A new way forward via innovative integration

A 3-year family medicine and enhanced skills residency program

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The role of enhanced skills (ES) training programs in Canada has been the subject of extensive debate. These programs were designed to provide both residents and physicians in practice with opportunities to extend their competence in a focused area to support the delivery of comprehensive care that is community responsive. Over time, options for ES training have increased, with growing proportions of trainees opting in.[1] Despite these trends, contentious debates have arisen, as some argue that ES programs divert residents from practising comprehensive family medicine.[1-3] Conversely, others suggest that ES training might increase the number of graduates providing comprehensive family medicine via care outside of office-based settings owing to expanded competency development.[4,5] Some studies point to the added value that ES program graduates might provide, as they are more likely to undertake leadership roles in their communities.[4,5] An internal research report by Dr Grierson et al for the College of Family Physicians of Canada (CFPC), examining the impact of the College's Certificates of Added Competence program, characterizes these disparate views.[6] While that report recognizes the value that ES programs yield by addressing specific community needs, it acknowledges the likely impact of such programs on decreasing the proportion of physicians providing comprehensive family medicine.[6]

As questions remain about the relative benefits and drawbacks of ES training, the landscape of family medicine residency training is shifting in Canada, particularly regarding its scope and length.[7] This commentary examines the drivers for ES programming and discusses an innovative residency program design that suggests a way forward for the future of family medicine training that might reconcile ongoing tensions. The commentary also outlines critical aspects of program evaluation that must be considered, especially in innovative curricular reform.

Further evaluation of integrated postgraduate training needed

Residents have offered varied reasons for pursuing ES training that cut across perceived community health care needs, career aspirations, focused clinical interests, and management of work-life demands.[6] Data collected by the CFPC through the Family Medicine Longitudinal Survey have shown year-over-year increases at our institution, the University of Toronto in Ontario, in the number of family medicine residents choosing to apply to ES programs, with 47% of residents in our 2018-2019 cohort applying for additional training. This data set revealed that most residents felt adequately prepared to practise in their ES area of interest after graduation; however, 26% felt prospective employers would require this training, and 42% wanted even more exposure to the ES program, despite feeling prepared to practise in that area. According to Grierson et al, some ES program residents express keen interests in higher-acuity clinical care, while others seek to improve their competitiveness for academic positions, and still others seek to optimize their remuneration and work-life balance.[6] There are also hidden curriculum messages that emerge throughout training that make family medicine residents feel that completing an ES program is valued or even necessary to secure work in urban centres.[8,9]

Interest in ES training programs has spurred broader explorations of whether Canadian family medicine residency programs should move to a 3-year training model, to align with programs internationally where training is 3 to 4 years in length.[10] Consideration of this option arose when the CFPC launched multiple initiatives to evaluate the future of family medicine training programs.[10,11] These included publishing the Family Medicine Professional Profile, which defines the scope of care of family physicians,[10] and developing the Outcomes of Training project, which re-examines the nature of family medicine residency training in Canada.[11] These initiatives provide a framework for outgoing competencies, length of training, and readiness to practise comprehensive family medicine in diverse community settings.[10,11]

The possibility of transitioning to a 3-year family medicine training program creates a unique opportunity to bridge the diversity of and interest in ES programs with the potentially shifting landscape of family medicine residency. An innovative approach could involve integrating existing ES programs within traditional residency programs. As a curricular strategy, integration aims to co-locate learning either longitudinally or across subject matter areas to support the development of adaptive expertise.[12] Program-level, longitudinal integration would mean that ES training is interwoven with and across an expanded family medicine residency program.[13] This integrated approach could maintain ongoing focus on comprehensive care and professional identity formation in primary care while simultaneously

developing focused skill sets. Curricular integration is commonly explored in the undergraduate medical context, with the main aim of integrating basic and clinical sciences.[13] However, there is scant empirical attention paid to integration in postgraduate programming.[13-15] We suggest that integrated postgraduate programs should be evaluated more closely, with a targeted exploration of the potential for sustainable upscaling.

In Canada, there are only 3 programs that are formally structured and promoted as longitudinally integrated ES family medicine residencies: the integrated family medicine–emergency medicine program at Dalhousie University in Halifax, Nova Scotia, the family medicine–care of the elderly program at the University of Manitoba in Winnipeg, and the University of Toronto's newly introduced program in the Department of Family and Community Medicine.[16,17] The Family Medicine and Enhanced Skills (FAM-ES) Program at the University of Toronto is a 3-year, longitudinal curriculum that integrates content from an existing ES program with core family medicine content during years 2 and 3 of training. The first FAM-ES cohort integrates existing care of the elderly and palliative care programs. Internal recruitment for the pilot program began in early 2020, with 2 FAM-ES residents beginning their integrated program in September 2020. Several key principles underpin FAME-ES: it maintains an ongoing focus on comprehensive care while training residents to meet more targeted community-care needs, it emphasizes team-based family practice, and it supports residents' professional identity formation as comprehensive family physicians. Successful enactment of these principles will require resource investment, faculty commitment, and purposeful evaluative research to inform ongoing and future programming.

