



BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (<http://bmjopen.bmj.com>).

If you have any questions on BMJ Open's open peer review process please email info.bmjopen@bmj.com

BMJ Open

Multinational Comparison of New Antidepressant Use in Older Adults

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2018-027663
Article Type:	Research
Date Submitted by the Author:	07-Nov-2018
Complete List of Authors:	Tamblyn, Robyn; McGill University, Department of Medicine and Department of Epidemiology and Biostatistics Bates, David ; Brigham and Women's Hospital, Medicine Buckridge, David; McGill University, Epidemiology, Biostatistics, and Occupational Health; Agence de la Santé et des services Sociaux de Montréal, Direction de santé publique Dixon, Will; University of Manchester, Arthritis Research UK Centre for Epidemiology Forster, Alan; The Ottawa Hospital , Internal Medicine ; The Ottawa Hospital Research Institute, Clinical Epidemiology Program Girard, Nadyne; McGill University, Clinical and Health Informatics Research Group Haas, Jennifer; Brigham and Women's Hospital Habib, Bettina; McGill University, Clinical and Health Informatics Research Group Kurteva, Siyana; McGill University, Epidemiology, Biostatistics, and Occupational Health Li, Jack; Taipei Medical University, Graduate Institute of Biomedical Informatics Sheppard, Therese; University of Manchester
Keywords:	Antidepressants, Multinational comparison, Older adults, EPIDEMIOLOGY

SCHOLARONE™
Manuscripts

Multinational Comparison of New Antidepressant Use in Older Adults

Robyn Tamblyn^{1, 2, 3}, David W. Bates⁴, David L. Buckeridge^{1, 3}, William G. Dixon⁵, Alan J. Forster⁶, Nadyne Girard³, Jennifer S. Haas⁴, Bettina Habib³, Siyana Kurteva¹, Jack Li^{7, 8}, Therese Sheppard⁵

¹Department of Epidemiology, Biostatistics and Occupational Health, McGill University, 1020 Pine Avenue West, Montreal, QC H3A 1A2, Canada
²Department of Medicine, McGill University Health Center, 1001 Decarie Boulevard, Montreal, QC H4A 3J1, Canada
³Clinical and Health Informatics Research Group, McGill University, 1140 Pine Avenue West, Montreal, QC H3A 1A3, Canada.
⁴Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115, USA.
⁵Arthritis Research UK Centre for Epidemiology, Centre for Musculoskeletal Research, Manchester Academic Health Science Centre, The University of Manchester, 2nd Floor, Stopford Building, Oxford Road, Manchester M13 9PT, UK.
⁶The Ottawa Hospital, 501 Smyth Road, Ottawa, Ontario K1H 8L6, Canada.
⁷International Center for Health Information Technology (ICHIT), Taipei Medical University, Taipei, Taiwan
⁸Graduate Institute of Biomedical Informatics, College of Medical Science and Technology, Taipei Medical University, Taipei, Taiwan

Corresponding Author

Robyn Tamblyn, BScN, MSc, PhD, FCAHS, CM
McGill University
1140 Pine Avenue West
Montreal, QC H3A 1A3
Tel. 514-934-1934 ext 32999
robyn.tamblyn@mcgill.ca

Word count: 3,934

ABSTRACT

Objectives: We used an international pharmacosurveillance network to estimate the rate and characteristics of antidepressant use in older adults in countries with more conservative (UK) and liberal depression guidelines (Canada, USA).

Setting: Electronic health records and population-based administrative data from six jurisdictions in four countries (UK, Taiwan, USA, and Canada).

Participants: A historical cohort of older adults (≥ 65) who had a new episode of antidepressant use between 2009-2014.

Outcome Measures: The age-standardized cumulative incidence of new episodes of antidepressant use in older adults was measured. Descriptive statistics were used to compare the proportion of new users by the antidepressant prescribed, therapeutic class, potential treatment indication, and country, as well as the characteristics of the first treatment episode (standardized daily doses, duration and changes).

Results: The incidence of antidepressant use between 2009-2014 varied from 0.7%(UK), to 18.6% (Taiwan). Tricyclic antidepressants (TCAs) were the most commonly used class in the UK (48.8%) and Taiwan (52.4%) compared to selective serotonin reuptake inhibitors (SSRIs) in North American jurisdictions (42.3%-53.3%). Chronic pain was the most common potential treatment indication (41.2%-68.2%). Among users with chronic pain, TCAs were used most frequently in the UK and Taiwan (55.2%-60.4%) whereas SSRIs were used most frequently in North America (33.5%-46.4%). Treatment was longer (252-525 vs 169-437 days), standardized doses were higher (0.7-1.3 vs 0.5-1.0), and treatment was more likely to be changed (31%-46% vs 21%-34%) among patients with depression (9.1%-43%) than those with chronic pain.

Conclusion: Antidepressant use in older adults varied 24-fold by country, being lowest in the UK, which has the most conservative treatment guidelines. Chronic pain was the most common potential treatment indication. Evaluation of real-world risks of TCAs is a priority for future research, given high rates of use, and the potential for increased toxicity in older adults because of potent anti-cholinergic effects.

Summary Boxes

What is already known on this topic

- The use of antidepressants in older adults has been increasing in many countries.
- Antidepressant use in older adults is associated with fall-related injuries, functional decline, and mortality.
- Guidelines on depression management vary between countries, but it is not known how these differences impact the use of antidepressants among older adults.

What this study adds

- Our study shows that antidepressant use among older adults varies between countries and is lowest in England, which has the most conservative guidelines.
- The most common potential treatment indication in all studied countries was chronic pain.
- Antidepressant users with chronic pain in England and Taiwan most frequently used TCAs, whereas those in North America used SSRIs.

Strengths of this study

- Uses an international pharmacosurveillance network to characterize antidepressant use across multiple jurisdictions

Limitations of this study

- Despite data harmonization efforts, measurement and reporting issues may lead to arbitrary differences between regions and countries.
- Treatment indication is unknown for all but one study cohort. Documentation of health problems in medical services billing data and EMRs was used as a proxy for treatment indication for remaining cohorts, which could have resulted in misclassification bias.
- While some cohorts represented total populations or representative samples, others were assembled from practices supported by specific information technology systems.

INTRODUCTION

Depression affects an estimated 300 million people worldwide[1]. In the past decade, many countries have reported a two to three fold increase in the use of antidepressant medications[2]. The primary increase has been in newer antidepressants such as selective serotonin reuptake inhibitors (SSRIs), which are considered to have better efficacy than older drugs, with fewer side effects[3]. Increasing prevalence of use of antidepressants has also been associated with both an increase in the number of people started on therapy as well as its duration, with 40% of antidepressants being prescribed for more than 180 days [4]. Antidepressants now represent one of the most commonly prescribed medications[5 6], especially among older adults, where the increase in use has been the greatest in the US population[5 7].

The increasing use of antidepressants in older adults may be due to a number of factors. There has been long-standing advocacy for better recognition and treatment of depression in older adults[8 9]. In addition, individuals with multiple chronic conditions are more likely to experience depression. In Canada, 12% of persons 65 years and older have two or more major chronic conditions compared to only 3.6% in younger adults; and 4% of adults with at least one major chronic disease have mood or anxiety disorders, which are other approved indications for antidepressant use[10]. While increasing prevalence of depression, anxiety and other mood disorders in older adults may account for increasing use of antidepressants, there is also evidence that antidepressants are prescribed for unapproved indications that may not be supported by scientific evidence of efficacy[11-14]. One recent study found that nearly 50% of antidepressants were prescribed for unapproved indications including chronic pain, tiredness, and sleep disturbance[11], which are also more common in older adults[15].

Taken together, these factors have led to increasing concern about overuse of antidepressants, particularly in older adults[16]. This concern is heightened because of the reported association between antidepressant use and fall-related injuries, motor vehicle accidents, functional decline, and mortality in older adults[17-19]. Clinical practice guidelines for the management of depression vary considerably in their recommendations for first line treatment[20-24], although most acknowledge the need to consider patient preferences (Table 1). The United Kingdom NICE guidelines are the most conservative, recommending first line treatment with psychotherapy such as cognitive behavioral therapy with pharmacotherapy added only if non-pharmacological therapy is unsuccessful[24]. At the other end of the spectrum, the Canadian 2016 guidelines recommend pharmacotherapy as the first line treatment; including selective serotonin re-uptake inhibitors (SSRIs), serotonin-norepinephrine reuptake inhibitors (SNRIs), mirtazapine, or bupropion for mild or moderate depressive disorder, with the addition of psychotherapy only if there is an inadequate antidepressant response[21]. Of note, Canada ranks as the 3rd highest user of anti-depressants among 23 OECD countries, surpassed only by Australia and Iceland[2].

However, few data are available regarding how national guidelines may contribute to differences in how antidepressants are used for older adults. We took advantage of an international pharmacosurveillance network[25] that uses electronic medical record (EMR) and population-based health administrative data to estimate the rate of antidepressant use in older adults in countries that had more conservative (UK) and lenient guidelines (Canada, USA, Taiwan). We evaluated differences in the choice of antidepressant, dose and duration of treatment, the prevalence of dose changes and switches in treatment of older adults

with new episodes of antidepressant use, as well as differences in treatment approach for patients with a recorded diagnosis of depression, other mental health co-morbidities, and chronic pain.

METHODS

Study Design and Population

To characterize antidepressant use in older adults, a prospective cohort of individuals who were 65 years of age or older and had a new episode of antidepressant use between 2009 and 2014 following two years during which they had no prescription or dispensation of an antidepressant was assembled. Eligible patients were identified from electronic medical record (EMR) or population-based registries in a total of six jurisdictions in four countries (Canada, United States, UK, and Taiwan).

Data Sources

CANADA

Quebec EMR cohort: Data were extracted from the Medical Office of the 21st Century (MOXXI) EMR, which includes a real-time linkage to the Quebec insurance agency, the Régie de l’assurance maladie du Québec (RAMQ) databases. This linkage provides historical and daily updates of patients’ received medical services (diagnosis, procedure, date, location, provider), prescriptions dispensed from community pharmacies for persons who are publicly insured (prescriber, pharmacy, drug, dose, dispensing date, duration, refills), and mortality. Approximately 110 primary care physicians in Quebec use MOXXI for approximately 90,000 of their patients, representing approximately 25% of the patients in the practice, and approximately 5% of the Quebec population in primary care practices.

Quebec Administrative Data cohort: Data were retrieved from the Montreal Population Health Record, a population-based 25% random sample of the 4.1 million residents of Montreal, Canada’s second largest city, which is dynamically updated each year to account for in and out-migration. Beneficiary characteristics were measured by linking the RAMQ beneficiary database (age, sex, postal code) with Statistics Canada’s census file (postal code level measures of socio-economic status), and the Institute of Statistics birth and death registry (date of birth and death). From this population-based dataset, we identified all non-institutionalized persons 65 years of age or older between 2009-2014. All medical services (date, diagnosis, procedure), hospitalizations (admission and discharge date, primary and secondary diagnoses, in-hospital procedures), and medications (prescriber, pharmacy, drug, dose, dispensing date, duration, refills) received by members of the cohort were retrieved from the RAMQ database and those of the Quebec Ministry of Health.

Ontario Administrative Data Cohort: Data were extracted from the Institute for Clinical Evaluative Sciences population-based repository of health records for the 13.6 million Ontario residents. The data is provided by the Ontario Ministry of Health and Long-Term Care, which pays for all essential health services. For the 2 million Ontario non-institutionalized residents who were 65 year or older between 2007 and 2014 , we extracted age, sex and date of death from the beneficiary registrants database, all billing claims for medical services provided by Ontario physicians (date of service, diagnosis, procedure code, physician provider), all claims for medications dispensed in the community by Ontario pharmacies (drug, date

dispensed, prescriber, quantity, duration, number of refills), and data from discharge summaries of emergency department visits and hospital stays (date of admission and discharge, primary and secondary diagnoses and procedures).

UNITED STATES

Boston, Massachusetts EMR cohort: Data were extracted from the Partners HealthCare Research Patient Data Registry (RPDR), which provides care for approximately 3 million of 5 million residents in Boston and surrounding areas. RPDR includes data from the Longitudinal Medical Record (LMR), an internally developed, web-based, fully functional EMR that was in use during this period for the participating primary care clinics from Brigham and Women's Hospital (BWH) and Massachusetts General Hospital (MGH), the two founding members of Partners Healthcare in Boston, Massachusetts. Data were retrieved from the structured clinical encounter information from RPDR for all outpatient primary care visits. To ensure complete follow-up, patients were eligible if they were seen in one of 37 BWH- or MGH- affiliated primary care or diabetes clinics.

UNITED KINGDOM

EMR cohort: Data were extracted from the Clinical Practice Research Datalink (CPRD), an anonymised longitudinal medical records database for primary care. The primary care EHR includes information on all primary care interactions, including documented health problems, visit notes, prescriptions, and records of specialty referrals, as well as information on lab results, hospitalizations, and death. The CPRD includes more than 4 million active patients, 76% of whom are in England, representing 6.9% of the 64 million primary care population in the UK, and around 600 primary care practices[26]. Patients were included if their records met minimum quality standards and there were no gaps in registration.

TAIWAN

Administrative Data Cohort: Data were extracted from the Taiwanese National Health Insurance (NHI) system databases. The NHI provides health coverage to around 99% of Taiwan's population of 23 million, providing comprehensive coverage for all health services, including dental, preventive, Western medicine, and traditional Chinese medicine services. A random sample of 103,400 of the 3.6 million residents that were 65 years or older in Taiwan between 2007 and 2014 was extracted for this study. The NHI's research databases include a registry for beneficiaries (e.g. registrant's age, sex, residence), an outpatient visit database (date and time of visit, ICD-9-CM codes of existing health problems, service provided), an inpatient visit database (date of hospitalization and discharge, ICD-9-CM codes of existing health problems, procedure codes and dates), and a pharmacy database (drug prescribed, date, duration, dosage, prescribing physician, dispensing pharmacy).

1

2

3 **Measurement**

4

5

6 **Patient Characteristics**

7 *Age & Sex:* Date of birth and sex were retrieved from the administrative data in Canada and Taiwan as
8 these data are verified at the time of enrollment in the health plan. For the US and United Kingdom, these
9 data were retrieved from the EMR.

10

11

12 **Depression, Other Mental Health Comorbidities, and Chronic Pain**

13 We measured the existence of potential indications for antidepressant use[11 12] including depression,
14 other mental health conditions, and chronic pain. Depression included mild, moderate, major single or
15 recurrent depressive disorder with or without psychotic symptoms, adjustment reaction, and mixed
16 anxiety and depression. Other mental health conditions included anxiety, alcohol abuse, illicit drug use,
17 attempted suicide, psychosis, schizophrenia, and bipolar disorder. Anxiety included dissociative and
18 somatoform disorders. We used standard diagnostic codes (ICD 9, ICD 10, and Read codes) retrieved from
19 the EMR, and/or medical services claims, and hospitalizations in the two-years prior to the first anti-
20 depressant prescription to measure these conditions (Appendix).

21

22

23

24 To measure chronic pain, we used a previously validated ICD9 and ICD10 code set for non-cancer pain[27].
25 The concepts and definitions used in the development and validation of this code set were used to map
26 to Read codes (Appendix). Chronic non-cancer pain conditions included lumbar pain, back disorders that
27 are often associated with pain (e.g. degenerative disc disease), neck and back problems (e.g. spondylosis),
28 fibromyalgia, complex regional pain syndromes (e.g. mononeuritis), painful neuropathic disorders (e.g.
29 post herpetic neuralgia), pain disorders with psychosocial dysfunction, and unclassified chronic pain
30 problems.

31

32

33

34 **Characterizing Antidepressant Use**

35 The characteristics of antidepressant use were compared in the population of seniors with a new episode
36 of antidepressant use in each country, overall, and then within subgroups that had a diagnosis of a)
37 depression, b) chronic pain, or c) other mental health problems.

38

39

40 *Classification of Starting Therapy:* The Anatomic Therapeutic Classification (ATC) system[28] was used to
41 map national drug names and identification numbers to a common nomenclature based on the
42 antidepressants that were prescribed during the study time period. Therapeutic classes included tri-cyclic
43 antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), serotonin-norepinephrine
44 reuptake inhibitors (SNRIs), serotonin antagonist and reuptake inhibitors (SARIs), norepinephrine-
45 dopamine reuptake inhibitors (NDRIs), noradrenergic and specific serotonergic
46 antidepressants (NaSSAs), tetracyclic antidepressants (TeCAs), melatonergic agonists (MAs), and
47 norepinephrine reuptake inhibitors (NRIs). Monoamine oxidase inhibitors were excluded as they are
48 rarely used and only for bipolar disorder. Starting therapy was classified by therapeutic class and drug,
49 and by the number of antidepressants prescribed at treatment initiation.

50

51

52

53

54 *Starting Antidepressant Dose:* To enable comparisons in the dose prescribed among antidepressants, we
55 created a standardized dose for each drug by dividing the prescribed dose by the WHO recommended

daily dose for adults. The resulting indicator represents the proportion of the recommended daily adult dose that was prescribed. When more than one antidepressant was prescribed concurrently, we summed the standardized dose for each drug.

Analysis

The cumulative incidence of older adults with new episodes of antidepressant use in the period 2009 to 2014 was measured by dividing the number of new users by the total population that was 65 years or older during this time period. Rates were standardized for age using the direct method and the United Kingdom as the reference population. New episodes of use were defined as those who had no prior prescription of an antidepressant in the two years preceding their first prescription. Descriptive statistics were used to compare the proportion of new antidepressant users by the antidepressant prescribed, therapeutic class, country and potential treatment indication, as well as the characteristics of the first treatment episode. As the co-existence of other mental health conditions may modify treatment choices, we used the prevalence ratio to estimate the concurrence of other mental health problems, chronic pain and depression. The prevalence ratio allowed us to compare between countries even if the prevalence of these conditions is different[29].

