



## HIGHLIGHTS FROM THE REPORT ON CLINICAL PREVENTIVE SERVICES: RESULTS OF THE 2010 POPULATION SURVEY

Sylvie Provost, Odette Lemoine, Brigitte Simard, Jean-Frédéric Levesque, Raynald Pineault, Pierre Tousignant

In 2005, the Population Health and Health Services team, a joint team from Direction de santé publique de l'Agence de la santé et des services sociaux de Montréal and Institut national de santé publique du Québec, conducted a study in the two most populated regions of Québec (Montréal and Montérégie). The goal of the study was to evaluate the association between primary care organizational models existing at that time and the population's care experience. A second study was undertaken in 2010 to understand the evolution of primary care organizational models and how they have performed during the healthcare reform process, and to evaluate the organizational and contextual factors associated with these changes.

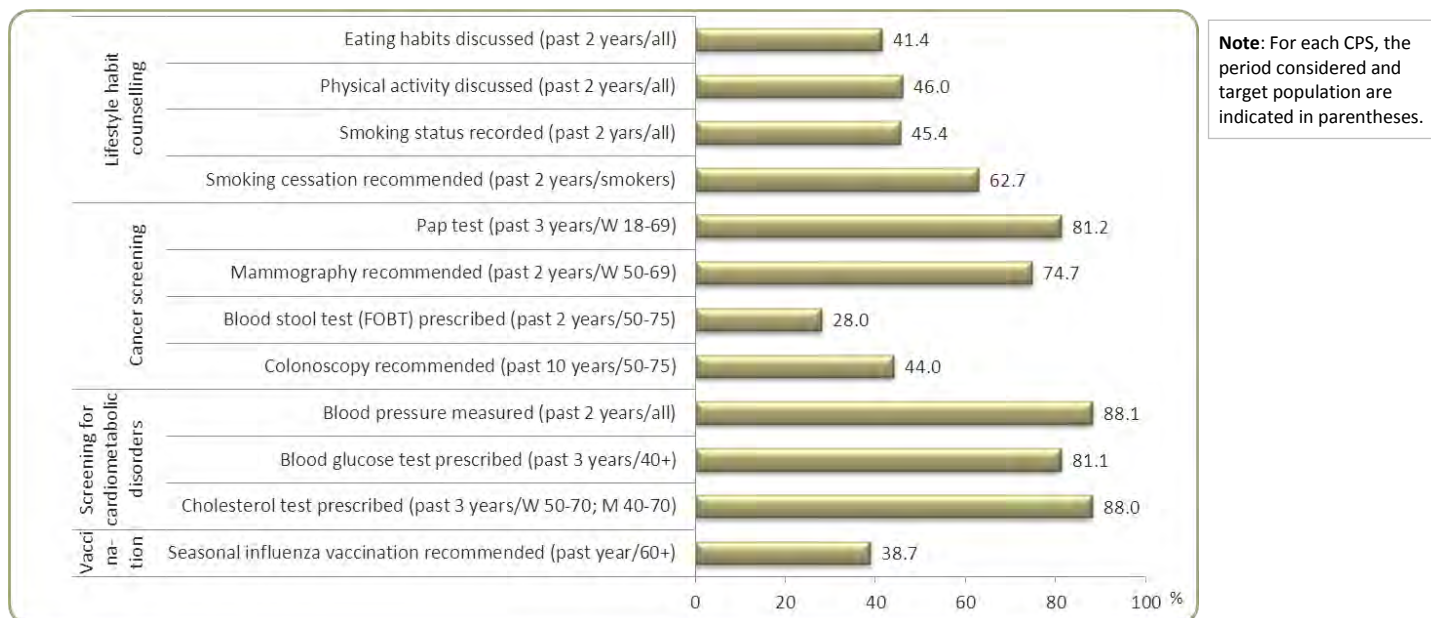
The study consists of three interrelated and hierarchically nested surveys:

- a population survey of adults randomly selected among the population of both regions to assess patient affiliation with primary care organizations, use of services, various attributes of patient care experience, preventive care received, and perception of unmet needs;
- a survey of primary care organizations to evaluate aspects related to their vision, structure, resources and practice characteristics, as well as primary care services reorganization;
- a third survey of key informants from Health and Social Services Centres to assess the organizational contexts within which various organizational models evolve.

