

## Needs of specialists in rural and remote Canada

Clare Toguri, MSc  
Faculty of Medicine,  
University of Toronto,  
Toronto, Ont.

Michael Jong, MBBS,  
MRCP(UK), CHE,  
FCFP, FRRMS  
Discipline of Family  
Medicine, Faculty of  
Medicine, Memorial  
University of Newfoundland,  
St. John's, NL

Judith Roger, MD,  
FRCSC  
Department of Surgery,  
Western Memorial Regional  
Hospital, Corner Brook, NL  
Faculty of Medicine,  
Memorial University of  
Newfoundland, St. John's, NL

Correspondence to: Clare  
Toguri; clare.toguri@mail  
.utoronto.ca

This article has been peer  
reviewed.

**Introduction:** Very little literature exists on rural specialists as a unique group and how best to meet their needs. We sought to provide some baseline information on specialists practising in rural and remote Canada to better understand their reasons for working rurally, their workload and how supported they felt, as well as their sources of advice and satisfaction with continuing medical education (CME).

**Methods:** The Society of Rural Physicians of Canada mailed a survey to specialists working in rural and remote Canada. Specialists were identified based on databases of the Canadian Medical Association (CMA) and the provincial colleges. The survey focused on reason(s) for working in a rural or remote setting, level of support and CME.

**Results:** The survey was sent to 1500 physicians and yielded a 19% response rate. Although 85% of respondents felt supported overall, less than 20% felt supported by the CMA or by the Royal College of Physicians and Surgeons of Canada (RCPSC). Conversely, most felt supported by immediate colleagues (85%) and their community (78%). Most wished they had access to more training, with close to 90% agreeing that additional training should be available if they had worked for several years in a rural or remote area and a need was demonstrated.

**Conclusion:** The CMA and the RCPSC may wish to work with rural specialists to foster a more supportive relationship and better meet their needs. Additionally, efforts should be made to provide rural specialists with better access to relevant CME.

**Introduction :** On dispose de très peu d'articles scientifiques sur les spécialistes en milieu rural en tant que groupe distinct et sur la façon de répondre à leurs besoins. Nous avons tenté de fournir des renseignements de base sur la pratique spécialisée dans les régions rurales et éloignées, au Canada, afin de mieux comprendre pourquoi certains y exercent, quelle est leur charge de travail et le degré de soutien perçu, de même que leurs sources de conseils et leur satisfaction à l'endroit de l'éducation médicale continue (EMC).

**Méthodes :** La Société de la médecine rurale du Canada a posté un sondage aux spécialistes qui travaillent en région rurale et éloignée, au Canada. Les spécialistes ont été recensés à partir des bases de données de l'Association médicale canadienne (AMC) et des ordres provinciaux. Le questionnaire portait sur les raisons de choisir la pratique en région rurale et éloignée et sur le degré d'aide et d'EMC reçu.

**Résultats :** Le sondage a été envoyé à 1500 médecins et a produit un taux de réponse de 19 %. Même si 85 % des répondants ont dit se sentir généralement appuyés, moins de 20 % ont dit ressentir cet appui de la part de l'AMC et du Collège royal des médecins et chirurgiens du Canada (CRMCC). En revanche, la plupart se sont dits aidés par leurs collègues immédiats (85 %) et par leur communauté (78 %). La plupart des répondants ont dit souhaiter un meilleur accès à la formation, près de 90 % étant d'avis qu'on devrait leur offrir de la formation additionnelle après quelques années de pratique en milieu rural et éloigné; ce besoin a pu être démontré.

**Conclusion :** L'AMC et le CRMCC pourraient envisager de travailler avec les spécialistes en milieu rural pour mieux les soutenir et répondre à leurs besoins. De plus, il faudrait faire des efforts pour offrir aux spécialistes en région rurale un meilleur accès à une EMC adaptée à leurs besoins.

## INTRODUCTION

Although about 20% of Canadians live in rural and remote areas, less than 10% of all physicians work there.<sup>1</sup> These figures have changed little over time, with 22.2% of the population and 9.8% of physicians in 1996, and 21.1% of the population and 9.4% of physicians in 2004 living in rural and remote Canada. Furthermore, most rural physicians work in family medicine, with only 2.4% of specialists working in rural and remote communities.<sup>1</sup>

Canadian physicians are drawn to rural areas by the opportunity to practise a broad scope of skills and by the appeal of the rural lifestyle.<sup>2</sup> Having grown up in a rural community may be positively associated with doctors practising in a similar setting, but rural experience during training (for physicians raised in urban communities) may also positively influence the decision to pursue rural practice.<sup>3</sup> However, the literature largely describes the experience of family physicians and either excludes specialists or merges the groups together.<sup>2,3</sup> Therefore, it is still not clear what motivates specialists to work in rural areas.

