COMPETENCE BY DESIGN TECHNICAL GUIDE

ASSESSMENT

Competence by Design Technical Guides are a series of documents to support program education leaders, PGME offices, and Specialty Committees to interpret accreditation standards and applicable Royal College policies, and to understand how those requirements can be operationalized in conjunction with institutional policies.

A well-designed assessment system serves two key purposes in CBD: it provides residents with timely, actionable feedback (assessment *for* learning), and it documents their progress toward independent practice (assessment *of* learning). Together, these functions support continuous learning for residents, and it encourages program accountability for ensuring residents are ready for independent practice.

In CBD, residency programs are required to establish a clearly defined system of assessment that guides and supports residents' ongoing development.[1] Programs have flexibility in how they design their systems, but assessments must be multimodal, using a variety of tools and methods to capture performance across a broad range of learning experiences. Common assessment tools include:

- Work-based assessment forms
- Objective Structured Clinical Exams (OSCEs)
- Written tests
- In-training evaluation/assessment reports (ITERs/ITARs)
- Multi-source feedback

In addition to documenting performance, programs should also create opportunities for informal, low-stakes feedback that is not recorded. These moments foster a learning environment where residents can grow without the pressure of constant evaluation.

Assessment systems must gather data on Entrustable Professional Activities (EPAs) **and** non-EPA-based data. Programs should ensure that:

1. Each assessment method is aligned with the purpose of the learning activity it supports;
2. Each tool generates meaningful feedback for the resident and provides useful data for competence committee decisions; and
3. The data collected from different assessment activities should work together to give a well-rounded and reliable understanding of the resident's abilities — allowing patterns and insights to emerge when viewed as a whole.

Finally, programs must map all required competencies and EPAs to both training experiences and assessment strategies to ensure full coverage of training expectations.[2]

[1] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.1
[2] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.2.2

DEFINITIONS

Competencies: The integrated knowledge, skills, abilities, and behaviors that individuals must demonstrate to perform effectively in professional practice. For Royal College disciplines, the required competencies for certification are outlined in the *Competencies* document for that discipline, as developed by the discipline's Specialty Committee.

Entrustable Professional Activities (EPAs): Authentic tasks of a discipline as defined by the specialty committee of that discipline.

Milestones: A milestone is an observable marker of a person's ability along a developmental continuum. As part of Competence by Design (CBD) design, specialty committees identify milestones that are organized by CanMEDS Role and describe the skillset required to perform a specific professional activity, or EPA at a particular stage of training. These milestones can be found in the Pathway to Competence document for each discipline.

Training requirements: There are two types of training requirements that must be achieved or completed by a resident in order to be eligible for certification:

1) Royal College-defined: On behalf of the Royal College, each discipline's Specialty Committee defines the standardized national Competencies, EPA, and Training Experiences that must be achieved or completed for certification in that discipline.

2) Institution- or program-defined: Institutions or programs may also establish tasks, competencies, or other requirements that must be achieved or completed by the resident during training.

Retrospective supervision scale: A type of scale typically used in workplace-based assessment tools with anchors that describe the amount of supervision/assistance that a trainee requires on an activity or task.

Training Experiences: Training experiences support a resident's acquisition of competence. These activities can include clinical care such as inpatient care, ambulatory clinics, performing technical procedures; or extra-clinical activities (e.g., simulation exercises, scholarly projects, journal clubs, etc.).

WHAT PROGRAMS NEED TO DO

Curriculum mapping:[3] Programs are expected to map all Competencies and EPAs to their Training Experiences/curriculum and identify how each requirement will be assessed.

Allow residents to identify and address their individual learning objectives:[4] Residents' educational experiences should be tailored to meet their learning needs and future career goals, while meeting the national standards and training requirements.

Have a multi-modal system of assessment:[5] Programs are expected to use various assessment tools and/or methodologies to obtain qualitative and quantitative data on achievement or completion of the training requirements. Not all requirements can be assessed using the same tools - for example, a program may use an ITER to capture longitudinal elements of competencies, EPA observation form completion to assess EPAs, and multi-source feedback to assess professionalism.

