Updates & Errata

After publication of the report, *Outpatient Antibiotic Prescribing by Manitoba Clinicians*, the following updates were required:

October 20, 2021 – Erratum

- **Page 72**
  Figure 6.11 was replaced

The web version of the report has been updated.

The updated page follows.

An inappropriate antibiotic is defined as any antibiotic other than those in subclass extended-spectrum (including amoxicillin) and β-lactamase sensitive (such as penicillin). In older children ages 10-14, some use of macrolides would be appropriate as mycoplasma emerges as a pathogen.

Models were run to look at all children and children ages 0-5 only (available in the online supplement), but since they yielded similar results, only the results for all children are presented. An inappropriate antibiotic was dispensed in 32.8% of visits and in 52.4% of dispensations. In the model looking at children ages 0-5 only, an inappropriate antibiotic was dispensed in 23.7% of visits and in 40.4% of dispensations.

The following characteristics were significantly associated with:

- Higher odds of an inappropriate antibiotic dispensation:
  - Physician practice in Prairie Mountain Health (aOR 2.62, 95% CI 1.56-4.39) compared to Winnipeg RHA.
  - A Charlson Index of 1 (aOR 1.44, 95% CI 1.25-1.66) compared to 0.
  - Older physician age (aOR 1.48, 95% CI 1.24-1.76).
  - Higher physician visits per day, a measure of patient load (aOR 1.33, 95% CI 1.07-1.65).
- Lower odds of an inappropriate antibiotic dispensation:
  - Patient age group under 1 year (aOR 0.10, 95% CI 0.07-0.13), 1-4 years (aOR 0.18, 95% CI 0.15-0.21) or 5-9 years (aOR 0.39, 95% CI 0.32-0.47) compared to 10-14 years.
  - Too few visits to assign a majority of care provider (aOR 0.66, 95% 0.60-0.72).
  - Number of children in the home 3 (aOR 0.88, 95% CI 0.82-0.94) or 4+ (aOR 0.82, 95% CI 0.75-0.89) compared to 1.
  - Higher SEFI-2 score, indicating lower socioeconomic status (aOR 0.90, 95% CI 0.88-0.93).

Sinusitis

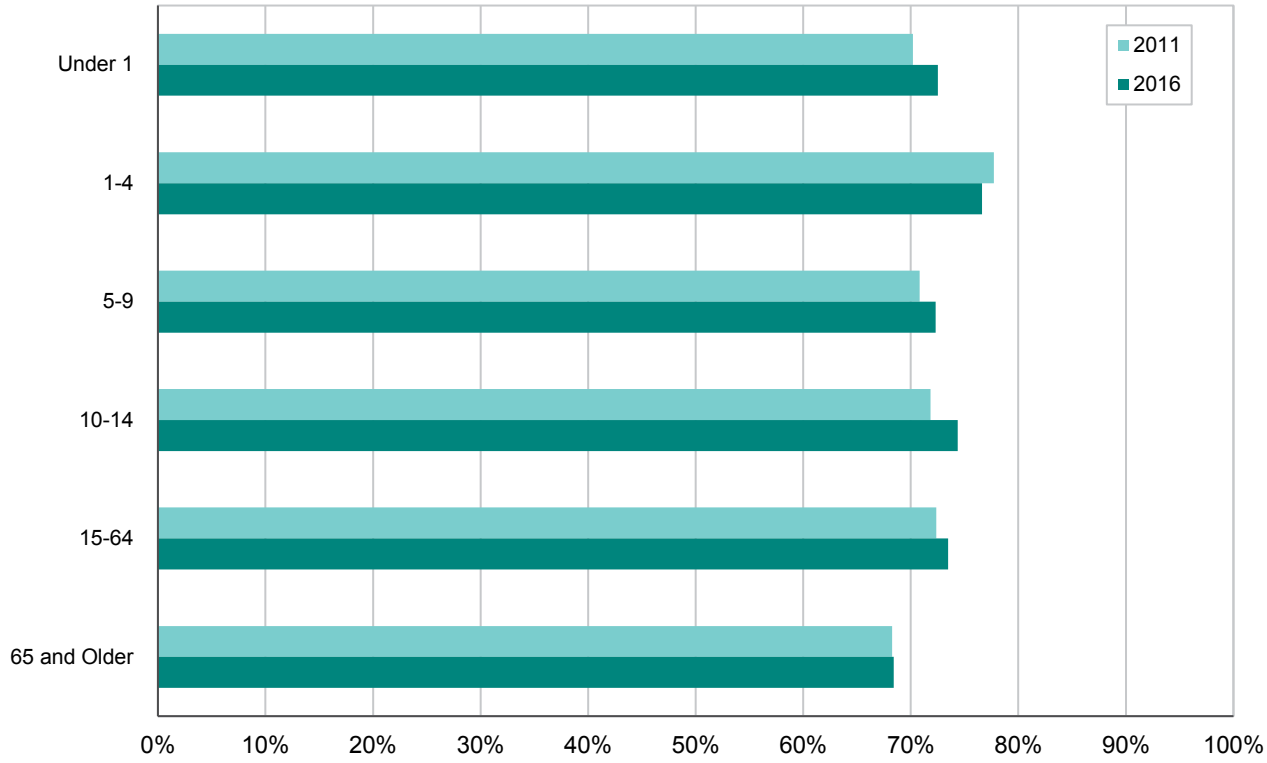
Sinusitis is a general term for an infection of the sinuses, which are air-filled spaces connected to the nasal cavity in the skull and facial bones. Infections can be caused by viruses or bacteria. Acute bacterial sinusitis is suspected when symptoms of purulent nasal discharge with blockage and facial pain/headache have persisted for at least ten days or worsened after initial improvement. Management includes watchful waiting for another week or antibiotics. Due to the predominance of gram-positive bacteria such as Streptococcus pneumoniae and Haemophilus influenzae causing bacterial sinusitis, treatment with amoxicillin is recommended as first line if antibiotics are prescribed [59,60].

In 2016, an antibiotic was dispensed in 72.9% (95% CI 71.8-74.0%) of visits with a diagnosis of sinusitis.

Figure 6.11 shows dispensations as percentage of visits by age group:

- Antibiotic dispensation rates were lowest in children under 1 year and in adults ages 65 and older.
- Rates were roughly similar in the other age groups.
- There was no significant change in any age group between 2011 and 2016.

Figure 6.11: Antibiotic Dispensations Linked to Primary Care Ambulatory Physician Visits for Sinusitis, by Age Group (Years)
Crude percent of visits with a dispensation within five days



* Indicates a statistically significant difference between rates in 2011 and 2016 (p<0.05).