CLARIFYING MYTHS, MISCONCEPTIONS & MISUNDERSTANDINGS

Common questions regarding the implementation of Competence by Design.

SIX ESSENTIAL ELEMENTS OF THE CBD ASSESSMENT STRATEGY

- Assessment requirements, as defined by the Specialty Committee, and inclusive of EPAs and CanMEDs-based milestones
- Increased emphasis on direct and indirect observation
- Many low-stakes observations of focused clinical tasks
- Narrative, actionable, timely, concrete recorded feedback
- Curation, collation, and group-decision-making by a Competence Committee
- Stages and progression of increasing entrustment, facilitated by group entrustment decisions at the Competence Committee level

* Confirmed on November 25, 2016 at the Conjoint meeting of the Committee of Specialty Medical Education and Postgraduate Deans.

The Postgraduate Deans (PG Deans) from the seventeen medical schools in Canada and the Royal College of Physicians and Surgeons of Canada (Royal College) are working collaboratively on the implementation of Competence by Design (CBD), the new model for specialty residency education.

The following has been developed in collaboration with the Royal College and Competency-based Medical Education (CBME) Leads to provide answers to common questions about and to clarify myths relating to CBD.
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**01 Will Entrustable Professional Activities (EPAs) be set prior to implementation of CBD in a new discipline?**

EPAs and related milestones will be set in advance of the implementation of CBD in a new discipline. All Faculties must adhere to and base their CBD curriculum on the assessment requirements (EPAs, CanMEDS-based milestones), as defined by the Specialty Committee.

**02 How many EPAs are developed per specialty?**

While there is no explicit limit to the number of EPAs that Specialty Committees should include in their Specialty Education Design, the PG Deans and Royal College have discussed and documented that 30 to 40 EPAs for a five-year specialty was a target, with variations depending on specialty.

- The focus of the EPAs is to provide clear expectations that are not too granular and can be managed by both the resident and faculty supervisors.
- The number of EPAs will vary based on the context of the discipline and how they organize their training.
- The Royal College works with the Specialty Committees during their CBD Workshops to ensure the number of EPAs is representative of the discipline, but manageable to implement.

**03 Can EPAs be used for clinical tasks + non-clinical tasks?**

There are many pieces of knowledge, skills and tasks that feed into a fullest understanding of the modern physician.

- Originally, EPAs were envisions as pertaining to clinical tasks, only.
- The Royal College's CBD model recognizes non-clinical tasks that are a part of medicine. Both clinical and other tasks, such as quality improvement, teaching, leadership etc. are considered to be essential tasks of a specialty physician and require an element of entrustment, and are therefore eligible for EPAs.
- Royal College EPAs are defined as tasks that involve multiple CanMEDS roles. CanMEDS is a framework of roles that emphasizes competencies within all areas of medical practice: Professional, Communicator, Collaborator, Leader, Health Advocate, Scholar and Medical Expert.

"EPAs can only be used for clinical tasks. It is not possible to entrust a non-clinical task."
Milestones

01 What is a milestone?

There are many abilities, competencies, or 'milestones', required in the integration of a task, or entrustable professional activity (EPA).

The milestones required to perform an EPA are provided with the EPA, to guide learning and are positioned at the level appropriate to their stage of training, in order to facilitate progression of competence.

Generally, milestones are used for curriculum development and assessment. Passing a stage implies that all milestones are achieved, unless indicated.

02 What is a prioritized or 'bolded' milestone?

As part of CBD planning, Specialty Committees will emphasize particular milestones in order to confirm essential skills and priorities and ensure feasibility of assessment.

03 Do all prioritized milestones need to be tracked and assessed for each resident?

Yes!

The current expectation is that there must be explicit tracking of milestone completion as part of the assessment strategy, though not all milestones linked to an EPA are prioritized by the Specialty Committee for the assessment strategy for that EPA.

Usually, approximately 8 milestones are prioritized under a given EPA and will appear in assessment tools. Milestones that appear in assessment forms must be tracked.

