Prescription drug abuse (PDA) — also referred to as “problematic prescription drug use” — can lead to addiction, overdose, chronic ill health and death. Pan-Canadian data from hospitalizations and emergency departments (EDs) can help answer questions such as the following:

- How many people were seen in EDs or hospitalized with a diagnosis of poisoning due to a high-risk drug?
- What treatments were most common for people diagnosed with disorders due to opioid use?
- What was the average length of stay in acute care for people with a primary diagnosis of substance abuse?

CIHI’s Discharge Abstract Database (DAD) has data from acute inpatient facilities in all jurisdictions except Quebec; data for that province is included in the Hospital Morbidity Database (HMDB).

Data on all ED visits in Ontario and Alberta — and some ED visits in Prince Edward Island, Nova Scotia, Manitoba, Saskatchewan, British Columbia and Yukon — is in the National Ambulatory Care Reporting System (NACRS).
Examples of the types of data held in the DAD/HMDB and NACRS appear in Table 1.

**Table 1** Types of data in the DAD/HMDB and NACRS

<table>
<thead>
<tr>
<th>Type of data</th>
<th>Examples</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient information</strong></td>
<td>Date of birth</td>
<td>DAD/HMDB and NACRS</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>DAD/HMDB and NACRS</td>
</tr>
<tr>
<td></td>
<td>Postal code</td>
<td>DAD/HMDB and NACRS</td>
</tr>
<tr>
<td><strong>Administrative information</strong></td>
<td>Admission or registration and discharge dates</td>
<td>DAD/HMDB and NACRS</td>
</tr>
<tr>
<td></td>
<td>Visit disposition</td>
<td>NACRS</td>
</tr>
<tr>
<td></td>
<td>Discharge disposition</td>
<td>DAD/HMDB</td>
</tr>
<tr>
<td></td>
<td>Provider service</td>
<td>DAD/HMDB and NACRS</td>
</tr>
<tr>
<td><strong>Clinical information</strong></td>
<td>Diagnoses (using ICD-10-CA codes)</td>
<td>DAD/HMDB and NACRS</td>
</tr>
<tr>
<td></td>
<td>Diagnosis type</td>
<td>DAD/HMDB</td>
</tr>
<tr>
<td></td>
<td>Interventions (using CCI codes)</td>
<td>DAD/HMDB and NACRS</td>
</tr>
<tr>
<td><strong>Service-specific information</strong></td>
<td>Canadian Triage and Acuity Scale level</td>
<td>NACRS</td>
</tr>
<tr>
<td></td>
<td>Special Care Unit</td>
<td>DAD/HMDB</td>
</tr>
<tr>
<td></td>
<td>Mental Health indicators</td>
<td>DAD/HMDB</td>
</tr>
</tbody>
</table>

**Notes**
- CCI: Canadian Classification of Health Interventions.

The DAD and HMDB feed the Hospital Mental Health Database (HMHDB) information on hospitalizations for mental illness and addictions from across the country. The Ontario Mental Health Reporting System (OMHRS) provides the HMHDB with data from all hospitals with designated adult mental health beds — and from 2 psychiatric facilities with child/adolescent mental health beds — in that province.

OMHRS also has data from 3 facilities outside Ontario.

**Diagnosis codes related to use of opioids, sedatives/hypnotics and stimulants**

Both the DAD and NACRS use diagnosis codes from ICD-10-CA, a classification system developed by the World Health Organization and enhanced by CIHI to meet Canadian morbidity data needs.

A diagnosis may be coded either as the “main problem” or “other problem” using the ICD-10-CA coding system or the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV). The Canadian Emergency Department Diagnosis Shortlist (CED-DxS) is mapped to ICD-10-CA codes.

There are 3 types of prescription drugs at high risk for abuse:

- Opioids (normally used to treat pain);
- Benzodiazepines (normally used to treat anxiety and sleep disorders); and
- Stimulants (normally used to treat attention deficit disorder).
Relevant drug-specific ICD-10-CA diagnostic codes are as follows:

- F11 — Mental and behavioural disorders due to use of opioids
- F13 — Mental and behavioural disorders due to use of sedatives or hypnotics
- F15 — Mental and behavioural disorders due to use of other stimulants, including caffeine
- F19 — Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances

These are all associated with specific extensions:

- FXX.0 — Acute intoxication
- FXX.1 — Harmful use
- FXX.2 — Dependence syndrome
- FXX.3 — Withdrawal state
- FXX.4 — Withdrawal state with delirium
- FXX.5 — Psychotic disorder
- FXX.6 — Amnesic syndrome
- FXX.7 — Residual and late-onset psychotic disorder
- FXX.8 — Other mental and behavioural disorders
- FXX.9 — Unspecified mental and behavioural disorder

Other codes relevant to this research include

- T40.2 — Poisoning by other opioids (morphine and codeine)
- T40.3 — Poisoning by methadone
- T40.4 — Poisoning by other synthetic narcotics (pethidine, also known as meperidine)
- T40.6 — Poisoning by other and unspecified narcotics
- T42.4 — Poisoning by benzodiazepines
- T42.7 — Poisoning by antiepileptic and sedative-hypnotic drugs, unspecified
- X42 — Accidental poisoning by and exposure to narcotics and psychodysleptics, not elsewhere classified
- X62 — Intentional self-poisoning by and exposure to narcotics and psychodysleptics, not elsewhere classified
- Y12 — Poisoning by and exposure to narcotics and psychodysleptics not elsewhere classified, undetermined intent
- Y45.0 — Opioids and related analgesics causing adverse effects in therapeutic use
- Y47 — Sedatives, hypnotics and antianxiety drugs causing adverse effects in therapeutic use

Using these codes, you may request specific information through a custom data request.

Talk to us

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