Patient and Public Involvement

Patients and members of the public were not involved in the development of research questions or outcome measures, design, or implementation of this study. There are no plans to involve patients in dissemination of research results.

RESULTS

The age-standardized cumulative incidence of antidepressant use in persons aged 65 and older in the period 2009-2014 was highest in Taiwan (18.6%) and Ontario, Canada (15.3%), and lowest in England (0.7%) (Table 2). Similarly, the overall prevalence of antidepressant use in the same time period was lowest in England (10.3%), and highest in Ontario, Canada (26.8%) and Taiwan (23.4%) and. The distribution of age was similar in all jurisdictions.

Frequency Distribution of the First Antidepressant Prescription by Therapeutic Class

Overall, there were substantial differences between jurisdictions in the choice of starting therapy for new users (Table 3). Tricyclic antidepressants were the most commonly used class of antidepressants in England (48.8%) and Taiwan (52.4%) compared to selective serotonin reuptake inhibitors in North American jurisdictions (42.3%-53.3%). Notably, in the United Kingdom, approximately one-quarter of antidepressant prescriptions were for newer classes of antidepressants: serotonin antagonist & reuptake inhibitors (trazodone), norepinephrine-dopamine reuptake inhibitors (bupropion), and noradrenergic serotonin specific antidepressants (mirtazapine).

Co-Existence of Depression, Other Mental Health Problems and Chronic Pain

The prevalence of a depression diagnosis among new antidepressant users was relatively low, varying from 9.1% (Taiwan) to 21.7% (USA). The exception was the EMR cohort in Quebec where the prevalence

was 43.0% (Table 4). Among new antidepressant users with a diagnosis of depression, there was a 30% (UK Prevalence Ratio: 1.3) to 7-fold (USA Prevalence Ratio: 7.3) increase in the likelihood of also having an alcohol or other substance abuse problem. Anxiety, which varied from being present in 12.1% of new antidepressant users in the UK to 47.8% of new users in Taiwan, was the most common mental health problem, and was also more likely to be present among persons with depression (Prevalence Ratio: 1.3 (Ontario, Quebec) to 3.6 (USA)). Although less common in all jurisdictions, both major mental illness and suicide attempt were more likely to be present among antidepressant users with depression compared to those without depression. In contrast, chronic pain was the most prevalent problem among new antidepressant users (41.2% (UK) to 68.2% (Taiwan)), and was as likely to be present among those with or without depression (Prevalence Ratio: 0.9-1.3) (Table 4). For almost one-third of new antidepressant users, there was no documented diagnosis of depression, other mental health problems or chronic pain.

Choice of Anti-depressant by Potential Treatment Indication

Among new antidepressant users with a diagnosis of depression, selective serotonin reuptake inhibitors were selected as the starting therapy for 55.2% (Ontario) to 71.4% (UK), followed by SNRIs in Canadian jurisdictions, and newer antidepressants in Boston, the UK, and Taiwan (Table 5). For antidepressant users with a diagnosis of chronic pain, starting therapy was predominantly with SSRIs in North American jurisdictions (33.5%-46.1%), and with TCAs in the UK and Taiwan (55.2%-60.4%). Selection of therapy for other mental health problems was a mixture of choices made for persons with a diagnosis of depression and chronic pain.

Characteristics of the First Treatment Episode by Potential Treatment Indication

Among patients with a diagnosis of depression who were started on antidepressants, 54% (Ontario) to 68% (Taiwan) remained on their initial course of antidepressant treatment (Table 6A). For this group, the mean duration of treatment varied from 104.7 (Taiwan) to 340.9 (Quebec) days, and the mean dose varied from 60% of (0.6) of the recommended adult dose (Taiwan), to the recommended adult dose in the United States site (mean dose: 1.0). Among the 32% (Taiwan) to 46% (Ontario) with a change in treatment, the most common change in all jurisdictions was an increase in dose occurring in 20% (Taiwan) to 33% (Ontario) of patients, followed by a decrease in dose (13% (Taiwan) to 21% (Ontario)), and the addition of a drug from a different therapeutic class (6% (UK) to 18% (Ontario)). Among patients with a change in therapy in their initial treatment episode, the mean duration of treatment was almost double (mean duration 312.6 to 616.9 days) than for patients with no change, and the mean dose during treatment was substantially higher (mean standardized proportion of the adult dose: 0.8 to 1.4).

The first treatment episode for new antidepressant users with a diagnosis of chronic pain was substantially different than patients with a diagnosis of depression (Table 6B). Overall, 66% (Ontario) to 79% (Taiwan) were kept on the initial treatment regimen, for a much shorter duration than for new users with a diagnosis of depression (mean duration: 83.6 days (Taiwan) to 300.9 days (Quebec)), and at lower mean doses (mean standardized proportion of the adult dose: 0.4 (Taiwan, UK, Montreal) to 0.8 (U.S.)). For the 21% to 34% of patients who had a change in treatment, the most common changes in all jurisdictions were an increase in dose (13% to 25%), a decrease in dose (9% to 14%) and the addition of another drug from a different therapeutic class (3% to 11%). For those with a change in treatment, the duration of the

treatment episode was considerably longer in all jurisdictions (264.4 to 590.0 days), and the mean dose during the treatment episode was higher (0.5 to 1.1).

INTERPRETATION

This multi-national study is the first to compare the use of antidepressants among comparable cohorts of new users in different countries. We found wide variation in the incidence and prevalence of antidepressant use; the lowest rate was in the UK where guidelines for pharmacotherapy use for depression were the most conservative. Choice of starting therapy also varied widely by country and condition, with the UK and Taiwan more likely to use tricyclic antidepressants for persons with a diagnosis of chronic pain whereas selective serotonin reuptake inhibitors were the most common choice for both depression and pain in North American settings. Overall treatment duration was longer for patients with depression than chronic pain, mean treatment doses were higher, and there were more likely to be changes in therapy.

Differences in the incidence of antidepressant use in different countries as well as the choice of antidepressant therapy may also be influenced by a variety of system-related factors. For example, direct to consumer advertising of prescription drugs is permitted in the USA but banned in Canada, Europe, and the UK because these ads drive demand for specific treatments[30]. Also, drugs available and covered by public insurance plans in the UK, Taiwan and Canada are influenced by rigorous reviews and guidelines for the use of new drugs and technologies by national agencies such as the National Institute for Health and Care Excellence in the United Kingdom[31-33].

A surprisingly large percentage of older adults were prescribed antidepressants for conditions other than depression. We found that chronic pain was the most common problem documented and it appeared to be the most likely reason for antidepressant use. Chronic pain has an estimated prevalence of 11.8%[34] to 43.5%[35] in adults, and increases with age, with an estimated 62% of those 75 years of age or older experiencing this problem[35]. While use of antidepressants for chronic pain has been shown to be effective, particularly tricyclic antidepressants (amitriptyline) and serotonin noradrenalin reuptake inhibitors (duloxetine) for neurogenic pain[36 37], tricyclic antidepressants have been on the lists of potentially contraindicated medications for the elderly for over a decade because of their potent anticholinergic effects that can lead to cognitive impairment, and other avoidable morbidity[38 39]. Moreover, only one antidepressant, duloxetine has been approved for treatment of chronic pain in North America and Europe[11]. Although the anticholinergic effects of tricyclic antidepressants have been well documented[40-42], the actual “real-world” evidence of harm is limited[43], and should be addressed in future studies given the high rates of use. The variation in approach in the use of antidepressants for depression and chronic pain in different countries creates the natural experiment that could generate unbiased evidence of potential harms and benefits.

Notably, in this study of older adults, depression was documented in only two in ten users; the exception being in Quebec City/Montreal where four out of ten patients were prescribed antidepressants for

depression. There are known problems in under-reporting, diagnosis and documentation of depression[44-46] , which may account for some or all of these differences between sites. The MOXXI system used in the Quebec cohort likely provides an approximate estimate of the extent to which depression is undocumented. In this cohort, physicians are required to document the treatment indication for each drug prescribed[47], data that has been validated in prior studies[48]. Results from this setting suggest that twice as many patients receive antidepressants for depression, whereas a similar proportion of new antidepressant users had a diagnosis of chronic pain as in other sites.

Also, of interest, among patients with documented depression, antidepressant use in all countries followed current guidelines for depression management[21 24 49 50]. Choice of first-line therapy was predominantly selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors. Starting doses were lower than the recommended adult doses, mean duration of treatment was 251-525 days, and the main changes in treatment were increases in doses and the addition of an antidepressant from a different therapeutic class. Not surprisingly, among patients where there was a change in treatment, both the average antidepressant dose was higher and treatment duration was longer, suggesting a lack of treatment effectiveness. The cohort in Taiwan was different in a number of respects including lower antidepressant doses, shorter treatment duration, and fewer changes in therapy once started. The reason for these differences in approach is not clear. They may represent an innate conservatism in the use of antidepressants in the Taiwanese population where there is an acknowledged absence of evidence to support clinical guidelines[50], or known differences in genetic determinants of drug metabolism that have been established in population-based genomic studies of drug metabolism[51].

This study has several limitations to consider in the interpretation of results. Efforts were made to harmonize data from different sources and countries, however both measurement and reporting issues may lead to arbitrary differences between regions and countries. With the exception of the Quebec cohort, treatment indication is unknown. Documentation of health problems in medical services billing data and EMRs was used as a proxy for treatment indication, which based on past studies has a predictive value of 7.8 – 80.3%[52]. The resulting misclassification will attenuate differences observed in treatment approach between conditions. Moreover, diagnoses of health problems tend to be under-reported in administrative data. While the Ontario, Montreal, and Taiwan cohorts represented total populations or representative samples, the UK, Quebec, and USA cohorts were assembled on the basis of practices supported by specific information technology systems. The trends observed in these more selected populations however are similar to those reported for antidepressant use in older adults in these countries[6 53-58].

In conclusion, antidepressant use in older adults varies up to 24-fold by country (cumulative incidence from 0.7% to 17.0%), and chronic pain appears to be the most common treatment indication in all jurisdictions, even more so than depression. Evaluation of real-world risks and benefits of antidepressants by treatment indication should be a priority for future research. The relative contraindication of tricyclic antidepressants in older adults because of their potent anticholinergic effects needs to be assessed given their high rate of use, and proven efficacy in pain management[36-39].

Funding: This project was funded by the Canadian Institutes of Health Research (CIHR) operating grant # MOP-111166.

Ethical Approval: This study received ethics approval from the McGill University Institutional Review Board (IRB # A01-B02-02A), the Institute for Clinical Evaluative Sciences, the Partners Human Research Committee IRB (Protocol # 2011P000773/PH), and the Independent Scientific Advisory Committee (ISAC) of CPRD (Protocol # 14_081R).

Transparency Declaration: The lead author, Dr. Robyn Tamblyn, affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted and that any discrepancies from the study as planned have been explained.

Competing interests: None to disclose

Data sharing: No additional data available

Contributors: RT, DWB, DLB, WGD, AJF, JSH, and JL contributed to the study concept and design. NG, TS, and BH contributed to the statistical analysis. RT drafted the manuscript. DWB, DLB, WGD, AJF, NG, JSH, BH, SK, JL, and TS critically reviewed the manuscript for intellectual content. All authors read and approved the final manuscript.

Reference List

1. WHO. Depression. In: Organization WH, ed., 2017.

2. OECD. Health at a Glance 2015: OECD indicators. OECD Indicators, OECD Publishing, Paris. DOI: https://doi.org/10.1787/health_glance-2015-en. Accessed February, 2015:217.

3. Chee KY, Tripathi A, Avasthi A, et al. International study on antidepressant prescription pattern at 40 major psychiatric institutions and hospitals in Asia: A 10-year comparison study. *Asia Pac Psychiatry* 2015;**7**(4):366-74 doi: 10.1111/appy.12176[published Online First: Epub Date]].

4. Burton C, Anderson N, Wilde K, Simpson CR. Factors associated with duration of new antidepressant treatment: analysis of a large primary care database. *Br J Gen Pract* 2012;**62**(595):e104-12 doi: 10.3399/bjgp12X625166[published Online First: Epub Date]].

5. Rotermann M, Sanmartin C, Hennessy D, Arthur M. Prescription medication use by Canadians aged 6 to 79. *Health Rep* 2014;**25**(6):3-9

6. Pratt LA, Brody DJ, Gu Q. Antidepressant use in persons aged 12 and over: United States, 2005-2008. *NCHS Data Brief* 2011(76):1-8

7. Zhong W, Kremers HM, Yawn BP, et al. Time trends of antidepressant drug prescriptions in men versus women in a geographically defined US population. *Arch Womens Ment Health* 2014;**17**(6):485-92 doi: 10.1007/s00737-014-0450-7[published Online First: Epub Date]].

8. Ivanova JI, Bienfait-Beuzon C, Birnbaum HG, Connolly C, Emani S, Sheehy M. Physicians' decisions to prescribe antidepressant therapy in older patients with depression in a US managed care plan. *Drugs Aging* 2011;**28**(1):51-62 doi: 10.2165/11539900-000000000-00000[published Online First: Epub Date]].

9. Singh R, Mazi-Kotwal N, Thalitaya MD. Recognising and Treating Depression in the Elderly. *Psychiatr Danub* 2015;**27** Suppl 1:S231-4

10. PHSA. Chronic disease multi-morbidity. How healthy are Canadians? A Trend analysis of the health of Canadians from a healthy living and chronic disease perspective.: Public Health Agency of Canada, 2014:23-24.

11. Wong J, Motulsky A, Abrahamowicz M, Egale T, Buckeridge DL, Tamblyn R. Off-label indications for antidepressants in primary care: descriptive study of prescriptions from an indication based electronic prescribing system. *BMJ* 2017;**356**:j603 doi: 10.1136/bmj.j603[published Online First: Epub Date]].

12. Wong J, Motulsky A, Egale T, Buckeridge DL, Abrahamowicz M, Tamblyn R. Treatment indications for antidepressants prescribed in primary care in quebec, canada, 2006-2015. *JAMA* 2016;**315**(20):2230-32 doi: 10.1001/jama.2016.3445[published Online First: Epub Date]].

13. Egale T, Buckeridge DL, Winslade NE, Benedetti A, Hanley JA, Tamblyn R. Drug, patient, and physician characteristics associated with off-label prescribing in primary care. *Archives of internal medicine* 2012;**172**(10):781-8 doi: 10.1001/archinternmed.2012.340[published Online First: Epub Date]].

14. Chen H, Reeves JH, Fincham JE, Kennedy WK, Dorfman JH, Martin BC. Off-label use of antidepressant, anticonvulsant, and antipsychotic medications among Georgia medicaid enrollees in 2001. *The Journal of clinical psychiatry* 2006;**67**(6):972-82

15. Mojtabai R, Olfson M. Proportion of antidepressants prescribed without a psychiatric diagnosis is growing. *Health Aff (Millwood)* 2011;**30**(8):1434-42 doi: 10.1377/hlthaff.2010.1024[published Online First: Epub Date]].

16. Mojtabai R. Diagnosing depression in older adults in primary care. *N Engl J Med* 2014;**370**(13):1180-2 doi: 10.1056/NEJMp1311047[published Online First: Epub Date]].

17. Wang CY, Fu SH, Wang CL, Chen PJ, Wu FL, Hsiao FY. Serotonergic antidepressant use and the risk of fracture: a population-based nested case-control study. *Osteoporos Int* 2016;**27**(1):57-63 doi: 10.1007/s00198-015-3213-z[published Online First: Epub Date]].

18. Moura C, Bernatsky S, Abrahamowicz M, et al. Antidepressant use and 10-year incident fracture risk: the population-based Canadian Multicentre Osteoporosis Study (CaMoS). *Osteoporos Int* 2014;**25**(5):1473-81 doi: 10.1007/s00198-014-2649-x[published Online First: Epub Date]].

