What do they contribute?

*Family medicine residents who practise in cities*

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**ABSTRACT**

**OBJECTIVE** To determine how a cohort of family practice residents graduating between 1990 and 1997 was serving the needs of urban populations in British Columbia.

**DESIGN** Survey using mailed questionnaire.

**SETTING** British Columbia.

**PARTICIPANTS** All graduates of the British Columbia family practice residency program between 1990 and 1997.

**MAIN OUTCOME MEASURES** Graduates who were currently practising as family physicians and providing medical care to urban and inner-city populations of more than 100 000, sex, practice profiles, and a comparison with Janus Project data for British Columbia.

**RESULTS** Of 287 graduates surveyed, 206 responded (71.8%). Less than half (86) identified themselves as practising in urban settings; 61 of those were practising as family physicians. These physicians offered a range of primary care services; many offered inpatient and obstetric care. In addition, many were offering care to disadvantaged inner-city populations with unique and challenging medical problems.

**CONCLUSION** Recent graduates in family medicine practising in urban and inner-city areas are offering full-service primary care and are not abandoning it for more episodic high-volume medical practice.

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**RÉSUMÉ**

**OBJECTIF** Établir comment une cohorte de résidents diplômés de médecine familiale entre 1990 et 1997 répondent maintenant aux besoins des populations urbaines en Colombie-Britannique.

**TYPE D’ÉTUDE** Enquête (questionnaire) par la poste.

**CONTEXTE** Colombie-Britannique.

**PARTICIPANTS** Tous les diplômés du programme de résidence en médecine familiale de Colombie-Britannique.

**PRINCIPAUX PARAMÈTRES ÉTUDIÉS** Les diplômés pratiquant activement la médecine familiale et prodiguant des soins dans des villes ou des quartiers défavorisés de plus de 100 000 habitants, leur sexe, leur profil de pratique; comparaison des données avec celles du Projet Janus pour la Colombie-Britannique.

**RÉSULTATS** Des 287 diplômés interrogés, 206 ont répondu (71.8%). Moins de la moitié (86) déclaraient pratiquer en milieu urbain, dont 61 comme médecins de famille. Ces médecins offraient un variété de soins de première ligne, plusieurs ayant une pratique hospitalière et obstétricale. De plus, plusieurs traitaient des patients des quartiers défavorisés présentant des problèmes de santé uniques et complexes.

**CONCLUSION** Les diplômés récents de médecine familiale œuvrant en milieu urbain et dans les quartiers défavorisés offrent une gamme complète de soins de première ligne et n’abandonnent pas leur poste pour une pratique plus rémunératrice et moins exigeante.

This article has been peer reviewed.

Cet article a fait l’objet d’une évaluation externe.

We were interested in exploring and describing the practice profiles of family practice residents who chose, upon completion of training, to practise in inner-city or urban settings and the contribution a family residency program can make to the care of Canadians living in cities.

**METHODS**

The Family Practice Residency program at the University of British Columbia (UBC) has six different locations: one northern regional, one rural, one small town, and three urban. Residents normally complete the 2 years of training at one site. Training is primarily community-based, using preceptors from community practices. Outcomes of the rural stream of training have been tracked over several years. Many family practice residency programs across Canada are similar in that they use different sites for training and community-based programs.

The survey sample included all residents graduating from the UBC family practice program from all sites of training between 1990 and 1997. These graduates completed their undergraduate medical degrees in Canada, the United States, and other countries, but completed all 2 years of their postgraduate training at UBC sites. A survey was constructed from previously validated survey questionnaires. It was further validated by pilot-testing with graduating residents.

Graduates were surveyed by mail in the summer of 1998, with two repeat mailings to nonrespondents; 21 graduates could not be located. Respondents were asked to identify their location of practice: inner city, urban, suburban, small town, or rural. Data were collected through self-report of types of practice, of percentage of time in each type of practice, of professional activities engaged in, and of percentage of time spent in each professional activity.

Respondents were asked about scope of practice: 23 areas of clinical practice were defined, and respondents were asked to identify amount of activity in each area on a four-point Likert scale: never, rarely, sometimes, frequently. An individual profile of the total amount of time spent in each area of clinical practice was generated for each respondent to reflect overall scope of practice. Using these individual profiles, a measure reflecting the scope of practice of the cohort was derived and compared with the scope of practice for other similar cohorts. Statistical significance was determined using a two-sample $t$ test.

Respondents identified whether they had an area of special interest in family medicine and whether...
other family physicians referred patients to them in their area of special interest. Finally, all survey respondents were asked an open-ended question, “How does your community benefit from your professional work?” Replies were analyzed through a qualitative process to develop an appreciation of common themes in the responses.

This study received approval from the UBC Ethics Review Committee.

RESULTS

Surveys were sent to 287 former residents; rate of return was 71.8%. Of 206 returned surveys, 86 respondents claimed they were practising in urban or inner-city areas and confirmed this claim by stating that they were practising in communities of more than 100,000. Respondents who said they were practising in suburban communities or in urban communities of less than 100,000 were not included in the sample.

