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LANGUAGE, DETERMINANT OF HEALTH STATUS AND OF SERVICES' QUALITY

Knowledge and Use of the English Language by Healthcare and Social Services Professionals in Québec



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Introduction

In Canada, everyone has the right to receive health and social services in the language of their choice—English or French (Official Languages Act, 1985). In Québec, health and social services legislation affirms English speakers' right to receive health and social services in English.

From this perspective, it will be instructive to analyze whether healthcare providers communicate in the minority official language, i.e., English in Québec. Using the 2001 and 2006 censuses, Statistics Canada drew a picture of official-language knowledge among healthcare professionals, and we have examined that data to assess the situation in Québec. The province was divided into five (5) geographic regions¹ that can be linked to Québec's health and social services regions.

A number of linguistic variables are available from the census, including native language, language spoken at home, knowledge of official languages, and the derived "first official language spoken" (FOLS) variable². This last variable is used to estimate the minority official-language population and is also used by Statistics Canada to determine whether healthcare professionals belong to the English-speaking minority. Statistics Canada also derives information from the census on their use of the English language as well as their knowledge of the language as declared in the census, i.e., the ability to conduct a conversation.

The selected professions are general practitioners, nursing staff, psychologists and social workers, and other healthcare professionals. Their population numbers were obtained from the Canadian Institute for Health Information (CIHI) by Statistics Canada.

Since this is an analysis where population sub-groups (family doctors, nursing staff, etc.) are crossed with language variables (minority official language, language spoken at work, etc.) and observed on a regional scale, we are often faced with low population numbers. Results based on small numbers must, of course, be interpreted carefully. In addition, statistical tests were conducted to verify whether there is a significant gap between the various percentages (p \leq 0.05). The Statistics Canada document explains the methodology used to make this calculation.

Since it is difficult to assess real linguistic abilities other than through self-declaration, we will present the indicator of minority language (English) knowledge, but we must remain cautious as to the conclusions that can be drawn in connection with access to services in English

General Practitioners

According to 2006 census data, 15.3% of general practitioners in Québec declared English as their first official language spoken (FOLS), whether it was their native language or the first language spoken after their native language; we can therefore assume that these doctors have excellent English-language communication skills. This percentage is slightly higher than that of the entire English FOLS population of Québec (13.4%).

The percentages observed in the Montréal region heavily influence the province's overall result, while 26.1% of Montréal doctors are English speaking according to the FOLS variable, compared to 22.3% of the general population.

For other regions of Québec, we see the opposite situation where a larger percentage of the general population declared English as their FOLS, as compared to doctors. It should be noted that, according to statistical tests conducted by Statistics Canada, none of these differences is significant, (Graph 1).

Note that the same geography was used in Statistics Canada's Survey on the Vitality of Official-Language Minorities. See appendix map.

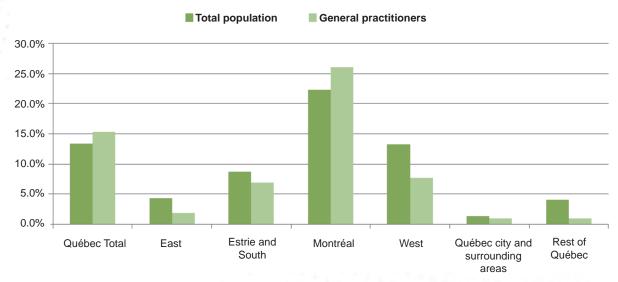
First official language spoken (FOLS) is derived from knowledge of the two official languages, the native language, and the language spoken at home. This information is taken from the long census questionnaire (one respondent in five). Everyone counted is classified as either French or English speaking, except a small percentage that can be classified as speaking both French and English, or as speaking neither.

In addition, if we consider the percentage of doctors who say they use English at work "most often" or "regularly," the data leads us to believe it is not difficult to find doctors who use English frequently in their medical practice in the regions of Montréal, Estrie and the south, and western Québec. The regions of Québec City (which includes Chaudière-Appalaches and Saguenay), eastern Québec, and rest of Québec show much lower percentages with, respectively, 15%, 27%, and 29% of doctors saying they use English most often

or regularly at work. These percentages are largely higher than those of the English FOLS population, regardless of region, (Graph 2).