This summary conveys highlights of the 2010 population survey results on exposure to clinical preventive services of respondents who have a regular source of primary care. Respondents were instructed to refer to preventive health services received at their regular source of care, regardless of whether the nurse or the doctor conducted the intervention. All data are weighted, taking into account sample characteristics. Detailed results are included in the report on clinical preventive services, available on the Web sites of the Direction de santé publique de l'ASSS de Montréal and of the Institut national de santé publique du Québec (see Web addresses at the end of the document).

Clinical preventive services (CPS) are interventions delivered by health professionals to patients to prevent, avoid or delay onset of health problems.

The following figure illustrates the proportion of adults targeted by various CPS who reported having been exposed to such preventive interventions at their regular source of primary care. Results regarding the two regions surveyed are presented together.



Proportion of individuals with regular sources of primary care exposed to various CPS. Montréal-Montérégie, 2010

**Proportion of individuals with regular sources of primary care exposed to various CPS,  
by region of residence. Montréal-Montérégie, 2010**

	Montréal	Montérégie
<b>CPS</b>	%	%
<b>Lifestyle habit counselling</b>		
Eating habits discussed, past 2 years (all)	39.6	43.5
Physical activity discussed, past 2 years (all)	44.1	48.3
Smoking status recorded, past 2 years (all)	46.0	44.7
Smoking cessation recommended, past 2 years (smokers)	60.0	66.3
<b>Cancer screening</b>		
Pap test, past 3 years (W 18-69 years old)	79.0	83.9
Mammography recommended, past 2 years (W 50-69 years old)	70.4	79.0
FOBT prescribed or colonoscopy recommended (50-75 years old)	57.8	53.2
Blood stool test (FOBT) prescribed, past 2 years (50-75 years old)	28.7	27.4
Colonoscopy recommended, past 10 years (50-75 years old)	46.9	41.0
<b>Screening for cardiometabolic disorders</b>		
Blood pressure measured, past 2 years (all)	86.9	89.5
Blood glucose test prescribed, past 3 years (40 years old or over)	79.9	82.6
Cholesterol test prescribed, past 3 years (W 50-70; M 40-70)	87.0	89.1
<b>Vaccination</b>		
Seasonal influenza vaccination recommended, past year (60 years old or over)	39.0	38.3

□ Non-statistically significant difference ( $p \geq 0.05$ )

A CPS exposure score was calculated for each respondent. The score corresponds to the proportion of CPS to which a person was exposed among CPS for which he or she is eligible (based on age and sex). Respondents' average CPS exposure score is the average score for all respondents. The average score for both regions under study is 60.5% (Montréal, 59.2%; Montérégie, 62.0%).

**Average CPS exposure score based on sociodemographic characteristics, Montréal-Montérégie, 2010**

The following table shows average CPS exposure scores based on respondents' sociodemographic characteristics. We see that average CPS scores are higher

- for women;
- for people aged 45-64;
- for people in the highest income quartile.

The average CPS score is lower for people who immigrated less than 10 years ago.

