## **Appendix 1 (as supplied by the authors)**

## Quintile of Adjusted Income per Person Equivalent

Quintile of adjusted income per person equivalent was calculated using information from the 2006 census. Neighbourhood income per person equivalent is a household size-adjusted measure of household income, based on 2006 census summary data at the dissemination area level, and using person-equivalents implied by the 2006 low income cut-offs. Note that the 2001 single person equivalents were 1.00 for 1 person, 1.25 for 2 persons, 1.55 for 3 persons, 1.95 for 4 or 5 persons, and 2.44 for 6 or more persons sharing the same household (regardless of age). For a description of how income per person equivalent was calculated previously based on 1991 census summary data and single-person equivalents from the 1991 low income cut offs, see Ng et al.<sup>1</sup>

Within each census metropolitan area, census agglomeration, or provincial residual area not in any census metropolitan area or census agglomeration, the dissemination area average income per person equivalent was used to rank all dissemination areas, and then the population was divided into approximate fifths, thus creating community-specific income quintiles based on the income per person equivalent. The quintiles were defined within each area in order to better reflect the relative nature of this measure, to minimize the effect on household welfare of large differences in housing costs, and to ensure that each census metropolitan area or census agglomeration would have about an equal percentage of the population in each income quintile. The first income quintile is associated with the lowest income.

Definitions for the terms census metropolitan area,<sup>2</sup> census agglomeration<sup>2</sup> and dissemination area<sup>3</sup> are provided by Statistics Canada.

A census metropolitan area (CMA) or a census agglomeration (CA) is formed by one or more adjacent municipalities centred on a population centre (known as the core). A CMA must have a total population of at least 100,000 of which 50,000 or more must live in the core. A CA must have a core population of at least 10,000. To be included in the CMA or CA, other adjacent municipalities must have a high degree of integration with the core, as measured by commuting flows derived from previous census place of work data.

A dissemination area (DA) is a small, relatively stable geographic unit composed of one or more adjacent dissemination blocks. It is the smallest standard geographic area for which all census data are disseminated. DAs cover all the territory of Canada.

Small area composed of one or more neighbouring dissemination blocks, with a population of 400 to 700 persons. All of Canada is divided into dissemination areas.

## **Episode of care**

Episode of care, constructed from information in the Discharge Abstract Database, is based on transfers between two different institutions using both the timing between admissions and transfer flags on either record.

The following situations are defined as a transfer:

- 1. any admissions within six hours of the previous discharge;
- 2. any admissions within 12 hours of the previous discharge where either:
  - a. the "institution from" number matches the "institution to" number, OR
  - b. the "institution from" type OR the "institution to" type equals 1 (acute care);
- 3. any admissions within 48 hours of the previous discharge where:
  - a. the "institution from" number matches the "institution to" number.
- 1. Ng E, Wilkins R, Perras A. How far is it to the nearest hospital? Calculating distances using the Statistics Canada postal code conversion file. *Health Rep* 1993;5:179-88.
- 2. CMA and CA: detailed definition. Cat no 92-195-X. Ottawa: Statistics Canada; modified 2018 Sept. 17. Available: www.statcan.gc.ca/pub/92-195-x/2011001/geo/cma-rmr/def-eng.htm (accessed 2018 June 7).
- 3. Dissemination area (DA). Cat no 98-301-XWE. Ottawa: Statistics Canada; modified 2015 Nov. 27. Available: www12.statcan.gc.ca/census-recensement/2011/ref/dict/geo021-eng.cfm (accessed 2018 June 7).