

Triple C: linking curriculum and assessment

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This article is part of a series describing the key elements of the Triple C Competency-based Curriculum.¹⁻⁶ It highlights how different frameworks introduced by the College of Family Physicians of Canada (CFPC) can be used to design and implement residency programs, and teach and assess family medicine residents. The overarching viewpoint from which to understand these frameworks and their contributions lies in the goal of residency training: to develop professional competence to the level of a physician ready to begin practice in the specialty of family medicine. The vision of our College is to produce family physicians who are confident and competent to practise comprehensive and continuing care anywhere in Canada. Residency programs must therefore provide residents with relevant learning experiences to gain competence in these areas.

To understand Triple C's role in residency education it is helpful to articulate its 2 distinct intents: 1) to be a curriculum that clearly identifies expected outcomes and 2) to provide a process that ensures learners are assessed for competence. Both curriculum design and assessment processes are interdependent features of a Triple C Competency-based Curriculum. The critical components that link curriculum and assessment within Triple C are the relevant learning experiences within which learners acquire competencies and are assessed for competence.

Frameworks guiding curriculum and assessment

To understand the notion of competence, we must recognize that competence 1) is defined according to a specific time in the learning continuum (eg, end of residency), 2) reflects required abilities for practice in particular settings and contexts (eg, for office-based practice or for specific health care populations), and 3) is multidimensional and dynamic.⁷ In order to create a competency-based curriculum for residents it is necessary to consider these elements.

Three frameworks have been endorsed by the CFPC to help curriculum planners design curricula and assess learners, all of which align with Triple C and assess learners within a competency-based approach:

- the CanMEDS–Family Medicine (CanMEDS–FM) roles⁸;
- the domains of clinical care⁹; and
- the evaluation objectives.¹⁰

Each of these frameworks provides a different lens to help program directors design their family medicine residency curricula. They also help residents and their clinical preceptors evaluate whether relevant clinical experiences are being provided. For preceptors, the frameworks help assess progressive achievement of competence by residents. For residents, the frameworks help envision what needs to be learned and help keep track of what is being learned. Each framework helps define how the family medicine curriculum must be designed, what experiences need to be provided, and what abilities need to be assessed.

Design, provide, assess

Residency programs need to *design* curricula that will enable learners to develop the desired competencies required of family physicians to be ready to begin practice independently. They need to ensure that their clinical sites and preceptors *provide* relevant learning experiences within contexts that are family medicine centred. The CanMEDS–FM roles and the domains of clinical care frameworks offer useful tools for programs to design and provide relevant learning experiences for residents, ensuring exposure to the breadth of the discipline of family medicine. Over time, the preceptor, who understands the specific competencies required of a family medicine resident, can attest to the resident's competency acquisition. Preceptors can confidently *assess* resident competence in family medicine, using the evaluation objectives framework as a tool. Used interdependently, the 3 CFPC frameworks all contribute to a Triple C curriculum.

Relevant learning experiences: critical pieces of the puzzle

Figure 1¹¹ provides a pictorial representation of how residents are engaged in relevant learning experiences related to the 3 CFPC frameworks. Program directors want to ensure that residents have been exposed to learning experiences that reflect the breadth of family medicine and the CanMEDS–FM roles. Where learners are not getting adequate exposure, other types of learning through simulation, seminars, or online learning might need to be used. Those who

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are assessing residents will observe them within relevant family medicine learning experiences in order to make a judgment about competency acquisition. The tracking of these relevant learning experiences according to the domains of clinical care and the CanMEDS-FM roles enables residents and preceptors to be active partners in ensuring that these competencies are met. **Figure 2**¹¹ provides an example of how these frameworks interact with one another. In this case, a resident seeing a pregnant adolescent immigrant in the family medicine clinic is exposed to multiple CanMEDS-FM roles across different domains of clinical care, and can demonstrate areas of competence as described in the evaluation objectives. The 3 CFPC frameworks all inform the types of relevant learning experiences required. The provision of relevant family medicine learning experiences becomes fundamental for a successful Triple C Competency-based Curriculum.

