

# Creation of a national emergency medicine enhanced competency directory for residency training

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## ABSTRACT

Canadian emergency medicine Royal College residency training allows for pursuing extra training in enhanced competency areas. A wealth of enhanced competency training opportunities exist nationally. However, the search for the right fit is a challenging one because there is no centralized resource that catalogues all of these opportunities. A working group of the Canadian Association of Emergency Physicians (CAEP) Resident Section was assembled in 2016 to create a freely accessible and comprehensive directory of Canadian enhanced competency areas. The working group used stakeholder surveys (of residents, recent graduates, and faculty members), social media engagement, and program website searches. Information was collated into the first edition of a national enhanced competency directory, which is available at no cost at <http://caep.ca/sites/caep.ca/files/enhancedcompdoc.pdf>. Limitations include the scope defined by the working group and survey responses. A biannual update is also incorporated into the CAEP Resident Section portfolio to ensure it remains up-to-date.

## RÉSUMÉ

La formation en médecine d'urgence du Collège royal des médecins et chirurgiens du Canada au niveau de la résidence prévoit la poursuite d'une formation supplémentaire dans des domaines de compétence fine. Il existe, à l'échelle nationale, un large éventail de possibilités de formation dans ces domaines. Toutefois, la recherche du champ d'intérêt le plus approprié est particulièrement difficile, car il n'existe pas de répertoire centralisé de toutes les spécialités possibles. Un groupe de travail de la section des résidents de l'Association canadienne des médecins d'urgence (ACMU) a donc été formé en 2016 afin de constituer un répertoire gratuit et complet de ces domaines de compétence fine, existant au Canada. Pour ce faire, le groupe de travail a mené des enquêtes parmi divers intervenants (résidents, diplômés récents, enseignants), fait appel aux médias sociaux et effectué des recherches dans des sites Web de programmes. Les renseignements recueillis ont été réunis dans la première édition du répertoire national de compétences fines, accessible gratuitement à <http://caep.ca/sites/caep.ca/files/enhancedcompdoc.pdf>. Le répertoire comporte toutefois des faiblesses, notamment la portée de l'inventaire déterminée par le groupe de travail et les réponses au questionnaire d'enquête. Enfin, une mise à jour semestrielle est prévue dans le programme d'activités de la section des résidents de l'ACMU afin s'assurer qu'il reste à jour.

**Keywords:** emergency medicine, enhanced competency, fellowship, residency

## BACKGROUND

The Fellow of the Royal College of Physicians and Surgeons of Canada (FRCPC) emergency medicine (EM) residency programs were established in 1980 to train EM specialists to have additional academic or clinical skills.<sup>1</sup> FRCPC programs require a minimum of 6 months of residency to be “devoted to achieving particular expertise either in a scholarly activity or a clinical area, pertinent to the practice of the specialty of Emergency Medicine.”<sup>2</sup> These areas of expertise include both formal and informal training in clinical or academic domains. Canadian College of Family Physicians (CCFP)-trained EM physicians may pursue post-program training, which is not mandatory. Areas of training have been colloquially called “subspecialty training” or “fellowships”; however, the term *enhanced competency (EC)* is more descriptive because not all programs are formally recognized fellowships. Many of these EC programs are available to EM trainees from both the FRCPC and the CCFP streams.

The need for developing an EC directory has been previously highlighted as difficulty in accessing these programs could present a barrier to the development of ECs and of the specialty as a whole.<sup>3</sup> Due to the mandatory nature of this EC component of the FRCPC curriculum, residents are often left with the task of searching websites (e.g., Canadian Resident Matching Services [CaRMS]) or asking colleagues and mentors to develop their own list of possible opportunities.

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This search can be challenging because it encompasses a broad range of opportunities and multiple, geographically divided locations. A major barrier has been the lack of a centralized national resource, making the search arduous and time-consuming. In contrast, American fellowship program information is accessible through a published guide by the Emergency Medicine Resident Association (EMRA).<sup>4</sup>

## **PURPOSE**

The purpose of this initiative was to create an accessible, comprehensive Canadian EC directory. We sought to index both the formal (i.e., those leading to a formal certification) and informal experiences. We hope that the directory will ease the search for EC opportunities, serving as a starting point with direct links to program contacts and websites.

## **DESCRIPTION OF INNOVATION**

The Canadian Association of Emergency Physicians (CAEP) Resident Section (RS) sought to create a nation-wide EC directory. This project arose from discussions at the 2016 annual CAEP RS chief residents meeting, which highlighted the need for an EC directory. An initial Google Forms (Google LLC, Mountain View, California, USA) survey was sent to CAEP resident members to gather preliminary data on Canadian EC programs and to solicit prospective working group members. Next, the CAEP RS team sought to harness the power of social media to augment their recruitment of working group members. Social media use in EM has grown to become a key resource for knowledge gathering and communication.<sup>5</sup> The project was concurrently promoted through a free open access medical (FOAM) education website (<https://canadiem.org>) and social media (i.e., Twitter and Facebook) to crowdsource information.<sup>6</sup> Ultimately, a working group composed of interested residents (n=6 across three training sites) and CAEP administration (n=2) was formed.

