

Assessment of rural emergency department physician staff, hiring practices and needs

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Abstract

Introduction: Rural communities suffer from an unequal access to health-care resources. The purpose of this study was to characterise Emergency Departments (EDs) in the Champlain Local Health Integration Network (LHIN) and determine their barriers to recruitment and retention of emergency physicians. **Methods:** A survey was sent to the 17 ED chiefs in the Champlain LHIN area by E-mail through May to December 2019. Results were analyzed for common themes and trends.

Results: Seven of the 17 hospitals responded to the survey. The average number of physicians staffing the ED was 16, with the majority being Canadian College of Family Physicians certified without additional emergency training. Common described barriers to recruitment include lack of incentives for physicians to work in rural communities, lack of available resources at rural centres, such as specialists and poor flexibility in terms of shift coverage. Barriers to retention included limited incentives to remain in rural communities.

Conclusion: This study analyzed the demographics and barriers to recruitment and retention in rural EDs. These results can be used to help build strategies that encourage physicians to practise in rural EDs.

Keywords: Emergency departments, recruitment, retention, rural emergency departments, rural medicine

Résumé

Introduction: Les communautés rurales souffrent d'un accès inégal aux ressources de santé. Cette étude visait à caractériser les services du Réseau local d'intégration des soins de santé (RLISS) Champlain et à déterminer quels étaient les obstacles au recrutement et à la rétention des urgentologues.

Méthodologie: Dix-sept urgentologues en chef de la région desservie par le RLISS Champlain ont reçu un questionnaire par courriel entre les mois de mai et décembre 2019. Certains thèmes et tendances sont ressortis de l'analyse.

Résultats: Sept des 17 hôpitaux ont répondu au sondage. Le personnel des services d'urgence comptait en moyenne 16 urgentologues, et la majorité était certifiée par le CMFC (Collège des médecins de famille du Canada) sans autre formation en médecine d'urgence. Les obstacles au recrutement fréquemment cités étaient:

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Absence d'incitatif pour attirer les médecins dans les communautés rurales, absence de ressources dans les hôpitaux ruraux, tels spécialistes, et mauvaise flexibilité en matière de quarts de travail. Le peu d'incitatifs pour demeurer dans les communautés rurales était le principal obstacle à la rétention.

Conclusion: Cette étude a analysé les caractéristiques démographiques et les obstacles au recrutement et à la rétention dans les services d'urgence en milieu rural. Ces résultats peuvent servir à concevoir des stratégies qui encouragent les médecins à pratiquer dans les services d'urgence des hôpitaux ruraux.

Mots-clés: Recrutement, rétention, médecine rurale, services d'urgence, urgence rurale

INTRODUCTION

Rural communities often face barriers to medical care ranging from a lack of medical resources¹ to struggles recruiting physicians.² A detailed analysis of physician locations in Canada found that while 21.4% of Canada's population resides in rural communities, only 9.4% of physicians practised in these areas.³ To fill this void, Canadian rural emergency departments (EDs) employ more family physicians compared to their urban counterparts.³ Further, since Canada has different pathways to emergency physician (EP) work (no extra training, Canadian College of Family Physicians [CCFP]), a 1-year certification programme under the College of Family Physicians of Canada (CCFP-EM), practice eligibility programme under the CCFP-EM and a 5-year residency programme under the Royal College of Physicians and Surgeons of Canada, physicians of different levels of training may be found working in rural EDs.

To understand emergency care in rural communities, one must examine both the current demographics of rural EDs and the obstacles they encounter when they recruit physicians. For example, *The British Columbia Needs Assessment* and testimonials from physicians working in Timmins, Ontario found that positive experiences with rural medicine and strong working relationships motivated people to work in rural centres, whereas lack of support from health-care systems and demands of office practice decreased their desire to practise rurally.^{4,5} As each area has its unique challenges and barriers, it is important to analyse each community so that strategies can be best tailored to their needs.

This study seeks to better understand the demographics and barrier to recruitment and retention for ED in the Champlain Local Health Integration Network (LHIN) area through questionnaires administered to ED chiefs. This analysis could help to guide future discussions that can be made to

increase the number of physicians practising rurally, thus increasing patients' access to care.

METHODS

The 17 ED chiefs in the Champlain LHIN were contacted by E-mail through May to December 2019. A consent form was signed by the participating physicians. ED chiefs were sent a survey through *Survey Monkey*⁶ composed of 34 questions that sought to determine the demographics of their ED, as well as barriers to recruitment and retention. The full survey is available from the authors. This study was exempt from review from the Ottawa Health Science Network Research Ethics Board at The Ottawa Hospital as it was deemed a quality improvement project.

RESULTS

Emergency department demographics

Of the 17 hospital ED chiefs contacted, 7 responded to the survey. Table 1 outlines the number of physicians and their level of qualification in each hospital. The average number of physicians working in the ED was 16 with 5 hospitals feeling that they currently had enough EPs to staff their ED and only 1 hospital reported having sufficient EP staff to cater to future demand. CCFP without EM training comprised the majority of EP staff.

