Updates & Errata

After publication of the report, The 2019 RHA Indicators Atlas, the following updates were required:

May 29, 2020 - Erratum

- **On page 53**
  - The first set of Key Findings should read:
    - Hypertension prevalence in Manitoba decreased slightly from 24.2% to 23.6%. There were small changes in some RHAs, but none of these changes were significant.
    - Hypertension prevalence was related to PMR at the regional level, with the lowest values in Southern and Winnipeg and the highest in Northern. This relationship did not hold as strongly across districts of most rural regions; at these smaller levels, results were more variable (see online supplement).
    - The first bullet under Comparisons to Previous Findings should read:
      - For this report, MCHP adopted a revised case definition for hypertension, based on ongoing validation work by other researchers in Canada. Therefore, the prevalence rates reported here for most regions and Manitoba overall are lower than in previous Atlas reports [1,2].
  - Figure 4.1 was replaced
- **On page 54:**
  - The first two bullets under Key Findings should read:
    - Hypertension incidence decreased significantly from 3.1 to 2.8 cases per 100 person-years. (As explained in the introduction, these values can be interpreted as a percent, presuming all residents lived for at least one year). Incidence decreased in all regions, though the drop decline in Southern and Northern was not statistically significant.
    - Hypertension incidence rates were related to PMR at the regional level, with the lowest rates in Southern and the highest in Northern. Interestingly, this relationship did not hold as strongly across districts of most rural regions or Winnipeg NCs; at these smaller levels, results were more variable (see online supplement).
  - Figure 4.2 was replaced
- **On page 63:** Figure 4.11 was replaced

The web version of the report has been updated.

The updated pages follow.

The online supplement zip folder for Chapter 4 has also been updated with new hypertension and CHF Excel files.

Section A: Chronic Physical Illness

4.1 Hypertension Prevalence

Definition: The percent of residents age 19 and older with hypertension (high blood pressure) in a one-year period, as defined by any of the following:

- One or more hospitalizations with a diagnosis of hypertension: ICD-10-CA codes I10-I13, I15
- Two or more physician visits with a diagnosis of hypertension (ICD-9-CM codes 401-405)
- Two or more dispensations of medications to treat hypertension (see online supplement)

Prevalence was calculated for 2011/12 and 2016/17, and was age- and sex-adjusted to the Manitoba population age 19 and older in 2011/12. See the online supplement for further details.