Of the 86 respondents, 12 were practising full-time emergency medicine with CCFP(EM); 12 were in Royal College specialist programs or similar training; and one was no longer practising medicine, leaving a total of 61 eligible subjects. Of these 61 respondents, about one third were male and two thirds were female. Respondents were evenly distributed across all years of graduation from the program. Respondents who had completed training in all training sites in the UBC program except the northern site; 74% were from the two Vancouver city-based sites of training.

Of respondents’ total practice time, 15% was spent in community-based teams, hospital-based teams, and non–fee-for-service family practice settings; 75% was spent in solo or group fee-for-service practice. Although 30% of respondents spent some time in walk-in clinics, the total percentage of time spent in these clinics was 10%. While 13% of respondents spent time in teaching, administration, and research, these activities contributed only 3% to total professional time, with 97% of professional time spent in clinical work.

The 23 areas of clinical activity are listed and respondents’ reporting of their level of activity in each area is compared with Janus Project data for British Columbia in Table 1. When the mean derived individual scope of practice for respondents who practised in urban areas was compared with the mean derived individual scope of practice for respondents who practised in other settings, there was no statistical difference (P = .71), although actual areas of clinical practice varied. Rural respondents had the highest standard deviation in derived individual scope of practice scores; urban respondents had a lower standard deviation.

Table 1. Scope of practice of graduates based in urban areas compared with Janus Project data for the whole of British Columbia

<table>
<thead>
<tr>
<th>AREA OF PRACTICE</th>
<th>URBAN N=61</th>
<th>URBAN %</th>
<th>JANUS %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult health care</td>
<td>60</td>
<td>98</td>
<td>91</td>
</tr>
<tr>
<td>Adolescent health</td>
<td>59</td>
<td>97</td>
<td>88</td>
</tr>
<tr>
<td>Mental health</td>
<td>59</td>
<td>97</td>
<td>83</td>
</tr>
<tr>
<td>Preventive medicine</td>
<td>59</td>
<td>97</td>
<td>85</td>
</tr>
<tr>
<td>Chronic disease</td>
<td>58</td>
<td>95</td>
<td>83</td>
</tr>
<tr>
<td>Child health care</td>
<td>57</td>
<td>93</td>
<td>88</td>
</tr>
<tr>
<td>Sports medicine</td>
<td>55</td>
<td>90</td>
<td>69</td>
</tr>
<tr>
<td>Care of the elderly</td>
<td>54</td>
<td>88</td>
<td>91</td>
</tr>
<tr>
<td>Minor surgery</td>
<td>47</td>
<td>77</td>
<td>82</td>
</tr>
<tr>
<td>Obstetric care*</td>
<td>43</td>
<td>70</td>
<td>73</td>
</tr>
<tr>
<td>Addiction medicine</td>
<td>42</td>
<td>69</td>
<td>72</td>
</tr>
<tr>
<td>In-hospital care</td>
<td>41</td>
<td>67</td>
<td>25</td>
</tr>
<tr>
<td>Immigrant health</td>
<td>36</td>
<td>59</td>
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</tr>
<tr>
<td>Aboriginal health</td>
<td>34</td>
<td>55</td>
<td>71</td>
</tr>
<tr>
<td>Palliative care</td>
<td>33</td>
<td>54</td>
<td>79</td>
</tr>
<tr>
<td>Emergency medicine</td>
<td>31</td>
<td>51</td>
<td>60</td>
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<tr>
<td>Occupational medicine</td>
<td>27</td>
<td>45</td>
<td>57</td>
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<tr>
<td>HIV and AIDS care</td>
<td>27</td>
<td>45</td>
<td>61</td>
</tr>
<tr>
<td>Surgical assists</td>
<td>26</td>
<td>42</td>
<td>–</td>
</tr>
<tr>
<td>Nursing home visits</td>
<td>14</td>
<td>23</td>
<td>71</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>7</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Surgical procedures</td>
<td>5</td>
<td>8</td>
<td>39</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

*Obstetric care: 53% full care including deliveries; 47% prenatal and postnatal care only.

Table 2. Areas of special interest

<table>
<thead>
<tr>
<th>SPECIAL-INTEREST AREA*</th>
<th>RESPONDENTS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetrics</td>
<td>31</td>
</tr>
<tr>
<td>Sports medicine</td>
<td>25</td>
</tr>
<tr>
<td>Counseling and family therapy</td>
<td>21</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>19</td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
</tr>
</tbody>
</table>

*Respondents could choose more than one special-interest area.

Fifty-two of the 61 respondents (85%) indicated a special interest within family medicine; of these, 52 (48%) are consulted by colleagues (Table 2). The 40% who listed “other” as their area of special interest
had wide-ranging interests, although addiction medicine, adolescent medicine, HIV medicine, and Native health care were all identified more than once.

Forty of the 61 respondents answered the open-ended question, “How does your community benefit from your professional work?” Although responses were not rich or detailed enough for qualitative analysis, they can be grouped into categories.