Whereas most interest has focused on best practices for recruiting to rural areas, retaining physicians is equally important. Retention may be improved by increasing access to relevant continuing medical education (CME).<sup>4</sup> Although 60% of rural physicians surveyed by the Canadian Medical Association (CMA) in 2008 were very or somewhat satisfied with the availability of CME,<sup>2</sup> the number of those dissatisfied was found to be double that of their urban colleagues.<sup>5</sup>

We have a basic understanding of the needs of rural Canadian physicians; however, the focus of research has been on family physicians.<sup>2,5</sup> Rural specialists remain largely unrepresented in the literature. It is not clear how supported rural specialists feel in their work or how satisfied they are with CME and additional training opportunities. The purpose of this paper is to provide some baseline information on Canada's rural specialists, including reasons for choosing rural practice, and to assess and describe the perceived level of support and satisfaction with CME and available training.

## METHODS

In 2008, the Society of Rural Physicians of Canada (SRPC) mailed a survey to specialists working in rural and remote Canada to collect information on this demographic. The survey focused on 3 broad areas of interest, including reason(s) for working in

a rural or remote setting, level of support and CME. The purpose of the survey was to assess the needs of specialists to better address these needs at future SRPC meetings.

The CMA database was used to identify all registered specialists in Canada.<sup>6</sup> Databases from the provincial colleges were used to identify specialists not registered in the CMA database. In both cases, a second digit of zero in the mailing postal code was used to identify specialists in rural and remote areas. Based on the list of rural specialists identified from databases, a paper survey and explanatory letter were mailed out to physicians. To confirm rural or remote status, the survey included screening questions about the size of the population the physician served and the distance to the next referral centre. There was no follow-up mailing.

## RESULTS

The survey was sent to 1500 physicians; 286 respondents returned completed or partially completed surveys, yielding a modest 19% response rate.

### Demographics

The returned surveys were organized based on specialty, as declared by the physician (Fig. 1). The greatest number of replies came from general surgeons (19%), followed by internists (14%). Figure 1 shows all reported specialties. It was assumed that respondents only checked medical subspecialist or surgical subspecialist if their specialty was not otherwise listed. Respondents who checked more than one selection were entered as the most specific specialty. For example, if a physician checked urologist and surgical subspecialist, he or she was entered only as a urologist.

Screening questions confirmed the rural or remote location of physicians' work communities (Fig. 2). Most specialists (58%) worked in communities with populations of less than 30 000, with very few (1%) working in communities with populations greater than 100 000. Of this 1%, half were located more than 200 km from a referral centre. Among all respondents, 69% were less than 200 km and 14% were more than 400 km from a referral centre (Fig. 3).

### Reasons for working in a rural or remote setting

Of the respondents, 75% indicated that family reasons, safety and outdoor lifestyle were reasons for

practising in a rural area. Close to 60% of respondents indicated that autonomy (59%) and the variety of cases and challenges (57%) were reasons. Only 16% indicated that financial reasons influenced their decision. Just 3% said that working in a rural area was an immigration or licensing requirement.

### Support and workload

Overall, 85% of respondents felt supported, 9% did not feel supported and the remainder felt ambiguous about the question. When asked about specific sources of support, physicians felt most supported