04 How do milestones identified by the Specialty Committee inform the local curriculum for assessment?

The Specialty’s Pathway to Competence document details the progression that a resident will follow in order to attain the competencies laid out in the ( Discipline) Competencies document (Specialty Document Suite).

This document portrays the ideal progression by identifying milestones (observable markers of an individual’s ability) and EPAs, illustrating how the skillset of a discipline is outlined across the stages of the Competence Continuum.

This detailed document informs the curriculum that is created locally by programs and allows for customized, isolated views (e.g., isolation of Medical Expert milestones that a resident must achieve in the CORE stage, or maybe view the ideal progression for just one particular key competency such as handover) for tracking of learning goals at any stage of a resident’s training.
01 Who designs and implements the assessment strategy and tools for a discipline?

- **The Specialty Committee** of a discipline recommends assessment tools and provides guidance on how they can be implemented locally (e.g., number of observations per EPA, contexts etc.)

- **Local schools or residency programs** can elect to use the Royal College's assessment forms. They may also develop local assessment tools to assess milestones and EPAs, and implement the CBD assessment strategy.

- The assessment of residents must, however, always adhere to the Six Essential Elements of the CBD Assessment Strategy, including the Specialty Committee's specific EPAs and milestones, reflecting the principles and integration of CBD, as well as the assessment section of the Specialty Specific Standards for Accreditation (SSA).

02 How many observations are required by the Specialty Committee?

- The Specialty Committee provides guidance about a recommended number of observations per EPA.

- These are meant to act as guidance only.

**Myth:**

"A specific number of observations are required by the Specialty Committee and/or Royal College."
03 How many and what range of assessment tools are required? Are local programs required to use a fixed set of assessment tools established by a discipline’s Specialty Committee?

- EPA Observation Form
- Procedural Competencies Form
- Multiple-source Feedback Form
- Narrative Observation Form

The Royal College, in collaboration with the Clinician Educators, has developed four forms for conducting these assessments (listed above). The Specialty Committee provides guidance about the use of the four assessment tools.

- Faculties may elect to use their own local assessment templates to fulfill this need.

**Myth:** Faculties have no autonomy over the assessment tools used in local programs.

04 Should assessment tools focus on EPAs exclusively? **No**

- Local schools or residency programs will develop assessment programs per accreditation standards and Six Essential Elements of the CBD Assessment Strategy.

05 Are schools allowed to use In Training Evaluation Reports (ITERs)? **Yes**

- The Royal College is moving away from time-based assessments (e.g., ITERs) in preference for ongoing, small stakes coaching and documentation of progress.

- Local schools or residency programs may still use ITERs for their own purposes, as part of an assessment program or system that is consistent with Six Essential Elements of the CBD Assessment Strategy.
01 What are the various documents included in the Specialty Document Suite?

The Specialty Document Suites includes the 1) Competencies, 2) Training Experiences and 3) Standards of Accreditation that are specific to a discipline.

1 The **(Discipline) Competencies** document contains a high-level description of the competencies of a graduate of a given Royal College-accredited discipline or special program. This document also provides a definition of the discipline and the context of practice in which the competencies are relevant and applicable.

Specialty Committees (discipline specific) modify and supplement the generic CanMEDS Framework with Royal College support.

The process involves multiple stages of review, including input from the Royal College Office of Specialty Education clinician educators, education writers, and document specialists.

2 The **Training Experiences** document outlines the mandatory and recommended training activities that support a resident’s acquisition of competence. The document identifies clinical activities such as inpatient care; ambulatory clinics, and surgical procedures; as well as non-clinical activities such as a scholarly project, journal clubs, and simulation exercises.

Specialty Committees (discipline specific) develop the Training Experiences document with Royal College support.

The process involves multiple stages of review, including input from the Royal College Office of Specialty Education clinician educators, education writers, and document specialists.

3 The **Standards of Accreditation** document describes the requirements that a given residency program must meet in order to deliver training and thus achieve and maintain Royal College accreditation.