In addition, over 85% of general practitioners in Québec stated they are able to conduct a conversation in English and these percentages are high regardless of region of residence, (Table 1).

Graph 1 Percentage of general practitioners and the total population whose first official language spoken (FOLS) is English, based on region of residence, Québec, 2006



Graph 2 Percentage of general practitioners stating they use English most often or regularly at work and percentage of the population whose FOLS is English, based on region of residence, Québec, 2006

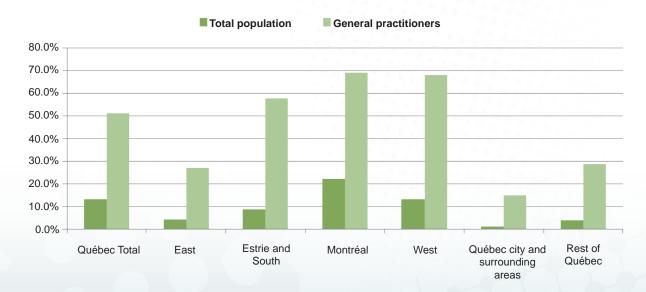


Table 1 General practitioners and family doctors

	Total minority official-language population	Total doctors*	docto first langua	ntage of rs whose official ge spoken inglish	docto Engli:	ntage of ors using sh most at work	Percentage of doctors using English most often or regularly at work	Percentage of doctors who know English
Québec total	994 720 (13.4%)	10 540	15.3%	(1 610)	14.6%	(1 535)	51.2% (5 395)	85.6% (9 025)
East	16 430 (4.3%)	520	1.9%	(10)	0%		26.9% (140)	78.8% (410)
Estrie and South	51 210 (8.7%)	855	6.9%	(59)	2.9%	(25)	57.9% (495)	89.5% (765)
Montréal	800 600 (22.3%)	5 525	26.1%	(1 440)	25.5%	(1 410)	69.2% (3 825)	89.6% (94 950)
West	64 075 (13.3%)	455	7.7%	(35)	4.4%	(20)	68.1% (310)	95.6% (435)
Québec City and surrounding areas	17 375 (1.3%)	2 155	0.9%	(20)	1.2%	(25)	15.1% (325)	76.3% (1 645)
Rest of Québec	45 030 (4.1%)	1 040	5.3%	(55)	5.8%	(60)	28.8% (300)	78.8% (820)

Source: Explanatory Table 2.1, page 23.

Figures in green indicate that the percentage is significantly **lower** than that in the total population.

Figures in blue indicate that the percentage is significantly **higher** than that in the total population.

Nursing Staff

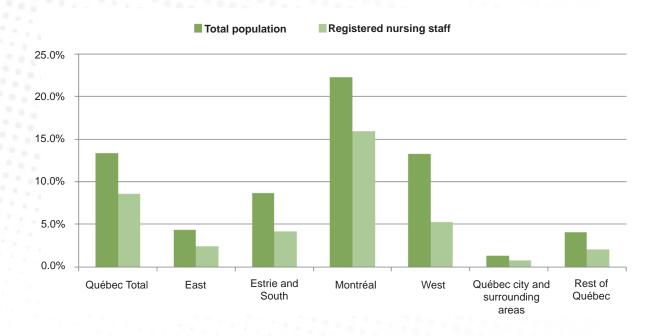
According to 2006 census data, 8.6% of nursing staff in Québec declared English to be their first official language spoken (FOLS). This percentage is lower than that observed for the entire population of Québec (13.4%). This situation is repeated in all regions of Québec, including the Montréal region, and is particularly pronounced in western Québec (Outaouais and Abitibi) where only 5.2% of nursing staff's FOLS is English, compared to 13.3% for the population of this region. It should be noted that the differences observed are statistically significant for all regions except Québec City and surrounding areas, (Graph 3).

The percentage of nursing staff who say they use English "most often" or "regularly" at work ranges from 8.5% for the Québec City region to 55% for the Montréal region. The regions of Montréal, Estrie, and western Québec therefore have the highest percentages of nursing staff who use English regularly at work, (Graph 4).

With regard to English knowledge, one nurse in four in eastern Québec, the Québec City region, and the rest of Québec states having such knowledge and the percentages climb to nearly 50% and above for the other regions, (Table 2).

