## Ambulatory Care-Sensitive Conditions

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## Avoidable Mortality in

 Québec's French- and EnglishSpeaking Populations from 1990 to 2007


INITIATIVES POUR LA SANTÉ DES PERSONNES ET COMMUNAUTÉS D'EXPRESSION ANGLAISE DU QUÉBEC

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## The Concept of Avoidable Mortality (AM) and Its Use

$ـ$ Deaths that could be prevented before age
75 from certain specific causes.
Through interventions by the healthcare system and transsectoral partners (schools, municipalities, other ministries)
© Evaluate the $\xlongequal{\leftrightharpoons}$ performance of the health system and its partners

## The Components of Avoidable Mortality (AM)

PAM: Primary
Avoidable Mortality

- Risk behaviours
- Health habits
- Physical and social environments

SAM: Secondary Avoidable Mortality

- Early intervention
- Screening

TAM:Tertiary
Avoidable Mortality

- Healthcare
- Recovery and rehabilitation system


## Major Causes of Avoidable Mortality by Type of Intervention

PAM: Primary Avoidable Mortality

- Lung cancer
- Ischemic heart disease
- Chronic obstructive pulmonary disease

SAM: Secondary
Avoidable Mortality

- Cerebrovascular disease
- Colorectal
- Diabetes

TAM:Tertiary
Avoidable Mortality

- Breast cancer
- Stomach cancer
- Uterine cancer


## Relative importance from the three types of intervention in the reduction of mortality rates



General Avoidable Mortality (AM) in French and English Speakers by Gender and Area, Québec, 1990-2007

## General Avoidable Mortality of French and English Speakers by Gender

## Finding 1

$\checkmark$ Avoidable mortality rates in French and English speakers dropped overall from 1990 to 2007
$\checkmark$ French speakers (men and women) have the highest avoidable morality rates for all periods

Men

Women
Français Anglais

## General Avoidable Mortality (AM) in French and English Speakers by Gender and Area, Québec, 1990-2007 <br> Finding 2

$\checkmark$ The same drop can be seen in the areas, but in an irregular, uneven way.
$\checkmark$ Outside CMA rate for English-speakers is higher than in the other regions
$\checkmark$ Regional disparities more pronounced for English-speakers



## Impact of Primary (PAM), Secondary (SAM), and

 Tertiary (TAM) Preventive Actions for English and French speakers by sex, Québec, 1990-2007
## Avoidable Mortality of English- and FrenchSpeaking Men by Intervention Type

## Finding 3

$\checkmark$ A drop in avoidable mortality through primary prevention in English- and French-speaking men.
$\checkmark$ A less pronounced drop through secondary and tertiary prevention is seen.
—PAM - -SAM etTAM

## Avoidable Mortality of English- and FrenchSpeaking Women by Intervention Type Finding 4

$\checkmark$ A marked drop for SAM and TAM that is faster in French-speaking women than in English speakers
$\checkmark$ A less pronounced drop in avoidable mortality through primary prevention in Englishand French-speaking women is seen due to lung cancer


## Impact of Primary (PAM), Secondary (SAM), and

Tertiary (TAM) Preventive Actions in French- and English-Speaking Men by sex and region, Québec, 19902007

## Avoidable Mortality of French- and English-Speaking Men through Primary Prevention (PAM) by Area Finding 5

$\checkmark$ There is a marked drop everywhere through primary prevention (PAM), except Outside CMAs
$\checkmark$ Outside CMA rate for English-speakers is higher than in the other regions
$\checkmark$ Regional disparities more pronounced for English-speakers


- Autres RMR
- Hors RMR


## Avoidable Mortality of French- and English-Speaking Men through Secondary and Tertiary Prevention (SAM and TAM) by Area

## Finding 6

$\checkmark$ Avoidable mortality reduction by SAM and TAM is less pronounced, especially for Montreal English-speakers, due to colorectal cancer
$\checkmark$ Growing similarity between French and English speakers (outside CMAs and Montreal)
$\checkmark$ Regional disparities more pronounced for English-speakers


## Avoidable Mortality of French- and English-Speaking Women through Primary Prevention by Area

## Finding 7

$\checkmark$ There is a rise in avoidable mortality through primary prevention (PAM) outside CMAs in both groups, mainly caused by lung cancer.
$\checkmark$ Outside CMA rate for English-speakers is higher than in the other regions
$\checkmark$ Regional disparities more pronounced for English-speakers


## Avoidable Mortality of French- and English-Speaking Women

 through Secondary and Tertiary Prevention (SAM and TAM) by Area
## Finding 8

$\checkmark$ Avoidable mortality reduction by SAM and TAM is pronounced
$\checkmark$ Growing similarity between French and English speakers (outside CMAs and Montreal)
$\checkmark$ Regional disparities more pronounced for English-speakers


## Conclusions

- The avoidable mortality rates, both overall and by intervention type (PAM, SAM, and TAM), of Englishand French-speaking men and women trend generally downward over time. This reduction is more pronounced for French speakers.
- The rates are typically always lower in English speakers than in French speakers.
- As the literature indicates, the avoidable mortality reduction potential is greater for causes subject to primary preventive intervention than it is for those subject to secondary or tertiary preventive intervention, which are interventions associated with risk behaviours (alcohol, tobacco). That is observed for both the French and English speakers of Québec.


