

Defining the *specialist generalist*

The imperative for adaptive expertise in family medicine

Nicole N. Woods PhD Maria Mylopoulos PhD Melissa Nutik MD MED CCFP FCFP Risa Freeman MD MED CCFP

In commentaries, research papers, and policy reports published across Canada, there exists considerable variation in the ways the discipline of family medicine is perceived. Some scholars describe family physicians as the consummate medical experts: physicians able to respond to patient needs across the age, sex, and community spectrums. In other instances, family medicine is understood as the provision of care that is patient centred and compassionate, foregrounding the role of the family physician in providing holistic care and advocacy for the entire person. In contrast to their subspecialist counterparts, family physicians are trained to address the needs of Canadians by maintaining the breadth of knowledge and skills required to provide comprehensive, continuous care in urban and rural communities.¹ Over the years, practitioners, policy makers, and scholars have shaped these constructions of the discipline into various models for framing, explaining, and justifying clinical practice in family medicine.² The recent College of Family Physicians of Canada publication of the Family Physician Professional Profile brings together all of these ideas in describing that “it is through relational continuity and a commitment to a broad scope of practice that the complexity of care is meaningfully addressed.”³

One common denominator, central to virtually all of these models, is the explicit notion of family medicine as fulfilling a need for “generalist” physicians in the Canadian health care system. The prioritization of generalism in family medicine education means that residency programs are expected to produce physicians who can serve the needs of the whole patient, integrating their understanding of context to provide comprehensive care from cradle to grave, from acute to chronic presentations, and across all care settings.³

Still, many scholars and leaders have expressed concerns that the traditional generalist has become an “endangered species.”⁴ The emergence of evidence-based medicine,⁵ widening income gaps between specialists and generalists,⁶ and changes in medical education⁷ have led to concerns that fewer family physicians are embracing their roles as generalists. Given these calls for concern, we believe it is time to consider reframing the role of generalism and expertise in family medicine.

Generalism is a philosophy of care⁸ encompassing many elements, including the importance of the doctor-patient relationship, portrayal of the whole person in the context of his or her family and environment, continuity

and coordination of care, and consideration of prevention and health promotion. Generalist physicians act as advocates for their patients and often work in multidisciplinary teams.

Discussions of the demise of generalism in family medicine typically emphasize scope of practice. Using this lens, family physicians are generalists because they are trained to take on a variety of clinical problems in the widest range of contexts, rather than having a narrow focus. In unpacking this domain of generalism, it becomes clear that what is common across all family physicians is the expectation that they will have the capacity to handle cases that range from the routine and simple (eg, sore throat) to the unusual and highly complex (eg, rare genetic disorders).⁹ Moreover, as generalists, family physicians are frequently expected to diagnose and manage undifferentiated clinical problems that can be ambiguous, making it critical that new graduates be prepared for uncertainty and can use their knowledge flexibly to handle situations for which the obvious solution is unclear. These core activities of generalism—dealing with complexity, novelty, and ambiguity—are easily overlooked when the focus is exclusively on the range of services provided in practice.

Adaptive expertise

Models of adaptive expertise offer a theoretical framing for all of the core activities of an expert generalist. Adaptive expertise focuses on the ability of an expert to quickly and efficiently solve the routine problems encountered in their everyday work while simultaneously accounting for the need to solve nonroutine problems when they arise.¹⁰ When applying adaptive expertise to medicine, it is argued that physicians use their extensive knowledge to solve the common problems of practice. In family medicine, this means the physician must be able to quickly recognize a typical presentation of a common condition (eg, wheeze and asthma). Adaptive expertise in family medicine also means being resourceful and innovative when faced with ambiguous undifferentiated cases (eg, fatigue). To be an expert generalist means being able to balance both the routine and the nonroutine, providing exceptional care for the simple and the complex, and remaining capable in the face of uncertainty and ambiguity.

This conceptualization of the family physician as an expert in generalism embraces the many ways in which an individual physician can choose to build a practice. There have been substantive shifts in the Canadian

system, including a move to ambulatory care models, an aging population, greater complexity, and an increasing number of comorbidities in the patients seen in primary care. These changes mean that all family physicians, including those who choose to maintain breadth in their practice by providing primary care across the spectrum, could potentially see more complex presentations of cases than the generation of family physicians that came before them. For these physicians, the model of adaptive expertise highlights their ability to use their extensive knowledge to diagnose and manage cases across a range of medical conditions. The model also accounts for their capacity to recognize when a novel problem is incompatible with their repertoire of known solutions and requires referral. Similarly, providers who opt for increased specialization within family medicine must still be able to practise in new and complex settings, maintaining a level of flexibility that will enable exceptional care in the face of uncertainty and ambiguity. For the family physician practising obstetrics or emergency medicine, the ability to navigate both the routine and innovative dimensions of adaptive expertise still applies.