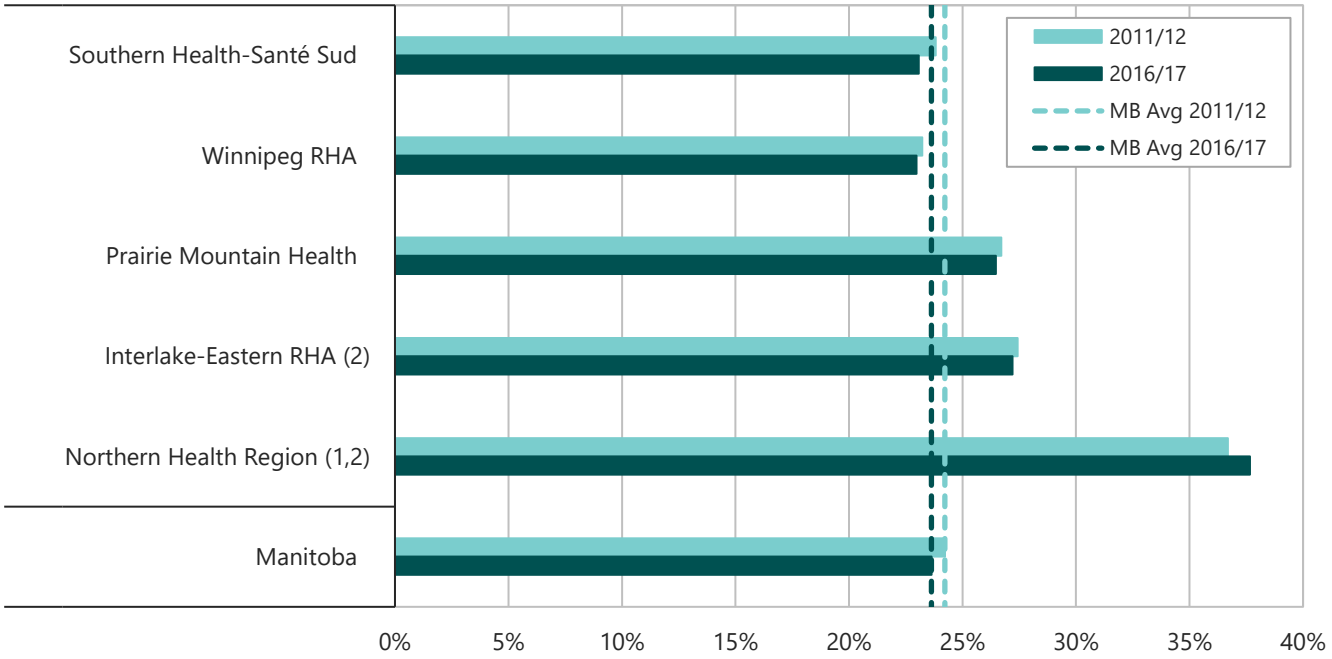
Key Findings

- Hypertension prevalence in Manitoba decreased slightly from 24.2% to 23.6%. There were small changes in some RHAs, but none of these changes were significant.
- Hypertension prevalence was related to PMR at the regional level, with the lowest values in Southern and Winnipeg and the highest in Northern. This relationship did not hold as strongly across districts of most rural regions; at these smaller levels, results were more variable (see online supplement).
  - The crude rates of hypertension in Northern are actually lower than the provincial average, but the high adjusted rates indicate the prevalence is higher than expected for the young population living there.
- There were significant relationships between income and hypertension prevalence in urban and rural areas in both time periods: prevalence was higher among residents of lower income areas (see online supplement).

Comparisons to Previous Findings

- For this report, MCHP adopted a revised case definition for hypertension, based on ongoing validation work by other researchers in Canada. Therefore, the prevalence rates reported here for most regions and Manitoba overall are lower than in previous Atlas reports [1,2].
- Earlier Atlas reports suggested a slow but steady increase in hypertension prevalence over time [2,9], but current results suggest rates may be stabilizing, which is consistent with decreasing incidence rates reported in the 2013 Atlas [1].

Figure 4.1: Prevalence of Hypertension by RHA, 2011/12 and 2016/17
Age- and sex-adjusted percent of residents age 19+ diagnosed with disorder



1 indicates area's rate was statistically different from Manitoba average in first time period
2 indicates area's rate was statistically different from Manitoba average in second time period
t indicates change over time was statistically significant for that area
s indicates data suppressed due to small numbers

4.2 Hypertension Incidence

Definition: The number of new cases of hypertension (high blood pressure) among residents age 19 and older per 100 person-years at risk, defined using the case definition in Section 4.1 of this report (hypertension prevalence).

Incidence rates were calculated for 2011/12 and 2016/17, and age- and sex-adjusted to the Manitoba population age 19 and older in 2011/12. See the online supplement for further details.