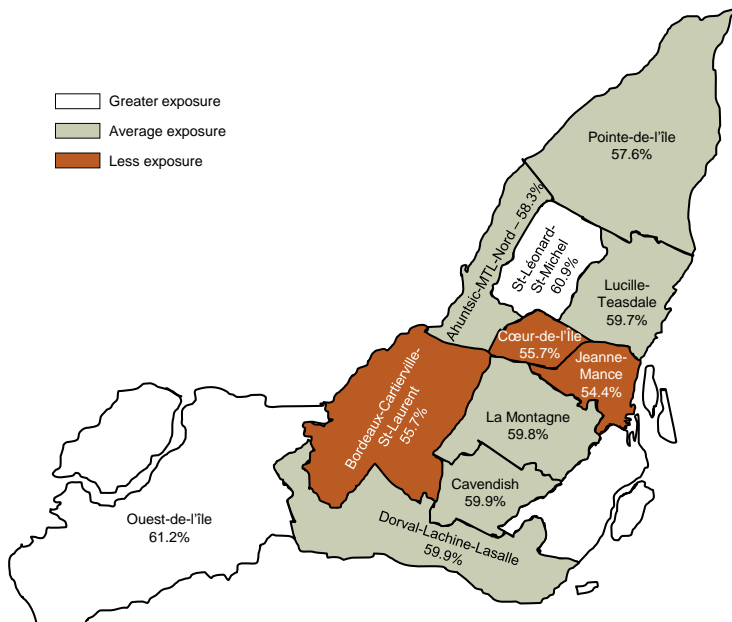
Generally, the results indicate that the fact of presenting certain cardiometabolic risk factors (high blood pressure, diabetes, hypercholesterolaemia) or certain chronic diseases (heart disease, respiratory disease, cancer, stroke, arthritis/osteoarthritis) is associated with greater exposure to CPS. Accordingly, the overall CPS exposure score is 65.8% for people with at least one cardiometabolic risk factor (versus 57.1% for individuals with no risk factors); the score for people with at least one chronic illness is 62.9% (versus 59.0% for those with no chronic diseases).

		Average CPS score %
Sex	Women	61.5
	Men	59.2
Age	18-29 years	55.1
	30-44 years	56.7
	45-64 years	66.7
	65 years and over	58.5
Immigration status	Born in Canada	61.7
	Immigrated less than 10 years ago	48.2
	Immigrated 10 years ago or more	58.3
Education level	No high school diploma	59.0
	High school diploma	61.3
	College diploma	60.6
	University degree	60.2
Income adjusted for household size	First quartile (low)	57.3
	Second quartile	60.9
	Third quartile	60.2
	Fourth quartile (high)	63.8

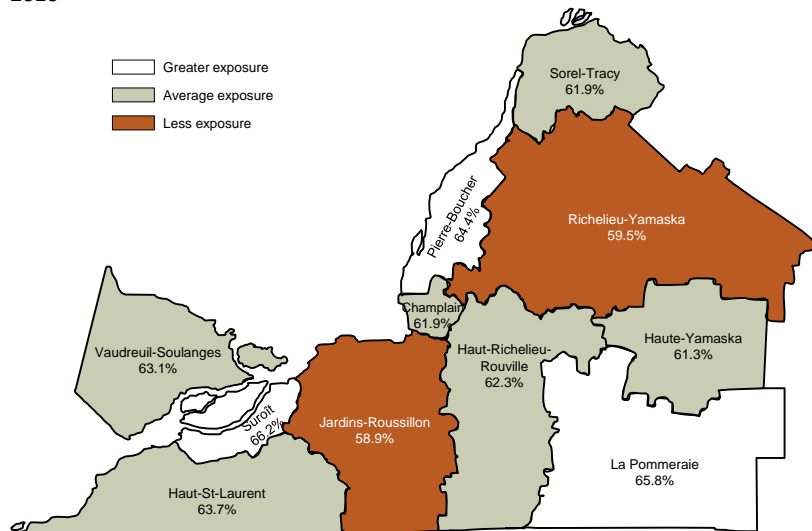
□ Non-statistically significant difference ( $p \geq 0.05$ )

The following maps illustrate a threefold classification of territories, based on average CPS exposure score. The categories were defined according to statistically significant differences in average scores for CSSS groupings.