Adaptive expertise has been a powerful framework for understanding practice and the educational design across specialties including developmental pediatrics, general internal medicine, and psychiatry.¹¹ Along the same lines, we propose that adaptive expertise for family physicians can be understood as the practice and training of the “specialist generalist.” By emphasizing both the routine and innovative dimensions of generalist practice, adaptive expertise provides an opportunity to recognize the variability inherent in the way family medicine is practised in Canada, without compromising the field’s status as a specialty in its own right. This framing also has several key implications for family medicine education.¹² Supporting the development of future specialist generalists requires the provision of learning opportunities that prepare residents to become adaptive experts in family medicine.

Conclusion

The notion of the family physician as a specialist generalist is essential for all Canadians. In the face of today’s evolving health care and education systems, safeguarding generalism in family practice, and preparing

students for generalism as part of their family medicine education, requires an explicit conversation around our construction and conceptualization of the term. The theoretical model of adaptive expertise provides an opportunity to advance research, training, and the academic conversation in family medicine.



Dr Woods is Richard and Elizabeth Currie Chair in Health Professions Education Research with the University Health Network in Toronto, Ont, and Associate Professor in the Department of Family and Community Medicine at the University of Toronto. **Dr Mylopoulos** is Education Scientist and Associate Director of The Wilson Centre with the University Health Network and Associate Professor in the Department of Paediatrics at the University of Toronto. **Dr Nutik** is Undergraduate Education Lead in the Office of Education Scholarship and Assistant Professor in the Department of Family and Community Medicine at the University of Toronto. **Dr Freeman** is Vice-Chair of Education and Associate Professor in the Department of Family and Community Medicine at the University of Toronto.

Competing interests

None declared

Correspondence

Dr Nicole N. Woods; e-mail nikki.woods@utoronto.ca

The opinions expressed in commentaries are those of the authors. Publication does not imply endorsement by the College of Family Physicians of Canada.

References

- Albritton W, Bates J, Brazeau M, Busing N, Clarke J, Kendel D, et al. Generalism versus subspecialization: changes necessary in medical education. *Can J Rural Med* 2006;11(2):126-8.
- Shaw E, Oandasan I, Fowler N, editors. *CanMEDS—Family Medicine 2017. A competency framework for family physicians across the continuum*. Mississauga, ON: College of Family Physicians of Canada; 2017.
- College of Family Physicians of Canada. *Family Medicine Professional Profile*. Mississauga, ON: College of Family Physicians of Canada; 2018.
- Stein HF. Family medicine's identity: being generalists in a specialist culture? *Ann Fam Med* 2006;4(5):455-9.
- Reeve J. Protecting generalism: moving on from evidence-based medicine? *Br J Gen Pract* 2010;60(576):521-3.
- Showstack J, Rothman AA, Hassmiller S. Primary care at a crossroads. *Ann Intern Med* 2003;138(3):242-3.
- Beaulieu MD, Rioux M, Rocher G, Samson L, Boucher L. Family practice: professional identity in transition. A case study of family medicine in Canada. *Soc Sci Med* 2008;67(7):1153-63. Epub 2008 Jul 20.
- Royal College of Physicians and Surgeons of Canada. *Generalism in medical education*. Ottawa, ON: Royal College of Physicians and Surgeons of Canada; 2020. Available from: <http://www.royalcollege.ca/rcsite/educational-initiatives/generalism-medical-education-e>. Accessed 2021 Mar 31.
- Reeve J, Irving G, Freeman G. Dismantling Lord Moran's ladder: the primary care expert generalist. *Br J Gen Pract* 2013;63(606):34-5.
- Schwartz DL, Bransford JD, Sears D. Efficiency and innovation in transfer. In: Mestre JP, editor. *Transfer of learning from a modern multidisciplinary perspective: research and perspectives*. Greenwich, CT: Information Age Publishing; 2005. p. 1-52.
- Sockalingam S, Mulsant BH, Mylopoulos M. Beyond integrated care competencies: the imperative for adaptive expertise. *Gen Hosp Psychiatry* 2016;43:30-1.
- Mylopoulos M, Kulasegaram K, Woods NN. Developing the experts we need: fostering adaptive expertise through education. *J Eval Clin Pract* 2018;24(3):674-7. Epub 2018 Mar 8.

This article has been peer reviewed.

Can Fam Physician 2021;67:321-2. DOI: 10.46747/cfp.6705321

Cet article se trouve aussi en français à la page 326.