^{*} Figures from the Canadian Institute for Health Information and Statistics Canada.

Graph 3 Percentage of nursing staff and the total population whose first official language spoken (FOLS) is English, based on region of residence, Québec, 2006



Graph 4 Percentage of nursing staff stating they use English most often or regularly at work and percentage of the population whose FOLS is English, based on region of residence, Québec, 2006

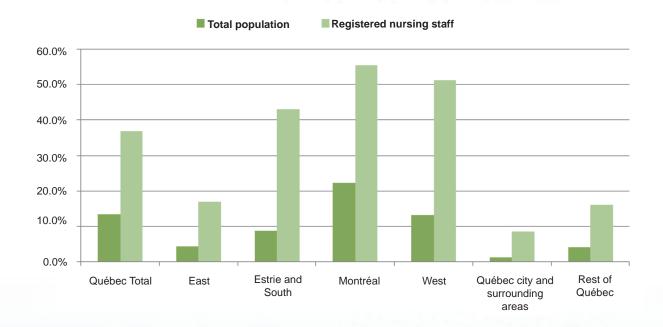


Table 2 Nursing staff (excluding assistants and aides)

	Total minority official-language population	Total nursing staff*	Percentage of nursing staff whose first official language spoken is English		Percentage of nursing staff using English most often at work		Percentage of nursing staff using English most often or regularly at work		Percentage of nursing staff who know English	
Québec total	994 720 (13.4%)	61 320	8.6% (5 275)	12.67%	(7 795)	36.9%	(22 655)	44.9% (27 535)
East	16 430 (4.3%)	3 765	2.4% (90)	3.2%	(120)	17.0%	(640)	23.8% ((895)
Estrie and South	51 210 (8.7%)	4 495	4.1% (185)	4.9%	(220)	43.2%	(1 940)	46.5% (2 090)
Montréal	800 600 (22.3%)	28 685	16.0% (4	4 580)	23.7%	(6 785)	55.5%	(15 915)	60.2% ((17 275)
West	64 075 (13.3%)	3 255	5.2% (170)	7.7%	(250)	51.3%	(1 670)	51.9% (1 690)
Québec City and surrounding areas	17 375 (1.3%)	13 420	0.8% (105)	0.6%	(85)	8.5%	(1 145)	25.3% ((3 390)
Rest of Québec	45 030 (4.1%)	7 700	2.0% (155)	4.3%	(330)	16.2%	(1 245)	28.4% (2 190)

Source: Explanatory Table 2.2, page 23.

Figures in blue indicate that the percentage is significantly **higher** than that in the total population.

Psychologists and Social Workers

According to 2006 census data, 10.7% of psychologists and social workers³ in Québec declared English to be their first official language spoken (FOLS). This percentage is significantly lower than that observed for the entire population of Québec (13.4%).

The percentage of English-speaking psychologists and social workers based on FOLS does not seem to have a strong correlation with the percentage of English speakers in the same region. However psychologists and social workers in Québec are less likely than the general population to have English as their first official language spoken. Additionally, the regions with the highest percentages of English as the FOLS—Montréal, the west, and Estrie and the south—all show significantly lower percentages of English-speaking psychologists and social workers, (Graph 5).

We can see that in Québec overall, around 30% of psychologists and social workers say they use English most often or regularly at work. The percentages by region range from 5.1% in the Québec City region to 44% in the Montréal region, (Graph 6).

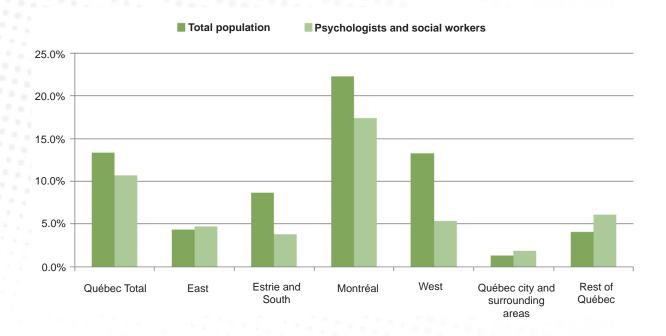
With regard to English knowledge among psychologists and social workers, the lowest percentage (35%) can be seen in the east while Montréal shows the highest percentage (68%), (Table 3).