**Average CPS exposure score, by CSSS territory of residence, Montréal, 2010**

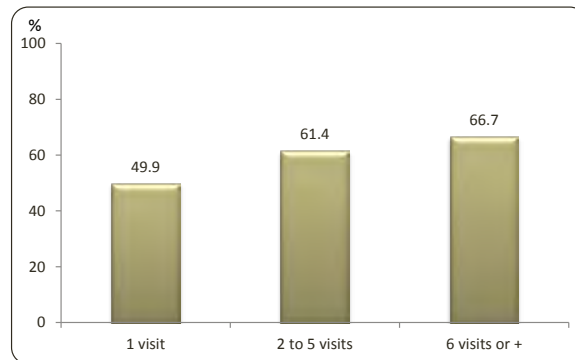


**Average CPS exposure score, by CSSS territory of residence, Montérégie, 2010**



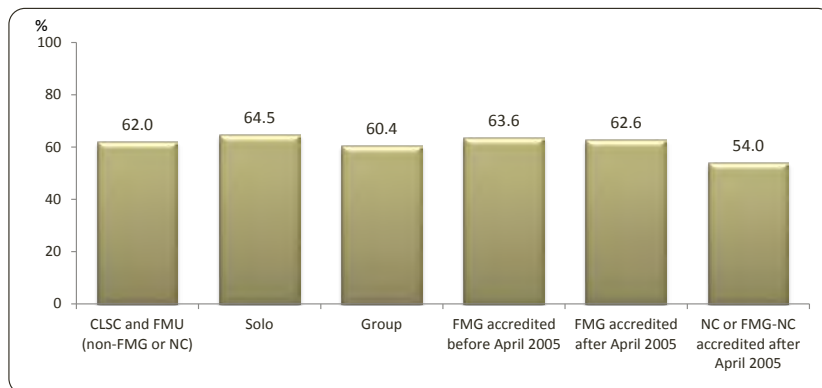
Results also demonstrate that seeing a regular source of primary care several times over the past two years is generally associated with greater exposure to CPS.

**Average CPS exposure score, by number of visits to the regular source of care over the past two years. Montréal-Montérégie, 2010**



Among the factors associated with patients' exposure to CPS, having a family doctor is very strongly associated with greater exposure to CPS: overall CPS exposure score of 64.4% for people who have a family doctor (versus 37.8% for those who do not).

**Average CPS exposure score, by type of clinic of regular source of care, Montréal-Montérégie, 2010**



Patients' average CPS exposure score varies little by type of regular source of care. However, we note that the score is significantly lower when the regular source of care is a network clinic (NC) or a family medicine group that is also a network clinic (FMG-NC).

## Conclusion

Analysis of the descriptive results of the 2010 population survey conducted in Montréal and Montérégie indicates that exposure to CPS varies greatly depending on clinical preventive service considered. Generally, exposure to screening for cardiometabolic disorders and for cancers (except for colorectal cancer) seems higher than exposure to counselling on lifestyle habits and vaccination.

Moreover, exposure to preventive interventions varies according to clientele. We note that some population subgroups are exposed to CPS to varying degrees, based on their sociodemographic characteristics.

Having a family doctor and number of visits to the source of care are significant determinants of exposure to primary care preventive interventions. In particular, having a family doctor is strongly associated with greater exposure to CPS.

Exposure to preventive interventions is one element of performance of primary care organizational models considered in the *Evolution* project, both in terms of organizations' clientele and of the population in the regions under study. Although data on exposure to CPS are for the year 2010 of the project only and are insufficient to make a judgement about how exposure is evolving, the results highlight some of the differences linked to organization type. Differences in clientele exposure to preventive interventions are probably linked, at least in part, to differences in organizations' missions (e.g. priority given to accessibility in emerging organizations such as network clinics). On a population level, the differences in exposure to CPS noted among CSSS territories should be considered in terms of primary care service organization in local networks.

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The project has received ethical approval from the research ethics committee of the Agence de la santé et des services sociaux de Montréal, the main committee. The multicentre nature of the research project requires ethical approval from research ethics committees in each health and social services centre in the territories under study.

This document is available on the Web sites of the Direction de santé publique ([www.dsp.santemontreal.qc.ca/dossiers\\_thematiques/services\\_preventifs/thematique/sante\\_des\\_populations\\_et\\_services\\_de\\_sante/documentation.html](http://www.dsp.santemontreal.qc.ca/dossiers_thematiques/services_preventifs/thematique/sante_des_populations_et_services_de_sante/documentation.html)) and the INSPQ ([www.inspq.qc.ca/publications/](http://www.inspq.qc.ca/publications/)).

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