To create the Standards of Accreditation for their discipline, specialty committees alter and supplement the General Standards of Accreditation (updated in response to the need for a new credentialing process for CBD’s competency-based educational model).

Similar to the (Discipline) Competencies and Training Experiences, the Royal College provides guidance and coaching in the creation of this document.
02 Can Specialty Committees share information about the CBD workshops they have attended with their local programs, PG Deans and CBME Lead(s)?

**Of course!**

- Specialty Committee members may share information about the CBD workshops and communicate decisions with their local programs, PG Deans and CBME Lead(s).
- Sharing of information is to remain within the local Faculty and between CBD programs for the purpose of protection of intellectual property from those external to the Royal College and Canadian Faculties of Medicine.
- Shared materials will be in draft form and are subject to change.

**Myth:**

“Specialty Committee members are not allowed to talk about decisions made at CBD workshops.”

03 What will the Specialty Document Suite look like for each discipline?

- Dependent on the training needs of their disciplines, the style and content of the Specialty Document suites produced by Specialty Committees will vary by Specialty.
- The Specialty Standards Review Committee approval process provides oversight of standards documents and ensures clarity and consistency of documents.
04 Will the Specialty Document Suite include the requirements for assessment or accreditation for a discipline?

Yes

Details of the requirements for assessment are found in the Specialty Specific Standards for Accreditation (SSAs), Required Training Experiences (RTE), and Pathway.

05 Are there materials available to help disciplines that are new to CBD develop their own CBD content?

Yes!

Materials developed by similar disciplines are available to Specialty Committees working to develop their own CBD content.

Royal College staff roles in the development of Specialty Standards

01 Do Royal College educators/administrators develop the Specialty Document Suite?

No

Program requirements, components of training, and scholarship activities are decided and mandated nationally by the Specialty Committee (i.e., representatives practicing within the discipline).

Royal College staff writers assist in the version control and revisions of Specialty documents, identifying potential gaps and making recommendations to the Specialty Committee, based on Royal College requirements, linkages to CanMEDS and the experiences of other disciplines.

Myth:

"Royal College staff are responsible for writing the Specialty Document Suite and will revise specialty documents to add EPAs that the specialty did not include."
02 Does the Royal College require a research project be completed as part of a discipline’s national standard for residency training?

No

- A discipline’s Specialty Committee may choose to mandate a research project as part of the discipline’s national standard for residency training.
- Each discipline provides a description of the type of research/scholarship experiences they are looking for and provide direction for the residents using the milestones within the EPA.
- An example definition of what is expected for a research/scholarship experiences is included from the Otolaryngology - Head and Neck Surgery discipline, below:

  "The resident’s involvement in the research project will include the following: literature review, experimental design, ethics application, data analysis/statistics, manuscript preparation and presentation of work (does not need to be published)."

Readiness for launch

01 Do all programs within a discipline need to be ready to launch CBD together?

- All programs in a discipline must implement CBD at the same time.
- As the first programs launching in the new national standard of CBD, it is anticipated that there will need to be corrections along the way – and the Royal College will be available to provide help and support.
- The Royal College will continue working with schools on all areas of implementation including, data sharing agreements, faculty development, and Resident ePortfolio support.

02 Do programs need to be ready for both on service and off service experiences?

- Implementation in Anesthesiology and Otolaryngology (Head and Neck Surgery) includes all aspects of training, including those educational experiences that may be provided by other services. As always, the determination of the need for these experiences and the responsibility for the quality of the education provided on these experiences is the responsibility of the local program director using the Required Training Experiences and SSA documents.
Implementation

01 Who has the responsibility for implementation of CBD programs at the local level?

- Implementation of CBD at the local school level is under the jurisdiction of PG Deans, Program Directors and CBME Leads.
- Implementation of CBD is the primary role of the CBME leads on behalf of the PG Dean and local implementation questions will be directed to the local CBME lead.
- The Royal College offers information and resources to support implementation at the local level. Information and resources relating to implementation will always be shared with the CBME Lead group.
- CBD involves everyone in the medical education system working together.

Myth:
"The implementation of CBD in local programs is the responsibility of the Royal College."