^{*} Figures from the Canadian Institute for Health Information and Statistics Canada.

Figures in green indicate that the percentage is significantly **lower** than that in the total population.

³ Psychologists and social workers were put in a single category by Statistics Canada for purposes of uniformity across the country.

Graph 5 Percentage of psychologists and social workers and the total population whose first official language spoken is English, based on region of residence, Québec, 2006



Graph 6 Percentage of psychologists and social workers stating they use English most often or regularly at work and percentage of the population whose FOLS is English, based on region of residence, Québec, 2006

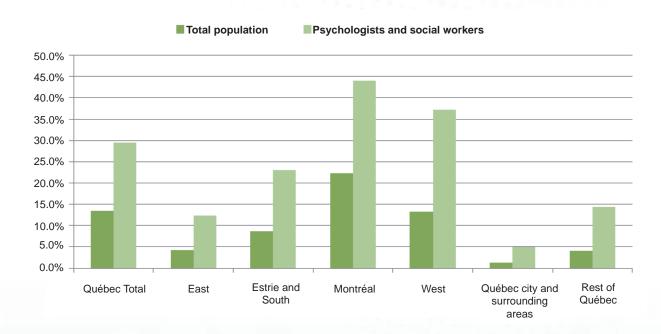


Table 3 Psychologists and social workers

	official-	minority language ulation	Total psychologists and social workers*	psycho socia whose langua	entage of logists and I workers first official ge spoken English	Percentage of psychologists and social workers using English most often at work		Percentage of psychologists and social workers using English most often or regularly at work	Percentage of psychologists and social workers who know English	
Québec total	994 720	(13.4%)	18 230	10.7%	(1 950)	11.3%	(2 065)	29.4% (5 365)	55.5%	(10 125)
East	16 430	(4.3%)	845	4.7%	(40)	2.4%	(20)	12.4% (105)	34.9%	(295)
Estrie and South	51 210	(8.7%)	1 195	3.8%	(45)	4.6%	(55)	23.0% (275)	53.1%	(635)
Montréal	800 600	(22.3%)	9 330	17.4%	(1 625)	18.9%	(1 760)	44.0% (4 105)	68.0%	(6 340)
West	64 075	(13.3%)	1 115	5.4%	(60)	7.2%	(80)	37.2 % (415)	59.2%	(660)
Québec City and surrounding areas	17 375	(1.3%)	3 860	1.8%	(70)	1.3%	(50)	5.1% (195)	36.4%	(1 405)
Rest of Québec	45 030	(4.1%)	1 880	6.1%	(115)	5.3%	(100)	14.4% (270)	41.5%	(780)

Source: Explanatory Table 2.3.

Figures in green indicate that the percentage is significantly lower than that in the total population.

 $Figures \ in \ blue \ indicate \ that \ the \ percentage \ is \ significantly \ \textbf{higher} \ than \ that \ in \ the \ total \ population.$

Other Healthcare Professionals

In its document, Statistics Canada emphasizes that this is a bit of a catchall category since it also includes veterinarians and animal health technologists. Despite this limitation, most professionals considered in this category treat humans and it is important to know more about their English proficiency.

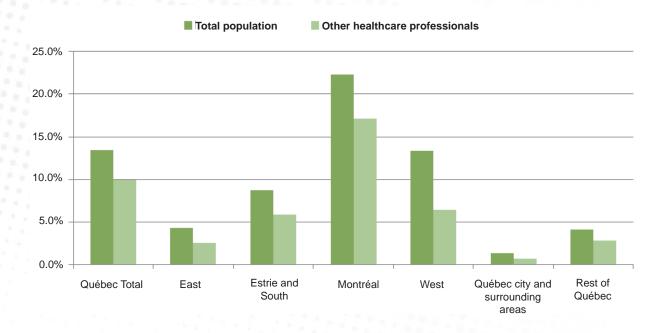
According to 2006 census data, 9.9% of other healthcare professionals in Québec have English as their first official language spoken (FOLS), which is lower than the overall percentage for Québec (13.4%). This trend can be seen in all regions, (Graph 7).