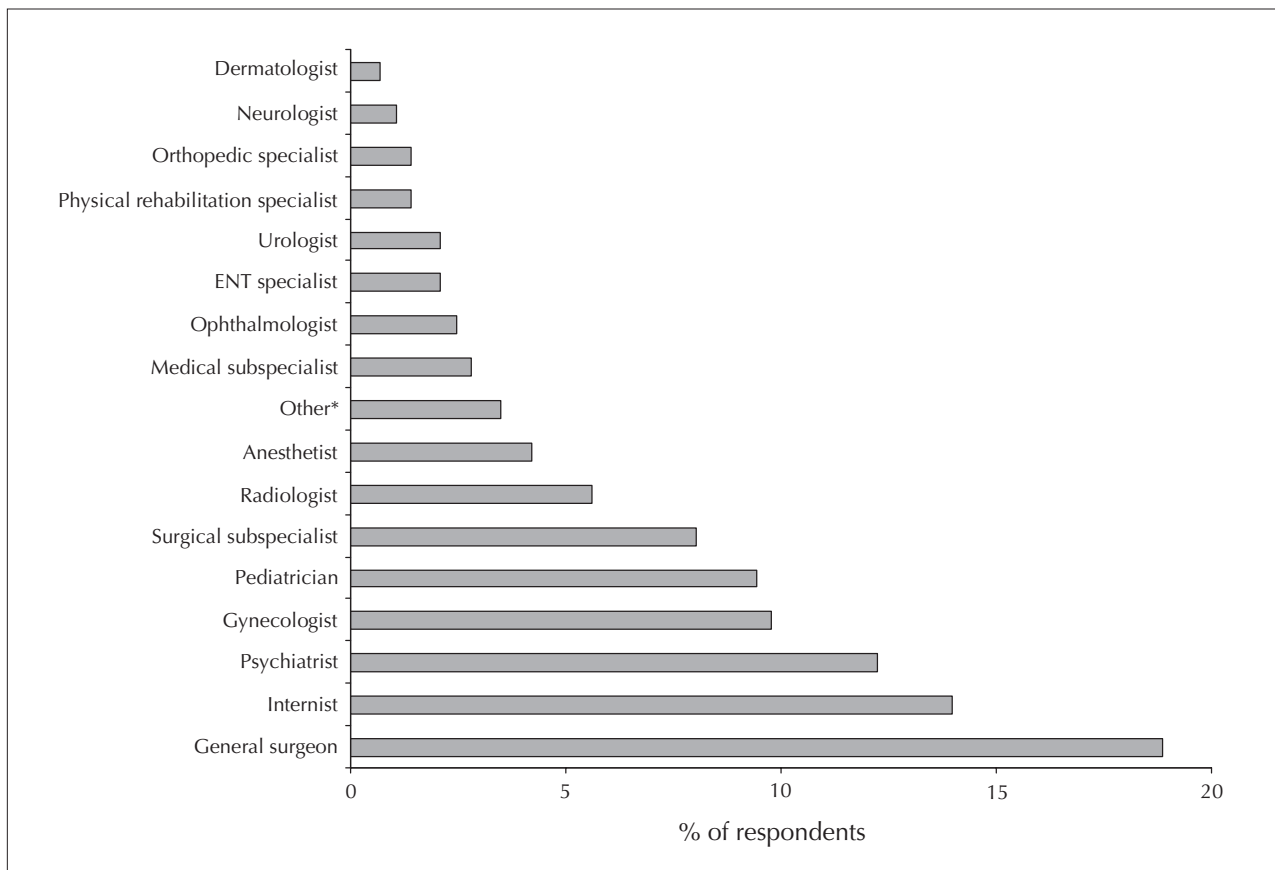


Fig. 1. Breakdown of specialties as declared by respondents. ENT = ear, nose and throat.

\*Includes specialties such as pathology, emergency medicine, laboratory medicine, nuclear medicine, plastic surgery, rheumatology and public health.

