### Use of health services by people with diabetes in Montréal, 2003-2004

#### Abstract

The main goal of this report is to allow health administration and clinical decision-makers in Montréal be more aware of health services utilisation by diabetics in their territories. The report on diabetes is part of the "Monitorage interprétatif" project conducted by the Équipe Santé des populations et services de santé (ESPSS), a joint team of the Montréal Public Health Department and the Institut national de santé publique du Québec. It is the first in a series of reports that will be produced on the utilisation of services by Montrealers with chronic diseases such as chronic obstructive pulmonary diseases and heart failure.

### Prevalence of diabetes among users of health services

- In 2003-2004, the proportion of service users in Montréal who are diabetic is 5.4%.
- This rate is presented in Figure 1 by CSSS territory. Note that the rate varies from 3.7% (CSSS Jeanne-Mance) to 7.3% (CSSS St-Léonard et St-Michel).
- Over half of people with diabetes are aged 65 and over.

We have chosen not to standardise the rates for age and sex because our goal is to describe the true number of individuals with diabetes and the services they use according to territory of residence. Therefore, we find rates that differ from standardised rates presented in other documents.

### Health services utilisation<sup>1</sup>

- Many individuals with diabetes consulted physicians several times and many consulted a number of different doctors:
  - → More than 4 out of 10 people with diabetes had 10 or more visits with a general practitioner or specialists
  - Nearly 1 out of 3 saw 6 or more different general practitioners or specialists
  - 14.4% consulted 3 or more different general practitioners
  - however, 17.3% of people with diabetes did not consult a general practitioner, and 15.4% a specialist.
- Particular attention was paid to consultations with ophthalmologists since Canadian guidelines are very specific when it comes to monitoring eye health in people with diabetes. In Montréal, in 2002-2004, almost half of those with diabetes did not see an ophthalmologist.
- People with diabetes are also heavy users of in institutional services:
  - More than 1 out of 3 diabetics went to an emergency department in 2003-2004
  - More than 1 out of 4 diabetics were hospitalised.
- People with diabetes aged 65 and over are heavier users of services than non-diabetics of the same age.

<sup>&</sup>lt;sup>1</sup> Services utilisation by people with diabetes is presented in the full report of the study by CSSS territory. The report is available on the Montréal Public Health Department and the INSPQ Web sites.



# Profile of people with diabetes' use of health services

Results obtained by the 12 CSSS territories have been grouped into a Summary Table presented below, according to three categories of indicators (characteristics of the population in the territory, utilisation of ambulatory care and of institutional services). We have ranked the proportions obtained for each indicator included from 1 to 12, with 1 being the lowest value and 12 the highest. We note that in regard to the characteristics of the population of the territories, CSSS Jeanne-Mance (rank = 1) has the lowest prevalence of diabetes of the territories and the lowest proportion of people aged 65 and over, as well as a fairly high socioeconomic level. However, this CSSS is ranked 11th when it comes to utilisation of institutional services, with some of the highest proportions of visits to emergency departments and hospitalisations. We also note that the territory of CSSS Ahuntsic et Montréal-Nord presents the highest proportion of people with diabetes who consulted a general practitioner at least once (rank = 11) but the lowest who saw a specialist (rank = 1).

Data in the Summary Table enable us to categorise the CSSS territories by the health services utilisation profile of diabetics in their territories. The three categories are illustrated on the map of Montréal territories in Figure 1. They include the following profiles:

#### Profile of use of specialised ambulatory care services:

- → Territories in this group: CSSS de l'Ouest-de-l'Île, CSSS Cavendish, CSSS de la Montagne and CSSS Bordeaux-Cartierville-St-Laurent.
- → Use of ambulatory care services, especially services provided by specialists to people with diabetes in these territories is relatively high, and their use of institutional services is lower.
- → The economic status of these territories is also higher, except for CSSS Bordeaux-Cartierville – St-Laurent.

#### Profile of use of general ambulatory care services:

- → Territories in this group: CSSS Ahuntsic et Montréal-Nord, CSSS St-Léonard et St-Michel and CSSS Pointe-de-l'Île.
- → People with diabetes in these territories' use of ambulatory care services, especially the services of general practitioners, is relatively high, and their use of institutional services is rated intermediate.
- → These territories also have the highest prevalence rates of diabetes on the island.

#### • Profile of institutional services utilisation:

- → Territories in this group: CSSS Dorval-Lachine-LaSalle, CSSS Sud-Ouest-Verdun, CSSS Cœur-del'Île, CSSS Jeanne-Mance and CSSS Lucille-Teasdale.
- → People with diabetes in these territories' use of institutional services is relatively high, and their use of ambulatory care is lower.
- → The proportion of the population aged 65 and over is relatively lower in three of these five territories, that is, CSSS Jeanne-Mance, CSSS Cœur-de-l'Île and CSSS Sud-Ouest-Verdun.