Over one-third of other healthcare professionals say they speak English "most often" or "regularly" at work. These percentages vary greatly from region to region. In Québec City and surrounding areas, only 8% of other healthcare professionals say they use English at work, but this figure climbs to 52% in the Montréal region, (Graph 8).

With regard to English knowledge among other healthcare professionals, the east, Québec City and surrounding areas, and the rest of Québec show somewhat low percentages, ranging from 26% to 33%, while the other regions show percentages that are nearly twice as high, (Table 4).

^{*} Figures from the Canadian Institute for Health Information and Statistics Canada.

Graph 7 Percentage of other healthcare professionals and the total population whose first official language spoken (FOLS) is English, based on region, Québec, 2006



Graph 8 Percentage of other healthcare professional stating they use English most often or regularly at work and percentage of the population whose FOLS is English, based on region of residence, Québec, 2006

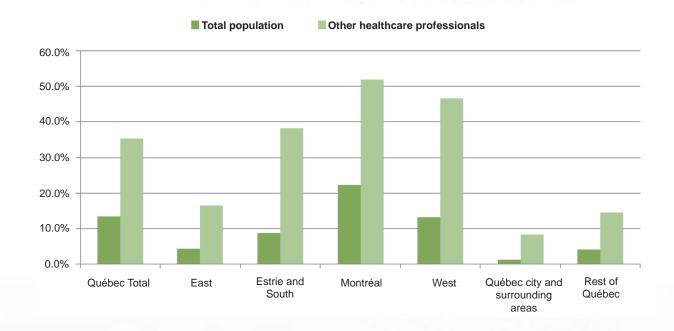


Table 4 Other healthcare professionals

	Total minority official-language population	Total healthcare professionals	Percentage of healthcare professionals whose first official language spoken is English	Percentage of healthcare professionals using English most often at work	Percentage of healthcare professionals using English most often or regularly at work	Percentage of healthcare professionals who know English
Québec total	994 720 (13.4%)	167 940	9.9% (16 635)	11.7% (19 630)	35.4% (59 530)	49.5% (83 135)
East	16 430 (4.3%)	8 595	2.6% (220)	1.6% (140)	16.5% (1 420)	26.3% (2 260)
Estrie and South	51 210 (8.7%)	12 880	5.9% (755)	6.3% (815)	38.3 % (4 935)	49.7% (6 400)
Montréal	800 600 (22.3%)	83 260	17.1% (14 240)	20.7% (17 260)	52.0 % (43 285)	62.9% (52 350)
West	64 075 (13.3%)	8 385	6.4% (540)	7.7% (645)	46.7 % (3 915)	56.6% (4 745)
Québec City and surrounding areas	17 375 (1.3%)	32 355	0.7% (235)	0.8% (275)	8.3 % (2 695)	30.8% (9 950)
Rest of Québec	45 030 (4.1%)	22 460	2.8% (640)	2.2% (495)	14.6% (3 280)	33.1% (7 425)

Source: Explanatory Table 2.4.

Figures in green indicate that the percentage is significantly **lower** than that in the total population.

Figures in blue indicate that the percentage is significantly **higher** than that in the total population.

Change in the Number of Healthcare Professionals Using English at Work

Data from the 2001 and 2006 censuses allow us to track changes in the use of English at work among healthcare professionals.

There was a relative drop in the percentage of healthcare professionals, all professions combined, who used English most often in their work (13.3% in 2001 vs. 12.0% in 2006). However, given the rise in the number of healthcare professionals, those working most often in English increased 4.4%, mainly attributable to the Montréal region, which saw a 5.2% increase. The "rest of Québec" region also saw a 13.2% absolute increase of those working most often in English, while the "East" and "Estrie and South" regions experienced 23.3% and 14.2% decreases, (Graph 9).

The percentage of professionals using English most often or regularly is higher in 2006 than in 2001, except for the "Estrie and south" region where there is a slight regression.

In addition, the absolute number of healthcare professionals who use English most often or regularly in their work increased 20% on average from 2001 to 2006 for all Québec. This rise was especially pronounced in western Québec, Québec City and surrounding areas, and the rest of Québec.