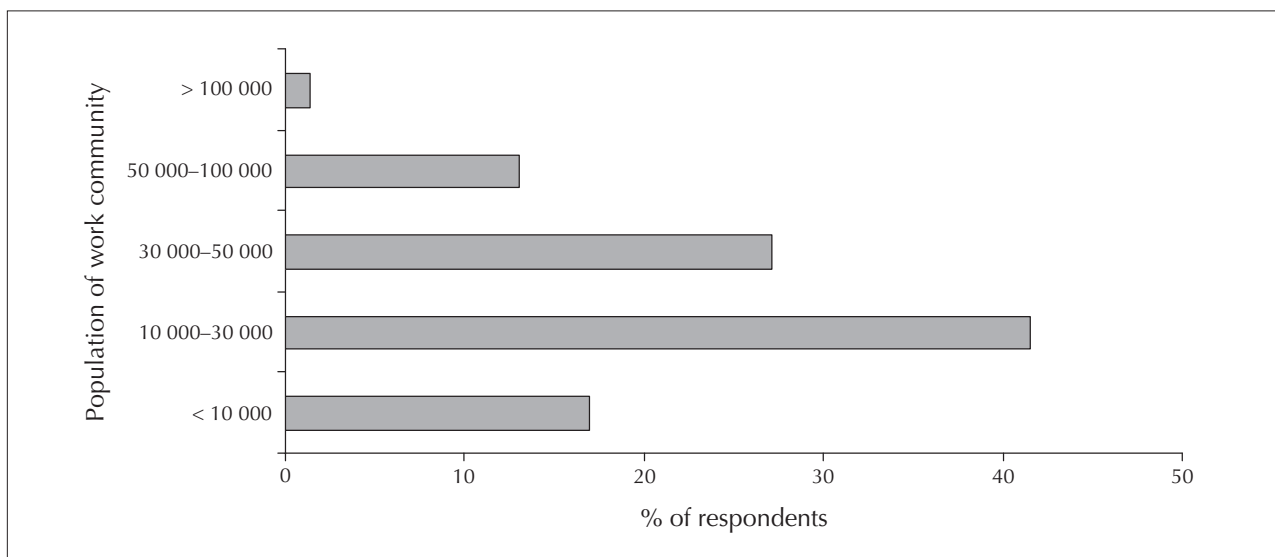


Fig. 2. Breakdown of the population of physicians' work community.

by their immediate colleagues (85%). Most also felt supported by their communities (78%) and nurses in the hospital (75%). However, less than one-fifth of physicians felt supported by the CMA (17%) and the Royal College of Physicians and Surgeons of Canada (RCPSC; 19%). Only 4% of respondents felt supported by all sources (Fig. 4).

When asked about their workload, most respondents (45%) indicated that at times it was too much. Only 3% said it was not adequate (Fig. 5).

### Advice-seeking practices and CME

Nearly three-quarters (72%) of respondents said

that for immediate advice they relied on the Internet, books and/or videos. Many (61%) also consulted a colleague in a tertiary care centre (Fig. 6).

Of the respondents, 25% felt they had not been adequately prepared for their current practice, and 80% of this group sometimes wished they had access to more training. Of all respondents, 68% sometimes wished they had access to more training, and 88% felt entitled to more training after practising several years, if a need was demonstrated.

Eighty-one percent agreed that either continued training via mentorship or time at a larger centre would be useful. Close to three-quarters (72%) of all respondents said they would prefer a short peri-

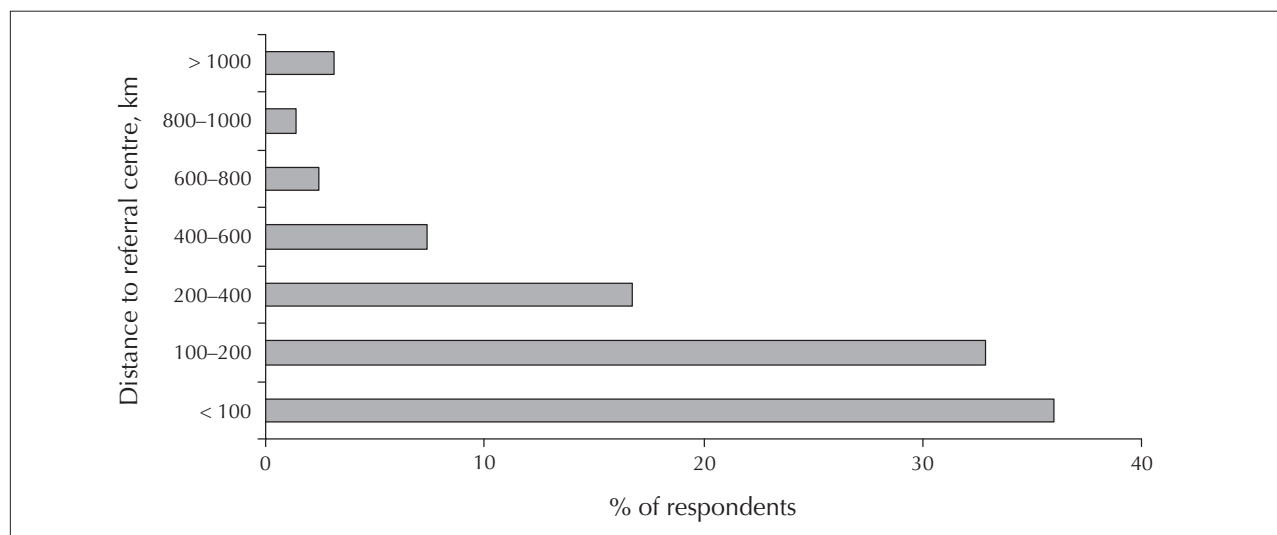


Fig. 3. Distance to the nearest referral centre.