02 How will the Specialty Committee requirements (including EPAs and milestones) be mapped to local rotations or learning experiences?

- Mapping of the EPAs and milestones to specific training experiences will occur at the program level.
- The Royal College has sample templates designed by the Specialty Committees (which includes local Program Directors) to demonstrate how to use the discipline’s standards documents to map Specialty Committee standards to the local curriculum.
- Local programs are welcome to use these templates when mapping their own curriculum.

03 What rotations are expected for completing EPAs/milestones, etc.?

- The new standards for training (determined by the Specialty Committee as part of the Specialty Document Suite) include the Required Training Experiences (RTE), which describe the nature of training, both clinical and non-clinical, that are required, recommended or optional, as defined by the Specialty Committee.
- Local programs will have greater flexibility than they have previously in the selection and duration of training experiences.
- Programs are flexible to sequence experiences (i.e., a required training experience can be offered/completed in an earlier stage), the Royal College only requires that all required training experiences be completed by the end of a given stage.
- The new standards will NOT provide requirements for specific duration of any aspect of training; they may, as CBD is a hybrid model of competency-based medical education, at the Specialty Committee’s discretion, provide guidance or recommendation on the overall duration of training, of stages of training and/or of specific experiences.
04 Do faculty need to assess EPAs on off service rotations?

- The local program is, as always, responsible for all aspects of the educational experiences (clinical and non-clinical) including the delivery and quality of aspects of the educational program provided by other disciplines.
- All aspects of the CBD standards are implemented when a discipline is ready to launch (i.e. on and off service experiences and assessments).
- However, whether to deploy EPAs to off-service rotations is up to the Program Director, locally.

05 Will CBD change the amount of time spent in training for some residents?

- In CBD, the number of years needed to complete a residency program is not expected to change for the vast majority of residents. Training is based on the accomplishment of all standards of a discipline and is anticipated that the same length of time to complete.
- CBD is a hybrid model that falls between the time-bound and time-free spectrum.
- It is possible for a resident to finish their training early, but is likely the exception.
- This developmental path will have some flexibility for individual residents' needs. For example, a fast-tracked resident will have the flexibility to achieve mastery of a skill while maintaining service delivery, whereas a student struggling with a certain area may focus and achieve support for skills not yet achieved.

Competence Committees

01 How should local Competence Committees be implemented (i.e., role, composition)?

- The Royal College has drafted guidelines of terms of reference, roles and responsibilities of the Competence Committee, available [here](#).
- How local Competence Committees are implemented is up to the discretion of the local school and program.
- Decisions regarding the role of residents, program directors and 'external' members will vary based on local schools' policies and practices.
- Program directors should contact their CBME Lead regarding local policies and practices on the composition of Competence Committees.
- Members of the Committee are normally from either the Residency Training/Program Committee or clinical supervisors who are closely associated with the program.
02 How much information is required for a Competence Committee to confirm that a resident has achieved an EPA or completed a stage of training?

- Locally, a university based residency program Competence Committee is responsible for and has the authority to make entrustment and promotion decisions of a trainee, based on available data.
- It is anticipated and acceptable for a Competence Committee to determine if they have enough information to confirm an EPA is achieved, should they have limited or missing assessment data for each of the prioritized milestones.
- The Royal College will accept the promotion decisions of the resident’s Competence Committee and PG Dean. While it is not required that all milestones must be assessed and tracked for each resident, it is expected that the Competence Committee have the ‘fulsome picture’ of a resident’s performance, progress and competence.
- Eligibility for examinations or certifications will also require the approval of the Postgraduate Dean.

03 What does the Royal College mean by entrustment scale?

- The concept of EPAs being “entrusted” is defined as a resident’s performance with minimal or indirect supervision (i.e. “I didn’t need to be there to directly supervise the resident”).
- While not all local programs or schools will use a ‘5-point’ scale, they must use some version of an entrustment scale that can indicate this level of independence.

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**Myth:**

"A resident may only be promoted to the next stage of training if all EPAs are given an equivalent of a 5 on the O-SCORE."

