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Analytical Bulletin

Certified and Non-Certified Specialists: Understanding the Numbers

CIHI Physician Databases

2004:2

Introduction

Physician count information is available from a number of Canadian data sources, including the Canadian Institute for Health Information (CIHI), provincial and territorial ministries of health and professional licensing or certifying organizations. CIHI's Southam Medical Database is used by CIHI to publish annual physician counts broken down by medical specialty groups.¹ While reports based on other data sources may present similar total physician counts, the proportional mix of family or general practitioner physicians and specialist physicians can differ due to varying methodological approaches and/or the level of detailed information available within various data sources.

The Southam Medical Database assigns physicians to medical specialty categories based on information provided by the Royal College of Physicians and Surgeons of Canada, the Collège des médecins du Québec and the College of Family Physicians of Canada. Other data sources may contain additional data, such as international certification credentials and licensed specialty information, that allow for alternative physician classification methodologies. The purpose of this bulletin is to identify licensing regulations that facilitate the practice of specialties by physicians without, or prior to, specialty certification within Canada. It also presents results from a variety of data sources in order to quantify and better understand the differences.

¹ CIHI's most recent physician counts are published in CIHI's recent report, *Supply, Distribution and Migration of Canadian Physicians, 2003*.

Data Sources

Southam Medical Database (SMDB), CIHI: CIHI receives an annual data file from the Business Information Group to maintain the SMDB. The Business Information Group gathers physician information to generate products such as the Canadian Medical Directory. Links to SMDB reports, as well as a detailed description of database data elements, are available on-line at CIHI's Web site (www.cihi.ca).

Provincial and territorial data sources: Provincial and territorial government representatives of CIHI's Expert Group on Physician Databases were asked to provide physician count information based on data sources maintained within their respective health ministries. Information was also gathered from the on-line data sources of provincial colleges of physicians and surgeons. Provincial college of physicians and surgeons information was gathered for purposes of cross-validation and for reporting results for jurisdictions where health ministry data were not available. Results for the territories were not available at the time of publication.

Non-Certified Specialists

In the context of this analytical bulletin, the term "non-certified specialist" refers to specialist² physicians who do not (yet) possess certification credentials awarded by the Royal College of Physicians and Surgeons of Canada or the Collège des médecins du Québec, but who are considered as specialist physicians within their jurisdictions. The term "non-certified specialist" has been adopted from the *2003 Registrar's Report to the Medical Board* (Newfoundland and Labrador). Non-certified specialist physicians may, indeed, possess specialty certification credentials awarded outside of Canada. In such cases, the term "non-certified specialist" may convey an ambiguous meaning. Nevertheless, the term is presently in use and did not present difficulties in gathering information from provincial data sources for this report.

Licence Regulations and Non-Certified Specialists

A review of licence requirements, as set out by provincial licensing authorities, indicates that physicians may enter practice as non-certified specialists in a variety of ways. Provincial licensing authorities typically require physicians to be licentiates of the Medical Council of Canada in order to receive a licence to practise as either a family doctor or a specialist physician. Certification by the Royal College of Physicians and Surgeons of Canada is commonly listed as an additional requirement to be licensed as a specialist physician.

² In the context of this report, the terms "specialist" and "specialist physician" are used to identify physicians who are not family or general practitioners and who engage in focused areas of clinical practice. It is acknowledged, however, that from a broader perspective family doctors may be described as "family medicine specialists."

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Provincial licensing authorities also identify alternative routes to enter practice as a specialist physician. While a comprehensive review of jurisdictional licensing requirements is beyond the scope of this brief analytical bulletin, the following brief descriptions highlight key text given in on-line regulations. These excerpts provide a sense of the various avenues to non-certified specialist practice in Canada.

- The College of Physicians and Surgeons of British Columbia offers temporary registration to physicians who are “a) graduates in medicine from a university or medical school approved by Council; b) have postgraduate training appropriate for the practice and approved by Council; and c) have success on examinations acceptable to Council.” (<http://www.cpsbc.ca/physician/registration.htm>)
- With respect to postgraduate education, the College of Physicians and Surgeons of Alberta recognizes “Canadian-equivalent specialty training (as determined by the registrar or, if specialist recognition is required, by the Council).” (www.cpsa.ab.ca/physicianregistration/registration_part2.asp)
- Saskatchewan offers provisional licences to physicians who have specialist qualifications and who are certification-eligible with the Royal College of Physicians and Surgeons of Canada. Such physicians are required to “make a commitment to remain in a named Saskatchewan community for 3 years [and] . . . must obtain Royal College certification within the period of Royal College certification-eligibility (usually 3 years).” (<http://www.quadrant.net/cpss/registration.html>)
- In their description of postgraduate educational requirements for conditional registration, the College of Physicians and Surgeons of Manitoba recognizes specialty training where “the length of training is of equal duration to that required by the Royal College of Physicians & Surgeons of Canada, which would entitle the physician to obtain a licence limited to the specialty training field.” (<http://www.umanitoba.ca/colleges/cps/Registration/condreg.html>)
- Ontario’s Registration Through Practice Assessment program “allows the applicant who is not certified as a specialist by one of Canada’s national colleges to gain access to registration through an evaluation of his or her clinical and practice skills.” (http://www.cpsso.on.ca/Info_physicians/applicants/regist.htm)
- The College of Physicians and Surgeons of New Brunswick reviews physicians’ specialty training in issuing public service licences. A physician may be licensed for specialty practice when “evidence of such specialty training and certification as would in the College’s opinion, adequately prepare the applicant for the intended practice situation.” (<http://www.cpsnb.org/english/Regulations/regulation-6.html>)