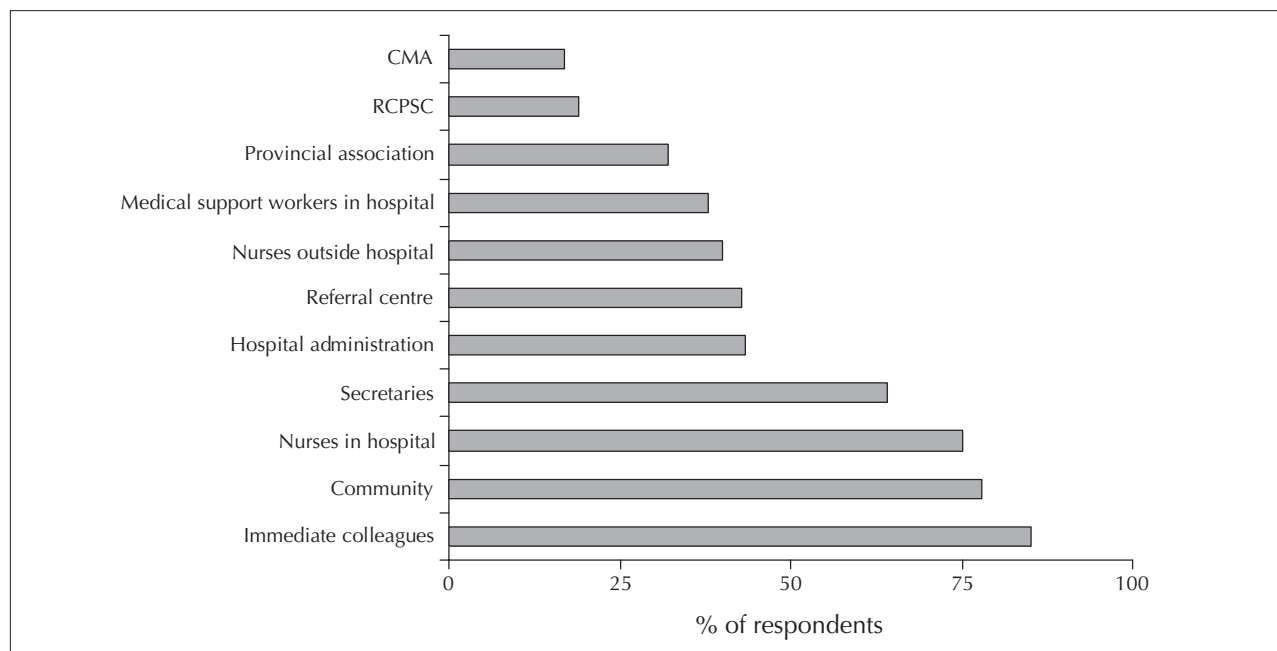


Fig. 4. Percentage of respondents who felt supported by each group. CMA = Canadian Medical Association; RCPSC = Royal College of Physicians and Surgeons of Canada.

od of training between 1 and 4 weeks over longer periods of upwards of a year.

In the comments added by some respondents, it was clear that although some specialists were interested in actively engaging in CME beyond their practising centre, few were able to get the locums necessary to take part. Additionally, many cited travel costs and losses in income as barriers to participation.

## DISCUSSION

As expected, most respondents reported practising in a rural or remote location as determined by demographic responses about size of community and distance to the nearest referral centre. Additionally, a number of respondents reported that transportation to their referral centre was limited to boat or air transit, naturally increasing the time required for the transfer, as well as the associated costs.

According to the 2007 National Physician Survey, about 2.1% of all specialists practise rurally and 0.9% practise in geographically remote areas.<sup>7</sup>

Although previous studies<sup>2,5</sup> have investigated factors motivating physicians to practise in rural and remote regions, they generally do not distinguish between family physicians and specialists or were only interested in family physicians. Here, specialists were surveyed on their reasons for choosing rural practice. Fully three-quarters of respondents said family reasons, safety and outdoor lifestyle were reasons for practising in a rural area, and close to 60% cited autonomy and variety of cases. These results support findings of a 2008/09 CMA survey of rural physicians, which found the top 2 factors considered important in selecting a rural practice were the opportunity to practise a full skill set and a preference for rural lifestyle.<sup>2</sup>

Only 16% of respondents indicated that finances were a factor in choosing to practise in a rural area.

