sitions available, it makes little sense to have a resident train in an RCPSC program for 5 years only to enter a purely clinical practice. This needs to be made clear to medical students before and during residency interviews. Most CCFP-EM residents should expect to enter a practice that is focused primarily on patient care, but which may also accommodate interests such as clinical or didactic teaching.

For emergency medicine to fulfill its role in coming years, we need to prepare residents for the emergency department as it now exists and how it is expected to evolve — not how we wish it could be. We will not be working in emergency departments where admitted patients move immediately to ward beds.

Family medicine, the CCFP-EM program and the

RCPSC fellowship each provide training that leads to satisfying, but different, emergency medicine careers. There will always be exceptions in emergency medicine training, but those exceptions should not be used to conclude that the programs produce similar results. All 3 training pathways are essential in providing quality emergency medical care in Canada.

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## Emergency medicine practice and training in Canada

## Ivan P. Steiner

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In the late 1970s, emergency departments of urban hospitals were staffed by physicians without formal training in emergency medicine, which was not recognized as a distinct, specific discipline. Comprehensive emergency care was rare. Most university emergency departments did not provide round-the-clock coverage by an attending physician, and during the night shift unsupervised junior residents made all decisions related to patient care. Undergraduate education in emergency medicine did not exist, and a 1-year rotating internship was often sufficient in many jurisdictions to obtain a licence for general practice and to practise emergency medicine.

In June 1980, the Royal College of Physicians and Surgeons of Canada (RCPSC) recognized emergency medicine as a free-standing specialty requiring 4 years of residency training. (This was subsequently extended to 5 years.) Concurrently, the College of Family Physicians of Canada (CFPC) identified the need to upgrade emergency medicine education for family physicians (FPs) and created the administrative framework for a 1-year training program. As a result, emergency care in Canada today is provided by a heterogeneous group of clinicians. In urban centres, emergency departments are staffed by specialists who hold fellowships from the RCPSC (FRCPCs), FPs with certificates of special competence in emergency medicine from the CFPC (CCFP-EMs) and progressively fewer FPs

and clinicians with a general licence.¹ The situation is different in smaller regional and rural hospitals, where the latter 2 groups provide virtually all emergency care. This diversity of emergency care providers reflects the varied educational, economic and geographic realities of our vast country, and it is further complicated by an overall shortage of Canadian emergency physicians.²-⁴

Moorehead and colleagues<sup>5</sup> have calculated that, in the United States, physicians certified or trained in emergency medicine fill 58% of full-time-equivalent positions in acute care hospitals, and FPs and internists account for most of the rest. Adapting their formula to a Canadian setting, we can calculate that physicians certified in emergency medicine in this country fill about 45% of full-time-equivalent positions and that FPs fill the rest. In the United States, 124 emergency medicine training programs produce 1136 graduates each year.<sup>6</sup> In Canada, at present, there are 27 training programs: 11 for FRCPCs and 16 for CCFP-EMs, with 20 and 70 postgraduate entry positions, respectively.<sup>7,8</sup> Even with 2 educational tracks, the proportion of residency positions that are in emergency medicine is 21% lower in Canada than in the United States.

In Canadian urban and regional settings, career emergency physicians are coming increasingly from these 2 educational tracks and provide comprehensive, round-the-clock patient care. This workforce comprises a large cohort of full-

or half-time clinicians and a smaller group of physicians in academic tracks. However, the 2 educational tracks are distinctly different. The objective of the FRCPC program is to provide residents with in-depth knowledge of emergency medicine and to prepare them for academic careers involving teaching, research and administration. The mandatory curriculum includes a year of basic clinical training, a number of months in adult and pediatric emergency departments, and a broad base of training in surgical and medical specialties, critical care and anesthesia. Training in pre-hospital care, administration and epidemiology is common, and 1 year is devoted to subspecialization, research or medical education. In fact, many residency programs exceed the minimum requirements for emergency department training.

The CCFP-EM track aims to "provide family physicians with ... enhanced skills in emergency medicine" and to prepare future CCFP-EM educators and administrators. The certification year is intense, with time divided evenly among adult and pediatric emergency medicine and related subspecialties. Time constraints preclude virtually all elective work. Since it would be impossible to provide residents with the in-depth and comprehensive knowledge required for an academic career during this year, the primary objective is clinical competence.

Graduates of these 2 educational streams work mainly in urban areas. FRCPCs typically practise at university centres or in other settings that can support a number of full-time emergency physicians. Because of marketplace demands, many graduating CCFP-EMs also end up practising full-time emergency medicine in urban centres. For FRCPCs and a number of CCFP-EMs, this is in keeping with their respective college-given mandate. As trainees continue to graduate, we may expect that urban patients will receive increasingly consistent and high-quality emergency care. As the quality of emergency care increases in our cities, it is important to pay particular attention to the challenge of providing emergency care in other settings.

To address this, over the last 10 years, the CFPC has implemented changes to the training of residents in the core family medicine programs and has made emergency medicine training mandatory. Currently, the challenge for those who provide education in acute care to rural FPs is to provide an adequate base of knowledge and skills for independent function. Training of family medicine residents needs to maximize educational opportunities in all settings by offering rotations in urban and regional emergency departments and in rural locations. New educational resources in emergency medicine for FP trainees should help this process, but more exposure under the supervision of qualified and experienced urban, regional or rural mentors is still needed.<sup>10</sup>

Future urban emergency practice should become the domain of physicians certified in this speciality, whether FR-

CPCs or CCFP-EMs. Emergency departments in larger centres are the entry points for patients who present with increasingly more acute or complex medical, psychological or social problems. It is appropriate that practitioners with the most intensive training should carry out patient care, clinical teaching and research in those settings. FRCPCs will be able to draw upon their preparation for academic work and didactic teaching and by virtue of their training in family medicine, CCCFP-EMs will be able to apply their humanistic skills to patient care and clinical teaching.<sup>11</sup> FPs will continue to be responsible for providing much of the emergency care in our rural settings. Although training in emergency skills for FPs is, overall, too short, we may expect that the further development of educational resources for emergency medicine in core family medicine programs will enhance the quality of emergency care in nonurban settings.

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