

# COMPETENCE BY DESIGN CHEAT SHEET

Busy physicians tell us they want a brief introduction to Competence by Design so that they can quickly grasp its impact on them, their residents, their program, and their colleagues.

This document has been created for this purpose and it will serve as a “cheat sheet” to CBD. It introduces concepts that can be explored further when time permits.

## 4 common CBD related FAQs

### What is competency-based medical education (CBME)?

Competency-based medical education (CBME) is an outcomes-based approach to the design, implementation, assessment, and evaluation of a medical education program using an organizing framework of competencies (e.g. CanMEDS 2015). In a CBME system, a curriculum is organized around the outcomes expected of a resident and that resident’s advancement is dependent on having achieved those expected outcomes.<sup>2</sup>

### What is the Royal College’s Competence by Design (CBD) initiative?

Competence by Design (CBD) is the Royal College’s version of CBME. It is a transformational change initiative designed to enhance CBME in residency training and specialty practice in Canada.<sup>3</sup>

CBD organizes residency training into four developmental stages and clearly lays out markers for teaching and learning at each stage. Each stage of training, and each learning experience, focuses on the identified outcomes for that stage. The stage-specific outcomes, which are sometimes called milestones or abilities are determined by each specialty as part of their cohort plans for implementation of CBD.

The first stage in residency is known as **Transition to discipline**. It emphasizes the orientation and assessment of new trainees. **Foundations of discipline**, the second stage, covers broad-based competencies that every trainee must acquire before moving on to the third stage, which is known as **Core of discipline**. The third stage covers more advanced, discipline-specific competencies. As part of CBD, the Royal College is also exploring moving the Royal College exam to the end of this stage.<sup>5</sup> The fourth and final stage of residency education is known as **Transition to practice**. During this stage the trainee demonstrates readiness for autonomous practice.

### As a teacher, how will CBD affect me?

Going forward your residents will start to think of you as a coach, someone who helps them develop their skills. You will incorporate both direct and indirect observation into your work on a regular basis and in a way that is practical for the reality of you and your work team. You will give short focused feedback to your learners and complete brief records of the observed performance.

### Is it feasible for me to do all of these assessments in a busy clinical practice?

Yes, CBD assessments are being designed so they are feasible to do within any busy clinical program. In CBD, you will make use of your clinical oversight activity to engage in work-based assessment of resident performance. With the introduction of EPAs and milestones, the assessment criteria will be more explicit and deliberate than it has been before. In a given encounter, you and your residents will focus on a small number of specific tasks or milestones.

Note: As you begin to implement CBD, we will seek your input about the quality and functionality of the assessment tools.



## Key concepts

Find more CBD key terms [here](#)<sup>5</sup>

### Milestones

A milestone is the expected ability of a health care professional at a stage of expertise. CanMEDS milestones illustrate the expected progression of competence from novice to mastery associated with each enabling CanMEDS competency. Every discipline will have hundreds of milestones, but for practical reasons you will rely on the educational concept of EPAs as the basis for assessing your residents.

Milestones:

- Illustrate the developmental nature, features, and progression of the competencies
- Assist learners in monitoring their own developmental progress
- Allow individuals to monitor their progress
- Support the identification of learners whose progress is not following the typical development sequence to assist in early intervention
- Guide curriculum development

### Entrustable Professional Activity (EPA)

An EPA is a key task of a discipline (i.e. specialty or subspecialty) that an individual can be trusted to perform without direct supervision in a given health care context, once sufficient competence has been demonstrated.<sup>6</sup> EPAs are a common approach to CBME around the world.

EPAs are linked to a specific stage of the competence continuum. EPAs integrate multiple CanMEDS milestones from various CanMEDS Roles.

Some people think of an EPA as a basket or a bundle that holds numerous milestones. As residents progress through the stages of the continuum, the EPAs become progressively more complex reflecting the residents' achievement of more sophisticated milestones.

Each Specialty Committee creates EPAs that faculty and residents will use as a focus for teaching and learning the abilities that are essential for that stage of the residents' training. EPAs allow for authentic, work-based assessment that is targeted at the daily tasks of a physician.

As a supervisor, you will observe residents as they perform an EPA multiple times and each time you will coach the residents to improve their performance. You may initially refer to the milestones associated with an EPA to inform your feedback on specific elements of the task, but as you become familiar with the EPAs and milestones, you may find that you 'unpack' an EPA (i.e. look at all of the milestones) only to plan your teaching or to help a resident who is struggling to progress.<sup>7</sup>

### Competence Committees

Competence Committees will review residents' progress at regularly scheduled meetings over the course of their training and they'll use the RCEPA assessments that you and your colleagues have completed to determine the residents' readiness for promotion to the next stage of the competence continuum.



### References:

1. <http://www.royalcollege.ca/rcsite/cbd/competence-by-design-cbd-e>
2. Part 1: Rationale <http://www.royalcollege.ca/rcsite/documents/cbd/cbd-handout-faq-part-1-rationale-april-27-e.pdf>
3. Frank JR, Snell LS, Cate OT, Holmboe ES, Carraccio C, Swing SR, Harris P, Glasgow NJ, Campbell C, Dath D, Harden RM, Lobst W, Long DM, Mungroo R, Richardson DL, Sherbino J, Silver I, Taber S, Talbot M, Harris KA. Competency-based medical education: theory to practice. *Med Teach*. 2010;32(8):638-45.
4. Video Introduction to CBME and Competence by Design <https://www.youtube.com/watch?v=P-aCiHCrpeM>
5. Part 2: Implementing <http://www.royalcollege.ca/rcsite/documents/cbd/cbd-handout-faq-part-2-april-27-e.pdf>
6. Part 3: Terms and their Uses <http://www.royalcollege.ca/rcsite/documents/cbd/cbd-handout-glossary-april-27-e.pdf>
7. ten Cate O. Entrustability of professional activities and competency-based training. *Medical Education*. 2005 Dec;39(12): 1176-7.
8. Video Understanding EPAs <https://www.youtube.com/watch?v=5Ase3ETcsu0>