## Conclusions

- As the literature indicates, the primary avoidable mortality (PAM) reduction potential is greater for men than for women. An increase of primary avoidable mortality is actually observed for women outside CMAs, due to lung cancer.
- The avoidable mortality rates for English speakers outside CMAs are higher than those for English speakers in other areas (Montréal CMA, Other CMAs), and this is also the case for French speakers.
- The avoidable mortality rates for English speakers Outside CMAs (PAM, SAM, and TAM) exceeded the Englishspeaking rates for the Montréal CMA from 1990 to 2007.


## Conclusions

- The geographic disparity often appears heightened among English speakers. When gaps between areas narrow in French speakers, they often widen in English speakers.
- The lack of a significant drop of avoidable mortality through SAM and TAM in Englishspeaking men appears mainly due to colorectal cancer.

> Thank you for your attention!

## Definition

Ambulatory Care-Sensitive Conditions (ACSCs) are conditions for which appropriate care will avoid or reduce the need for hospitalization.

Hospitalizations related to ACSCs are not all avoidable, but it is assumed that adequate and timely ambulatory care could prevent these conditions from appearing, could control acute episodes, or stabilize chronic conditions. The optimal level of use is not known, but a disproportionately high level could indicate a problem with access to primary care. (Statistics Canada and CIHI, 2005).

## Summary

## Concept

## Usefulness

ACSCs are defined as avoidable hospitalizations accompanied by appropriate care.

## Like avoidable

 mortality, this indicator also enables the health system's performance to be measured.
## Chronic Illnesses Considered to Present ACSCs

## Asthma;

Chronic Obstructive Pulmonary Disease (COPD) ;

## Diabetes;

Epilepsy;

Congestive Heart Failure;

Hypertension.

## A few methodological considerations

## hospitalization database: <br> no information on the patient's language

## $\pi$

The DAs were grouped according to the majority language:
13000 DA grouped:
11774 French DA + 941 English DA + 405 other DA.


Dissemination areas (DA): Small area composed of one or more neighbouring dissemination blocks, with a population of 400 to 700 persons (Statistics Canada).

Each hospitalization in each dissemination area was considered to be of an English- or
French-speaker according to the language spoken by the majority of people living in the dissemination area.
$\square$

DA distribution according to their geographic localization: Montreal CMA, other CMAs, outside CMAs.

We calculated the adjusted ACSC rates per 100,000 inhabitants under the age of 75 for the seven illnesses mentioned earlier.

Measures of central tendency and dispersion.


## Average ACSC Rates and

## Dispersion of "English" and "French" Dissemination Areas

Finding 1
$\checkmark$ Average ACSC rates are higher in French dissemination areas than in English ones.
$\checkmark$ Rate dispersion is also higher in French dissemination areas.
$\square$ AD Francophones $\square$ AD Anglophones


## Average ACSC Rates and

## Dispersion of "English" Dissemination Areas by <br> Region

Finding 2
$\checkmark$ The average ACSC rate in English dissemination areas is higher in areas outside CMAs than in CMAs.
$\checkmark$ Rate dispersion is also higher outside than within CMAs.


## Average ACSC Rates of "French" and "English" Dissemination Areas by Region

Finding 3
$\checkmark$ On average, the ACSC rate in French dissemination areas is higher than in English dissemination areas, both within and outside CMAs.
$\checkmark$ The difference between linguistic groups is relatively less outside CMAs and higher in the Montréal CMA.


## Dispersion of ACSC Rates in "French" and "English" Dissemination Areas by Region

Finding 4
$\checkmark$ The ACSC rates for English and French dissemination areas are more dispersed outside CMAs.
$\checkmark$ Rate dispersion in English dissemination areas is broader than in French ones, both outside CMAs and in other CMAs.


## Conclusions

$\AA$ There is no known threshold beyond which ambulatory care is considered adequate or inadequate.
$\AA$ Comparing French- and English-speaking areas does not show differences in the quality or quantity of ambulatory care given to English-speaking patients. If a conclusion can be drawn, it would appear that there is no difference.
$\AA$ The better "relative" performance of Englishspeaking geographical units disappears outside CMAs, where English and French speakers have higher ACSC rates than elsewhere in Québec.

## Conclusions

$\AA$ The measure of dispersion appears to show greater disparity among English speakers than among French speakers, especially outside CMAs.
$\AA$ There is less dispersion among English speakers in Montréal than among French speakers.