19. Orriols L, Wilchesky M, Lagarde E, Suissa S. Prescription of antidepressants and the risk of road traffic crash in the elderly: a case-crossover study. *Br J Clin Pharmacol* 2013;**76**(5):810-5 doi: 10.1111/bcp.12090[published Online First: Epub Date]].
20. McIntyre RS, Suppes T, Tandon R, Ostacher M. Florida Best Practice Psychotherapeutic Medication Guidelines for Adults With Major Depressive Disorder. *The Journal of clinical psychiatry* 2017;**78**(6):703-13 doi: 10.4088/JCP.16cs10885[published Online First: Epub Date]].
21. Kennedy SH, Lam RW, McIntyre RS, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) 2016 Clinical Guidelines for the Management of Adults with Major Depressive Disorder: Section 3. Pharmacological Treatments. *Can J Psychiatry* 2016;**61**(9):540-60 doi: 10.1177/0706743716659417[published Online First: Epub Date]].
22. APA. The American Psychiatric Association Practice Guidelines for the Psychiatric Evaluation of Adults. Third ed: American Psychiatric Association, 2016:170.
23. Mulsant BH, Blumberger DM, Ismail Z, Rabheru K, Rapoport MJ. A systematic approach to pharmacotherapy for geriatric major depression. *Clin Geriatr Med* 2014;**30**(3):517-34 doi: 10.1016/j.cger.2014.05.002[published Online First: Epub Date]].
24. NICE. Depression in adults: recognition and management. UK: National Institute for Health and Care Excellence, 2009.
25. Tamblyn R, Girard N, Dixon WG, et al. Pharmacosurveillance without borders: electronic health records in different countries can be used to address important methodological issues in estimating the risk of adverse events. *Journal of clinical epidemiology* 2016;**77**:101-11 doi: 10.1016/j.jclinepi.2016.03.033[published Online First: Epub Date]].
26. Herrett E, Gallagher AM, Bhaskaran K, et al. Data Resource Profile: Clinical Practice Research Datalink (CPRD). *International Journal of Epidemiology* 2015;**44**(3):827-36 doi: 10.1093/ije/dyv098[published Online First: Epub Date]].
27. Lacasse A, Ware MA, Dorais M, Lanctot H, Choiniere M. Is the Quebec provincial administrative database a valid source for research on chronic non-cancer pain? *Pharmacoepidemiology and drug safety* 2015;**24**(9):980-90 doi: 10.1002/pds.3820[published Online First: Epub Date]].
28. Hohl CM, Zed PJ, Brubacher JR, Abu-Laban RB, Loewen PS, Pursell RA. Do Emergency Physicians Attribute Drug-Related Emergency Department Visits to Medication-Related Problems? *Annals of Emergency Medicine* 2010;**55**(6):493-502.e4 doi: <https://doi.org/10.1016/j.annemergmed.2009.10.008>[published Online First: Epub Date]].
29. Thompson ML, Myers JE, Kriebel D. Prevalence odds ratio or prevalence ratio in the analysis of cross sectional data: what is to be done? *Occupational and environmental medicine* 1998;**55**(4):272-7
30. Magrini N, Font M. Direct to consumer advertising of drugs in Europe. *BMJ* 2007;**335**(7619):526-26 doi: 10.1136/bmj.39310.506308.AD[published Online First: Epub Date]].
31. The development and updating of local formularies, NICE good practice guidance: National Institute for Health and Clinical Excellence (NICE), 2012.
32. Technology appraisal guidance. Secondary Technology appraisal guidance. <https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance>.
33. CADTH Common Drug Review (CDR). Secondary CADTH Common Drug Review (CDR). <https://www.cadth.ca/about-cadth/what-we-do/products-services/cdr>.
34. Mansfield KE, Sim J, Jordan JL, Jordan KP. A systematic review and meta-analysis of the prevalence of chronic widespread pain in the general population. *Pain* 2016;**157**(1):55-64 doi: 10.1097/j.pain.0000000000000314[published Online First: Epub Date]].
35. Fayaz A, Croft P, Langford RM, Donaldson LJ, Jones GT. Prevalence of chronic pain in the UK: a systematic review and meta-analysis of population studies. *BMJ Open* 2016;**6**(6) doi: 10.1136/bmjopen-2015-010364[published Online First: Epub Date]].
36. Fennema J, Petrykiv S, de Jonge L, Arts M. Efficacy and safety of antidepressants as analgesics in chronic pain: A review. *European Psychiatry* 2017;**41**:S234 doi: <https://doi.org/10.1016/j.eurpsy.2017.01.2248>[published Online First: Epub Date]].
37. Finnerup NB, Attal N, Haroutounian S, et al. Pharmacotherapy for neuropathic pain in adults: a systematic review and meta-analysis. *The Lancet Neurology* 2015;**14**(2):162-73 doi: 10.1016/S1474-4422(14)70251-0[published Online First: Epub Date]].

38. O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age and ageing 2015;**44**(2):213-8 doi: 10.1093/ageing/afu145[published Online First: Epub Date] |.

39. American Geriatrics Society 2015 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc 2015;**63**(11):2227-46 doi: 10.1111/jgs.13702[published Online First: Epub Date] |.

40. Chew ML, Mulsant BH, Pollock BG, et al. Anticholinergic activity of 107 medications commonly used by older adults. J Am Geriatr Soc 2008;**56**(7):1333-41 doi: 10.1111/j.1532-5415.2008.01737.x[published Online First: Epub Date] |.

41. Pollock BG, Mulsant BH, Nebes R, et al. Serum anticholinergic activity in elderly depressed patients treated with paroxetine or nortriptyline. The American journal of psychiatry 1998;**155**(8):1110-2 doi: 10.1176/ajp.155.8.1110[published Online First: Epub Date] |.

42. Duran CE, Azermay M, Vander Stichele RH. Systematic review of anticholinergic risk scales in older adults. European journal of clinical pharmacology 2013;**69**(7):1485-96 doi: 10.1007/s00228-013-1499-3[published Online First: Epub Date] |.

43. Collamati A, Martone AM, Poscia A, et al. Anticholinergic drugs and negative outcomes in the older population: from biological plausibility to clinical evidence. Aging clinical and experimental research 2016;**28**(1):25-35 doi: 10.1007/s40520-015-0359-7[published Online First: Epub Date] |.

44. Bharadwaj P, Pai MM, Suziedelyte A. Mental health stigma. Economics Letters 2017;**159**:57-60 doi: <https://doi.org/10.1016/j.econlet.2017.06.028>[published Online First: Epub Date] |.

45. Hunt M, Auriemma J, Cashaw ACA. Self-Report Bias and Underreporting of Depression on the BDI-II. Journal of Personality Assessment 2003;**80**(1):26-30 doi: 10.1207/S15327752JPA8001_10[published Online First: Epub Date] |.

46. Cepoiu M, McCusker J, Cole MG, Sewitch M, Belzile E, Ciampi A. Recognition of Depression by Non-psychiatric Physicians—A Systematic Literature Review and Meta-analysis. Journal of General Internal Medicine 2008;**23**(1):25-36 doi: 10.1007/s11606-007-0428-5[published Online First: Epub Date] |.

47. Tamblyn R, Huang A, Kawasumi Y, et al. The Development and Evaluation of an Integrated Electronic Prescribing and Drug Management System for Primary Care. Journal of the American Medical Informatics Association 2006;**13**(2):148-59 doi: 10.1197/jamia.M1887[published Online First: Epub Date] |.

48. Eguale T, Winslade N, Hanley JA, Buckeridge DL, Tamblyn R. Enhancing Pharmacosurveillance with Systematic Collection of Treatment Indication in Electronic Prescribing. Drug Safety 2010;**33**(7):559-67 doi: 10.2165/11534580-000000000-00000[published Online First: Epub Date] |.

49. Gelenberg AJF, M. P.; Markowitz, J. C.; Rosenbaum, J. F.; Thase, M. E.; Trivedi, M. H.; Van Rhoads, R. S. Practice Guideline for the Treatment of Patients with Major Depressive Disorder: American Psychiatric Association, 2010.

50. Treuer T, Liu CY, Salazar G, et al. Use of antidepressants in the treatment of depression in Asia: guidelines, clinical evidence, and experience revisited. Asia Pac Psychiatry 2013;**5**(4):219-30 doi: 10.1111/appy.12090[published Online First: Epub Date] |.

51. Kirchheiner J, Nickchen K, Bauer M, et al. Pharmacogenetics of antidepressants and antipsychotics: the contribution of allelic variations to the phenotype of drug response. Molecular Psychiatry 2004;**9**:442 doi: 10.1038/sj.mp.4001494[published Online First: Epub Date] |.

52. Jenna W, Michal A, L. BD, Robyn T. Assessing the accuracy of using diagnostic codes from administrative data to infer antidepressant treatment indications: a validation study. Pharmacoepidemiology and drug safety;**0**(0) doi: doi:10.1002/pds.4436[published Online First: Epub Date] |.

53. Gobert M, D'hoore W. Prevalence of psychotropic drug use in nursing homes for the aged in Quebec and in the French-speaking area of Switzerland. International Journal of Geriatric Psychiatry 2005;**20**(8):712-21 doi: doi:10.1002/gps.1349[published Online First: Epub Date] |.

54. Beck CA, Williams JV, Wang JL, et al. Psychotropic Medication Use in Canada. The Canadian Journal of Psychiatry 2005;**50**(10):605-13 doi: 10.1177/070674370505001006[published Online First: Epub Date] |.

55. Beck CA, Patten SB, Williams JVA, et al. Antidepressant utilization in Canada. Social Psychiatry and Psychiatric Epidemiology 2005;**40**(10):799 doi: 10.1007/s00127-005-0968-0[published Online First: Epub Date] |.

BMJ Open: first published as 10.1136/bmjopen-2018-027663 on 14 May 2019. Downloaded from <http://bmjopen.bmj.com/> on June 13, 2025 at Agence Bibliographique de l'Enseignement Supérieur (ABES).
Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

56. Lewer D, O'Reilly C, Mojtabai R, Evans-Lacko S. Antidepressant use in 27 European countries: Associations with sociodemographic, cultural and economic factors. *British Journal of Psychiatry* 2018;**207**(3):221-26 doi: 10.1192/bjp.bp.114.156786[published Online First: Epub Date]].
57. Petty DR, House A, Knapp P, Raynor T, Zermansky A. Prevalence, duration and indications for prescribing of antidepressants in primary care. *Age and ageing* 2006;**35**(5):523-26 doi: 10.1093/ageing/af1023[published Online First: Epub Date]].
58. Mark TL, Joish VN, Hay JW, Sheehan DV, Johnston SS, Cao Z. Antidepressant Use in Geriatric Populations: The Burden of Side Effects and Interactions and Their Impact on Adherence and Costs. *The American Journal of Geriatric Psychiatry* 2011;**19**(3):211-21 doi: <https://doi.org/10.1097/JGP.0b013e3181f1803d>[published Online First: Epub Date]].

For peer review only

Table 1. Summary of Depression Guidelines

	US – APA guidelines (2010)	UK – NICE guidelines (2009)	Canada – CANMAT (2016)	Taiwan - Taiwan Association Against Depression (2012)
First line treatment	<p>Antidepressant medications for patients with mild, moderate, or severe MDD, especially patients with a history of prior positive response, moderate to severe symptoms, significant sleep or appetite disturbances, agitation, patient preference, etc.</p> <p><u>Psychotherapy</u> for patients with mild/moderate MDD, especially in the presence of significant psychosocial stressors, intrapsychic conflict, interpersonal difficulties, a co-occurring Axis II disorder, treatment availability, or patient preference.</p> <p>The <u>combination of psychotherapy and antidepressant medication</u> for patients with moderate to severe MDD, as well as in milder cases for patients with psychosocial or interpersonal problems, intrapsychic conflict, or co-occurring Axis II disorder.</p>	<p>For patients with persistent subthreshold depressive symptoms or mild to moderate depression, first-line treatment is <u>low-intensity psychosocial interventions</u>. Antidepressants should only be considered for patients with a past history of moderate or severe depression, initial presentation of symptoms that have been present for a long period (at least 2 years), or subthreshold depressive symptoms or mild depression that persists after other interventions.</p> <p>For patients with persistent subthreshold depressive symptoms or mild to moderate depression with inadequate response to initial interventions, an <u>antidepressant or a high-intensity psychological intervention</u> should be considered.</p> <p>For patients with moderate or severe depression, a <u>combination of antidepressant medication and a high-intensity psychological intervention</u> should be provided.</p>	<p>Second-generation antidepressants are first line treatments for patients with a major depressive episode of moderate or greater severity.</p> <p>First line treatments for individuals with depression of mild severity include <u>psychoeducation, self-management, and psychological treatments</u>. Pharmacological treatments can be considered for mild depression in some situations including patient preference, previous response to antidepressants, or lack of response to nonpharmacological interventions.</p> <p><u>Psychotherapy</u> should be considered for patients with inadequate antidepressant response to initial treatment.</p>	<p>Pharmacotherapy (preferred) or <u>psychotherapy</u></p>
Pharmacotherapy first-line treatment	<p>Antidepressant selection should be based on the tolerability, safety, and cost of the medication, as well as patient preference and history of prior medication treatment.</p> <p>SSRIs, SNRIs, mirtazapine, and bupropion are optimal for most patients.</p> <p>MAOIs are limited to patients who do not respond to other treatments.</p>	<p>Prescribed antidepressant should normally be an SSRI in a generic form.</p> <p>When prescribing drugs other than SSRIs, the following should be considered:</p> <ul style="list-style-type: none">• The increased likelihood of the person stopping treatment because of side effects (and the consequent need to increase the dose gradually) with venlafaxine, duloxetine and TCAs.• The specific cautions, contraindications, and monitoring requirements for some drugs• Non-reversible MAOIs, such as phenelzine, should normally be prescribed only by specialist mental health professionals.• Dosulepin should not be prescribed	<p>Choice of antidepressant should be based on patient factors (clinical features, patient preference, etc.) and medication factors (drug-drug interactions, cost, availability, efficacy and tolerability, etc.).</p> <p>First-line treatments include SSRIs, SNRIs, agomelatine, bupropion, mirtazapine, mianserin and vortioxetine.</p> <p>Second-line treatments include TCAs, quetiapine and trazodone, moclobemide and selegiline, levomilnacipran, and vilazodone.</p> <p>Third-line treatments include MAOIs and reboxetine.</p>	<p>SSRIs, SNRIs, or any one of the newer antidepressive agents except MAOIs.</p>

Table 2 Comparisons in the Cumulative Incidence and Prevalence of Episodes of Antidepressant Use in Adults 65 Years of Age or Older Between Regions and Countries

Elderly Population	Canada			United States	United Kingdom	Taiwan
	Ontario Sample (Admin. Data) ¹	Montreal Sample (Admin. Data) ¹	Quebec City & Mtl (EMR Data) ²	Boston (EMR Data) ²	CRD (EMR Data) ²	NHIRDB (Admin. Data) ¹
Total Population Elderly	2,053,588	120,777	28,273	83,394	2,496,188	103,400
New Episodes of Antidepressant Use³						
Number of New Users	306,197	13,303	1,308	10,131	118,868	17,580
Incidence in Elderly (%)	14.9%	11.0%	4.6%	12.2%	4.8%	17.0%
Age Standardized Incidence (%)	15.3%	12.1%	4.7%	12.3%	0.7% (no incidence)	18.6%
All Users of Antidepressants⁴						
Number of Users	549,444	23,422	4,450	17,359	251,888	24,239
Prevalence in Elderly (%)	26.8%	19.4%	15.74%	20.8%	10.1%	23.4%
Demographics						
Between 65 – 74 years old	162,895 (53.2%)	5,713 (42.9%)	699 (53.4%)	5,826 (57.5%)	7,129 (44.1%)	8,811 (50.1%)
75 years or older	143,302 (46.8%)	7,590 (57.1%)	609 (46.6%)	4,305 (42.5%)	8,739 (55.9%)	8,769 (49.9%)
% Female	187,037 (61.1%)	8,986 (67.5%)	853 (65.2%)	6,136 (60.6%)	10,041 (64.1%)	9,539 (54.3%)

¹Administrative data is retrieved from population-based health insurance claims for medical visits, and prescriptions.

²EMR data are extracted from primary care clinic electronic health records in the USA (Partners Inc.), Quebec (MOXXI), and the United Kingdom (Clinical Practice Research Database)

³New Episodes of Use of Antidepressants were defined as no prescription or dispensing of an antidepressant in the two years prior to the first antidepressant in the period 2009-2014

⁴All users include persons with an active prescription or dispensed supply of antidepressants between 2007-2008 as well as all new users between the period 2009-2014

Table 3 Frequency Distribution of the First Antidepressant Prescribed for New Antidepressant Users by Therapeutic Class by Country and Jurisdiction

Antidepressant	Canada			United States	United Kingdom	Taiwan
	Ontario Sample	Montreal Sample	Quebec City & Mtl	Boston	CPHR	NHIRDB
	(N=60,366 patients N=61,696 Rx)	(N=13,303 patients N=14,217 Rx)	(N=1,308 patients N=1,324 Rx)	(N=10,131 patients N=10,586 Rx)	(N=15,868 patients N=15,958 Rx)	(N=17,580 patients N=17,790 Rx)
	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)
Selective Serotonin Reuptake Inhibitors						
Citalopram	8,760 (14.2%)	4,708 (33.1%)	410 (30.9%)	2,117 (19.9%)	32 (26.4%)	335 (1.8%)
Escitalopram	9,000 (14.6%)	1 (0.0%)	73 (5.5%)	438 (4.1%)	145 (0.9%)	825 (4.6%)
Fluoxetine	697 (1.1%)	114 (0.8%)	8 (0.6%)	1,156 (10.9%)	76 (5.4%)	773 (4.3%)
Fluvoxamine	172 (0.3%)	44 (0.3%)	6 (0.4%)	29 (0.2%)	1 (0.0%)	101 (0.5%)
Paroxetine	1,924 (3.1%)	515 (3.6%)	23 (1.7%)	432 (4.0%)	92 (0.5%)	435 (2.4%)
Sertraline	2,561 (4.2%)	640 (4.5%)	132 (20.2%)	1,481 (13.9%)	90 (6.1%)	1,174 (32.2%)
Subtotal	23,114 (37.4%)	6,022 (42.3%)	652 (49.2%)	5,653 (53.3%)	6 (39.6%)	3,643 (20.4%)
Selective Noradrenaline Reuptake Inhibitors						
Desvenlafaxine	0 (0.0%)	1 (0.0%)	4 (0.3%)	28 (0.2%)	-	-
Duloxetine	3,190 (5.2%)	161 (1.1%)	57 (4.3%)	267 (2.5%)	56 (0.9%)	241 (1.3%)
Milnacipran	0 (0.0%)	-	-	2 (0.0%)	-	18 (0.1%)
Venlafaxine	3,323 (5.4%)	1,514 (10.6%)	105 (7.9%)	434 (4.0%)	44 (0.8%)	206 (1.1%)
Subtotal	6,513 (10.5%)	1,676 (11.7%)	166 (12.5%)	731 (6.9%)	90 (1.8%)	465 (2.6%)
Tricyclic Antidepressants						
Amitriptyline	10,448 (16.9%)	2,629 (18.4%)	120 (9.0%)	796 (7.5%)	7,385 (45.4%)	1,181 ((6.6%)
Dosulepin	-	-	-	-	77 (1.1%)	25 (0.2%)
Imipramine	-	-	-	32 (0.3%)	54 (0.3%)	7,340 (41.2%)
Nortriptyline	3,158 (5.1%)	95 (0.6%)	18 (1.3%)	566 (5.3%)	208 (1.3%)	-
Other TCAs	1,860 (12.0%)	263 (1.8%)	24 (1.8%)	117 (1.1%)	113 (0.7%)	778 (4.4%)
Subtotal	15,466 (25.0%)	2,987 (21.0%)	162 (12.2%)	1,511 (14.2%)	7,897 (48.8%)	9,324 (52.4%)
Serotonin Antagonist & Reuptake Inhibitors						
Trazodone	12,373 (20.1%)	2,362 (16.6%)	192 (14.5%)	1,279 (12.0%)	60 (2.2%)	3,574 (20.0%)
Norepinephrine-Dopamine Reuptake Inhibitors						
Bupropion	1,406 (2.3%)	278 (1.9%)	49 (3.7%)	1,056 (9.9%)	34 (0.2%)	215 (1.2%)
Noradrenergic Serotonin Specific Antidepressants						
Mirtazapine	2,819 (4.6%)	892 (6.2%)	103 ((7.7%)	354 (3.3%)	1,441 (7.1%)	535 (3.0%)
Subtotal	16,598 (26.9%)	3,532 (24.8%)	344 (26.0%)	2,689 (25.4%)	1,435 (9.6%)	4,324 (24.3%)
Other Antidepressants	5 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.0%)	2 (0.0%)	34 (0.2%)