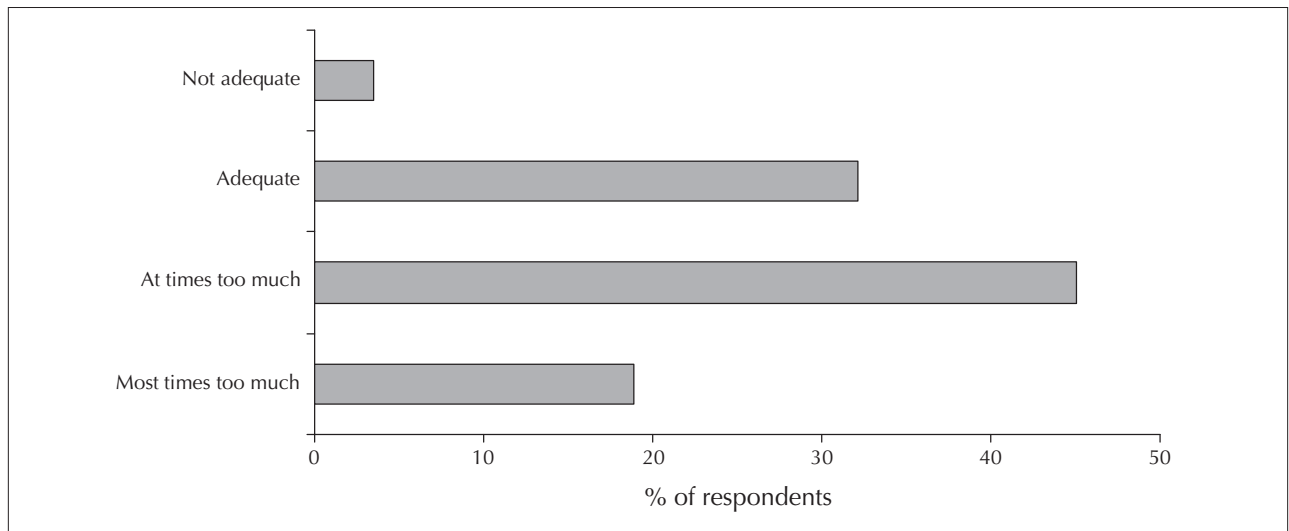


Fig. 5. Self-described workload of specialists.

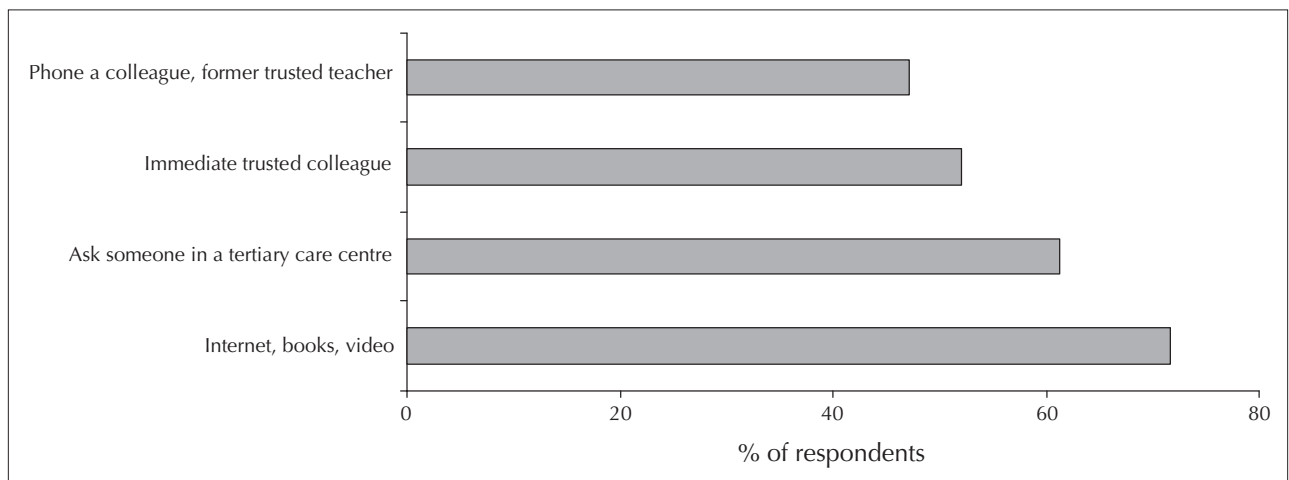


Fig. 6. Who or where respondents turned to for immediate advice.