Conclusion

The overall responsibilities of a residency program are to design and provide a family medicine curriculum that ensures the provision of relevant learning experiences that reflect the breadth of family medicine. Through these learning experiences, residents are able to be assessed for competence. The frameworks (CanMEDS-FM, domains of clinical care, and evaluation objectives) provide 3 necessary perspectives that are useful in the implementation of a competency-based curriculum. The provision of relevant learning experiences within Triple C is fundamental for learners to

achieve competencies and to demonstrate their overall competence—that they are ready to begin practice in the specialty of family medicine. 🌿

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Figure 1. Curriculum and assessment frameworks

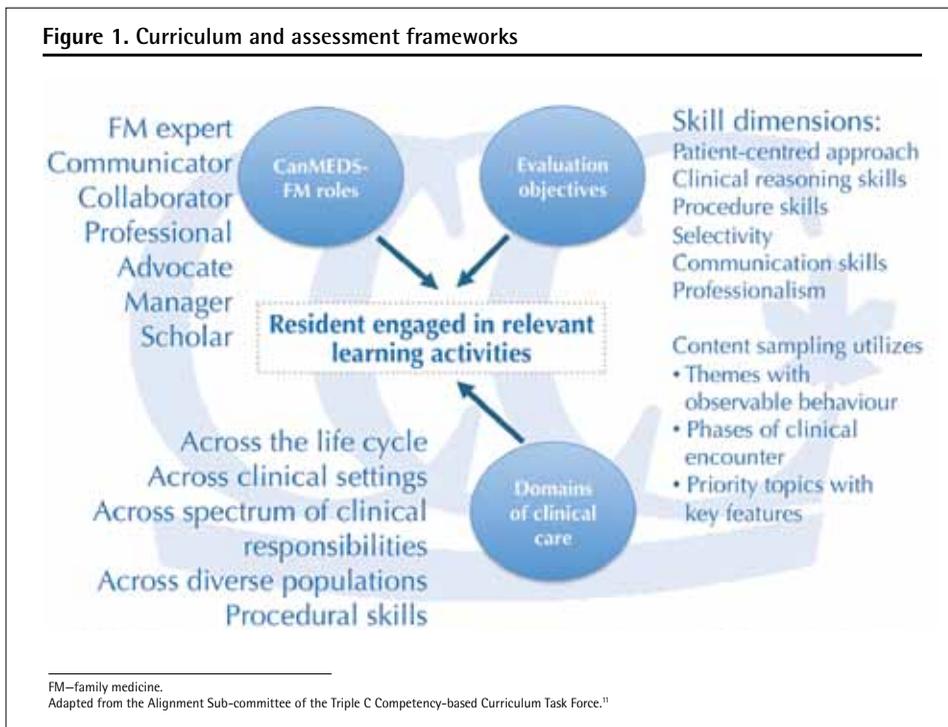
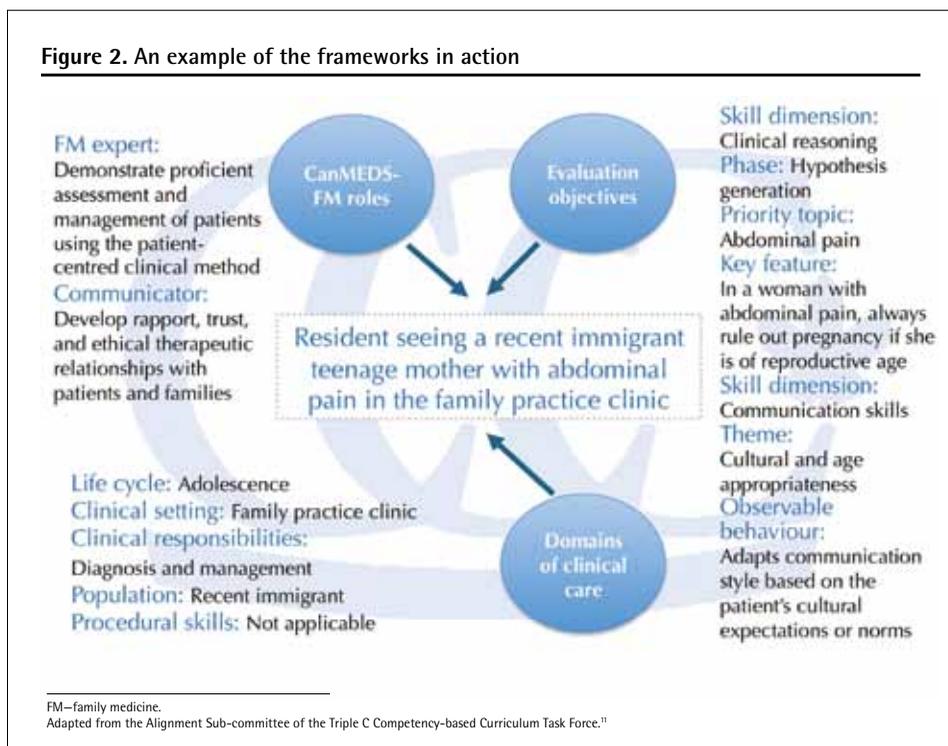


Figure 2. An example of the frameworks in action



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Competing interests

None declared

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