Physician recruitment

FRCP-EM trained physicians were described as being very difficult to recruit by 5 hospitals and difficult to recruit by 2 hospitals. CCFP-EM trained physicians were described as moderately difficult to recruit by 4 hospitals and difficult to recruit by 2 hospitals. The remote location was reported as the most common barrier (3 hospitals), followed by lower wages received by rural

Table 1: Hospitals' responses to questions regarding characteristics of emergency departments

	Hospital characteristics							
How many physicians do you currently have on your roster?	20	24	5	15	18	12	18	Mean: 16 Median: 18
How many are CCFP (EM) certified?	5	1	0	1	13	1	3	Mean: 3.4 Median: 1
How many are FRCP-EM certified?	1	6	0	0	2	0	0	Mean: 1.3 Median: 0
If physicians working in your ED hold other residency training, please list their respective certification types and how many physicians with that type	2: CCFP- Anaesthesia	1 US: FAAEM	0	1: Palliative Care	0	0	5 CCFP-CA (anaesthesia) 4 CCFP with extra OB training	
How many of your emergency physicians also have a family practice?	8	10	5	4	2	4	9	Mean: 6 Median: 5
What is the average annual number of patients seen in your ED?	23,000	17,100	18,000	12,000	19,000	18,000	18,000	Mean: 17 871.4 Median: 18 000
What do you anticipate the annual volume of your ED to be in 2 years?	25,000	19,000	18,000	14,000	22,000	18,000	19,000	Mean: 19 285.7 Median: 19 000

CCFP: Canadian College of Family Physicians, EM: Emergency medicine, FRCP-EM: Federal rules of civil procedure-EM, ED: Emergency departments, CAC: Certificate of added competence, FAAEM: Fellow of the American Academy of EM, US: United States, OB: Obstetrics

physicians (2 hospitals). Additional described barriers included the lack of additional specialties for consults/coverage/call, competition with other EDs to recruit physicians, lack of incentives for physicians to practise in rural communities, poor flexibility in terms of shifts/coverage and lower acuity of cases. The implementation of electronic medical records was highlighted as a potential future barrier by 1 hospital. Two hospitals reported no current barriers to recruitment.

Described strategies to increase recruitment were offering training positions in hospital during residency (1 hospital), approaching training facilities for interest and availability (1 hospital), word of mouth (4 hospitals), recruitment fairs (1 hospital), offering shifts through Health Force Ontario's ED

Locum Programme (3 hospitals), social media (1 hospital) and referrals from other physicians (1 hospital). In addition, 3 hospitals used the help of outside resources for recruitment. Five hospitals are currently recruiting with the time it takes to find physicians variable, taking anywhere from a few weeks to months and even years. All hospitals offer placements for residents with 6 also offering medical school student places. Three of these hospitals found that student positions are regularly filled. Three hospitals have had locum physicians in their hospital in the past 5 years. One ED had a staff of 5 physicians and used locums for 23–27 shifts per month. In 4 of the hospitals, locum physicians occupy placements on a weekly basis, one of them specifying that they work certain shifts on a regular basis.

Barriers to retention

Once hired, 3 hospitals reported difficulties in retaining their EPs as they either opt to take a different trajectory in their career or because they are independent contractors and work elsewhere. Additional described barriers include limited incentive to remain in a smaller community with little support, reduced support with increasing patient loads, conflicts with hospital administration and isolated communities.

DISCUSSION

Rural communities have reduced access to health care and health-care resources.¹ To guide solutions, an examination of current barriers to recruitment and retention within rural EDs is needed. This study attempts to address this by administering questionnaires to ED chiefs within the LHIN area.

Of the EDs that responded to this survey, CCFP-trained physicians without additional emergency medicine certification composed the majority of the departments' staff. It was also found that some EDs rely on locum physicians for coverage. One ED had 5 physicians on staff and used locums for 23–27 shifts per month. This finding is comparable to a study that examined 25 ED in South-Western Ontario which found that only 29.3% of physicians working in EDs had formal EM training.⁷ Similarly, a study that examined 23 rural EDs throughout Québec found that 6% of the EPs held additional emergency certifications.⁸

The reported barriers to recruitment were similar to those described in *The British Columbia Needs Assessment*. One of the most common barriers was lack of support in rural communities from the health-care system or colleagues.⁴ This supports the need for the government to incentivise physicians to work in rural communities to help overcome the increased difficulty of working in departments with decreased levels of support. Further, a known strategy to increase recruitment to rural communities is rotations for medical students and residents.⁹ Interestingly, only 4 of 6 hospitals found that medical student spots were regularly filled, suggesting a missed opportunity for student exposure.

Limitations

There are limitations to this study. First, only 7 out of 17 hospitals responded to this survey,

suggesting that these results do not provide a complete description of LHIN EDs and limiting this study's external validity. Further, there is a potential for response bias to the administered questions. There is potential questionnaire bias as the study results were derived from a questionnaire that was not labelled as standardised. The authors attempted to reduce this bias through a comprehensive literature review when designing the questionnaire and using focused questions to address the aims of this study.

CONCLUSION

This study examined EDs within the Eastern Ontario area and reported the barriers to recruitment and to retention of EPs. Common barriers were a lack of support and incentives by rural physicians to practise in these communities. These results can help guide future strategies to increase rural EP recruitment.

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