Change
Currently, Resident Program Committees (or subcommittees) make decisions, often annual, about resident's promotion to the next postgraduate year (PGY). In CBME, assessment for progress decisions is based on multiple points of information and requires a process of integration and synthesis. Two new roles are proposed to support the resident and the program in this integration of information: the Competence Committee and the Academic Advisor (definitions page 3). The position of Academic Advisor is not mandatory within Royal College CBD programs. Royal College accreditation standards will require a Competence Committee in all CBD programs, and outline this committee's responsibilities.

Considerations and Recommendations
Competence Committees
The Royal College has provided guidance documents, but each institution will need to clearly articulate and consider the role, membership, terms of reference and overall integration of a Competence Committee within the Faculty's infrastructure. This includes PGME oversight of the functioning of individual Competence Committees.

Academic Advisor
Each institution will need to determine if the role of Academic Advisory is warranted, and if so, the role must be articulated, defined and aligned with the assessment policy and procedures. Consideration should be given as to whether there should be a common university-wide definition and approach, or if the requirement for and/or role-definition will be articulated at the program level, depending on program specific factors (i.e. variations in resident number, faculty number, program duration) and specifications relating to the CFPC and the Royal College.

Appeals

Rationale for change
The right to appeal a residency program or faculty decision related to assessment is supported by the principle of fairness. Currently, university policies related to appeals identify the process to follow, the consequences of appeal requests and decisions, and the nature of the matters which may be brought forward for appeal.

Considerations and Recommendations
With the change to CBME and programmatic assessment, consideration must be given to which matters may be brought forward for appeal. In CBME, there is an expectation that the learner will often be observed before having achieved competence for the purposes of feedback and guidance, and that these observations are recorded and collected as individual data points. Decisions regarding progress rest with the Competence Committee in CBD, and are based on the integration and synthesis of information from multiple methods and sources.
It is recommended that universities consider which matters may be "appealable". These matters may be thought of in two categories; it is suggested that only the second category be open to appeal:
- "low stakes" observations (e.g. field note, encounter card) which provide data on performance but are aggregated for use in progress decisions. These may be thought of as individual data points.
- "higher stakes" decisions which aggregate data from multiple sources and which are linked to decisions regarding progress of training. These include Competence Committee decisions regarding achievement of an EPA, progress status, promotion to the next stage and recommendation for certification; as well as decisions made by the PGME committee and/or leadership, based on Competence Committee recommendations.

Considerations for other stakeholders
Documentation and evidence of completion of rotations are currently kept for the purposes of verification of training. Consideration should be given to the requirement for ongoing document storage and management including whether to retain source documents on which progress decisions are made (e.g. daily observations) as opposed to summary decisions of progress.

Final Thoughts
As CBME is gradually adopted, a potential consequence of the adapted assessment requirements is that there may be a greater number of learners who fail to progress, who are unable to achieve competence and/or who are unable to do so in a reasonable time frame. There is some concern that this will result in an increased pool of residents who are unable to successfully complete training, which will have significant personal impact and may have resource and system-level impact for the institution as well as for regulators and ministries. Consideration should be given to develop and/or identify additional career counselling opportunities to provide those residents with resources to explore other careers

or professional pathways.

References

Schuwirth, L. W. T. & Van der Vleuten, C. P. M. (2011). Programmatic assessment: From assessment of learning to assessment for learning. Med Teach, 33, 478-485.