**Supplemental material 1.** Flow chart for linkage of data

Persons released from provincial prison in Ontario in 2010:

53,955 persons

Direct, deterministic, or probabilistic linkage with ≥1 valid IKN:
53,331 persons, 60,785 person-IKN linkages

Valid linkage:

52,546 persons, 58,363 person-IKN linkages

Excluded linkages that were likely incorrect:

* date of birth different in MCSCS and RPDB data (n=1,569)
* sex different in MCSCS and RPDB data (n=200)
* IKN matched to multiple persons (n=572)
* MCSCS data showed the person was in prison after the date of death in the RPDB (n=45)
* RPDB showed the person was OHIP-eligible after the date of death in MCSCS data (n=36)

Excluded persons not released to community in 2010:

* release period of ≤ 1 day (n=233)
* transfer to federal prison on release (n=2,178)
* died in provincial prison (n=7)
* reason for release related to immigration (n=1,267)

Prison release group:

48,861 persons

**Supplemental material 2.** Proportion of people with emergency department use for persons released from provincial prison in Ontario in 2010 and age- and sex- matched persons in the general population, by period relative to time in prison\* and visit acuity

|  |  |  |  |
| --- | --- | --- | --- |
| Acuity of visit  | Period relative to time in prison\* | Prison release group | General population group |
| All | In prison | 6.6% | 3.0% |
| Post-release (days) | 0-6  | 4.0% | 0.6% |
| 7-29 | 7.0% | 1.8% |
| 30-89  | 12.9% | 4.4% |
| 90-179  | 16.0% | 6.3% |
| 180-364  | 24.0% | 11.5% |
| 365-730  | 36.5% | 20.0% |
| Low acuity† | In prison | 2.4% | 1.6% |
| Post-release (days) | 0-6  | 1.7% | 0.3% |
| 7-29 | 3.3% | 0.9% |
| 30-89  | 6.3% | 2.3% |
| 90-179  | 8.0% | 3.4% |
| 180-364  | 12.3% | 6.2% |
| 365-730  | 19.9% | 11.0% |
| High acuity† | In prison | 4.7% | 1.7% |
| Post-release (days) | 0-6  | 2.6% | 0.3% |
| 7-29 | 4.4% | 1.0% |
| 30-89  | 8.4% | 2.4% |
| 90-179  | 10.6% | 3.5% |
| 180-364  | 16.6% | 6.7% |
| 365-730  | 26.7% | 12.5% |

\*In prison refers to the time in prison during the admission prior to the initial release in 2010 and post-release refers to the time after the initial release in 2010, or the corresponding period for matched persons in the general population. †High urgency includes visits with a Canadian Triage & Acuity Score (CTAS) of 1 (resuscitation), 2 (emergent), or 3 (urgent) or if the patient was admitted to hospital. Otherwise, the visit was considered low urgency.