1. Other tricyclic antidepressants include Amoxapine, Clomipramine, Desipramine, Doxepin, Lofepramine, and Trimipramine
2. Other antidepressants include Nefazodone, Maprotiline, Agomelatine, and Roboxetine

Table 4 The Prevalence of Potential Therapeutic Indications; Depression, Other Mental Health Problems, and Chronic Pain Among New Antidepressant Users, and the Proportion of Persons with Depression who had Other Concurrent Mental Health Problems or Pain by Jurisdiction

	Canada			USA	United Kingdom	Taiwan
	Ontario Sample (N=60,366 patients)	Montreal Sample (N=13,303 patients)	Quebec City & Mtl (N=1,308 patients)	Boston (N=10,131 patients)	PRISM (N=15,668 patients)	NHIRDB (N=17,580 patients)
Depression						
Prevalence, N (%)	7,484 (12.4%)	2333 (17.5%)	563 (43.0%)	2203 (21.7%)	2477 (15.8%)	1603 (9.1%)
Alcohol/Drug Abuse						
Prevalence, N (%)	1989 (3.3%)	326 (2.5%)	23 (1.8%)	290 (2.9%)	418 (2.6%)	224 (1.3%)
Abuse in Depressed, N (%)	450 (6.0%)	97 (4.2%)	12 (2.1%)	194 (8.8%)	799 (5.1%)	25 (1.6%)
Prevalence Ratio	2.1	2.0	1.4	7.3		1.3
Anxiety						
Prevalence, N (%)	23374 (38.7%)	3641 (27.4%)	465 (35.6%)	1798 (17.7%)	1911 (12.2%)	6277 (35.7%)
Anxiety in Depressed, N (%)	3684 (49.2%)	807 (34.6%)	218 (38.7%)	905 (41.1%)	588 (3.8%)	767 (47.8%)
Prevalence Ratio	1.3	1.3	1.2	3.6		1.4
Major Mental Illness						
Prevalence, N (%)	2627 (4.4%)	692 (5.2%)	50 (3.8%)	502 (5.0%)	259 (1.6%)	570 (3.2%)
Mental Ill. In Depressed, N (%)	1473 (19.7%)	225 (9.6%)	23 (4.1%)	323 (14.7%)	79 (0.5%)	95 (5.9%)
Prevalence Ratio	9.0	2.3	1.1	6.5		2.0
Suicide Attempt						
Prevalence, N (%)	101 (0.2%)	30 (0.2%)	-	72 (0.7%)	12 (0.0%)	6 (0.0%)
Suicide Att. in Depressed, N (%)	80 (1.1%)	8 (0.3%)	-	67 (3.0%)	6 (2.7%)	2 (0.1%)
Prevalence Ratio	26.9	1.7	-	48.2	5.8	5.0
Chronic Pain						
Prevalence, N (%)	28687 (47.5%)	6379 (48.0%)	571 (43.7%)	5200 (51.3%)	653 (4.1%)	11994 (68.2%)
Pain in Depressed, N (%)	3591 (48.0%)	1105 (47.4%)	235 (41.7%)	1365 (62.0%)	102 (4.1%)	994 (62.0%)
Prevalence Ratio	1.0	1.0	0.9	1.3	1.0	0.9

Table 5 Starting Therapy for New Users of Antidepressants by Potential Therapeutic Indication by Therapeutic Class and Country

Therapeutic Class	Canada			United States		United Kingdom	Taiwan
	Ontario Sample (N=60,366 patients)	Montreal Sample (N=13,303 patients)	Quebec City & Mtl (N=1,308 patients)	Boston (N=10,131 patients)	CRD (N=5,863 patients)	NHIRDB (N=17,580 patients)	
	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)
	Starting Therapy for Persons with a Diagnosis of Depression						
Selective Serotonin Re. Inh.	4,357 (55.2%)	1,548 (59.5%)	386 (67.5%)	1,388 (59.0%)	397 (71.4%)	930 (55.8%)	
Selective Noradrenaline Re. Inh.	1,039 (13.2%)	408 (15.7%)	72 (12.6%)	162 (6.9%)	67 (2.7%)	104 (6.2%)	
Tricyclic Antidepressants	647 (8.2%)	129 (5.0%)	20 (3.5%)	179 (7.6%)	19 (12.7%)	138 (8.3%)	
Serotonin Antagonist & Re. Inh.	940 (11.9%)	212 (8.2%)	32 (5.6%)	269 (11.4%)	56 (2.2%)	263 (15.8%)	
Norepinephrine-Dopam Re. Inh.	321 (4.1%)	81 (3.1%)	30 (5.2%)	233 (9.9%)	1 (0.0%)	43 (2.6%)	
Noradrenergic serotonin specific	590 (7.5%)	224 (8.6%)	32 (5.6%)	120 (5.1%)	77 (11.0%)	184 (11.0%)	
Other	1 (0.0%)	-	-	1 (0.0%)	-	4 (0.2%)	
Starting Therapy for Persons with a Diagnosis of Chronic Pain							
Selective Serotonin Re. Inh.	9,823 (33.5%)	2,643 (39.0%)	268 (46.4%)	2,481 (46.1%)	85 (31.8%)	2,291 (18.9%)	
Selective Noradrenaline Re. Inh.	3,516 (12.0%)	762 (11.2%)	83 (14.4%)	395 (7.3%)	95 (1.5%)	315 (2.6%)	
Tricyclic Antidepressants	8,771 (29.9%)	1,863 (27.5%)	100 (17.3%)	1,176 (21.8%)	363 (60.4%)	6,703 (55.2%)	
Serotonin Antagonist & Re. Inh.	5,410 (18.5%)	1,020 (15.0%)	65 (11.3%)	703 (13.0%)	89 (1.4%)	2,353 (19.4%)	
Norepinephrine-Dopam Re. Inh.	551 (1.9%)	108 (1.6%)	24 (4.2%)	424 (7.9%)	17 (0.3%)	126 (1.0%)	
Noradrenergic serotonin specific	1,221 (4.2%)	386 (5.7%)	38 (6.6%)	211 (3.9%)	315 (4.8%)	330 (2.7%)	
Other	3 (0.0%)	-	-	2 (0.0%)	1 (0.02%)	27 (0.2%)	
Starting Therapy for Persons with a Diagnosis of Other Mental Health Problems							
Selective Serotonin Re. Inh.	13,018 (49.5%)	2,459 (53.3%)	309 (61.1%)	1,384 (61.4%)	265 (45.1%)	2,212 (32.3%)	
Selective Noradrenaline Re. Inh.	3,099 (11.8%)	550 (11.9%)	61 (12.1%)	147 (6.5%)	105 (1.9%)	254 (3.7%)	
Tricyclic Antidepressants	3,823 (14.5%)	563 (12.2%)	28 (5.5%)	186 (8.2%)	218 (44.3%)	2,250 (32.8%)	
Serotonin Antagonist & Re. Inh.	4,107 (15.6%)	591 (12.8%)	53 (10.5%)	280 (12.4%)	102 (1.8%)	1,684 (24.6%)	
Norepinephrine-Dopam Re. Inh.	773 (2.9%)	98 (2.1%)	18 (3.6%)	163 (7.2%)	20 (0.4%)	126 (1.8%)	
Noradrenergic serotonin specific	1,480 (5.6%)	357 (7.7%)	37 (7.3%)	94 (4.2%)	374 (6.6%)	318 (4.6%)	
Other	3 (0.0%)	-	-	2 (0.1%)	1 (0.0%)	15 (0.2%)	

Table 6A Characteristics of the First Antidepressant Treatment Episode Among Persons with a Diagnosis of Depression

Characteristics	Canada				United States				United Kingdom	Taiwan
	Ontario		Montreal Sample		Quebec City & Mtl		Boston		CES-D	NHIRDB
	N	%	N	%	N	%	N	%	N	%
All patients	4,407	100%	1,221	100%	324	100%	1,259	100%	2,152	100%
No treatment change	2,383	54%	680	56%	220	68%	757	60%	1,117	61%
Treatment change	2,024	46%	541	44%	104	32%	502	40%	1,035	39%
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
All patients										
Dose*	1.3	1.0	0.9	0.6	0.9	0.5	1.3	0.8	0.5	0.4
Duration (days)	519.5	285.1	462.5	298.9	467.7	255.0	395.6	266.2	309.9	248.0
No treatment change**										
Dose	0.9	0.7	0.7	0.4	0.8	0.4	1.0	0.9	0.4	0.4
Duration (days)	289.1	309.6	246.3	290.4	340.9	243.2	225.7	212.3	122.1	179.7
Treatment change**										
Dose	1.5	1.0	1.0	0.6	1.1	0.6	1.4	0.8	0.6	0.4
Duration (days)	616.9	209.8	569.0	240.8	574.7	213.9	507.7	239.4	407.6	260.2
	N	%	N	%	N	%	N	%	N	%
Type of changes***										
Added molecule (different class)	796	18%	139	11%	31	10%	125	10%	25	6%
Added molecule (same class)	174	4%	22	2%	6	2%	42	3%	54	3%
Dose decrease	921	21%	246	20%	38	12%	151	12%	107	19%
Dose increase	1,464	33%	387	32%	64	20%	348	28%	111	28%
Removed molecule (different class)	710	16%	132	11%	26	8%	34	3%	19	1%
Removed molecule (same class)	178	4%	23	2%	5	2%	6	0%	6	0%
Switch class	10	0%	48	4%	-	-	56	4%	70	3%
Switch molecule (same class)	5	0%	11	1%	-	-	19	2%	24	1%

*Dose is the proportion of the WHO recommended daily dose (dose prescribed/recommended daily dose)

**Treatment change in the first antidepressant episode, defined as continuous therapy with gaps of no greater than 90 days

***Patients can have >1 type of change in the episode of antidepressant use.

Table 6B. Characteristics of the First Antidepressant Treatment Episode Among Persons with a Diagnosis of Chronic Pain

Characteristics	Canada						United States		United Kingdom	Taiwan	
	Ontario		Montreal Sample		Quebec City & Mtl		Boston		UK RD	NHIRDB	
	N	%	N	%	N	%	N	%	%	N	%
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	SD	Mean	SD
All patients, all changes	16045	100%	3276	100%	349	100%	2657	100%	5368	6029	100%
No treatment change	10650	66%	2220	68%	261	75%	1793	67%	4014	4761	79%
Treatment change	5395	34%	1056	32%	88	25%	864	33%	1354	1268	21%
All patients, all changes											
Dose*	0.9	0.7	0.7	0.5	0.8	0.6	1.0	0.8	0.5	0.5	0.4
Duration (days)	416.3	312.8	407.8	313.7	437.0	263.6	384.6	261.7	270.8	168.9	227.3
No treatment change**											
Dose	0.6	0.5	0.4	0.3	0.6	0.5	0.8	0.7	0.4	0.4	0.3
Duration (days)	198.7	271.4	202.1	270.2	300.9	238.6	247.4	223.3	192	83.6	154.6
Treatment change**											
Dose	1	0.7	0.8	0.5	1.0	0.6	1.1	0.7	0.5	0.5	0.4
Duration (days)	534.6	260.5	534.7	265.1	590.0	201.5	482.2	239.6	266.9	264.4	252.8
Type of changes***	N	%	N	%	N	%	N	%	%	N	%
Added molecule (different class)	1776	11%	267	8%	30	9%	189	7%	15	245	4%
Added molecule (same class)	375	2%	31	1%	5	1%	69	3%	9	90	1%
Dose decrease	2291	14%	455	14%	32	9%	243	9%	62	569	9%
Dose increase	3980	25%	818	25%	58	17%	611	23%	103	809	13%
Removed molecule (different class)	1547	10%	245	7%	26	7%	47	2%	14	262	4%
Removed molecule (same class)	372	2%	32	1%	4	1%	6	0%	1	95	2%
Switch class	30	0%	120	4%	-	-	92	3%	7	15	0%
Switch molecule (same class)	22	0%	30	1%	-	-	27	1%	2	4	0%

*Dose is the proportion of the WHO recommended daily dose (dose prescribed/recommended daily dose)
**Treatment change in the first antidepressant episode, defined as continuous therapy with gaps of no greater than 90 days
***Patients can have >1 type of change in the episode of antidepressant use.

136/bmjopen-2018-020662 on 14 May 2019. Downloaded from <http://bmjopen.bmj.com/> by June 13, 2025 at Agence Bibliographique de l'Enseignement Supérieur (A.B.E.S.). All rights reserved. No reuse allowed without permission. For peer review only - <http://bmjopen.bmj.com/site/about/guidelines.xhtml>

APPENDIX**DEPRESSION****At least one ICD-9 in:**

311	Depressive disorder, not elsewhere classified
296.2	Major depressive disorder, single episode
296.3	Major depressive disorder, recurrent episode
309	Adjustment reaction
309.0	Adjustment disorder with depressed mood
309.1	Prolonged depressive reaction
309.2	With predominant disturbance of other emotions
309.3	Adjustment disorder with disturbance of conduct
309.4	Adjustment disorder with mixed disturbance of emotions and conduct
309.8	Other specified adjustment reactions
309.9	Unspecified adjustment reaction

OR

At least one ICD-10 in:

F32	Depressive episode
F32.0	Mild depressive episode
F32.1	Moderate depressive episode
F32.2	Severe depressive episode without psychotic symptoms
F32.3	Severe depressive episode with psychotic symptoms
F32.8	Other depressive episodes
F32.9	Depressive episode, unspecified
F33	Recurrent depressive disorder
F33.0	Recurrent depressive disorder, current episode mild
F33.1	Recurrent depressive disorder, current episode moderate
F33.2	Recurrent depressive disorder, current episode severe without psychotic symptoms
F33.3	Recurrent depressive disorder, current episode severe with psychotic symptoms
F33.4	Recurrent depressive disorder, currently in remission
F33.8	Other recurrent depressive disorders
F33.9	Recurrent depressive disorder, unspecified
F41.2	Mixed anxiety and depressive disorder

OR

At least one READ code in:†:

E2B..00	Depressive disorder NEC	Eu32311	[X]Single episode of major depression and psychotic symptoms
Eu32z11	[X]Depression NOS	E113400	Recurrent major depressive episodes, severe, with

1	E112.14	Endogenous depression	psychosis
2	E200300	Anxiety with depression	E113z00 Recurrent major depressive episode NOS
3			E113300 Recurrent major depressive episodes, severe, no
4			psychosis
5	E135.00	Agitated depression	E11y200 Atypical depressive disorder
6	E204.00	Neurotic depression reactive type	E001300 Presenile dementia with depression
7	E290.00	Brief depressive reaction	Eu02z16 [X] Senile dementia, depressed or paranoid type
8	2257.00	O/E - depressed	Eu32z13 [X]Prolonged single episode of reactive depression
9	1B17.00	Depressed	Eu33.14 [X]Seasonal depressive disorder
10	E11..12	Depressive psychoses	Eu32314 [X]Single episode of reactive depressive psychosis
11	E204.11	Postnatal depression	E113100 Recurrent major depressive episodes, mild
12	1465.00	H/O: depression	Eu33100 [X]Recurrent depressive disorder, current episode
13			moderate
14	62T1.00	Puerperal depression	R007z13 [D]Postoperative depression
15	Eu32z00	[X]Depressive episode, unspecified	Eu33000 [X]Recurrent depressive disorder, current episode
16			mild
17			Eu33314 [X]Recurr severe episodes/psychogenic depressive
18	E2B0.00	Postviral depression	psychosis
19			E112400 Single major depressive episode, severe, with
20	Eu32z12	[X]Depressive disorder NOS	psychosis
21			Eu92000 [X]Depressive conduct disorder
22	Eu33.00	[X]Recurrent depressive disorder	Eu33313 [X]Recurr severe episodes/major
23	E2B1.00	Chronic depression	depression+psychotic symptom
24			Eu33200 [X]Recurr depress disorder cur epi severe without
25	Eu32.00	[X]Depressive episode	psyc sympt
26			E112000 Single major depressive episode, unspecified
27	1B17.11	C/O - feeling depressed	E113000 Recurrent major depressive episodes, unspecified
28	Eu53012	[X]Postpartum depression NOS	E290z00 Brief depressive reaction NOS
29	E112.11	Agitated depression	Eu33z11 [X]Monopolar depression NOS
30	Eu32z14	[X] Reactive depression NOS	Eu33316 [X]Recurrent severe episodes/reactive depressive
31	E113700	Recurrent depression	psychosis
32			E002z00 Senile dementia with depressive or paranoid
33			features NOS
34	E112.12	Endogenous depression first episode	Eu32211 [X]Single episode agitated depressn w/out
35			psychotic symptoms
36	Eu32y00	[X]Other depressive episodes	E004300 Arteriosclerotic dementia with depression
37			E112500 Single major depressive episode, partial or unspec
38	E113.11	Endogenous depression - recurrent	remission
39	E112.13	Endogenous depression first episode	Eu33z00 [X]Recurrent depressive disorder, unspecified
40			E002.00 Senile dementia with depressive or paranoid
41			features
42	E112z00	Single major depressive episode NOS	E02y300 Drug-induced depressive state
43	Eu32.13	[X]Single episode of reactive depression	Eu33300 [X]Recurrent depress disorder cur epi severe with
44			psyc symp
45	Eu34113	[X]Neurotic depression	Eu33y00 [X]Other recurrent depressive disorders
46	Eu41211	[X]Mild anxiety depression	Eu32312 [X]Single episode of psychogenic depressive
47			psychosis
48	Eu34100	[X]Dysthymia	E113600 Recurrent major depressive episodes, in full
49	Eu34111	[X]Depressive neurosis	remission
50			E113500 Recurrent major depressive
51			episodes,partial/unspec remission
52	Eu33.15	[X]SAD - Seasonal affective disorder	Eu32y12 [X]Single episode of masked depression NOS
53			
54	Eu33.11	[X]Recurrent episodes of depressive	
55		reaction	
56	Eu33.13	[X]Recurrent episodes of reactive	
57		depression	
58			
59			
60			