We have few statistics on the total number of healthcare professionals who were active in 2006 in Québec. The only statistic we found shows an absolute increase of 4.2% in the number of general practitioners and 11.2% in the number of nurses⁴ (St-Pierre and Labbé). On the other hand, Statistics Canada indicates 7.8% more doctors 17.5% more nurses speaking English most often or regularly at work; this rise is therefore higher than the absolute increase in professional staff, indicating an improvement in the number of these professionals working in English most often, (Table 5).

Info-SÉRHUM, Bulletin d'information concernant les ressources humaines et institutionnelles du système sociosanitaire québécois [newsletter about human and institutional resources within Québec's health and social services system]. Direction générale adjointe aux ententes de gestion, Direction de la gestion intégrée de l'information, Service du développement de l'information, MSSS, June 2010.

Graph 9 Percentage of healthcare professionals stating they use English most often or regularly at work, based on region of residence, 2001 and 2006

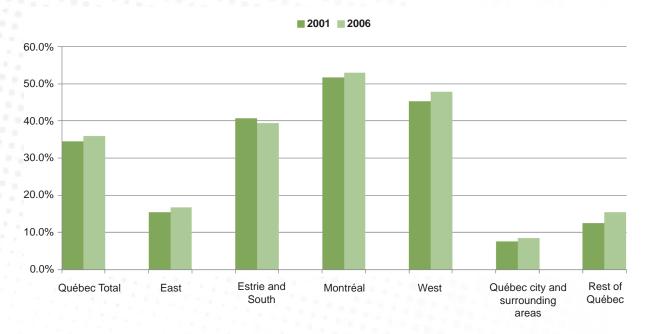


Table 5 Number of healthcare professionals using English most often or regularly at work, based on profession, and change from 2001 to 2006

	2001	2006	Change in number of professionals as a %
Doctors	5 005	5 395	7.8
Nurses	19 190	22 555	17.5
Psychologists and social workers	5 110	5 365	5.0
Other healthcare professionals	48 135	59 530	23.7

Source: Explanatory Table 3.6, page 46.

The change in the number of professionals is statistically significant (p < 0.05) from 2001 to 2006.

Language Used in Interactions with Healthcare Professionals

According to the picture of the English-speaking minority drawn by Statistics Canada, 60% to 80% of English speakers in Québec use English with their doctor, except in the Québec City region where this percentage drops to 20%. With regard to nursing staff, 37% to 58% of English speakers communicate with them in English, except in the Québec City region where this percentage drops to 11%. Similar percentages are seen for interactions with other healthcare professionals.

The Québec City region consistently shows the lowest percentages. Nevertheless, according to the Statistics Canada publication, it is also the region where three in ten English speakers say they are more comfortable in French than in English.

Corbeil concludes that "the proportion of health care professionals who can conduct a conversation in English and, to a lesser extent, the proportion of those who use that language at least on a regular basis at work, is much higher than the relative share of Anglophones (13.4%) in Québec" (page 55).

Conclusion

Statistics Canada's decision to use the first official language spoken (FOLS) as a linguistic measurement is subject to criticism since, as we discuss in other parts of the project led by INSPQ, this does not mean there is adequate English-language proficiency, among patients or providers, to ensure the quality of communication required for the best health service. We can believe that healthcare professionals who are from the English native language community or who have adopted English as their first official language are, in theory, capable of providing services to English speakers who request it.

For Québec overall, the percentage of doctors whose FOLS is English is higher than that of the general population, which indicates there isn't a real linguistic disadvantage in this field, except perhaps geographic.

The percentage of nursing staff whose FOLS is English is, however, clearly lower than that of the general English-speaking population. The same can be said of psychologists and social workers and other healthcare professionals.

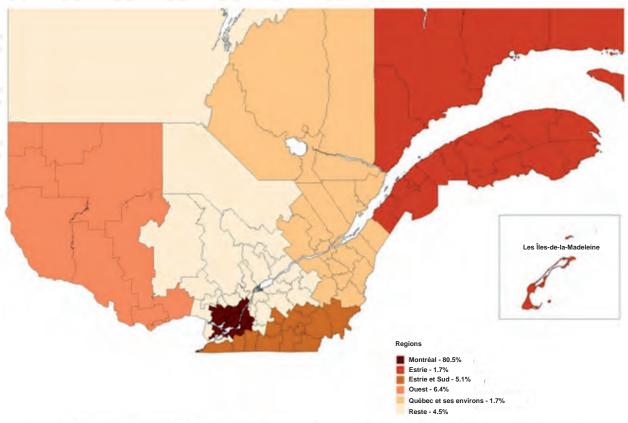
On the other hand, the ability of all these professionals to communicate in English, as measured by the use of English most often or regularly at work, is higher everywhere than the percentage of individuals whose FOLS is English. This phenomenon is even more pronounced in the three regions with a higher concentration of English speakers: Montréal, the West, and Estrie and South.