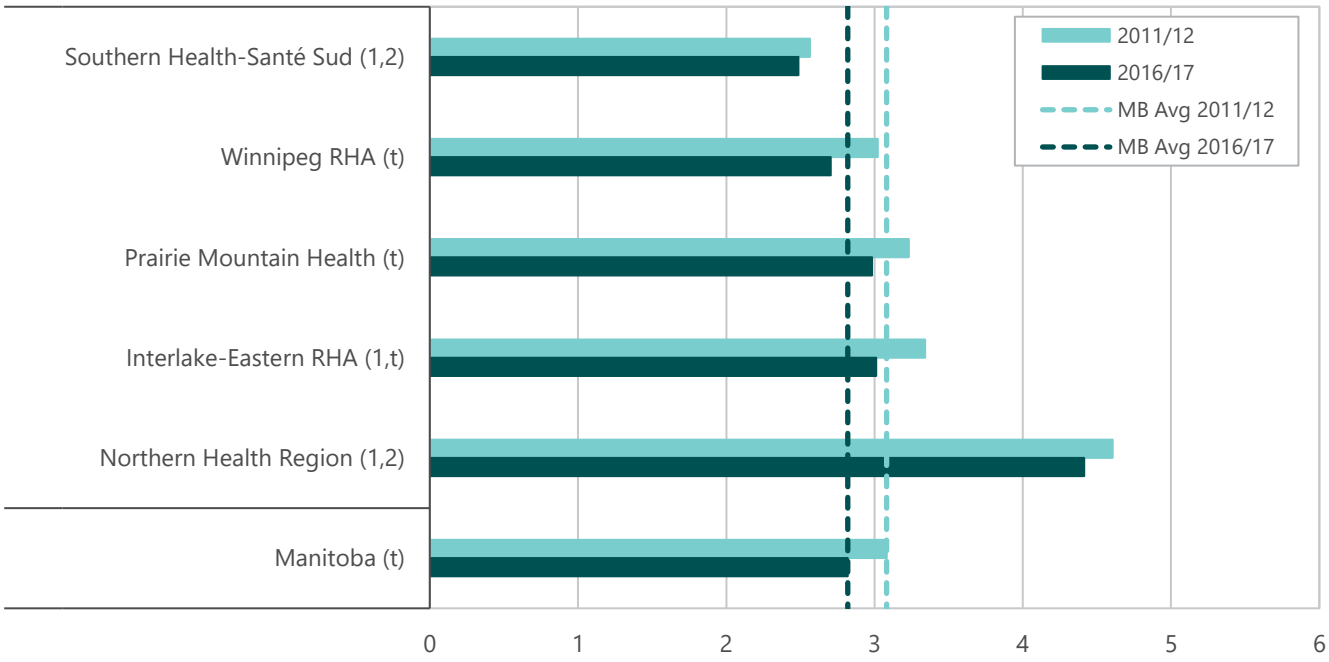
Key Findings

- Hypertension incidence decreased significantly from 3.1 to 2.8 cases per 100 person-years. (As explained in the introduction, these values can be interpreted as a percent, presuming all residents lived for at least one year). Incidence decreased in all regions, though the drop decline in Southern and Northern was not statistically significant.
- Hypertension incidence rates were related to PMR at the regional level, with the lowest rates in Southern and the highest in Northern. Interestingly, this relationship did not hold as strongly across districts of most rural regions or Winnipeg NCs; at these smaller levels, results were more variable (see online supplement).
- There were significant relationships between income and hypertension incidence in urban and rural areas in both time periods: incidence rates were higher among residents of lower income areas (see online supplement).

Comparison to Previous Findings

- Hypertension incidence was first reported in the 2013 Atlas, which also showed a slight decrease over time [1]. If this trend continues, we would expect decreases in hypertension prevalence in the future.

Figure 4.2: Incidence of Hypertension by RHA, 2011/12 and 2016/17
Age- and sex-adjusted incidence rate per 100 person-years at risk for residents age 19+



1 indicates area's rate was statistically different from Manitoba average in first time period
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t indicates change over time was statistically significant for that area
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4.10 Congestive Heart Failure (CHF) Prevalence

Definition: The percent of residents age 40 and older with CHF in a one-year period as defined by either:

- at least one inpatient hospitalization with an ICD–9–CM code of 428 or an ICD–10–CA code of I50, or
- at least two physician visits with ICD–9–CM code 428

Prevalence was calculated for 2011/12 and 2016/17 and was age- and sex-adjusted to the Manitoba population age 40 and older in the first time period. See the online supplement for further details.