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- The College of Physicians and Surgeons of Nova Scotia recognizes specialty certification credentials if a physician: “(i) is certified [registered] as a specialist by the medical licensing authority in the country where his/her specialist training was obtained, and (ii) has been in continuous specialty medical practice or training for at least the previous three years with no interruption for more than one year, and (iii) has completed at least the same number of years of structured, recognized post-graduate specialty training as is required to be certified in that specialty by the Royal College of Physicians and Surgeons of Canada and that is acceptable to the Credentials Committee of the College.” (www.cpsns.ns.ca/frm_set.html)
- The Newfoundland Medical Board issues provisional licences “for entry into sponsored practice in a specialty of medicine.” Eligible physicians include those “who have graduated in medicine from an approved faculty or school of medicine and who have completed a minimum of four years of postgraduate training in the speciality in Canada, the United States of America, the United Kingdom, the Republic of Ireland, Australia, New Zealand or the Republic of South Africa.” (www.nmb.ca/Registration.asp)

SMDB Medical Specialty Classification

At present, CIHI’s Southam Medical Database does not contain specialty information for non-certified specialists. It is also not possible to identify individual non-certified specialist physicians within the SMDB. Medical specialty classification within the SMDB is based on postgraduate certification credentials achieved within Canada. Physicians with certification in family medicine granted by the College of Family Physicians of Canada (CCFP and CCFP-Emergency Medicine) are counted within the SMDB’s family/general practitioner category. SMDB specialist physician counts include physicians who have been granted specialty certification by the Royal College of Physicians and Surgeons of Canada or the Collège des médecins du Québec. All other physicians, including general practitioners not certified by the College of Family Physicians of Canada, foreign-certified specialists and other non-certified specialists, are included in the SMDB’s family/general practitioner counts.

Physician Specialty Distribution

The review of provincial licensing regulations raises a number of questions. For example, what proportion of Canada’s physician workforce is made up of non-certified specialists? How does the SMDB’s distribution of physicians across medical specialty groups differ from distributions based on data sources that assign non-certified specialists to categories other than family/general practice? If there is disagreement between data sources, is the level of disagreement similar across all jurisdictions? Provincial data sources were consulted to provide answers to these questions.

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Table 1 provides estimates of the proportions of physicians who are family/general practitioners versus specialist physicians. Two sets of results are presented, one based on CIHI's Southam Medical Database and the other based on provincial data sources. The proportional distribution of physicians across family/general practitioner and specialist physician groups is presented for both data sources. Percentages of certified and non-certified specialists are given for provinces where data were available at the time of publication. The percentages of certified and non-certified specialists presented in the Table 1 total column are based on provinces for which data were available.

An estimated 1.7% of Canadian physicians are non-certified specialists (see Table 1). The percentage varies across jurisdictions. For example, 13.7% of Newfoundland and Labrador's total physician workforce is comprised of non-certified specialists, compared to 0.4% of Ontario's total physician workforce.

For the 10 provinces combined, a similar distribution of physicians across generalist and specialist physician groups is reported by the SMDB and provincial data sources. The SMDB's estimated proportion of all physicians who are specialist physicians is 1.4 percentage points lower than for all 10 provinces, based on provincial data sources ($48.2 - 49.6 = -1.4$ percentage points—see Table 1). The absolute differences between SMDB and provincial data source estimates are relatively small for Nova Scotia, Quebec, Ontario, Manitoba, Alberta and British Columbia. For all of these provinces, the percentage estimates for specialist physicians, based on SMDB and provincial data sources, are within four percentage points of each other.

The differences between data source estimates are comparatively larger in Newfoundland and Labrador, Prince Edward Island, New Brunswick and Saskatchewan. The SMDB's estimate of the proportion of total physicians who are specialist physicians is lower within each of these jurisdictions (a 14.0, 15.7, 11.8 and 7.8 percentage point difference, respectively). It is also true that the SMDB's proportional estimates of family/general practitioners are higher in these jurisdictions. SMDB results suggest that over 60% of physicians in Newfoundland and Labrador, Prince Edward Island, New Brunswick and Saskatchewan are family/general practitioners. This is compared to an SMDB estimate of 51.8% for all 10 provinces combined.