Assess all competencies, EPAs, and other requirements:[6] Residents must be assessed against all the training requirements for their program, which includes the Competencies, EPAs, and any other requirements set by the institution or program. Entrustment in the EPAs alone is not sufficient for progression and promotion from one stage of training to the next.

Conduct multiple assessments of residents' competencies:[7] The system of assessment must be based on multiple assessments of residents' competencies during the various educational experiences and over time, by multiple assessors, in multiple contexts. Residents and faculty have shared responsibility for recording resident learning.[8]

Monitor training experiences:[9] Programs are expected to provide opportunities for residents to participate in all required training experiences, and to monitor that they do so.

Give residents feedback:[10] In order for residents to learn and develop, they must receive regular, timely, meaningful, in-person feedback on their performance. Additionally, the program director and/or an appropriate delegate must meet regularly with residents to discuss and review their performance and progress.

Document and communicate: The system of assessment must clearly identify the methods by which residents are assessed for each educational experience and the level of performance expected of residents.[11] This must be documented and available to residents.[12]

Record residents' progress:[13] Resident progress toward achievement of competencies and EPAs, and completion of training requirements is recorded in a secure, individual assessment portfolio.

Inform the competence committee:[14] The system of assessment must form the basis of competence committee decision-making on progression and promotion of residents.

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[3] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.2.2
[4] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.2.3
[5] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.1
[6] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.1
[7] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.1
[8] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.2
[9] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.2.4
[10] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.2
[11] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.1
[12] *General Standards of Accreditation for Institutions with Residency Programs*, version 2.1 (July 2021); Requirement 5.1.1
[13] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.2
[14] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.3

WHERE THERE'S FLEXIBILITY

Assessment methods: Programs are expected to use various assessment tools and/or methodologies to obtain data on achievement. With oversight from their institutional PGME office, programs have the agency to choose which assessment methods best meet the needs of their local contexts. The system of assessment for each program should be purposefully chosen for its alignment with the desired resident outcomes.[15]

Assessment methods that were required prior to the introduction of CBD, for example, rotation-specific ITERs, may be used at the discretion of the program or institution, but are not a Royal College requirement.

Assessment forms and tools used: Each institution has the authority and mandate to develop, customize, and adopt the use of the assessment tools that are best suited to their programs. While the Royal College has developed sample assessment forms, institutions and programs may use thoughtfully chosen assessment instruments of their choosing. For EPAs specifically, reference to the use of specific EPA observation forms in a discipline's EPA Guide is a recommendation and not a requirement.

Number of assessments: While multiple assessments of a resident's performance provide a body of evidence for more robust decision-making, the exact number of assessments is at the discretion of the program with oversight from their PGME office. Focus should be on collecting sufficient evidence that competence has been achieved – across different contexts - rather than any specific number of assessments. For EPAs, the number of observations (or successful observations) for each EPA noted within the EPA Guide is a recommendation, and not a mandatory requirement, however all contextual variables must be captured within the program of assessment as per each discipline's EPA guide.

Initiating assessments: Assessments can be triggered by either residents or assessors. Programs following best practice will make use of both resident-driven and faculty-driven assessment. Programs following best practice should also consider using time-based (e.g., ITER) and event-based assessments (e.g., OSCE) to complement assessments that are triggered in-the-moment.

Retrospective supervision scales (also known as 'entrustment scales'): With oversight and direction from their PGME office, programs may use any rating scale with anchors that is most suitable to their needs. While the Royal College does not require a retrospective supervision scale for every assessment tool, its use is encouraged as part of the overall program of assessment.

Rating of bolded CanMEDS milestones associated with an EPA: It was previously recommended that bolded CanMEDS milestones be visible on the EPA observation form to provide a scaffold for coaching and assessment. This remains an option for programs to use as desired but should be weighed against the burden of assessment and end-user design of the associated assessment form. It is not the expectation of the Royal College that milestones be included on assessment forms and/or scored.

[15] *General Standards of Accreditation for Residency Programs*, version 3.0 (July 2024); Requirement 3.4.1