Eu32.11	[X]Single episode of depressive reaction	E112600	Single major depressive episode, in full remission
E11z200	Masked depression	Eu32213	[X]Single episode vital depression w/out psychotic symptoms
Eu32100	[X]Moderate depressive episode	Eu33214	[X]Vital depression, recurrent without psychotic symptoms
Eu32200	[X]Severe depressive episode without psychotic symptoms	Eu32600	[X]Major depression, moderately severe
1B1U.00	Symptoms of depression	Eu32500	[X]Major depression, mild
1BT..00	Depressed mood	Eu32700	[X]Major depression, severe without psychotic symptoms
1B1U.11	Depressive symptoms	Eu32800	[X]Major depression, severe with psychotic symptoms
E112.00	Single major depressive episode	Eu32900	[X]Single major depr ep, severe with psych, psych in remiss
Eu32400	[X]Mild depression	Eu32A00	[X]Recurr major depr ep, severe with psych, psych in remiss
Eu32y11	[X]Atypical depression	Eu32B00	[X]Antenatal depression
E118.00	Seasonal affective disorder	Eu34114	[X]Persistant anxiety depression
Eu33212	[X]Major depression, recurrent without psychotic symptoms	E112100	Single major depressive episode, mild
Eu33211	[X]Endogenous depression without psychotic symptoms	E291.00	Prolonged depressive reaction
Eu32000	[X]Mild depressive episode	Eu33315	[X]Recurrent severe episodes of psychotic depression
Eu41200	[X]Mixed anxiety and depressive disorder	Eu32.12	[X]Single episode of psychogenic depression
Eu32300	[X]Severe depressive episode with psychotic symptoms	Eu3y111	[X]Recurrent brief depressive episodes
Eu53011	[X]Postnatal depression NOS	Eu33.12	[X]Recurrent episodes of psychogenic depression
E113200	Recurrent major depressive episodes, moderate	Eu20400	[X]Post-schizophrenic depression
E113.00	Recurrent major depressive episode	E002100	Senile dementia with depression
E112200	Single major depressive episode, moderate	Eu33400	[X]Recurrent depressive disorder, currently in remission
E112300	Single major depressive episode, severe, without psychosis	Eu32212	[X]Single episode major depression w/out psychotic symptoms
Eu32313	[X]Single episode of psychotic depression	Eu33311	[X]Endogenous depression with psychotic symptoms

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ANXIETY

At least one ICD-9 in:	
300	Anxiety, dissociative and somatoform disorders

OR

At least one ICD-10 in:	
F40	Phobic anxiety disorders
F41	Other anxiety disorders (except F41.2)
F42	Obsessive-compulsive disorder
F43	Reaction to severe stress, and adjustment disorders
F44	Dissociative and conversion disorders
F45	Somatoform disorders
F48	Other nonpsychotic mental disorders

OR

At least one READ code in:			
1B13.00	Anxiousness	Eu42.11	[X]Anankastic neurosis
E28..00	Acute reaction to stress	Eu45213	[X]Hypochondriacal neurosis
E200111	Panic attack	Eu93100	[X]Phobic anxiety disorder of childhood
E200.00	Anxiety states	Eu45000	[X]Somatization disorder
E200300	Anxiety with depression	E201C00	Phantom pregnancy
E20z.11	Nervous breakdown	E201z12	Ataxia - hysterical
Eu41111	[X]Anxiety neurosis	E283100	Acute posttrauma stress state
E202B00	Cancer phobia	Eu41z11	[X]Anxiety NOS
E205.11	Nervous exhaustion	E28z.00	Acute stress reaction NOS
E202800	Claustrophobia	Z4I7211	Reducing anxiety
E200400	Chronic anxiety	E29y400	Adjustment reaction due to hospitalisation
E202.00	Phobic disorders	Eu44.13	[X]Hysteria
E203100	Obsessional neurosis	Eu44600	[X]Dissociative anaesthesia and sensory loss
E201.00	Hysteria	Eu40y00	[X]Other phobic anxiety disorders
E202000	Phobia unspecified	E28z.13	Stage fright
E202C00	Dental phobia	Eu46.00	[X]Other neurotic disorders
Eu40000	[X]Agoraphobia	E202600	Acrophobia
E29..00	Adjustment reaction	E28z.11	Examination fear
E264200	Cyclical vomiting - psychogenic	Eu41y11	[X]Anxiety hysteria
E202100	Agoraphobia with panic attacks	E292312	Specific work inhibition
E203.00	Obsessive-compulsive disorders	Z4I7200	Alleviating anxiety
E205.00	Neurasthenia - nervous debility	E202700	Animal phobia
1466.00	H/O: anxiety state	E201B00	Compensation neurosis
E201100	Hysterical blindness	Eu45413	[X]Psychogenic headache
E20y100	Writer's cramp neurosis	E262.00	Psychogenic cardiovascular symptoms
E264400	Psychogenic dyspepsia	E263.00	Psychogenic skin symptoms
E200100	Panic disorder	E283z00	Other acute stress reaction NOS
Eu41012	[X]Panic state	Eu93200	[X]Social anxiety disorder of childhood

E201z11	Aphonia - hysterical	Eu45400	[X]Persistent somatoform pain disorder
E201612	Globus hystericus	Eu45212	[X]Dysmorphophobia nondelusional
E202A0	Fear of flying	E262300	Psychogenic cardiovascular disorder
0			
Eu43100	[X]Post - traumatic stress disorder	E264.00	Psychogenic gastrointestinal tract symptoms
E26..00	Physiological malfunction arising from mental factors	Eu43z00	[X]Reaction to severe stress, unspecified
E201700	Hysterical amnesia	E2D0.00	Disturbance of anxiety and fearfulness childhood/adolescent
E200z00	Anxiety state NOS	E202900	Fear of crowds
E200500	Recurrent anxiety	E202400	Social phobia, fear of public speaking
E200200	Generalised anxiety disorder	E261000	Psychogenic air hunger
E201800	Hysterical fugue	Eu43111	[X]Traumatic neurosis
E264000	Psychogenic aerophagy	E29y100	Other post-traumatic stress disorder
E26z.00	Psychosomatic disorder NOS	Eu45312	[X]Da Costa's syndrome
E20..00	Neurotic disorders	E201511	Fit - hysterical
Eu42.00	[X]Obsessive - compulsive disorder	Eu40z00	[X]Phobic anxiety disorder, unspecified
E206.00	Depersonalisation syndrome	E261z00	Psychogenic respiratory symptom NOS
Eu41.00	[X]Other anxiety disorders	E201400	Hysterical paralysis
E203000	Compulsive neurosis	Eu45111	[X]Undifferentiated psychosomatic disorder
1B13.11	Anxiousness - symptom	Eu44400	[X]Dissociative motor disorders
E202E00	Fear of pregnancy	Eu44.11	[X]Conversion hysteria
E293000	Adjustment reaction with aggression	E2D0z00	Disturbance anxiety and fearfulness childhood/adolescent NOS
E292000	Separation anxiety disorder	E2D0000	Childhood and adolescent overanxiousness disturbance
Eu41011	[X]Panic attack	E29y200	Adjustment reaction with physical symptoms
E200000	Anxiety state unspecified	Eu41112	[X]Anxiety reaction
Eu40z11	[X]Phobia NOS	E293100	Adjustment reaction with antisocial behaviour
Eu45200	[X]Hypochondriacal disorder	Eu45y14	[X]Psychogenic torticollis
E29y300	Elective mutism due to an adjustment reaction	Eu45414	[X]Somatoform pain disorder
Eu41211	[X]Mild anxiety depression	Eu43211	[X]Culture shock
Eu43015	[X]Psychic shock	Eu43011	[X]Acute crisis reaction
Eu41000	[X]Panic disorder [episodic paroxysmal anxiety]	E29z.00	Adjustment reaction NOS
Eu46100	[X]Depersonalization - derealization syndrome	E264.11	Globus abdominalis
Eu40.00	[X]Phobic anxiety disorders	E261.00	Psychogenic respiratory symptoms
Eu46011	[X]Fatigue syndrome	Eu45412	[X]Psychogenic backache
Eu40200	[X]Specific (isolated) phobias	E283.00	Other acute stress reactions
E202.12	Phobic anxiety	Eu42y00	[X]Other obsessive-compulsive disorders
Eu41100	[X]Generalized anxiety disorder	E20y200	Other occupational neurosis
E202D0	Fear of death	Eu44300	[X]Trance and possession disorders
0			
Eu43012	[X]Acute reaction to stress	Eu44100	[X]Dissociative fugue
Eu43.00	[X]Reaction to severe stress, and adjustment disorders	Eu44y12	[X]Multiple personality
Eu40213	[X]Claustrophobia	E201z13	Ganser's syndrome - hysterical
Eu43200	[X]Adjustment disorders	E278.00	Psychalgia
Eu46y13	[X]Occupational neurosis, including writer's cramp	Eu44000	[X]Dissociative amnesia
Eu44511	[X]Pseudoseizures	Eu45300	[X]Somatoform autonomic dysfunction
Eu40100	[X]Social phobias	Eu43213	[X]Hospitalism in children

1	Eu43000	[X]Acute stress reaction	E29y.00	Other adjustment reactions
2	146G.00	H/O: agoraphobia	E201000	Hysteria unspecified
3	1B1V.00	C/O - panic attack	E261500	Psychogenic aphonia
4	Eu41200	[X]Mixed anxiety and depressive disorder	E20y.00	Other neurotic disorders
5	E280.00	Acute panic state due to acute stress reaction	E2z..00	Neuroses or other mental disorder NOS
6				
7	Eu44411	[X]Psychogenic aphonia	E281.00	Acute fugue state due to acute stress reaction
8	Eu45500	[X]Globus pharyngeus	Eu40112	[X]Social neurosis
9	Eu40300	[X]Needle phobia	E20yz00	Other neurotic disorder NOS
10	Eu40214	[X]Simple phobia	E201900	Multiple personality
11	Eu45316	[X]Psychogenic cough	Eu45317	[X]Psychogenic diarrhoea
12	Eu45322	[X]Psychogenic hyperventilat	E28..11	Combat fatigue
13	E202200	Agoraphobia without mention of panic attacks	E260.00	Psychogenic musculoskeletal symptoms
14				
15	2258.00	O/E - anxious	Eu45311	[X]Cardiac neurosis
16	E202z00	Phobic disorder NOS	Eu41300	[X]Other mixed anxiety disorders
17	E20z.00	Neurotic disorder NOS	Eu46y00	[X]Other specified neurotic disorders
18	Eu40012	[X]Panic disorder with agoraphobia	E265200	Psychogenic dysmenorrhea
19	E262z00	Psychogenic cardiovascular symptom NOS	Eu46y16	[X]Psychogenic syncope
20	E260z00	Psychogenic musculoskeletal symptoms NOS	E201200	Hysterical deafness
21	Eu34114	[X]Persistant anxiety depression	E278200	Psychogenic backache
22	E263z00	Psychogenic skin symptoms NOS	E294.00	Adjustment reaction with disturbance emotion and conduct
23				
24	E262200	Neurocirculatory asthenia	E201611	Astasia - abasia, hysterical
25	E262000	Cardiac neurosis	Eu44y11	[X]Ganser's syndrome
26	E20y000	Somatization disorder	Eu45y11	[X]Psychogenic dysmenorrhoea
27	E264300	Psychogenic diarrhoea	E203.11	Anancastic neurosis
28	E201600	Other conversion disorder	Eu46y12	[X]Dhat syndrome
29	E261100	Psychogenic cough	Eu45320	[X]Psychogenic flatulence
30	E282.00	Acute stupor state due to acute stress reaction	E261200	Psychogenic hiccough
31				
32	E203z00	Obsessive-compulsive disorder NOS	E260000	Psychogenic paralysis
33	E292z00	Adjustment reaction with disturbance of other emotion NOS	E292y00	Adjustment reaction with mixed disturbance of emotion
34				
35	E264500	Psychogenic constipation	Eu45z00	[X]Somatoform disorder, unspecified
36	E263000	Psychogenic pruritus	Eu44z00	[X]Dissociative [conversion] disorder, unspecified
37				
38	E202300	Social phobia, fear of eating in public	Eu46z00	[X]Neurotic disorder, unspecified
39	E293.00	Adjustment reaction with predominant disturbance of conduct	E2y..00	Other specified neuroses or other mental disorders
40				
41	E201500	Hysterical seizures	Eu44611	[X]Psychogenic deafness
42	Eu45324	[X]Psychogenic IBS	Eu41113	[X]Anxiety state
43	Eu46000	[X]Neurasthenia	Eu45314	[X]Neurocirculatory asthenia
44	E202.11	Social phobic disorders	Eu44.12	[X]Conversion reaction
45	Eu45y13	[X]Psychogenic pruritis	Eu45319	[X]Psychogenic dysuria
46	Eu45318	[X]Psychogenic dyspepsia	E29y000	Concentration camp syndrome
47	Eu40011	[X]Agoraphobia without history of panic disorder	Eu45321	[X]Psychogenic hiccough
48				
49	Eu44y13	[X]Psychogenic confusion	E278000	Psychogenic pain unspecified
50	Eu45323	[X]Psychogenic freq micturit	E278z00	Psychalgia NOS
51	Eu51511	[X]Dream anxiety disorder	Eu45411	[X]Psychalgia
52	Eu93000	[X]Separation anxiety disorder of childhood	E292200	Early adult emancipation disorder
53	Eu45.00	[X]Somatoform disorders	E265300	Psychogenic dysuria
54	Eu40212	[X]Animal phobias	Eu44200	[X]Dissociative stupor
55				
56				
57				
58				
59				

Eu42200	[X]Mixed obsessional thoughts and acts	E260100	Psychogenic torticollis
E202500	Social phobia, fear of public washing	E292400	Adjustment reaction with anxious mood
Eu44412	[X]Psychogenic dysphonia	E20y011	Briquet's disorder
225J.00	O/E - panic attack	Eu44500	[X]Dissociative convulsions
Eu45z11	[X]Psychosomatic disorder NOS	Eu45100	[X]Undifferentiated somatoform disorder
E29y500	Other adjustment reaction with withdrawal	E292500	Culture shock
E261300	Psychogenic hyperventilation	Eu45012	[X]Briquet's syndrome
E265100	Psychogenic vaginismus	Eu93y12	[X]Childhood overanxious disorder
E283000	Acute situational disturbance	Eu46y14	[X]Psychasthenia
Eu42000	[X]Predominantly obsessional thoughts or ruminations	Eu45y00	[X]Other somatoform disorders
Eu05400	[X]Organic anxiety disorder	E292300	Specific academic or work inhibition
E28z.12	Flying phobia	E26y.00	Other psychogenic malfunction
Eu45y12	[X]Globus hystericus	Z4I7100	Recognising anxiety
Eu46z11	[X]Neurosis NOS	Eu45313	[X]Gastric neurosis
Eu43014	[X]Crisis state	Eu44y00	[X]Other dissociative [conversion] disorders
Eu43y00	[X]Other reactions to severe stress	E293200	Adjustment reaction with destructiveness
Eu42.12	[X]Obsessive-compulsive neurosis	Eu45215	[X]Nosophobia
Eu42100	[X]Predominantly compulsive acts [obsessional rituals]	E292311	Specific academic or work inhibition
Eu44.00	[X]Dissociative [conversion] disorders	Eu40z12	[X]Phobic state NOS
Z4I7.00	Acknowledging anxiety	Eu40211	[X]Acrophobia
Eu42z00	[X]Obsessive-compulsive disorder, unspecified	Eu44y14	[X]Psychogenic twilight state
E292100	Adolescent emancipation disorder	E265.00	Psychogenic genitourinary tract symptoms
E201z00	Hysteria NOS	Eu43013	[X]Combat fatigue
E261400	Psychogenic yawning	E264z00	Psychogenic gastrointestinal tract symptom NOS
E29yz00	Other adjustment reactions NOS	E20y300	Psychasthenic neurosis
E201A0	Dissociative reaction unspecified	E265z00	Psychogenic genitourinary tract symptom NOS
0		Eu44700	[X]Mixed dissociative [conversion] disorders
E201300	Hysterical tremor	E267.00	Psychogenic symptom of special sense organ
Eu45011	[X]Multiple psychosomatic disorder	Eu46y15	[X]Psychasthenia neurosis
Eu4..00	[X]Neurotic, stress - related and somoform disorders	Eu45325	[X]Psychogenic pylorospasm
Eu41z00	[X]Anxiety disorder, unspecified	1B13.12	Anxious
E284.00	Stress reaction causing mixed disturbance of emotion/conduct	E26yz00	Other psychogenic malfunction NOS
Eu41y00	[X]Other specified anxiety disorders	Eu45511	[X]Globus hystericus
E292.00	Adjustment reaction, predominant disturbance other emotions	Eu46y11	[X]Briquet's disorder
E293z00	Adjustment reaction with predominant disturbance conduct NOS	Eu43400	[X]Chron post-traumatic stress disorder follow military comb
Eu45013	[X]Briquet's disorder	Eu43300	[X]Acute post-traumatic stress disorder follow military comb

MENTAL DISORDERS

At least one ICD-9 in:	
295	Schizophrenic disorders
296	Episodic mood disorders (except 296.2 & 296.3)
297	Delusional disorders
298	Other nonorganic psychoses
299	Pervasive developmental disorders
301	Personality disorders

