Appendix 1: Non-Pharmaceutical Interventions to Reduce Methamphetamine Use in Manitoba

Detoxification services help their clients manage short-term drug withdrawal symptoms and promote drug abstinence. In Winnipeg, the community-based Main Street Project operates a free 10-day detox program to help clients decrease the risks associated with drug use and access longer treatment programs [1]. At the city’s largest hospital, the Health Sciences Centre, the RR2 outpatient physical medicine and rehab clinic also provides medically monitored detoxification and treatment planning.

Individuals in residential treatment centres or “halfway houses” receive medium- to long-term care and monitoring in a home-like setting. Most residential treatment centres require that clients be detoxified and in reasonably good health before admission, and clients are often expected to participate in regular house meetings or step programs during their stay. Residential treatment centres in Winnipeg include Addictions Recovery Inc., the Addictions Foundation of Manitoba, the Behavioural Health Foundation, the Indigenous Women’s Healing Centre, St. Raphael Wellness Centre Pritchard House (administered by the Native Addictions Council of Manitoba), the Anchorage Addiction Treatment Program (the Salvation Army), and Morberg House (St. Boniface Street Links) [2–10].

Harm reduction strategies are specifically designed to connect people using illicit drugs with services and supports to help them reduce use or stop using. These strategies facilitate the development of relationships with healthcare and social service providers who aim to meet people where they are and respect their recovery goals [11]. Although the goal of treatment is abstinence, the recovery process is unique for each individual, and a harm reduction approach recognizes that abstinence may not be the top priority for all clients. Treatment may be considered successful if there is any improvement from initial use or a reduction in drug-related harm [11,12], or more broadly, if it addresses the social determinants of health like basic income, housing or violence prevention. Examples of harm reduction strategies for methamphetamine users include safe consumption kits (injecting or smoking equipment) to prevent transmission of blood-borne disease, safe consumption sites (injecting or smoking facilities) to help prevent overdose, and other strategies that help to provide convenient access to other health and social supports [13].

References


Appendix 2: Search Strategy used to Identify Records relating to Methamphetamine Use in the Winnipeg Fire Paramedic Service Dataset

We searched for indications of methamphetamine use in the database of WFPS electronic patient care reports. Two research team members did a preliminary review of approximately 15% of free-text fields to develop inclusion criteria. All remaining records were reviewed by one team member with assistance from a WFPS analyst. A portion (10%) of these records was randomly selected to be independently coded by both reviewers; decisions on these records showed very good agreement: kappa = 0.865 (95% CI 0.814 - 0.916), p < 0.0005.

Search Terms:

- 'amphetamine'
- 'amphetamines'
- 'amphetimine'
- 'amphetimens'
- 'cristalmeth'
- 'crystalmeth'
- 'ivmeth'
- 'meth'
- 'nmeth'
- 'methamphetamine'
- 'methampetamine'
- 'methamhetamine'
- 'methamphetamines'
- 'methamphetimine'
- 'methamphetimines'
- 'methamphitamine'
- 'methaphetamine'
- 'methemphetamine'
- 'metamphetamines'
- 'metamphetamoine'
- 'meth1'
- 'meth12'
- 'methamp'
- 'methampheta'
- 'methamphetatime'
- 'methamphetimine'
- 'methamphetaminee'
- 'methamphetaminee'
Appendix 3: Detailed Definitions of Mental Disorder Diagnoses

Mood or Anxiety Disorder
One or more hospitalizations with a diagnosis for depressive disorder, affective psychoses, neurotic depression, adjustment reaction or bipolar disorder (looking at ICD-10 only) ICD-10-CA codes F30, F31, F32, F33, F34, F38, F41.2, F43, F53.0; OR one or more hospitalizations with a diagnosis for an anxiety state, phobic disorders or obsessive-compulsive disorders: ICD-10-CA codes F40, F41.0, F41.1, F41.3, F41.8, F41.9, F42;
or
Two or more physician visits with a diagnosis for depressive disorder or affective psychoses: ICD-9-CM codes 296, 311; OR 2 or more physician visits with a diagnosis for adjustment reaction: ICD-9-CM code 309; OR 2 or more physician visits with a diagnosis for anxiety disorders (including dissociative and somatoform disorders)*: ICD-9-CM code 300.

Psychotic Disorder
One or more hospitalizations with a diagnosis of psychotic disorders: ICD-9-code - 295 (schizophrenic disorders) or 297 (delusional disorders) or 298 (other nonorganic psychoses): ICD-10 codes - F11.5, F12.5, F13.5, F14.5, F15.5, F16.5, F18.5, F19.5 (psychotic disorders due to opioids, cannabinoids…etc. do not include F17.5 psychotic disorders due to tobacco), F20 (schizophrenia), F22 (delusional disorder), F23 (acute and transient psychotic disorders), F24 (induced delusional disorder), F25 (schizoaffective disorders), F28 (other nonorganic psychotic disorders), F29 (unspecified nonorganic psychosis);
or
One or more physician visits with a diagnosis of psychotic disorders: ICD-9-code - 295 (schizophrenic disorders) or 297 (delusional disorders) or 298 (other nonorganic psychoses).

Personality Disorder
One or more hospitalization with a diagnosis for personality disorders: ICD-10-CA codes: F21, F60, F61, F62, OR F69
or
One or more physician visits with a diagnosis of personality disorders: ICD-9-CM code: 301

Substance Use Disorder
At least one hospitalization with a diagnosis for alcohol or drug-induced psychosis, alcohol or drug dependence, or nondependent abuse of drugs: ICD-9-CM codes 291 (alcoholic psychoses), 292 (drug psychoses), 303 (alcohol dependence), 304 (drug dependence), or 305 (nondependent abuse of drugs) or ICD-10-CA codes F10-F19, F55, Z50.2 and Z50.3 (ICD-9-CM: 291, 292, 303, 304, 305 ICD-10-CA: F10-F19, F55, Z50.2, Z50.3)
or
At least one physician visit with a diagnosis for alcohol or drug-induced psychosis, alcohol or drug dependence, or nondependent abuse of drugs: ICD-9-CM codes 291 (alcoholic psychoses), 292 (drug psychoses), 303 (alcohol dependence), 304 (drug dependence), or 305 (nondependent abuse of drugs)