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The Royal College assessment forms utilize the O-SCORE entrustment scale. As described by Gofton et al., (2012), "the purpose of this scale is to evaluate the trainee's ability to perform this procedure safely and independently."

The scale is described by Gofton et al., (2012), below.

1 – “I had to do” – i.e., Requires complete hands on guidance, did not do, or was not given the opportunity to do

2 – “I had to talk them through” – i.e., Able to perform tasks but requires constant direction

3 – “I had to prompt them from time to time” – i.e., Demonstrates some independence, but requires intermittent direction

4 – “I needed to be in the room just in case” – i.e., Independence but unaware of risks and still requires supervision for safe practice

5 – “I did not need to be there” – i.e., Complete independence, understands risks and performs safely, practice ready"
04 Are Competence Committees exclusively intended for residents of CBD programs?

- Competence Committees are required for CBD residents.
- Local programs and schools will approve local guidelines and have the discretion to include other duties.
- Competence Committees can be used for non-CBD residents.
- Competence committees are currently utilized in some non-CBD programs with positive results.

05 Can a school launch CBD if the Competence Committee hasn’t had their first meeting?

Yes! This is not a requirement. There are benefits to orienting and ‘pilot testing’ the Competence Committee as an early CBD implementation activity.

06 Are CBD programs expected to have faculty advisors for their residents?

- Faculty Advisors are not a required element of CBD implementation.
- It is helpful to have faculty who can advise and mentor residents in their learning and summarize CBD resident progress.

Electronic Platforms

01 Which electronic platforms are programs expected to use to track resident learning and assessment activities in CBD?

- Part of CBD implementation includes the use of an electronic portfolio to track resident learning and assessment activities. In addition, an electronic Portfolio will be required in the new General Standards of Accreditation.
- The decision of which platform to use is ultimately the responsibility of the PGME office, though it is recommended that the PGME offices consult with their Program Directors in regards to which electronic platform would suit their local needs.
- Local schools have options on how to track these activities and which electronic portfolio system they choose.
- Program Directors should contact their postgraduate medicine office or CBME Lead for direction on local processes related to electronic platforms and implementation.
02 What is the Royal College Resident ePortfolio?

The Resident ePortfolio system offers an enhanced method of tracking resident learning and assessment activities that is learner-centred, quality-driven and is explicitly designed to meet the principles of competency-based medical education and CBD. The platform has been in use since July 1, 2017.

The Royal College is happy to share the free Resident ePortfolio with any Faculty wishing to use it.

Schools are welcome to choose to any platform that will meet local needs.

03 How will the Royal College ensure timely access for the schools to specialty document changes?

The Royal College will communicate all changes to Specialty documents, regardless of which electronic platform system a Faculty uses, so that all Faculties will have timely access to these changes.

The Royal College Resident ePortfolio will automatically upload changes to specialty-specific milestones and EPAs.

Local schools are responsible to ensure their systems make timely changes to specialty-specific milestones and EPAs.

04 Who will have access to the Resident ePortfolio at the Royal College?

Designated Royal College IT staff will have secure access to Resident ePortfolio data, including resident identifiable information, for system administration purposes only. This access is necessary to assist users with technical issues.

The Royal College, schools and 3rd party vendors will fully comply with privacy laws, and ensure good practices in data security and data usage to protect residents and inform program quality improvement.

Office of Specialty Education staff will not have access to Resident ePortfolio.

Resident-identifiable information in the Resident ePortfolio will never be shared with accreditation or Royal College staff without the express written consent of the resident.

Myth:

"The Royal College’s Office of Specialty Education staff have access to Resident ePortfolio and will access this information directly for assessment purposes."
## 01 What are the intentions of the various data and legal agreements?