OR

At least one ICD-10 in:	
F20	Schizophrenia
F21	Schizotypal disorder
F22	Delusional disorders
F23	Brief psychotic disorder
F24	Shared psychotic disorder
F25	Schizoaffective disorders
F28	Other psychotic disorder not due to a substance or known physiological condition
F29	Unspecified psychosis not due to a substance or known physiological condition
F30	Manic episode
F31	Bipolar disorder
F34	Persistent mood [affective] disorders
F39	Unspecified mood [affective] disorder

OR

At least one READ code in:			
E104.00	Acute schizophrenic episode	Eu6y100	[X]Intent product/feign of symptom/disab eith physical/psych
Eu2z.11	[X]Psychosis NOS	Eu50400	[X]Overeating associated with other psychological disturbncs
E21z.11	Psychopathic personality	Eu60711	[X]Asthenic personality disorder
E10..00	Schizophrenic disorders	E04z.00	Chronic organic psychosis NOS
E2F3z00	Speech or language developmental disorder NOS	Eu34z00	[X]Persistent mood affective disorder, unspecified
E214100	Obsessional personality	Eu6z.00	[X]Unspecified disorder of adult personality and behaviour
E21y500	Immature personality disorder	Eu10600	[X]Mental and behav dis due to use alcohol: amnesic syndrome
E103.00	Paranoid schizophrenia	E214.11	Anancastic personality
Eu31.11	[X]Manic-depressive illness	Eu60800	[X]Addictive personality
E2A1200	Change in personality	Eu53000	[X]Mild mental/behav disorder assoc with the puerperium NEC
1B1E.00	Hallucinations	Eu21.15	[X]Prodromal schizophrenia
1BH..00	Delusions	Eu53100	[X]Severe mental and behav disorder assoc with puerperium NEC
ZV40.13	[V]Psychological problems	Eu22y11	[X]Delusional dysmorphophobia

E21..00	Personality disorders	Eu25112	[X]Schizophreniform psychosis, depressive type
Eu22011	[X]Paranoid psychosis	E141100	Residual disintegrative psychoses
E03y300	Unspecified puerperal psychosis	Eu13.00	[X]Mental and behavioural disorder due to use of sedatives/hypnotics
E107.00	Schizo-affective schizophrenia	Eu05y00	[X]Other specific mental disorder brain damage/dysfunction/physical disorder
R001.00	[D]Hallucinations	E11z.00	Other and unspecified affective psychoses
E11..12	Depressive psychoses	1S04.00	C/O - illusions seen
E21y711	Neurotic personality	E2z..00	Neuroses or other mental disorder NOS
Eu30000	[X]Hypomania	Eu11000	[X]Mental & behavioural disorder due to use of opioids: acute intoxication
E00z.00	Senile or presenile psychoses NOS	Eu60z00	[X]Personality disorder, unspecified
Eu63300	[X]Trichotillomania	Eu34.00	[X]Persistent mood affective disorders
E212.00	Schizoid personality disorder	E110300	Single manic episode, severe without mention of psychosis
E11z100	Rebound mood swings	Eu15.00	[X]Mental & behavioural disorder due to other stimulants including caffeine
E2F3.00	Speech or language developmental disorder	E14..00	Psychoses with origin in childhood
E....00	Mental disorders	Eu20100	[X]Hebephrenic schizophrenia
E13z.11	Psychotic episode NOS	1B0.00	Delusion of persecution
E114.00	Bipolar affective disorder, currently manic	Eu60400	[X]Histrionic personality disorder
E215200	Emotionally unstable personality	E107200	Chronic schizo-affective schizophrenia
E121.00	Chronic paranoid psychosis	E215000	Unspecified histrionic personality disorder
E100200	Chronic schizophrenic	Eu10000	[X]Mental & behavioural disorder due to use of alcohol: acute intoxication
E12..00	Paranoid states	Eu23300	[X]Other acute predominantly delusional psychotic disorders
285..11	Psychotic condition, insight present	Eu84z00	[X]Pervasive developmental disorder, unspecified
E011000	Korsakov's alcoholic psychosis	Eu13200	[X]Mental and behavioural disorder due to sedatives/hypnotics: dependence syndrome
E216.00	Inadequate personality disorder	Eu81y00	[X]Other developmental disorders of scholastic skills
E115.00	Bipolar affective disorder, currently depressed	E100400	Acute exacerbation of chronic schizophrenia
Eu30z11	[X]Mania NOS	Eu23y00	[X]Other acute and transient psychotic disorders
Eu31500	[X]Bipolar affective disorder current episode severe depression with psychotic symptoms	Eu30z00	[X]Manic episode, unspecified
E215.11	Hysterical personality disorders	Eu8y.00	[X]Other disorders of psychological development
Eu22015	[X]Paranoia	Eu31600	[X]Bipolar affective disorder, current episode mixed
Eu10.00	[X]Mental and behavioural disorders due to use of alcohol	Eu60215	[X]Sociopathic personality disorder
E210.00	Paranoid personality disorder	Eu19200	[X]Mental and behavioural disorder multiple/other psychological subtypes: dependence syndrome
Eu3..00	[X]Mood - affective disorders	ZV40z00	[V]Unspecified mental or behavioural problem
146..00	H/O: psychiatric disorder	Eu0z.00	[X]Unspecified organic or symptomatic mental disorder
Eu80.00	[X]Specific developmental disorders of speech and language	Eu80y00	[X]Other developmental disorders of speech and language
1464.00	H/O: schizophrenia	E111z00	Recurrent manic episode NOS
E213.11	Aggressive personality	E111100	Recurrent manic episodes, mild
Eu83.00	[X]Mixed specific developmental disorders	E114200	Bipolar affective disorder, currently manic, moderate
Eu80z00	[X]Developmental disorder of speech and language unspecified	Eu6y200	[X]Munchausen's by proxy
Eu81z00	[X]Developmental disorder of scholastic skills, unspecified	L184.00	Mental disorders in pregnancy, childbirth and the puerperium
Eu05y11	[X]Epileptic psychosis NOS	Eu33300	[X]Recurrent depressive disorder current episode severe with psychotic symptoms
Eu31.12	[X]Manic-depressive psychosis	Eu24.12	[X]Induced paranoid disorder
Eu31.00	[X]Bipolar affective disorder	Eu11.00	[X]Mental and behavioural disorders due to use of opioids
Eu84.00	[X]Pervasive developmental disorders	Eu02z12	[X]Presenile psychosis NOS
Eu...00	Organic psychotic conditions	Eu14100	[X]Mental and behavioural disorder due to use of cocaine:

1	Eu82.00	[X]Specific developmental disorder of motor function	Eu22013	harmful use [X]Paraphrenia - late
2				
3	E132.00	Reactive confusion	Eu84y00	[X]Other pervasive developmental disorders
4	Eu60300	[X]Emotionally unstable personality disorder	E101z00	Hebephrenic schizophrenia NOS
5	E10z.00	Schizophrenia NOS	Eu62000	[X]Enduring personality change after catastrophic experience
6			1S40.00	Dysphoric mood
7	Eu60600	[X]Anxious [avoidant] personality disorder	Eu06013	[X]Limbic epilepsy personality
8	E130.00	Reactive depressive psychosis	Eu30212	[X]Mania with mood-incongruent psychotic symptoms
9	E11..11	Bipolar psychoses	Eu60014	[X]Sensitive paranoid personality disorder
10	Eu0z.12	[X]Symptomatic psychosis NOS	E216.11	Asthenic personality
11	E103z00	Paranoid schizophrenia NOS	Eu66z00	[X]Psychosexual development disorder, unspecified
12	Eu25.00	[X]Schizoaffective disorders	Eu22z00	[X]Persistent delusional disorder, unspecified
13	Eu30.11	[X]Bipolar disorder, single manic episode	Eu20y00	[X]Other schizophrenia
14	E2...00	Neurotic, personality and other nonpsychotic disorders		
15			E2A..00	Nonpsychotic mental disorders following organic brain damage
16	Eu...00	[X]Mental and behavioural disorders	Eu14500	[X]Mental & behav dis due to use cocaine: psychotic disorder
17			Eu14000	[X]Mental & behav dis due to use cocaine: acute intoxication
18	Eu34112	[X]Depressive personality disorder	Eu60y00	[X]Other specific personality disorders
19	E211200	Depressive personality disorder	Eu60z12	[X]Pathological personality NOS
20			E10yz00	Other schizophrenia NOS
21	E03y000	Organic delusional syndrome	E117000	Unspecified bipolar affective disorder, unspecified
22	E107z00	Schizo-affective schizophrenia NOS	Eu60y13	[X]Immature personality disorder
23	Eu12.00	[X]Mental and behavioural disorders due to use cannabinoids	Eu21.16	[X]Pseudoneurotic schizophrenia
24	Eu19.00	[X]Men & behav disorder multiple drug use/psychoactive subst	Eu15500	[X]Mental/behav dis oth stims inc caffeine: psychotic dis
25	Ez...00	Mental disorders NOS	Eu23011	[X]Bouffee delirante
26	Eu25100	[X]Schizoaffective disorder, depressive type	Eu20011	[X]Paraphrenic schizophrenia
27	E011100	Korsakov's alcoholic psychosis with peripheral neuritis	Eu05z00	[X]Unspec mental disorder brain damag/dysfunction/physcal dr
28	Eu22012	[X]Paranoid state	E2y..00	Other specified neuroses or other mental disorders
29	Eu2z.00	[X]Unspecified nonorganic psychosis	Eu18000	[X]Mental & behav dis due vol solvents: acute intoxication
30	146D.00	H/O: manic depressive disorder	Eu60.00	[X]Specific personality disorders
31			E110400	Single manic episode, severe, with psychosis
32	E11y000	Unspecified manic-depressive psychoses	Eu34y00	[X]Other persistent mood affective disorders
33	Eu10611	[X]Korsakov's psychosis, alcohol induced	Eu22y12	[X]Involutional paranoid state
34				
35	Eu23200	[X]Acute schizophrenia-like psychotic disorder	Eu16.00	[X]Mental and behavioural disorders due to use hallucinogens
36	Eu24.13	[X]Induced psychotic disorder	Eu14200	[X]Mental and behav dis due to use cocaine: dependence syndr
37	R001400	[D]Visual hallucinations	Eu52800	[X]Erotomania
38	Eu32300	[X]Severe depressive episode with psychotic symptoms	Eu12100	[X]Mental and behav dis due to use cannabinoids: harmful use
39	R001000	[D]Hallucinations, auditory	Eu60y16	[X]Psychoneurotic personality disorder
40			E123.11	Folie a deux
41	Eu30.00	[X]Manic episode	Eu11500	[X]Mental & behav dis due to use opioids: psychotic disorder
42			Eu3y000	[X]Other single mood affective disorders
43	E211100	Hypomanic personality disorder	Eu31y12	[X]Recurrent manic episodes
44	Eu10500	[X]Mental & behav dis due to use alcohol: psychotic disorder	E02y.00	Other drug psychoses
45	225E.00	O/E - paranoid delusions	Eu19300	[X]Mental and behav dis mlti/oth psychoa sbs:
46	Eu45211	[X]Body dysmorphic disorder		
47	E211300	Cyclothymic personality disorder		
48				
49	E12z.00	Paranoid psychosis NOS		
50	146H.00	H/O: psychosis		
51	E115.11	Manic-depressive - now depressed		
52	Eu30100	[X]Mania without psychotic symptoms		
53				
54				
55				
56				
57				
58				
59				

1	E11..00	Affective psychoses	withdrwl state
2	E110100	Single manic episode, mild	Eu24.00 [X]Induced delusional disorder
3			E103300 Acute exacerbation of subchronic paranoid schizophrenia
4	E120.00	Simple paranoid state	Eu84511 [X]Autistic psychopathy
5	E212z00	Schizoid personality disorder NOS	E00y.11 Presbyophrenic psychosis
6	E117.00	Unspecified bipolar affective disorder	E211z00 Affective personality disorder NOS
7	E13z.00	Nonorganic psychosis NOS	Eu25012 [X]Schizophreniform psychosis, manic type
8	E122.00	Paraphrenia	Eu60500 [X]Anankastic personality disorder
9	E211.00	Affective personality disorder	225F.00 O/E - delusion of persecution
10	E133.00	Acute paranoid reaction	Eu32312 [X]Single episode of psychogenic depressive psychosis
11	F481K00	Visual hallucinations	Eu18200 [X]Mental and behav dis due to vol solvents: dependence synd
12			E14z.00 Child psychosis NOS
13	E21z.00	Personality disorder NOS	Eu06y00 [X]Oth organ personality behav disorders brain dis dam dysf
14	E00y.00	Other senile and presenile organic psychoses	E22y500 Nymphomania
15			E103400 Acute exacerbation of chronic paranoid schizophrenia
16	E100000	Unspecified schizophrenia	Eu60y14 [X]Narcissistic personality disorder
17	E115000	Bipolar affective disorder, currently depressed, unspecified	Eu62013 [X]Personality change aft prolong captiv+possib/being killed
18	E1...00	Non-organic psychoses	E100z00 Simple schizophrenia NOS
19	E21yz00	Other personality disorder NOS	Ryu5300 [X]Other hallucinations
20			Eu31y00 [X]Other bipolar affective disorders
21			Eu84314 [X]Symbiotic psychosis
22	E211000	Unspecified affective personality disorder	Eu20111 [X]Disorganised schizophrenia
23	E01..00	Alcoholic psychoses	R001100 [D]Hallucinations, gustatory
24	E02..00	Drug psychoses	E116400 Mixed bipolar affective disorder, severe, with psychosis
25	E13y.00	Other reactive psychoses	Eu21.12 [X]Borderline schizophrenia
26	E13y.00	Other reactive psychoses	E11z000 Unspecified affective psychoses NOS
27	E114300	Bipolar affect disord, currently manic, severe, no psychosis	Eu34012 [X]Cycloid personality
28	E1y..00	Other specified non-organic psychoses	Eu16500 [X]Mental & behav dis due to hallucinogens: psychotic disord
29			E116600 Mixed bipolar affective disorder, in full remission
30	Eu31300	[X]Bipolar affect disorder cur epi mild or moderate depressn	E03..00 Transient organic psychoses
31	Eu20000	[X]Paranoid schizophrenia	Eu22111 [X]Capgras syndrome
32	Eu31000	[X]Bipolar affective disorder, current episode hypomanic	Eu22y13 [X]Paranoia querulans
33	Eu33315	[X]Recurrent severe episodes of psychotic depression	1BH2.00 Ideas of reference
34	Eu25011	[X]Schizoaffective psychosis, manic type	ZV40y00 [V]Other specified mental or behavioural problem
35	Eu2..00	[X]Schizophrenia, schizotypal and delusional disorders	E114400 Bipolar affect disord, currently manic,severe with psychosis
36	E114.11	Manic-depressive - now manic	Eu60y11 [X]Eccentric personality disorder
37	Eu60513	[X]Obsessive-compulsive personality disorder	E141.00 Disintegrative psychosis
38	Eu10514	[X]Alcoholic psychosis NOS	Eu17100 [X]Mental and behav dis due to use of tobacco: harmful use
39	Eu53111	[X]Puerperal psychosis NOS	Eu16300 [X]Mental and behav dis due hallucinogens: withdrawal state
40	E130.11	Psychotic reactive depression	Eu62.00 [X]Enduring personality change not attrib to brain damag/dis
41			E107500 Schizo-affective schizophrenia in remission
42	1BH..11	Delusion	Eu60213 [X]Asocial personality disorder
43	Eu20y13	[X]Schizophrenifrm psychos NOS	Eu12200 [X]Mental and behav dis due to cannabinoids: dependence synd
44	E21y200	Borderline personality disorder	
45			
46	E110.11	Hypomanic psychoses	
47			
48	212T.00	Psychosis, schizophrenia + bipolar affective disord resolved	
49	1B1b.00	Transient hallucinations	
50	R001z00	[D]Hallucinations NOS	
51	E215100	Munchausen's syndrome	