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Appendix 1

Figure 1 Geographic divisions used by Statistics Canada



Source: Statistica Canada, Population Census, 2006.

 $Source: Map\ taken\ from\ Health\ Care\ Professionals\ and\ Official-Language\ Minorities\ in\ Canada,\ 2001\ and\ 2006.$

EAST (corresponds to the 11, 09, and 01 health and social service regions with the same names)

Gaspésie—Îles-de-la-Madeleine: Les Îles-de-la-Madeleine (2401), Le Rocher-Percé (2402), La Côte-de-Gaspé (2403), La Haute-Gaspésie (2404), Bonaventure (2405), and Avignon (2406)

Côte-Nord: La Haute-Côte-Nord (2495), Manicouagan (2496), Sept-Rivières-Caniapiscau (2497), and Minganie-Basse-Côte-Nord (2498)

Bas-Saint-Laurent: La Matapédia (2407), Matane (2408), La Mitis (2409), Rimouski-Neigette (2410), Les Basques (2411), Rivière-du-Loup (2412), Témiscouata (2413), and Kamouraska (2414) **ESTRIE AND SOUTHERN QUÉBEC** (corresponds to the Estrie [05] health and social service region and to part of the Montérégie [16] region)

Estrie: Le Granit (2430), Asbestos (2440), Le Haut-Saint-François (2441), Le Val-Saint-François (2442), La Région-Sherbrookoise (2443), Coaticook (2444), and Memphrémagog (2445)

Southern Québec (part of Montérégie): Brome-Missisquoi (2446), La Haute-Yamaska (2447), Acton (2448), Le Haut-Richelieu (2456), Les Jardins-de-Napierville (2468), and Haut-Saint-Laurent (2469)

MONTRÉAL (corresponds to the Montréal [06] and Laval [13] health and social service regions and to part of the Montérégie [16], Laurentides [15], and Lanaudière [14] regions)

Greater Montréal region (CMA: 462)

QUÉBEC CITY AND SURROUNDING AREAS (corresponds to the 03, 12, and 02 health and social service regions with the same names)

Capitale-Nationale: Charlevoix-Est (2415), Charlevoix (2416), L'Île-d'Orléans (2420), La Côte-de-Beaupré (2421), La Jacques-Cartier (2422), Communauté-Urbaine-de-Québec (2423), and Portneuf (2434)

Chaudière-Appalaches: L'Islet (2417), Montmagny (2418), Bellechasse (2419), Desjardins (2424), Les Chutes-de-la-Chaudière (2425), La Nouvelle-Beauce (2426), Robert-Cliche (2427), Les Etchemins (2428), Beauce-Sartigan (2429), L'Amiante (2431), and Lotbinière (2433)

Saguenay–Lac-Saint-Jean: Le Domaine-du-Roy (2491), Maria-Chapdelaine (2492), Lac-Saint-Jean-Est (2493), Le Fjord-du-Saguenay (2493) **WEST** (corresponds to the 07 and 08 health and social service regions with the same names)

Outaouais: Papineau (2480), CUO (2481), Les Collines-del'Outaouais (2482), La Vallée-de-la-Gatineau (2483), and Pontiac (2484)

Abitibi-Témiscamingue: Témiscamingue (2485), Rouyn-Noranda (2486), Abitibi-Ouest (2487), Abitibi (2488), and Vallée-de-l'Or (2489)

REST OF QUÉBEC (this last region is not very precise in the Statistics Canada document. It approximately corresponds to the regions of Mauricie and Centre-du-Québec [04], Nord-du-Québec [10], Nunavik [17], Terres-Cries-de-la-Baie-James [18], and part of the Lanaudière [14] and Laurentides [15] regions)

All other CDs and partial CDs that are not part of the Montréal CMA.







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