Eleven (25%) commented on providing patient-centred, high-quality, or comprehensive care: “[I] provide 24-hour coverage of our patients.” “[I] provide health care for my patient population both in the office and [in] the hospital.”

Eleven (25%) commented on special or enhanced skills they brought to their community: “[My] special interest in psychiatry helps my patients and the community [where] I do mental health work.” “[I offer] palliative care consultation.”

Fourteen (35%) stated they deliver care to people in the urban population who have difficulty accessing health care: “[I] work a lot with street-involved patients and mentally ill [patients].” “[I]nner-city, [practices require a] unique skill set.” “[I provide care for subsets of the population who may have difficulty accessing health care (eg, frail elderly, mental health patients, gays and lesbians).” “[I] take referrals from mental health teams of patients hard to find GPs for.” Eleven identified other benefits.

**DISCUSSION**

Although the sample is small, the data in this study suggest that recently trained family practice residents who practise in cities have a broad and well-defined scope of practice specific to family medicine in urban settings. The data do not support suggestions that recently graduated residents have a reduced scope of family practice in cities.

There is a widely held perception that many of the more recently graduated residents are working exclusively in walk-in clinics or have high-volume practices. While 30% of respondents said they spend some of their professional time in such clinics, our data indicate that the total time in clinics amounts to a mere 10%.

The fact that 67% of our respondents provided in-hospital care and 70% were involved in obstetric care also disproves the perception that recently trained family practice residents providing care in cities are abandoning traditional roles as medical care providers. These figures are in line with the National Family Medicine Resident Survey 2000, which indicated that 76.4% of family practice residents intended to provide obstetric care.

The many respondents who continue to care for their patients in hospital could well reflect the level of comfort residents have acquired while training on the family practice teaching ward. It certainly contrasts with Janus Project figures, which indicate that many family physicians are ceasing to see their hospitalized patients.

Respondents’ development of areas of special interest fits well with primary care reform strategies espoused by the College of Family Physicians of Canada. Many of these family physicians care for “invisible” cohorts of patients who have difficulty accessing care in urban areas, but form large enough groups for physicians to centre their practices on them. Provision of care to these underserviced patient populations can go unnoticed and unreported in questionnaires focused primarily on a traditional scope of practice.

**Limitations**

Data presented are from a small sample of residents who all completed residency in the same program, so generalization of the study could be limited. The literature suggests that experiences and milieu of training influence graduates’ decisions about practice. Rapidly changing patterns of practice could also mean that these data no longer reflect the situation in 2003. However, all of these graduates received their training in the past 11 years and continue to practise in BC cities.

The focus of one training site on issues of inner-city medicine; the presence of one of the very few family medicine teaching wards in a tertiary care hospital in Canada, and the strong clinical practice experience in this training program could all influence outcomes. Respondents to this survey had to identify themselves as practising in urban rather than suburban areas to be included, so that no data on activities of former residents in suburban areas are presented. While the scope of practice of former residents practising in urban areas appears as broad as that of former residents practising in other settings, intensity of practice or complexity of clinical area was not measured. As well, there is an implicit assumption that skill and expertise in such areas as substance abuse are as important for family physicians as the ability to manage a hospitalized patient with pneumonia.

**Conclusion**

Family practice residency programs in Canada train residents to meet society’s needs. Reduced access to family physicians for rural populations because of
inequitable distribution of manpower resources has led to increased calls for training programs focused on rural practice. Most (80%) Canadians live in urban areas, however, and clearly our respondents make an important contribution to the care of urban populations who have difficulty accessing health services. •

Acknowledgment
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Contributors
Dr Bates initiated and designed the study, gathered and helped analyze the data, and reviewed the literature. Dr Andrew reviewed the literature and helped analyze the data. Both authors contributed to writing the article, helped rewrite it after critical review, and approved the final version and its conclusions.

Competing interests
None declared

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References

Editor’s key points
• This survey examined the scope of practice of recent graduates from the University of British Columbia’s family medicine program who were working in urban settings.
• Contrary to conventional thinking, most were involved in a broad spectrum of care including hospital work and obstetrics.
• In addition, many had developed special areas of expertise, such as counseling, HIV, and obstetrics, where they were consulted by colleagues.
• Many respondents had sought out disadvantaged populations and were providing extraordinary care to them.

Points de repère du rédacteur
• Cette enquête examinait les champs de pratique des diplômés récents du programme de médecine familiale de Colombie Britannique qui pratiquaient en milieu urbain.
• Contrairement à l’opinion courante, la plupart offraient une large variété de soins, incluant une pratique hospitalière et obstétricale.
• Plusieurs étaient en outre développé des domaines d’expertise spéciaux, tels que l’assistance socio-psychologique, le sida et l’obstétrique, pour lesquels ils étaient consultés par leurs collègues.
• De nombreux répondants avaient ciblé des milieux défavorisés, y prodiguant des soins exemplaires.