E216.13	Labile personality	Eu19700	[X]Men/beh dis mlt drg use/oth subs: resid/late psychot dis
E111000	Recurrent manic episodes, unspecified	Eu8z.00	[X]Unspecified disorder of psychological development
E2C3200	Kleptomania	Z57C611	Schizophrenic language
E21yz11	Manipulative personality	Eu62011	[X]Personality change after concentration camp experiences
E110000	Single manic episode, unspecified	E115600	Bipolar affective disorder, now depressed, in full remission
E13..11	Reactive psychoses	Eu12700	[X]Mnt/bh dis due cannabinds: resid & late-onset psychot dis
E2C3300	Pyromania	E114z00	Bipolar affective disorder, currently manic, NOS
Eu10300	[X]Mental and behav dis due to use alcohol: withdrawal state	E03z.00	Transient organic psychoses NOS
Eu20211	[X]Catatonic stupor	E100300	Acute exacerbation of subchronic schizophrenia
Eu20400	[X]Post-schizophrenic depression	Eu03.11	[X]Korsakov's psychosis, nonalcoholic
Eu60311	[X]Aggressive personality disorder	Eu25y00	[X]Other schizoaffective disorders
E214.00	Compulsive personality disorders	E100500	Schizophrenia in remission
Eu6..00	[X]Disorders of adult personality and behaviour	Eu60313	[X]Explosive personality disorder
Eu30200	[X]Mania with psychotic symptoms	E102000	Unspecified catatonic schizophrenia
E21y700	Psychoneurotic personality disorder	E107000	Unspecified schizo-affective schizophrenia
Eu81.00	[X]Specific developmental disorders of scholastic skills	E111500	Recurrent manic episodes, partial or unspecified remission
Eu60000	[X]Paranoid personality disorder	E107300	Acute exacerbation subchronic schizo-affective schizophrenia
Eu23012	[X]Cycloid psychosis	Eu60714	[X]Self defeating personality disorder
Eu34000	[X]Cyclothymia	Eu18100	[X]Mental and behav dis due volatile solvents: harmful use
Eu23100	[X]Acute polymorphic psychot disord with symp of schizophren	E114500	Bipolar affect disord,currently manic, part/unspec remission
E216.12	Dependent personality	Eu23211	[X]Brief schizophreniform disorder
Eu60214	[X]Psychopathic personality disorder	Eu15700	[X]Mnt/bh dis oth stm inc caffne resid/late-onset psycht dis
Eu10100	[X]Mental and behav dis due to use of alcohol: harmful use	E03yz00	Other transient organic psychoses NOS
Eu0z.11	[X]Organic psychosis NOS	Eu84512	[X]Schizoid disorder of childhood
Eu05200	[X]Organic delusional [schizophrenia-like] disorder	Eu06000	[X]Organic personality disorder
Eu04.15	[X]Acute / subacute psycho-organic reaction	Eu20300	[X]Undifferentiated schizophrenia
ZV11112	[V]Personal history of manic-depressive psychosis	E11y.00	Other and unspecified manic-depressive psychoses
E02y400	Drug-induced personality disorder	E2Az.00	Nonpsychotic mental disorder post-organic brain damage NOS
ZV11000	[V]Personal history of schizophrenia	E215z00	Histrionic personality disorder NOS
E13y000	Psychogenic stupor	Eu19000	[X]Mental/behav dis multi drg use/psychoac subs: acute intox
E1z..00	Non-organic psychosis NOS	E107100	Subchronic schizo-affective schizophrenia
Eu60512	[X]Obsessional personality disorder	Eu84013	[X]Infantile psychosis
Euz..11	[X]Mental illness NOS	Eu13300	[X]Mental and behav dis due seds/hypntcs: withdrawal state
1BH3.00	Paranoid ideation	Eu20200	[X]Catatonic schizophrenia
286..11	Poor insight into psychotic condition	Eu17.00	[X]Mental and behavioural disorder due to use of tobacco
1S42.00	Manic mood	E212200	Schizotypal personality
Eu0..00	[X]Organic, including symptomatic, mental disorders	Eu10700	[X]Men & behav dis due alcoh: resid & late-onset psychot dis
E13y100	Brief reactive psychosis	E04..00	Other chronic organic psychoses
E213.00	Explosive personality disorder	Eu84312	[X]Disintegrative psychosis
E100100	Subchronic schizophrenia	Eu22100	[X]Delusional misidentification syndrome
Eu53z00	[X]Puerperal mental disorder, unspecified	Eu21.14	[X]Prepsychotic schizophrenia

E04y.00	Other specified chronic organic psychoses	E123.00	Shared paranoid disorder
Eu06.00	[X]Personality and behav disorder brain dis dam and dysfunct	E2Ay.00	Other specific mental disorder post-organic brain damage
Eu31400	[X]Bipol aff disord, curr epis sev depress, no psychot symp	Eu19100	[X]Mental and behav dis mlti drg/oth psychoa sbs: harmfl use
Eu33311	[X]Endogenous depression with psychotic symptoms	E116200	Mixed bipolar affective disorder, moderate
E040.11	Korsakoff's non-alcoholic psychosis	E116300	Mixed bipolar affective disorder, severe, without psychosis
Eu34013	[X]Cyclothymic personality	E107400	Acute exacerbation of chronic schizo-affective schizophrenia
ZV11111	[V]Personal history of manic-depressive psychosis	E116z00	Mixed bipolar affective disorder, NOS
E217.00	Antisocial or sociopathic personality disorder	E116500	Mixed bipolar affective disorder, partial/unspec remission
Eu05300	[X]Organic mood [affective] disorders	E117100	Unspecified bipolar affective disorder, mild
Eu84111	[X]Atypical childhood psychosis	E115400	Bipolar affect disord, now depressed, severe with psychosis
Eu20511	[X]Chronic undifferentiated schizophrenia	E114600	Bipolar affective disorder, currently manic, full remission
Eu32313	[X]Single episode of psychotic depression	ZV40200	[V]Other mental problems
Eu32311	[X]Single episode of major depression and psychotic symptoms	E2A1z00	Organic personality syndrome NOS
E113400	Recurrent major depressive episodes, severe, with psychosis	E102z00	Catatonic schizophrenia NOS
E117600	Unspecified bipolar affective disorder, in full remission	Eu06z00	[X]Unspec organ personality behav disorder brain dam dysfunc
E14y000	Atypical childhood psychoses	R001300	[D]Hallucinations, tactile
E134.00	Psychogenic paranoid psychosis	Eu13000	[X]Mental & behav dis due seds/hypntcs: acute intoxication
Eu04.13	[X]Acute / subacute infective psychosis	Eu20500	[X]Residual schizophrenia
146Z.00	H/O: psychiatric disorder NOS	Eu20212	[X]Schizophrenic catalepsy
Eu19500	[X]Ment/behav dis mlti drug use/oth psyc sbs: psychotc dis	Eu6y.00	[X]Other disorders of adult personality and behaviour
E110200	Single manic episode, moderate	Eu21.13	[X]Latent schizophrenia
E116100	Mixed bipolar affective disorder, mild	Eu22014	[X]Sensitiver Beziehungswahn
Eu53.00	[X]Mental and behav disorders assoc with the puerperium NEC	Eu12300	[X]Mental and behav dis due cannabinoids: withdrawal state
Eu23.00	[X]Acute and transient psychotic disorders	Eu62012	[X]Personality change after disasters
Eu04.00	[X]Delirium, not induced by alcohol+other psychoactive subs	E111300	Recurrent manic episodes, severe without mention psychosis
E2A1.00	Organic personality syndrome	Eu16200	[X]Mental and behav dis due to hallucinogens: dependence syn
ZV40.00	[V]Mental and behavioural problems	Eu22y00	[X]Other persistent delusional disorders
E21y.00	Other personality disorders	Eu31.13	[X]Manic-depressive reaction
Eu8..00	[X]Disorders of psychological development	Eu16000	[X]Mental & behav dis due hallucinogens: acute intoxicatn
R001200	[D]Hallucinations, olfactory	E105.00	Latent schizophrenia
E102.00	Catatonic schizophrenia	E101000	Unspecified hebephrenic schizophrenia
Eu54.00	[X]Psychological/behav factor assoc with disorder or dis EC	E0y..00	Other specified organic psychoses
E02z.00	Drug psychosis NOS	E14yz00	Other childhood psychoses NOS
E13yz00	Other reactive psychoses NOS	E12y000	Paranoia querulans
Eu23112	[X]Cycloid psychosis with symptoms of schizophrenia	E212000	Unspecified schizoid personality disorder
E11..13	Manic psychoses	Eu16100	[X]Mental and behav dis due to use hallucinogens: harmfl use
E111.00	Recurrent manic episodes	Eu14300	[X]Mental and behav dis due to use cocaine: withdrawal state

1	Eu31100	[X]Bipolar affect disorder cur epi manic wout psychotic symp	E215300	Psychoinfantile personality
2	Eu34011	[X]Affective personality disorder	E01z.00	Alcoholic psychosis NOS
3	Eu21.18	[X]Schizotypal personality disorder	E101500	Hebephrenic schizophrenia in remission
4	E215.00	Histrionic personality disorders	E217.11	Amoral personality
5	Eu31700	[X]Bipolar affective disorder, currently in remission	E133.11	Bouffe delirante
6				
7	Eu11700	[X]Men & beh dis due opioids: resid & late-onset psychot dis	E01yz00	Other alcoholic psychosis NOS
8				
9	Eu66.00	[X]Psychol and behav disorder assoc with sex dev and orienta	E03y.00	Other transient organic psychoses
10				
11	Ey...00	Other specified mental disorders	E117400	Unspecified bipolar affective disorder,severe with psychosis
12				
13	E111200	Recurrent manic episodes, moderate	E117200	Unspecified bipolar affective disorder, moderate
14	Eu02z16	[X] Senile dementia, depressed or paranoid type	Eu60013	[X]Querulant personality disorder
15				
16	Eu23312	[X]Psychogenic paranoid psychosis	Eu13500	[X]Mental & behav dis due to seds/hypntcs: psychotic disordr
17				
18	E21y400	Eccentric personality disorder	E14y100	Borderline psychosis of childhood
19	E115200	Bipolar affective disorder, currently depressed, moderate	Eu60412	[X]Psychoinfantile personality disorder
20				
21	Eu02z15	[X] Senile psychosis NOS	E110600	Single manic episode in full remission
22	Eu60411	[X]Hysterical personality disorder	E11y300	Other mixed manic-depressive psychoses
23	Eu05.00	[X]Oth mental disorder brain damag/dysfunction/physical disr	E117500	Unspecified bipolar affect disord, partial/unspec remission
24				
25	E117z00	Unspecified bipolar affective disorder, NOS	Eu23212	[X]Brief schizophrenifrm psych
26	Eu3y.00	[X]Other mood affective disorders	E21y600	Masochistic personality disorder
27	Eu44.14	[X]Hysterical psychosis	E11y100	Atypical manic disorder
28	E21..11	Neurotic personality disorder	Eu21.17	[X]Pseudopsychopathic schizophrenia
29	Eu31200	[X]Bipolar affect disorder cur epi manic with psychotic symp	Eu60y12	[X]Haltlose type personality disorder
30				
31	Eu22.00	[X]Persistent delusional disorders	E14y.00	Other childhood psychoses
32	Eu33312	[X]Manic-depress psychosis,depressed type+psychotic symptoms	E115500	Bipolar affect disord, now depressed, part/unspec remission
33				
34	E02yz00	Other drug psychoses NOS	E100.11	Schizophrenia simplex
35	Eu32314	[X]Single episode of reactive depressive psychosis	E117300	Unspecified bipolar affective disorder, severe, no psychosis
36				
37	Eu33213	[X]Manic-depress psychosis,depressd,no psychotic symptoms	ZVu6K00	[X]Personal history/other mental and behavioural disorders
38				
39	Eu3yy00	[X]Other specified mood affective disorders	Eu31y11	[X]Bipolar II disorder
40	Eu23z12	[X]Reactive psychosis	ZV11z00	[V]Personal history of unspecified mental disorder
41	Eu3y100	[X]Other recurrent mood affective disorders	212V.00	Bipolar affective disorder resolved
42	E131.00	Acute hysterical psychosis	1B1e.00	Hypnopompic hallucination
43	Eu1..00	[X]Mental and behavioural disorders due to psychoactive subs	212X.00	Psychosis resolved
44				
45	ZV11.00	[V]Personal history of mental disorder	Eu1A100	[X]Mental behav disorders due use crack cocaine: harmful use
46				
47	ZRby100	Profile of mood states, bipolar	1B1d.00	Hypnagogic hallucination
48	E214000	Anankastic personality	Eu62z00	[X]Enduring personality change, unspecified
49	Eu66y00	[X]Other psychosexual development disorders	212W.00	Schizophrenia resolved
50	Eu61.00	[X]Mixed and other personality disorders	Eu21.11	[X]Latent schizophrenic reaction
51	E101.00	Hebephrenic schizophrenia	Eu20311	[X]Atypical schizophrenia
52	Eu3y011	[X]Mixed affective episode	E10y.11	Cenesthopathic schizophrenia
53	Eu2y.00	[X]Other nonorganic psychotic disorders	Eu13100	[X]Mental and behav dis due to use seds/hypntcs: harmful use
54				
55	ZV71000	[V]Observation for mental disorder	ZV11y00	[V]Personal history of other specified mental disorder
56	Eu6y111	[X] Munchausens syndrome	Eu06011	[X]Organic pseudopsychopathic personality
57	E116.00	Mixed bipolar affective disorder	Eu20y12	[X]Schizophreniform disord NOS
58				
59				
60				

E103200	Chronic paranoid schizophrenia	E105200	Chronic latent schizophrenia
E12yz00	Other paranoid states NOS	Eu23214	[X]Schizophrenic reaction
Eu20214	[X]Schizophrenic flexibilatis cerea	E105500	Latent schizophrenia in remission
E116000	Mixed bipolar affective disorder, unspecified	Eu12600	[X]Mental and behav dis due to use cannabinoids: amnesic syn
E12y.00	Other paranoid states	Eu05z12	[X]Organic mental disorder NOS
Eu60200	[X]Dissocial personality disorder	E101400	Acute exacerbation of chronic hebephrenic schizophrenia
Eu3z.11	[X]Affective psychosis NOS	Eu32800	[X]Major depression, severe with psychotic symptoms
ZV40.12	[V]Mental problems	Eu18500	[X]Mental & behav dis due to vol solvents: psychotic disorder
Eu23z11	[X]Brief reactive psychosis NOS	Eu22200	[X]Cotard syndrome
Eu18.00	[X]Mental & behav disorders due to use of volatile solvents	E107.11	Cyclic schizophrenia
Eu2y.11	[X]Chronic hallucinatory psychosis	E10y100	Coenesthopathic schizophrenia
Eu33314	[X]Recurr severe episodes/psychogenic depressive psychosis	E102100	Subchronic catatonic schizophrenia
Eu60312	[X]Borderline personality disorder	Eu94211	[X]Affectionless psychopathy
Eu62015	[X]Personality change after torture	Eu3y200	[X]Premenstrual dysphoric disorder
Eu60700	[X]Dependent personality disorder	14g..00	History of developmental disorder
Eu05212	[X]Schizophrenia-like psychosis in epilepsy	L184400	Mental disorder in puerperium - baby previously delivered
E13..00	Other nonorganic psychoses	Eu32900	[X]Single major depr ep, severe with psych, psych in remiss
Eu14.00	[X]Mental and behavioural disorders due to use of cocaine	Eu32A00	[X]Recurr major depr ep, severe with psych, psych in remiss
Eu30y00	[X]Other manic episodes	Eu17300	[X]Mental and behav dis due to use tobacco: withdrawal state
E112400	Single major depressive episode, severe, with psychosis	Eu22300	[X]Paranoid state in remission
E100.00	Simple schizophrenia	Eu1A300	[X]Mental behav disord due crack cocaine: withdrawal state
E111400	Recurrent manic episodes, severe, with psychosis	Eu26.00	[X]Nonorganic psychosis in remission
Eu1A.00	[X]Mental and behavioural disorders due use of crack cocaine	E105000	Unspecified latent schizophrenia
Eu60212	[X]Antisocial personality disorder	E102500	Catatonic schizophrenia in remission
1BH1.00	Grandiose delusions	E105z00	Latent schizophrenia NOS
Eu33313	[X]Recurr severe episodes/major depression+psychotic symptom	Eu1A500	[X]Mental behav disord due crack cocaine: psychotic disorder
E10y000	Atypical schizophrenia	Eu1A200	[X]Mental behav disorders due use crack cocaine: depend synd
E103000	Unspecified paranoid schizophrenia	Eu14700	[X]Men & beh dis due cocaine: resid & late-onset psychot dis
Eu25z11	[X]Schizoaffective psychosis NOS	L184200	Mental disorder in the puerperium - baby delivered
E11zz00	Other affective psychosis NOS	Eu31900	[X]Bipolar affective disorder type II
E11yz00	Other and unspecified manic-depressive psychoses NOS	Eu11600	[X]Mental and behav dis due to use opioids: amnesic syndrome
Eu15200	[X]Mental and behav dis oth stim inc caffen: dependnce synd	Eu31911	[X]Bipolar II disorder
E01y.00	Other alcoholic psychosis	Eu31800	[X]Bipolar affective disorder type I
Eu25200	[X]Schizoaffective disorder, mixed type	E103100	Subchronic paranoid schizophrenia
E00..00	Senile and presenile organic psychotic conditions	Eu25211	[X]Cyclic schizophrenia
Eu60713	[X]Passive personality disorder	Eu60211	[X]Amoral personality disorder
Eu31z00	[X]Bipolar affective disorder, unspecified	Eu16700	[X]Mnt/bh dis due hallucngns: resid & late-onset psychot dis
E2Fz.00	Developmental disorder NOS	Eu24.11	[X]Folie a deux
Eu25000	[X]Schizoaffective disorder, manic type	Eu19600	[X]Mental/behav dis multi drg use/oth psy sbs:

		amnesic syndr	
1	Eu23z00	[X]Acute and transient psychotic disorder, unspecified	E102400 Acute exacerbation of chronic catatonic schizophrenia
2			
3	Eu20.00	[X]Schizophrenia	Eu8z.11 [X]Psychological developmental disorder NOS
4	Eu11200	[X]Mental and behav dis due to use opioids: dependence syndr	Eu17200 [X]Mental and behav dis due to use tobacco: dependence syndr
5			
6	Eu22000	[X]Delusional disorder	E21y000 Narcissistic personality disorder
7	E214z00	Compulsive personality disorder NOS	E115z00 Bipolar affective disorder, currently depressed, NOS
8	Eu62y11	[X]Chronic pain personality syndrome	Eu12000 [X]Mental & behav dis due cannabinoids: acute intoxication
9			
10	Eu6yy00	[X]Other specified disorders of adult personality/behaviour	E14z.11 Childhood schizophrenia NOS
11			
12	Eu20z00	[X]Schizophrenia, unspecified	Eu62100 [X]Enduring personality change after psychiatric illness
13	Euz..00	[X]Mental disorder, not otherwise specified	Eu11100 [X]Mental and behav dis due to use of opioids: harmful use
14			
15	Eu62y00	[X]Other enduring personality changes	Eu25212 [X]Mixed schizophrenic and affective psychosis
16	Eu25111	[X]Schizoaffective psychosis, depressive type	Eu6y000 [X]Elaboration of physical symptoms for psychological reason
17			
18			
19	E115300	Bipolar affect disord, now depressed, severe, no psychosis	Eu25z00 [X]Schizoaffective disorder, unspecified
20			
21	E21y100	Avoidant personality disorder	Eu33316 [X]Recurrent severe episodes/reactive depressive psychosis
22			
23	E115100	Bipolar affective disorder, currently depressed, mild	Eu60712 [X]Inadequate personality disorder
24			
25	E114000	Bipolar affective disorder, currently manic, unspecified	E106.00 Residual schizophrenia
26			
27	E21y300	Passive-aggressive personality disorder	Eu60511 [X]Compulsive personality disorder
28	Eu20600	[X]Simple schizophrenia	Eu60100 [X]Schizoid personality disorder
29	Eu20213	[X]Schizophrenic catatonia	Eu12500 [X]Mental & behav dis due to cannabinoids: psychotic disordr
30			
31	E213.12	Quarrelsome personality	E212100 Introverted personality
32	E114100	Bipolar affective disorder, currently manic, mild	E10y.00 Other schizophrenia
33			
34	E103500	Paranoid schizophrenia in remission	ZS34.00 Developmental disorder of scholastic skill
35	Eu11300	[X]Mental and behav dis due to use opioids: withdrawal state	Eu21.00 [X]Schizotypal disorder
36			
37	E110z00	Manic disorder, single episode NOS	Eu10200 [X]Mental and behav dis due to use alcohol: dependence syndr
38			
39			
40	Eu23000	[X]Acute polymorphic psychot disord without symp of schizoph	Eu3z.00 [X]Unspecified mood affective disorder
41			
42	E0z..00	Organic psychoses NOS	Eu30211 [X]Mania with mood-congruent psychotic symptoms
43	E110.00	Manic disorder, single episode	E111600 Recurrent manic episodes, in full remission
44			

