

# RESEARCH CONNECTION

## Measuring the challenges of rural physician supply in Manitoba

By John J. Murray, Ph.D.,  
& Charles Penner, MD, FRCPC



### Why this research is important

Canadians tend to have an expectation that they will have access to medical care where and when it is needed, no matter where they live. Though recent decades have seen large, urban comprehensive medical facilities shoulder the burden of more specialized care, there are many communities that have only episodic access to a physician or none at all. It is important to gain a clearer understanding of the factors which incline front-line health care professionals to locate longer-term in rural or remote Canadian settings. The problem comprises many factors which are entwined in a complex interplay of personal and professional conditions. Though solutions to a rural medicine undersupply of physicians continue to be elusive, examining the problem from a research and data perspective offers the promise of effective, strategic solutions which are evidenced-based and justified.

### What you need to know

Regional disparity in the recruitment and retention of physicians and the geographic maldistribution of physicians in Canada is an enduring, complex problem which contributes a great deal to uncertainty in the Canadian medical care system. Since 2003, the Office of Rural and Northern Health (ORNH), situated in Dauphin, Manitoba, has developed and implemented specialized programming for medical students and practicing physicians targeted at improving longer-term commitment of Manitoba physicians to rural medicine. The research presented here sought to determine the effectiveness of the ORNH programs in supporting a commitment to rural medical practice.

### How the research was conducted

The Manitoba Office of Rural and Northern Health, since 2003, has provided a multi-year series of elective opportunities for undergraduate medical students and those in practice to support rural/remote medicine. The purpose of the study was to examine the career trajectories of Manitoba physicians who fall into two distinct groups: (1) those who experienced only a mandatory rural clinical experience during their undergraduate medicine training and; (2) those who engaged in and completed additional elective programs

(points of contact) offered through the ORNH in addition to the required program. The required program is known as *Rural Week*. What we hoped to assemble was a picture of how effective the extra programs offered through the ORNH were in establishing a stronger connection to physicians locating their practice in rural/remote communities.

### What the researchers found

The study showed that by separating out those physicians who are in Manitoba urban centres and those who are practicing outside of these, some interesting trends and associations were noticed. Almost half of all doctors from the study groups who are now in rural communities participated in one or more of the specialized rural medicine programs. Moreover, for those who had accessed three or more *points of contact* at the ORNH, all of them are in rural/remote practice today. Conversely, over 80% of the doctors now in urban practice did not participate in any of the ORNH programs over a 10-year period. The strongest association in the data demonstrated that an individual who had participated in four or more of these programs was as much as ten times more likely to have remained in rural practice

### How this research can be used

One of the important outcomes of the research was the recognition that experiences matter in attracting Manitoba doctors to an appreciation for, and a deeper commitment to, establishing a rural medical practice that is lasting. Strong statistical associations do not provide the conclusive answers we may be seeking, but the study presented here has provided important insights into the overall effectiveness of the Office of Rural and Northern Health and its *points of contact* approach. The importance of periodic, measurable interventions in a young physician's life which act to sustain them in rural practice is an area where on-going research will be

important in decision-making in relation to physician training and supply. At a time of soaring costs of Manitoba health care, finding the social determinants of what creates a healthy rural doctor may be as important as closing the gaps in physician supply in our rural/remote communities.

### About the researchers

Dr. John Murray is an Assistant Professor of Education at Brandon University, holding a joint research appointment with the Max Rady College of Medicine at the University of Manitoba.

[MurrayJohn@Brandonu.ca](mailto:MurrayJohn@Brandonu.ca)

Dr. Charles Penner is Associate Dean of the Brandon Satellite Campus, Max Rady College of Medicine University of Manitoba.

[Charles.Penner@umanitoba.ca](mailto:Charles.Penner@umanitoba.ca)

### Keywords

rural medicine; distributed medical education; physician supply

### Publication based on the research

Murray, J., C., & Penner, D. (2018; in review). Trajectories of physicians in Manitoba, Canada: The influence of rural-focused contact points. *Canadian Journal of Medical Education*.

### Acknowledgements

Research Connection is a periodical publication intended to provide information about the impact of Brandon University's academic research and expertise on public policy, social programming, and professional practice. This summary is supported by the Office of Research Services and by the Centre for Aboriginal and Rural Education Studies, Faculty of Education.

<http://www.brandonu.ca/research-connection>

Editor: Christiane Ramsey

[Ramseyc@Brandonu.ca](mailto:Ramseyc@Brandonu.ca)

## BRANDON UNIVERSITY

Brandon University, founded in 1899, promotes excellence in teaching, research, and scholarship, and educates students so that they can make a meaningful difference as engaged citizens and leaders. This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. Thank you to ResearchImpact-RéseauImpactRecherche (researchimpact.ca) for their permission to adapt the ResearchSnapshot clear language research summary format.