Table 1. Family/General Practitioners and Specialist Physicians as a Percentage of Total Physicians, by Province, Southam Medical Database and Provincial Data Sources, 2003

Southam Medical Database ¹											
	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total
Family/General Practitioners ²	63.1%	62.1%	53.6%	60.3%	50.5%	48.6%	52.1%	62.3%	54.3%	55.5%	51.8%
Specialists ³	36.9%	37.9%	46.4%	39.7%	49.5%	51.4%	47.9%	37.7%	45.7%	44.5%	48.2%
Provincial Data Sources											
	N.L. ⁴	P.E.I. ^{5, 6}	N.S. ^{5, 7}	N.B. ⁵	Que. ⁸	Ont. ⁵	Man. ⁹	Sask. ⁵	Alta. ¹⁰	B.C. ¹¹	Total
Family/General Practitioners	49.1%	46.4%	50.2%	48.5%	49.1%	48.9%	52.8%	54.5%	50.8%	56.7%	50.4%
Specialists	50.9%	53.6%	49.8%	51.5%	50.9%	51.1%	47.2%	45.5%	49.2%	43.3%	49.6%
Certified Specialists	37.2%	44.5%	46.4%	48.6%	NA	50.6%	NA	35.0%	NA	NA	47.9%
Non-Certified Specialists	13.7%	9.1%	3.4%	2.9%	NA	0.4%	NA	10.5%	NA	NA	1.7%

- 1) Southam Medical Database, CIHI. Results are based on physician counts in December 2003.
- 2) Include family/general practitioners and non-certified specialists.
- 3) Include certificants of the Royal College of Physicians and Surgeons of Canada and/or the Collège des médecins du Québec.
- 4) *2003 Registrar's Report to the Medical Board*, Registrar, Newfoundland Medical Board. Results are based on physician counts in June 2003.
- 5) Based on data provided by provincial and territorial ministry of health representatives of CIHI's Expert Group on Physician Databases. Results are based on physician counts in December 2003.
- 6) Provincial data source results for P.E.I. are based on full-time equivalent physician counts.
- 7) Non-certified specialist data for Nova Scotia reflect physicians' functional specialties. A physician's functional specialty is the self-reported specialty of the physician and/or the specialty reported by district health authorities. Functional specialty may also be determined by the department of health, where the physician's specialty corresponds to the area of practice that accounts for the majority of his or her time.
- 8) Collège des médecins du Québec, <http://www.cmq.org/Pages/sections/medAujou/profStat.html#769> (accessed July 2004). Results are based on physician counts in December 2003.
- 9) College of Physicians and Surgeons of Manitoba, http://www.umanitoba.ca/colleges/cps/Directory/index_directory.html (accessed July 2004). Results are based on physicians listed in the on-line medical directory. Only physicians with a registration number who had an address in Manitoba are included.
- 10) College of Physicians and Surgeons of Alberta, http://www.cpsa.ab.ca/physicianregistration/physician_statistics.asp (accessed July 2004). Results are based on physician counts in December 2003.
- 11) *MSP Information Resource Manual Fee-for-Service Payment Statistics, 2002/2003*, British Columbia Ministry of Health Services; (MSP: Medical Service Plan). <http://www.healthservices.gov.bc.ca/msp/paystats/index.html> (accessed July 2004). Only fee-for-service physicians registered with the MSP and who were paid > \$0.00 by the MSP in 2002/2003 are included. Specialty assignment is based on "most recent specialty."

Notes: NA = data not available from provincial/territorial data sources at the time of publication. Province-specific specialty exclusion and grouping criteria were applied to SMDB data to improve comparability with data provided by provincial data sources. Rounding may produce sub-group percentages that do not add to 100%.

Summary

The results shown in Table 1 illustrate how different pictures of physician supply can emerge from reports based on different data sources. The differences presented here are greater in some regions than in others. Unfortunately, it is not possible at the present time to reconcile these differences at the level of the individual physician record.

However, the results given in this brief report may serve to improve data interpretation and also suggest ways of adjusting aggregate level results. For example, analysts may consider using the provincial non-certified specialist results shown in Table 1 to subtract a defined percentage from SMDB family/general practitioner counts and add the same percentage to specialist counts. This approach may be appropriate for adjusting physician count data at the broad medical specialty level (that is, family/general practitioners versus specialist physicians). However, similar data adjustments carried out at the detailed medical specialty level could lead to incorrect physician counts and unwanted error.

Given the data source variations shown in Table 1, it is critically important for reporting agencies to clearly state how physician specialty designations are made within their underlying data sources. As noted previously, physicians within the Southam Medical Database are assigned to medical specialty groups based on certification awarded by the Royal College of Physicians and Surgeons of Canada or the Collège des médecins du Québec. The SMDB identifies physicians who have been granted certification by the College of Family Physicians of Canada and all other physicians, including non-certified specialists, as family/general practitioners.

A review of current licensing regulations shows that physicians can be licensed to practise as non-certified specialists across Canada. Such licensing regulations recognize physicians' training and experience, while providing the flexibility needed to meet physician resource demands. The growing demand for physician services, coupled with ongoing efforts to prepare international medical graduates for practice in Canada, may heighten the need to gather and report data on non-certified specialists. To this end, CIHI will continue its work to enhance physician specialty information.

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