## Summary Table: Ranking of CSSS territories, according to the characteristics of their population and diabetics' use of ambulatory care and institutional services in Montréal, 2003-2004

	Regional value	Range	Ranking of CSSS territories											
			Ouest-de- l'Île	Lasalle	Sud-Ouest	Cavendish	Montagne	Bordeaux	Ahuntsic	Coeur-de- l'Île	Jeanne- Mance	St-Léonard	Lucille- Teasdale	Pointe-de- l'Île
Characteristics of the population of CSSS territories*														
Prevalence of diabetes	5.4	3.7 - 7.3	4	9	7	6	2	8	10	3	1	12	5	11
Population aged 65 years and over (%)	19.1	12.3 – 23.3	3	8	4	12	5	11	10	2	1	9	7	6
Depravation index		1.64 – 4.78	1	5	11	2	4	7	10	9	3	12	6	8
Total			8	22	22	20	11	26	30	14	5	33	18	25
Rank			2	7-8	7-8	6	3	10	11	4	1	12	5	9
Utilisation of ambulatory care services **														
Consultation with at least one general practitioner	82.7	72.7 – 88.0	6	9	4	3	2	5	11	8	1	12	7	10
Consultation with at least one specialist	84.6	81.5 – 90.3	9	6	8	12	11	10	1	3	7	4	5	2
Utilisation of institutional services ***														
Visits to emergency	37.1	28.8 – 41.5	1	9	12	5	4	2	8	10	11	6	7	3
Hospitalisation	26.2	19.7 – 29.2	1	4	11	5	3	2	9	8	10	6	12	7
Total			2	13	23	10	7	4	17	18	21	12	19	10
Rank			1	7	12	4-5	3	2	8	9	11	6	10	4-5

<sup>\*</sup> Ranking of CSSS territories is performed by arranging the values from lowest (=1) to highest (= 12).

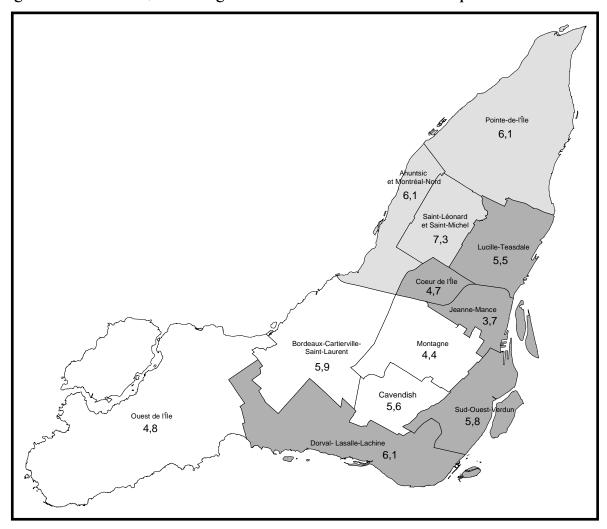
The CSSS territory of a person with diabetes is determined by place of residence and not territory of the service used. However, we know that Montrealers, except for those in the West-Island, only use about 50% of primary care services in the territory where they live. Therefore, we must be careful not to attribute directly to the services of a territory assessments of services utilisation by people with diabetes living in these territories. These results highlight the challenge faced by CSSSs in planning health services from a population health angle.

These findings raise questions concerning the organisation and utilisation of health services by people with diabetes. Thus, to what degree does the high number of visits to physicians and the high number of different physicians consulted reflect the complexity of the disease or of a problem of continuity of primary care? Moreover, is the high proportion of individuals with diabetes who did not consult an ophthalmologist due to follow-up conducted by other professionals or to follow-up that went beyond the guidelines? To what degree is the high rate of institutional services utilisation a symptom of lack of access to and continuity of primary care services or the expression of a behaviour that is specific to a segment of the population? Finally, what should we make of the worrisome proportion of people with diabetes who have not seen a general practitioner during the year? Other analyses are needed to answer these questions.

<sup>\*\*</sup> Ranking is performed by arranging the proportions of diabetics who have consulted a general practitioner or specialist from least (= 1) to most (= 12).

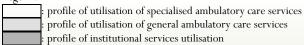
<sup>\*\*\*</sup> Ranking is performed by arranging the proportions of diabetics who have used institutional services the least (= 1) to the most (= 12).

Figure 1: Prevalence of diabetes among Montrealers aged 20 and over by CSSS territory and ranking of CSSS territories, according to their health services utilisation profile in 2003-2004



Source: Linked databases 2003-2004

Legend:



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#### Research team:

Odette Lemoine, Dominique Lesage, Cristine Leroux, Pierre Tousignant, Brigitte Simard, Yves Roy, Ginette Beaulne

#### **ESPSS**

Agence de la santé et des services sociaux de Montréal — Direction de santé publique Institut national de santé publique du Québec This document is available on the Web sites of the DSP (<a href="www.santepub-mtl.qc.ca/ESPSS/production.html">www.santepub-mtl.qc.ca/ESPSS/production.html</a>) and the INSPQ (<a href="www.inspq.qc.ca/publications/">www.inspq.qc.ca/publications/</a>)

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