Comparatively, the 2007 National Physician Survey found that 8% of specialists reported financial incentives and 4% reported nonfinancial incentives played a role in their recruitment or retention in their current location.<sup>7</sup> Given that the most common incentive offered to both younger ( $\leq 45$  yr) and older ( $> 45$  yr) physicians to encourage them to practise in rural Canada is financial,<sup>2</sup> this may warrant a reassessment of recruitment and retention strategies for rural specialists.

A total of 11% of international medical graduates practising in Canada work in rural areas.<sup>5</sup> However, the recruitment of this group has played a minor role in filling the need for specialists in rural Canada. Only 3% of respondents said that working in a rural area was an immigration or licensing requirement. This may indicate a reporting bias, which may in turn suggest a greater need to meet the specific needs of this group. Conversely, international medical graduates may be primarily family physicians.

Although it is reassuring that 85% of respondents felt supported overall, it is disconcerting that less than one-fifth felt supported by the CMA and the RCPSC. A better understanding of this perceived lack of support and what can be done to improve it may lead to higher levels of satisfaction among rural specialists.

Given that most specialists relied on the Internet, books and/or videos for immediate advice, it would be interesting to know the nature of the resources — whether they are evidence-based, journal articles or Cochrane Reviews. The strong (61%) reliance on colleagues in a tertiary care centre also emphasized the importance of forming good working relationships between centres.

The overwhelming response for relevant and accessible CME and additional training should not be taken lightly. These findings are supported by the CMA data holdings, which found that twice as many rural physicians were dissatisfied with CME opportunities as compared with urban physicians.<sup>5</sup> Although the 2007 National Physician Survey found that only 26% of specialists reported being neutral or dissatisfied with the availability of CME opportunities to meet their needs, with 65% being satisfied,<sup>7</sup> these numbers may largely represent the opinions of urban specialists. Given that more than 97% of specialists practise in urban centres,<sup>1</sup> the opinions of rural specialists may not be accurately reflected in these numbers. Our survey suggests that rural specialists are not satisfied with the availability of CME.

Furthermore, it has been suggested that provid-

ing physicians in rural and remote communities with better access to CME may improve retention.<sup>4</sup> Although these results could reflect a reporting bias, they should encourage the CMA, colleges and other networks to improve CME opportunities, which may in turn improve feelings of support.

### Limitations

The SRPC's survey of rural specialists yielded a modest 19% response rate. This response rate may have been improved by the use of other methods of contact, including email, fax and telephone. As well, a follow-up mailing may have picked up invalid addresses. The explanatory letter that accompanied the survey indicated that completing the survey would take about 10 minutes and that the results would be used to try to better meet the needs of specialists at future SRPC meetings. This may have dissuaded specialists who had very little time or did not feel that SRPC meetings benefit them.

It is possible that the responses received were biased. Physicians who are particularly interested in CME at SRPC meetings may have been more likely to respond. Similarly, those planning on leaving rural practice, either for retirement or for urban practice, may have been less likely to respond. Because the survey did not ask for identifying data, we cannot know whether the responses received are representative of the profile of Canadian specialists across geographical areas or age categories.

### CONCLUSION

Although financial incentives are still very common, it may be worthwhile also exploring preferences for rural lifestyle and variety of practice as incentives to recruit and retain specialists to rural areas. Additionally, the CMA and the RCPSC may wish to work with rural specialists to foster a more supportive relationship and better meet the needs of this unique, and often neglected, group. Finally, our results suggest a great interest among rural specialists to have better access to relevant CME and training opportunities. The CMA and the RCPSC may wish to address access to CME in upcoming policy and program choices.

**Competing interests:** None declared.

### REFERENCES

1. Canadian Institute for Health Information. *Geographic distribution*



---

of physicians in Canada: beyond how many and where. Ottawa (ON): The Institute; 2005.