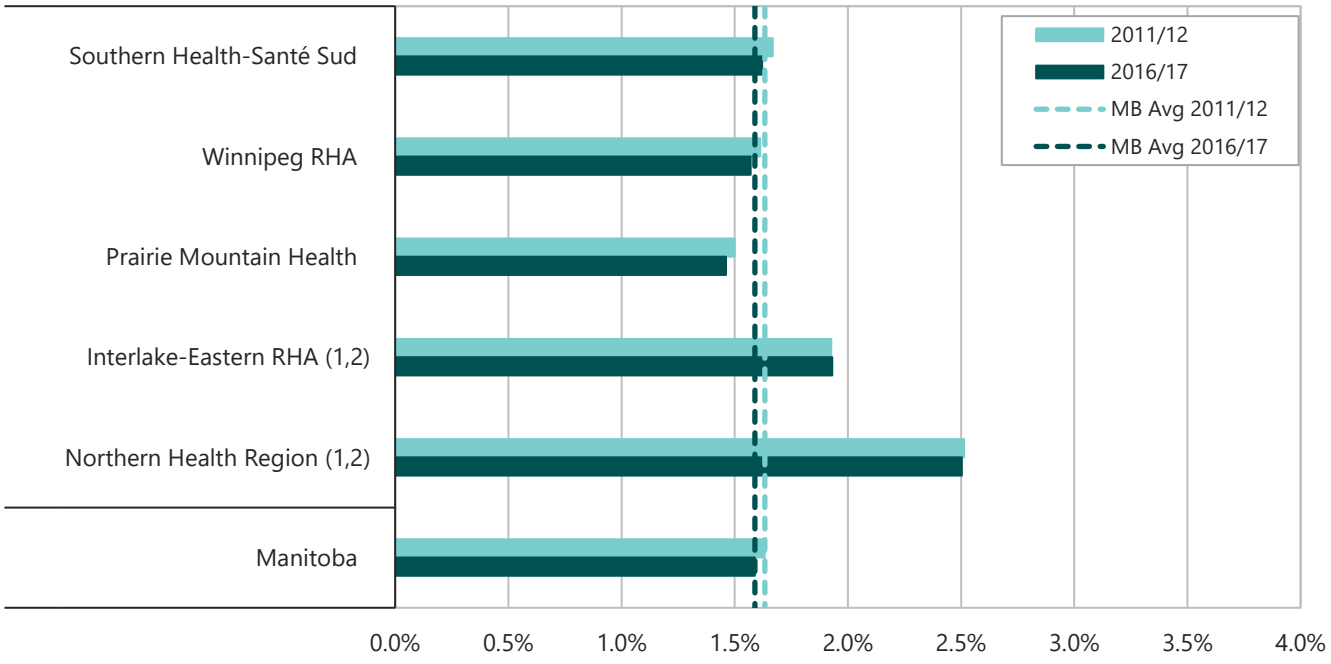
Key Findings

- CHF prevalence was stable over time in Manitoba, decreasing only slightly from 1.63% to 1.59% of the population age 40 and older.
- The prevalence of CHF appears to be weakly related to premature mortality at the regional level, with above average rates in Interlake-Eastern and Northern.
- There were significant relationships between income and CHF prevalence in urban or rural residents in both years, with higher prevalence among lower income residents.

Comparisons to Previous Findings

- The case definition for CHF was modified from that used in the previous report, moving to a one-year window instead of a 3-year window [1]. This was done to match recent validation work conducted in Ontario [13].
- Results in the 2013 Atlas also showed a decreasing prevalence of CHF over time [1].

Figure 4.11: Prevalence of Congestive Heart Failure by RHA, 2011/12 and 2016/17
Age- and sex-adjusted average annual percent of residents age 40+ diagnosed with disorder



1 indicates area's rate was statistically different from Manitoba average in first time period
2 indicates area's rate was statistically different from Manitoba average in second time period
t indicates change over time was statistically significant for that area
s indicates data suppressed due to small numbers