Working group members divided sites geographically and contacted all Canadian EM FRCPC residency programs to identify EC leaders at their respective sites. They performed EM program and departmental website searches to identify any listed EC programs. Once all of the programs were identified, a standardized

questionnaire was sent to each EC program director via email, which included the following:

- Overview of the program's curriculum
- EC program's Royal College status (i.e., an accredited Royal College fellowship or area of focused competency)
- Approximate application deadlines
- Prerequisites for the program
- Availability to CCFP residents
- Number of residents per year
- Ability to moonlight
- Associated costs or salary
- Program-related living expenses
- Contact information for program (e.g., EC director, administrator, and recent graduates)

Information from the questionnaires and national resident input were combined to create the Canadian EM EC directory, available at <http://caep.ca/sites/caep.ca/files/enhancedcompdoc.pdf>.<sup>7</sup> This resource was not intended to be a final source for specific application deadlines, program information, salaries, or other sensitive information but rather to function as a guide.

## ***Survey results***

The most frequently offered ECs were pediatric EM, clinical epidemiology/research (n=8 each); and critical care medicine, emergency medical services, and ultrasound (n=7 each). EC areas were identified across multiple domains, as illustrated in Table 1. These are delivered through Royal College or CCFP fellowships, graduate programs, and self-organized experiences. A draft was sent to all EC program directors for their approval prior to publication, and program information was rechecked with available program websites.

## ***Uptake by community***

As of November 2017, the directory has been accessed 268 times through the CAEP website out of a total of 468 visits to the CAEP RS website in general. This indicates that 57.3% (268/468) of CAEP RS page visits culminated in a viewing of the EC directory. A related article posted on CanadiEM.org has been viewed 487 times as of November 1, 2017.<sup>6</sup>

**Table 1. Canadian emergency medicine enhanced competency areas**

University	Programs
Dalhousie University	Emergency Medical Services Pediatric Emergency Medicine
McGill University	Trauma Ultrasound
McMaster University	Critical Care Emergency Medical Services Medical Education Pediatric Emergency Medicine Sports and Exercise Medicine Trauma Ultrasound
Queen's University	International Emergency Medicine Resuscitation
University of Alberta	Critical Care Emergency Medical Services Pediatric Emergency Medicine
University of British Columbia	Clinical Epidemiology/Research Critical Care Emergency Medical Services Medical Education Palliative Care Medicine Pediatric Emergency Medicine Resuscitation Sports and Exercise Medicine Trauma Ultrasound
University of Calgary	Critical Care Disaster Medicine Emergency Medical Services Pediatric Emergency Medicine Ultrasound
University of Manitoba	Critical Care Pediatric Emergency Medicine
University of Ottawa	Clinical Epidemiology/Research Emergency Medical Services Medical Education Pediatric Emergency Medicine Ultrasound
University of Toronto	Clinical Epidemiology/Research Critical Care Emergency Medical Services Geriatric Medicine Palliative Care Medicine Pediatric Emergency Medicine Simulation Ultrasound
Western University (formerly known as University of Western Ontario)	Critical Care Pediatric Emergency Medicine Sports and Exercise Medicine Ultrasound

## DISCUSSION

This directory may be a starting point for EM residents pursuing EC areas. Selecting the right fit is an important process affected by a multitude of factors. Thoma and colleagues have discussed optimal strategies for the

selection process including exploration of options, meeting program directors and clarifying details, completing applications and obtaining permission from your home program, and actually completing the EC.<sup>8</sup> We believe this EC directory serves as the first Canadian resource that provides a repository of ECs available to residents during the “exploration of options” phase described by Thoma et al.<sup>8</sup>

As of 2018, the *Competence By Design (CBD)* campaign by the Royal College will take place, reshaping Canadian EM residencies into a new competency-based medical education model. These changes will inevitably usher in new program structures, including the shifting of EC pursuits to post graduate year (PGY) 5. As such, our innovation will need to be revised in the near future. However, ensuring up-to-date information is both time-consuming and logistically challenging. As such, we have incorporated the renewal of this document into the CAEP RS Vice President Communications portfolio, and we are planning to engage our membership on a biannual basis. The CAEP RS welcomes any feedback moving forward with this national project. Learners and educators are encouraged to continue providing updates and new EC opportunities via the CAEP RS at [defibrilletter@caep.ca](mailto:defibrilletter@caep.ca). We would also like to acknowledge all input from residents, program directors, and administrators nationally as well as the CAEP head office staff.

The first edition of the EC directory has several limitations. The resident survey response was low, and some EC director questionnaires were incomplete. This required some programs to be listed based on information published on their websites. Additionally, the directory scope focused on the most relevant EM experiences as decided by the working group. Anecdotal survey responses regarding masters' programs were not included. These include masters' of business administration, health administration, public health, and so forth. The EC directory may also be influenced by response-bias because unique programs not identified by the survey or website searches may not be represented. Finally, The EC directory does not contain any Francophone entries. Francophone programs were contacted, and no confirmation was obtained from programs. A French translation to the first edition was not produced. The scope of future EC directory editions can be expanded to include more graduate programs applicable to EM trainees, Francophone fellowships, and publications in French.

**SUMMARY**

By surveying residents and EC program directors across Canada, we have created the first edition of the CAEP RS EC Directory. We anticipate ongoing updates to this resource as time goes on, especially following the introduction of CBD to FRCPC EM training programs nationwide.

**Competing interests:** None declared.

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