It is problematic that there is limited scholarly inquiry regarding the implementation and impact of ES programs. The current scholarly interest in the changing practice patterns in Canadian primary care will undoubtedly be relevant to understanding the broader outcomes of ES programs.[6,18] Such inquiries can allow the field to examine whether these programs are instrumental in increasing the number of family physicians in comprehensive practice or whether they limit access to comprehensive primary care. It is also essential that evaluative scholarship attends to quality, feasibility, and sustainability issues concerning the implementation of such programs. The outcomes of ES and integrated ES programs might vary over time and depend on context, owing to differences in program-level principles, pedagogies, teaching practices, and experiential opportunities. If the integrated ES programs are to become a model for 3-year family medicine residency programs, attention to program implementation is critical, given the existing evidence about the elusiveness of sustained, scaled-up curricular reform.[19-21] Innovative or reformative curriculum interventions are rarely implemented exactly as prescribed.[22,23] Not only can curriculum change be hotly contested, but adaptation is also often necessary to modify planned curricular strategies for emerging learner needs and contextual variations.[24]

The evaluation of program implementation needs to include an examination of whether and how core reform principles are enacted and how or why curricula evolve over time. For the evaluation of the FAM-ES program specifically, we draw on an innovative framework for evaluating implementation that guides the examination of how espoused pedagogic principles are enacted in practice.[25] Our evaluative work will examine how teaching and learning practices promote or demote core curricular principles. Additionally, it will explore questions about the program's sustainability (eg, examining whether faculty and learners are structurally and individually positioned to enact prioritized program principles). The insight gained from such explorations can be instrumental for educational systems working to mobilize scarce resources or scale up pilot interventions locally, regionally, or nationally.[25] Failure to identify implementation challenges can cast doubt on the accumulated knowledge about how or why integrated ES programs will influence varying outcomes. We contend that alongside program design and delivery considerations, longitudinally integrated ES programs must evaluate their feasibility and sustainability to inform future family medicine education meaningfully. Such evaluative work is particularly essential when there is limited evidence pertaining to competency-based medical education in the literature.[26] This work is critical not only to ongoing program refinement but also to facilitating the optimal design of a summative evaluation strategy to capture longer-term program outcomes—both the planned and the unanticipated.

Conclusion

Tensions about the roles, risks, and benefits of ES programs will undoubtedly continue to arise. These will include debates about whether longer residencies are, in fact, the answer to the complex issues facing family medicine education, as well as questions about what the upper limit of residency program length should be. Thus, the future of ES programs remains uncertain. Innovative longitudinally integrated programs, such as FAM-ES, may be instrumental in informing the national conversation on the optimal length and structure of future programs. The realization of this "informative potential" depends on the institutions' openness to pursue bold evaluative questions that illuminate the optimal design, sustainability, and impact of these programs. Ultimately, if such programs contribute to family medicine practices that are more competent and more responsive to community health needs, then family medicine institutions will have to consider investing in the creation of similar opportunities for future trainees.

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Competing interests

Several of the authors on this paper (**G. Sirianni, S. Kawaguchi, A. Freedman, S. Murdoch,** and **R. Freeman**) have been involved in the development and implementation of the Family Medicine and Enhanced Skills 3-year integrated program pilot that is discussed in this commentary.