- Chauhan TS, Jong M, Buske L. Recruitment trumps retention: results of the 2008/09 CMA Rural Practice Survey. *Can J Rural Med* 2010;15:101-7.
- Chan BT, Degani N, Crichton T, et al. Factors influencing family physicians to enter rural practice: Does rural or urban background make a difference? *Can Fam Physician* 2005;51:1246-7.
- White CD, Willett K, Mitchell C, et al. Making a difference: education and training retains and supports rural and remote doctors in Queensland. *Rural Remote Health* 2007;7:700.
- Canadian Medical Association. *Rural physician analysis based on CMA data holdings*. Ottawa (ON): The Association; 2008.
- CMA Masterfile, January 2006, Canadian Medical Association.
- The College of Family Physicians of Canada, Canadian Medical Association, Royal College of Physicians and Surgeons of Canada. National Physician Survey. National results by FP/GP or other specialist, sex, age, and all physicians. 2007. Available: [www.nationalphysiciansurvey.ca/nps/2007\\_Survey/Results/physician1-e.asp](http://www.nationalphysiciansurvey.ca/nps/2007_Survey/Results/physician1-e.asp) (accessed 2011 July 1).

---

## SERVICE INFORMATION

---

**Society of Rural Physicians of Canada (SRPC) members:** Subscription price included in membership fee.

**Nonmembers (2012 rates):** *Individuals:* Canada, \$112 (single copy, \$23); United States and elsewhere, US\$143 (single copy, US\$23). *Institutions:* Canada, \$181 (single copy, \$23); United States and elsewhere, US\$230 (single copy, US\$23). *Students/residents:* \$36 Can/US\$. Please contact the CMA Member Service Centre (see next paragraph) for other information. These rates include surface postage. Canadian subscribers please add applicable taxes.

All subscriptions are payable in advance. Payment should be made to the Canadian Medical Association (CMA) in the funds specified. MasterCard, VISA and American Express are accepted. Orders or requests for information should be addressed to *CJRM*, CMA Member Service Centre, 1870 Alta Vista Dr., Ottawa ON K1G 6R7; 888 855-2555 x2307 (Canada/US) or 613 731-8610 x2307; fax 613 236-8864; [cmadata@cma.ca](mailto:cmadata@cma.ca).

**Missing issues:** Claims for missing issues must be made within 3 months of publication date (subject to availability).

**Change of address:** Send one month before effective date to the CMA Member Service Centre (see above).

**Reprints:** Commercial and author reprints can be purchased through our partner Sheridan Press. To purchase commercial article reprints and ePrints, or to request a quote, please contact Matt Neiderer, Content Sales, Sheridan Content Services; 800 635-7181 x8265; [matt.neiderer@sheridan.com](mailto:matt.neiderer@sheridan.com). Authors can order their reprints by submitting an author reprint order form available at the Sheridan Press Electronic Order Centre at [www.sheridan.com/cma/eoc](http://www.sheridan.com/cma/eoc) or by contacting Lori Laughman,

Customer Service Representative, Sheridan Reprints Services; [lori.laughman@sheridan.com](mailto:lori.laughman@sheridan.com).

**Copyright and Permissions:** Copyright for all material is held by the SRPC or its licensors, unless otherwise indicated. You may reproduce or otherwise use material from this journal only in accordance with Canadian copyright law and provided that credit is given to the original source. In the case of photocopying or other reprographic copying, please contact the Canadian Copyright Licensing Agency (Access Copyright): 800 893-5777; [accesscopyright.ca](http://accesscopyright.ca). For any other use, including republishing, redistribution, storage in a retrieval system or transmission in any form or by any means, please contact Permissions Coordinator, CMA Publications, 1867 Alta Vista Dr., Ottawa ON K1G 5W8; fax 613 565-7704; [permissions@cma.ca](mailto:permissions@cma.ca).

**Indexing and Abstracting:** *CJRM* is available through the following services: MEDLINE/*Index Medicus*, Ovid Technologies, EbscoHost EJS, ProQuest Information and Learning Company, CAB Abstracts, Global Health and *Ullrich's International Periodicals Directory*. All articles published in *CJRM* are available free at the time of publication at [cma.ca/cjrm](http://cma.ca/cjrm).

**RuralMed:** Information on RuralMed (the SRPC listserv) is available online at [srpc.ca](http://srpc.ca).

**Advertising:** *Classified ads:* Contact Journal Advertising, *CJRM*, 1867 Alta Vista Dr., Ottawa ON K1G 5W8; 800 663-7336 or 613 731-8610 x2107/2041; fax 613 565-7488; [advertising@cma.ca](mailto:advertising@cma.ca). See Classified Advertising section of *CJRM* for information on rates. *Display ads:* Contact Journal Advertising (see preceding information), x2159.