<table>
<thead>
<tr>
<th>Agreement</th>
<th>User</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>University User Agreement</td>
<td>Schools using the Royal College Resident ePortfolio</td>
<td>This Agreement governs the use of the Royal College Resident ePortfolio by universities. It sets out the terms under which the Royal College will provide access to the ePortfolio to the universities learners, observers and other program administrators. The University User Agreement only has to be signed by medical schools using the Royal College Resident ePortfolio. It includes the End User License Agreement as a schedule, discussed in more detail below.</td>
</tr>
<tr>
<td>CBD License Agreement</td>
<td>Schools using a third-party (including internal) electronic platform</td>
<td>This Agreement licenses medical schools that are not using the Royal College Resident ePortfolio, to use the CBD materials, including the Entrustable Professional Activities (EPAs), milestones, and assessment templates, in their programs. It also allows the medical schools to sublicense the CBD materials to their software vendor or internal system, if they are using a third party software provider to track CBD requirements.</td>
</tr>
<tr>
<td>End User License Agreement (EULA)</td>
<td>Individual users of the Royal College Resident ePortfolio</td>
<td>The EULA must be accepted by each authorized user of the Royal College Resident ePortfolio, similar to the agreements we all accept when using any software service (e.g. Twitter). When each user first logs into the system, they will be required to click and agree to the terms of the EULA. Under the EULA, the Royal College obtains the consent of users to the collection and use of their personal information in the Resident ePortfolio.</td>
</tr>
<tr>
<td>Agreement for Disclosure of Information/Data Sharing</td>
<td>ALL schools (regardless of electronic platform)</td>
<td>This Agreement addresses the disclosure of the Minimum Data Set (MDS) by each medical school to the Royal College. The information in the MDS is still under consideration by the Data Stewardship Committee (DSC), but will include certain personally identifiable information about residents (including identification information, university and program, start of residency, and readiness for examination), and some de-identified aggregate data. This agreement will eventually have to be signed by all medical schools, whether or not they have elected to use the Royal College’s Resident ePortfolio, but was not required for launch.</td>
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Exams

01 When will exams occur?

In most cases, the specialty written exam will not be the last act of residency, and will be moved earlier to be completed near the **end of the CORE stage**, prior to entry into **TRANSITION TO PRACTICE**.

- Specialties usually have a written exam in CORE, then an applied exam in CORE or TTP. Subspecialties usually have a written exam that can take place in Core, TTP, or after training.
- Specialty exams will be deployed based on 1) the educational thinking of the Specialty and the different components of their exam (e.g., written, oral, applied, OSCE, combination), and 2) when it is possible to deploy the exam.
- For a two stage exam (e.g., written and oral), trainees must pass the written in order to challenge the oral.
- Due to resource limitations and impact on the profession and related practice, the exam cannot be offered more than once per year.
Accreditation

01 What are the accreditation requirements for CBD programs?

Accreditation of a CBD program will be based on the adherence to the expectations set out in the General Standards of Accreditation and the Specialty Specific Standards for Accreditation (SSAs) related to assessment as defined by the Specialty Committee.

Accreditation requirements for CBD programs (aggregated reports of EPAs, milestones, Competence Committee decisions, Training Experiences, competencies) or how accreditation surveyors will interpret the use of the full specialty document suite, are under review.

The focus of accreditation specifically related to CBD will be to confirm that the program meets the expectations set out in the general standards of accreditation as well as those set out in the discipline specific documentation. For example: accreditation will require evidence of a curriculum that is based on the standards set out by the discipline, including a curriculum map and incorporation of the required learning experiences.

The standards of accreditation for the first two CBD disciplines will be available on the Royal College website as of July 2017, and will apply to accreditation reviews as of July 2018 (i.e., 12 months later), in alignment with current practice, which acknowledges that preparation for an accreditation review typically begins approximately one year in advance.

02 What evidence do accreditation surveyors require that an education program aligns with the standards set out by a discipline?

Accreditation surveyors will require evidence that the education program aligns with the standards set out by the discipline, including a curriculum map of training experiences.

Although they will continue to have access to individual residents’ assessment files, including Competence Committee Decisions, surveyors will not focus on individuals’ completion of milestones.

The integration of aggregate resident data into the accreditation process will be determined over the next few years, as part of the phased implementation of accreditation reform.