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References

1. Slade S, Ross R, Lawrence K, Archibald D, Palacios Mackay M, Oandasan I. Extended family medicine training. Measuring training flows at a time of substantial pedagogic change. *Can Fam Physician* 2016;62:e749-57. Available from: **https://www.cfp.ca/content/cfp/62/12/e749.full.pdf**. Accessed 2021 Nov 24.
2. Dhillon P. Shifting into third gear. Current options and controversies in third-year postgraduate family medicine programs in Canada. *Can Fam Physician* 2013;59:e406-12. Available from: **https://www.cfp.ca/content/cfp/59/9/e406.full.pdf**. Accessed 2021 Nov 24.
3. Vogel L. Are enhanced skills programs undermining family medicine? *CMAJ* 2019;191(2):E57-8.
4. Green M, Birtwhistle R, MacDonald K, Kane J, Schmelzle J. Practice patterns of graduates of 2- and 3-year family medicine programs. *Can Fam Physician* 2009;55:906-7. e1-12. Available from: **https://www.cfp.ca/content/cfp/55/9/906.full.pdf**. Accessed 2021 Nov 21.
5. Casson I, Godwin M, Brown G, Birenbaum A, Dhalla M. Does a third year of emergency medicine training make a difference? Historical cohort study of Queen's University graduates. *Can Fam Physician* 2001;47:1227-32.
6. Grierson L, Vanstone M, Allice I. *Understanding the impact of the CFPC Certificates of Added Competence. Prepared for the College of Family Physicians of Canada*. Mississauga, ON: College of Family Physicians of Canada; 2020. Available from: **https://www.cfpc.ca/CFPC/media/PDF/2020-04-CAC-Impact-Study-Report.pdf**. Accessed 2021 Feb 28.
7. Lemire F, Fowler N. Pursuing longer family medicine residency training. *Can Fam Physician* 2021;67:218 (Eng), 217 (Fr).
8. Rosenthal E. Encouraging trainees. *Can Fam Physician* 2017;63:892 (Eng), e508 (Fr).
9. Payne L, Moaveni A, Handford C. Family medicine residents' perspectives on curricular messaging surrounding enhanced skills fellowship programs. *Can Fam Physician* 2019;65:e207-13. Available from: **https://www.cfp.ca/content/cfp/65/5/e207.full.pdf**. Accessed 2021 Nov 24.
10. *Family Medicine Professional Profile*. Mississauga, ON: College of Family Physicians of Canada; 2018. Available from: **https://www.cfpc.ca/CFPC/media/Resources/Education/FM-Professional-Profile.pdf**. Accessed 2021 Nov 21.
11. Sawchuk P. Outcomes of Training. Preparing for the future. *Can Fam Physician* 2019;65:301 (Eng), 302 (Fr).
12. Malik AS, Malik RH. Twelve tips for developing an integrated curriculum. *Med Teach* 2011;33(2):99-104. Epub 2010 Sep 27.
13. Kulasegaram KM, Martimianakis MA, Mylopoulos M, Whitehead CR, Woods NN. Cognition before curriculum: rethinking the integration of basic science and clinical learning. *Acad Med* 2013;88(10):1578-85.
14. Dehlendorf C, Brahmi D, Engel D, Grumbach K, Joffe C, Gold M. Integrating abortion training into family medicine residency programs. *Fam Med* 2007;39(5):337-42.
15. Allan GM, Korownyk C, Tan A, Hindle H, Kung L, Manca D. Developing an integrated evidence-based medicine curriculum for family medicine residency at the University of Alberta. *Acad Med* 2008;83(6):581-7.
16. Max Rady College of Medicine, University of Manitoba. *Integrated care of the elderly stream* [Department of Family Medicine fact sheet]. Winnipeg, MB: University of Manitoba; 2018. Available from: **https://umanitoba.ca/faculties/health_sciences/medicine/units/family_medicine/media/Stream_Brochure_-_Integrated_Care_of_the_Elderly_2018.pdf**. Accessed 2021 Feb 21.
17. Department of Family Medicine, Dalhousie University. *The integrated family medicine and emergency medicine program*. Halifax, NS: Dalhousie University. Available from: **https://medicine.dal.ca/departments/department-sites/family/education/teaching-sites/saint-john/saintjohnintegrated.html**. Accessed 2021 Feb 21.
18. Lavergne MR, Goldsmith LJ, Grudniewicz A, Rudoler D, Marshall EG, Ahuja M, et al. Practice patterns among early-career primary care (ECPC) physicians and workforce planning implications: protocol for a mixed methods study. *BMJ Open* 2019;9:e030477.
19. Burkhauser MA, Lesaux NK. Exercising a bounded autonomy: novice and experienced teachers' adaptations to curriculum materials in an age of accountability. *J Curriculum Stud* 2017;49(3):291-312.
20. Hawick L, Kitto S, Cleland J. Curriculum reform: the more things change, the more they stay the same? *Perspect Med Educ* 2016;5(1):5-7.
21. Whitehead CR, Hodges BD, Austin Z. Captive on a carousel: discourses of 'new' in medical education 1910-2010. *Adv Health Sci Educ Theory Pract* 2013;18(4):755-68. Epub 2012 Oct 9.
22. Drake C, Sherin MG. Practicing change: curriculum adaptation and teacher narrative in the context of mathematics education reform. *Curric Inq* 2006;36(2):153-87.
23. Pintó R. Introducing curriculum innovations in science: identifying teachers' transformations and the design of related teacher education. *Sci Educ* 2005;89(1):1-12.
24. McLaughlin MW, Mitra D. Theory-based change and change-based theory: going deeper, going broader. *J Educ Change* 2001;2(4):301-23.
25. Onyura B, Lass E, Lazor J, Zuccaro L, Hamza DM. Vitalizing the evaluation of curricular implementation: a framework for attending to the "how and whys" of curriculum evolution. *Adv Health Sci Educ Theory Pract* 2021 Nov 15. Epub ahead of print.
26. Campbell C, Hendry P, Delva D, Danilovich N, Kitto S. Implementing competency-based medical education in family medicine: a scoping review on residency programs and family practices in Canada and the United States. *Fam Med* 2020;52(4):246-54.

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