ALCOHOL AND DRUG DEPENDENCE

At least one ICD-9 in:

- 303 Alcohol dependence syndrome
- 305.00 Non dependent alcohol abuse
 - 305.00 Alcohol abuse, unspecified
 - 305.01 Alcohol abuse, continuous
 - 305.03** Alcohol abuse, episodic
 - 305.03 Alcohol abuse, in remission
- 304 Drug dependence
 - 304.0 Opioid type dependence
 - 304.1 Sedative, hypnotic or anxiolytic dependence
 - 304.2 Cocaine dependence
 - 304.3 Cannabis dependence
 - 304.4 Amphetamine and other psychostimulant dependence
 - 304.5 Hallucinogen dependence
 - 304.6 Other specified drug dependence
 - 304.7 Combinations of opioid type drug with any other drug dependence
 - 304.8 Combinations of drug dependence excluding opioid type drug
 - 304.9 Unspecified drug dependence

OR

At least one ICD-10 in:

- F10 Alcohol related disorders
 - F10.0 acute intoxication
 - F10.1 harmful use
 - F10.2 dependence syndrome
 - F10.3 withdrawal state
 - F10.4 withdrawal state with delirium
 - F10.5 psychotic disorder
 - F10.6 amnesic syndrome
 - F10.7 Residual and late-onset psychotic disorder
 - F10.8 other mental and behavioural disorder
 - F10.9 unspecified mental and behavioural disorder
- F11 Opioids related disorders
- F12 Cannabis related disorders
- F13 Sedative, hypnotic, or anxiolytic related disorders
- F14 Cocaine related disorders
- F15 Other stimulant related disorders
- F16 Hallucinogen related disorders
- F17 Nicotine dependence
- F18 Inhalant related disorders
- F19 Other psychoactive substance related disorders

OR

At least one READ code in:			
136..00	Alcohol consumption	E245z00	Hallucinogen dependence NOS
136K.00	Alcohol intake above recommended sensible limits	E246.00	Glue sniffing dependence
136S.00	Hazardous alcohol use	E246000	Glue sniffing dependence, unspecified
136T.00	Harmful alcohol use	E246100	Glue sniffing dependence, continuous
136W.00	Alcohol misuse	E246200	Glue sniffing dependence, episodic
136Z.00	Alcohol consumption NOS	E246300	Glue sniffing dependence in remission
13c..00	Drug user	E246z00	Glue sniffing dependence NOS
13c0.00	Injecting drug user	E247.00	Other specified drug dependence
13c1.00	Intravenous drug user	E247.11	Absinthe addiction
13c2.00	Never injecting drug user	E247000	Other specified drug dependence, unspecified
13c3.00	Intramuscular drug user	E247100	Other specified drug dependence, continuous
13c4.00	Intranasal drug user	E247200	Other specified drug dependence, episodic
13c7.00	Current drug user	E247300	Other specified drug dependence in remission
13c9.00	Subcutaneous drug user	E247z00	Other specified drug dependence NOS
13cA.00	Smokes drugs	E248.00	Combined opioid with other drug dependence
13cB.00	Misuses drugs orally	E248000	Combined opioid with other drug dependence, unspecified
13cC.00	Continuous use of drugs	E248100	Combined opioid with other drug dependence, continuous
13cD.00	Episodic use of drugs	E248200	Combined opioid with other drug dependence, episodic
13cE.00	Prolonged high dose use of cannabis	E248300	Combined opioid with other drug dependence in remission
13cH.00	Persistent substance misuse	E248z00	Combined opioid with other drug dependence NOS
13cJ.00	Previously injecting drug user	E249.00	Combined drug dependence, excluding opioids
13cK.00	Current non recreational drug user	E249000	Combined drug dependence, excluding opioid, unspecified
1462.00	H/O: alcoholism	E249100	Combined drug dependence, excluding opioid, continuous
1463.00	H/O: drug dependency	E249200	Combined drug dependence, excluding opioid, episodic
146E.00	H/O: recreational drug use	E249300	Combined drug dependence, excluding opioid, in remission
146F.00	H/O: drug abuse	E249z00	Combined drug dependence, excluding opioid, NOS
1B1c.00	Alcohol induced hallucinations	E24A.00	Ecstasy type drug dependence
1P30.00	Compulsive uncontrollable drug taking	E24z.00	Drug dependence NOS
1P31.00	Compulsive drug taking	E250.11	Drunkenness NOS
1P6..00	Craving for drugs	E250.12	Hangover (alcohol)
1P62.00	Abnormal craving for drugs	E250.13	Inebriety NOS
1T...00	History of substance misuse	E250.14	Intoxication - alcohol
1T0..00	H/O heroin misuse	E254.11	Barbiturate abuse
1T00.00	H/O daily heroin misuse	E254.12	Hypnotic or anxiolytic abuse
1T01.00	H/O weekly heroin misuse	E254.13	Sedative abuse
1T02.00	Previous history of heroin misuse	E254.14	Tranquilliser abuse
1T03.00	H/O infrequent heroin misuse	E257.11	Psychostimulant abuse
1T1..00	H/O methadone misuse	E257.12	Stimulant abuse
1T10.00	H/O daily methadone misuse	E259400	Misuse of prescription only drugs
1T11.00	H/O weekly methadone misuse	E25y.11	Analgesic abuse
1T12.00	H/O infrequent methadone misuse	E25y.12	Laxative abuse
1T13.00	Previous history of methadone misuse	E25y.13	Steroid abuse

1T2..00	H/O ecstasy misuse	E25z.00	Misuse of drugs NOS
1T20.00	H/O daily ecstasy misuse	Eu1..00	[X]Mental and behavioural disorders due to psychoactive subs
1T21.00	H/O weekly ecstasy misuse	Eu10.00	[X]Mental and behavioural disorders due to use of alcohol
1T22.00	H/O infrequent ecstasy misuse	Eu10000	[X]Mental & behav dis due to use alcohol: acute intoxication
1T23.00	Previous history of ecstasy misuse	Eu10011	[X]Acute alcoholic drunkenness
1T3..00	H/O benzodiazepine misuse	Eu10100	[X]Mental and behav dis due to use of alcohol: harmful use
1T30.00	H/O daily benzodiazepine misuse	Eu10200	[X]Mental and behav dis due to use alcohol: dependence syndr
1T31.00	H/O weekly benzodiazepine misuse	Eu10211	[X]Alcohol addiction
1T32.00	H/O infrequent benzodiazepine misuse	Eu10212	[X]Chronic alcoholism
1T33.00	Previous history of benzodiazepine misuse	Eu10213	[X]Dipsomania
1T4..00	H/O amphetamine misuse	Eu10300	[X]Mental and behav dis due to use alcohol: withdrawal state
1T40.00	H/O daily amphetamine misuse	Eu10400	[X]Men & behav dis due alcohol: withdrawal state with delirium
1T41.00	H/O weekly amphetamine misuse	Eu10411	[X]Delirium tremens, alcohol induced
1T42.00	H/O infrequent amphetamine misuse	Eu10500	[X]Mental & behav dis due to use alcohol: psychotic disorder
1T43.00	Previous history of amphetamine misuse	Eu10511	[X]Alcoholic hallucinosis
1T5..00	H/O cocaine misuse	Eu10512	[X]Alcoholic jealousy
1T50.00	H/O daily cocaine misuse	Eu10513	[X]Alcoholic paranoia
1T51.00	H/O weekly cocaine misuse	Eu10514	[X]Alcoholic psychosis NOS
1T52.00	H/O infrequent cocaine misuse	Eu10600	[X]Mental and behav dis due to use alcohol: amnesic syndrome
1T53.00	Previous history of cocaine misuse	Eu10611	[X]Korsakov's psychosis, alcohol induced
1T6..00	H/O crack cocaine misuse	Eu10700	[X]Men & behav dis due alcohol: resid & late-onset psychot dis
1T60.00	H/O daily crack cocaine misuse	Eu10711	[X]Alcoholic dementia NOS
1T61.00	H/O weekly crack cocaine misuse	Eu10712	[X]Chronic alcoholic brain syndrome
1T62.00	H/O infrequent crack cocaine misuse	Eu10800	[X]Alcohol withdrawal-induced seizure
1T63.00	Previous history of crack cocaine misuse	Eu10y00	[X]Men & behav dis due to use alcohol: oth men & behav dis
1T7..00	H/O hallucinogen misuse	Eu10z00	[X]Ment & behav dis due use alcohol: unsp ment & behav dis
1T73.00	Previous history of hallucinogen misuse	Eu11.00	[X]Mental and behavioural disorders due to use of opioids
1T8..00	H/O cannabis misuse	Eu11000	[X]Mental & behav dis due to use opioids: acute intoxication
1T80.00	H/O daily cannabis misuse	Eu11100	[X]Mental and behav dis due to use of opioids: harmful use
1T81.00	H/O weekly cannabis misuse	Eu11200	[X]Mental and behav dis due to use opioids: dependence syndr
1T82.00	H/O infrequent cannabis misuse	Eu11211	[X]Drug addiction - opioids
1T83.00	Previous history of cannabis misuse	Eu11212	[X]Heroin addiction
1T9..00	H/O solvent misuse	Eu11300	[X]Mental and behav dis due to use opioids: withdrawal state
1T90.00	H/O daily solvent misuse	Eu11311	[X]Cold turkey, opiate withdrawal
1T91.00	H/O weekly solvent misuse	Eu11400	[X]Men & behav dis due opioid: withdrawal state with delirium
1T93.00	Previous history of solvent misuse	Eu11500	[X]Mental & behav dis due to use opioids: psychotic disorder
1TA..00	H/O barbiturate misuse	Eu11600	[X]Mental and behav dis due to use opioids: amnesic syndrome
1TB..00	H/O major tranquilliser misuse	Eu11700	[X]Men & beh dis due opioids: resid & late-onset psychot dis

1	1TB0.00	H/O daily major tranquilliser misuse	Eu11y00	[X]Men & behav dis due to use opioids: oth men & behav dis
2	1TC..00	H/O anti-depressant misuse	Eu11z00	[X]Ment & behav dis due use opioids: unsp ment & behav dis
3				
4	1TC0.00	H/O daily anti-depressant misuse	Eu12.00	[X]Mental and behavioural disorders due to use cannabinoids
5				
6	1TC3.00	Previous history of anti-depressant misuse	Eu12000	[X]Mental & behav dis due cannabinoids: acute intoxication
7				
8	1TD..00	H/O opiate misuse	Eu12100	[X]Mental and behav dis due to use cannabinoids: harmful use
9				
10	1TD0.00	H/O daily opiate misuse	Eu12200	[X]Mental and behav dis due to cannabinoids: dependence synd
11				
12	1TD1.00	H/O weekly opiate misuse	Eu12211	[X]Drug addiction - cannabis
13	1TD2.00	H/O infrequent opiate misuse	Eu12300	[X]Mental and behav dis due cannabinoids: withdrawal state
14				
15	1TD3.00	Previous history of opiate misuse	Eu12500	[X]Mental & behav dis due to cannabinoids: psychotic disorder
16				
17	1TE..00	Uses heroin on top of substitution therapy	Eu12600	[X]Mental and behav dis due to use cannabinoids: amnesic syn
18				
19	1V...00	Drug misuse behaviour	Eu12700	[X]Mnt/bh dis due cannabinds: resid & late-onset psychot dis
20				
21	1V0..00	Misuses drugs	Eu12y00	[X]Men/behav dis due to use cannabinoids: oth men/behav disd
22				
23	1V01.00	Long-term drug misuser	Eu12z00	[X]Ment/behav dis due use cannabinoids: unsp ment/behav disd
24				
25	1V02.00	Poly-drug misuser	Eu13.00	[X]Mental and behavioural dis due use sedatives/hypnotics
26				
27	1V08.00	Smokes drugs in cigarette form	Eu13000	[X]Mental & behav dis due seds/hypntcs: acute intoxication
28				
29	1V09.00	Smokes drugs through a pipe	Eu13100	[X]Mental and behav dis due to use seds/hypntcs: harmful use
30				
31	1V0A.00	Chases the dragon	Eu13200	[X]Mental and behav dis due to seds/hypntcs: dependence synd
32				
33	1V0B.00	Sniffs drugs	Eu13211	[X]Drug addiction- sedative / hypnotics
34	1V0C.00	Drug addict	Eu13300	[X]Mental and behav dis due seds/hypntcs: withdrawal state
35				
36	1V0E.00	Health problem secondary to drug misuse	Eu13400	[X]Men & beh dis due seds/hypns: withdrwl state wth delirium
37				
38	1V26.00	Misused drugs in past	Eu13500	[X]Mental & behav dis due to seds/hypntcs: psychotic disorder
39				
40	1V3..00	Drug injection behaviour	Eu14.00	[X]Mental and behavioural disorders due to use of cocaine
41				
42	1V4..00	Priority of drug-related activities	Eu14000	[X]Mental & behav dis due to use cocaine: acute intoxication
43				
44	1V5..00	Routine of drug-related activities	Eu14100	[X]Mental and behav dis due to use of cocaine: harmful use
45				
46	1V6..00	Drug-related offending behaviour	Eu14200	[X]Mental and behav dis due to use cocaine: dependence syndr
47				
48	1V64.00	Illicit drug use	Eu14211	[X]Drug addiction - cocaine
49	1V65.00	Heroin misuse	Eu14300	[X]Mental and behav dis due to use cocaine: withdrawal state
50				
51	1V66.00	Ecstasy misuse	Eu14500	[X]Mental & behav dis due to use cocaine: psychotic disorder
52				
53	222N.00	O/E - signs of drug withdrawal	Eu14700	[X]Men & beh dis due cocaine: resid & late-onset psychot dis
54				
55	C150500	Alcohol-induced pseudo-Cushing's syndrome	Eu15.00	[X]Mental & behav disorder due other stimulants inc caffein
56				
57	E01..00	Alcoholic psychoses	Eu15000	[X]Mnt/beh dis due oth stim inc caffein: acute intoxication
58				
59	E010.00	Alcohol withdrawal delirium	Eu15100	[X]Ment/behav dis due to use oth stims inc caff: harmful use

E010.11	DTs - delirium tremens	Eu15200	[X]Mental and behav dis oth stim inc caffein: dependnce synd
E010.12	Delirium tremens	Eu15211	[X]Drug addiction-other stimul
E011.00	Alcohol amnestic syndrome	Eu15300	[X]Mnt/behav dis other stimInts inc caffeine: withdrwl state
E011000	Korsakov's alcoholic psychosis	Eu15500	[X]Mental/behav dis oth stims inc caffeine: psychotic dis
E011100	Korsakov's alcoholic psychosis with peripheral neuritis	Eu15700	[X]Mnt/bh dis oth stm inc caffne resid/late-onset psycht dis
E011z00	Alcohol amnestic syndrome NOS	Eu15z00	[X]Ment/beh dis oth stims inc caffeine: unsp ment/behav disd
E012.00	Other alcoholic dementia	Eu16.00	[X]Mental and behavioural disorders due to use hallucinogens
E012.11	Alcoholic dementia NOS	Eu16000	[X]Mental & behav dis due hallucinogens: acute intoxicatn
E012000	Chronic alcoholic brain syndrome	Eu16100	[X]Mental and behav dis due to use hallucinogens: harmfl use
E013.00	Alcohol withdrawal hallucinosis	Eu16200	[X]Mental and behav dis due to hallucinogens: dependence syn
E014.00	Pathological alcohol intoxication	Eu16211	[X]Drug addiction - hallucinogen
E015.00	Alcoholic paranoia	Eu16300	[X]Mental and behav dis due hallucinogens: withdrawal state
E01y.00	Other alcoholic psychosis	Eu16500	[X]Mental & behav dis due to hallucinogens: psychotic disord
E01y000	Alcohol withdrawal syndrome	Eu16700	[X]Mnt/bh dis due hallucngns: resid & late-onset psychot dis
E01yz00	Other alcoholic psychosis NOS	Eu16711	[X]Post hallucinogen perception disorder
E01z.00	Alcoholic psychosis NOS	Eu16z00	[X]Ment/behav dis due use hallucinogens: unsp ment/behav dis
E02..00	Drug psychoses	Eu18.00	[X]Mental & behav disorders due to use of volatile solvents
E020.00	Drug withdrawal syndrome	Eu18000	[X]Mental & behav dis due vol solvents: acute intoxication
E021.00	Drug-induced paranoia or hallucinatory states	Eu18100	[X]Mental and behav dis due volatile solvents: harmful use
E021000	Drug-induced paranoid state	Eu18200	[X]Mental and behav dis due to vol solvents: dependence synd
E021100	Drug-induced hallucinosis	Eu18211	[X]Drug addiction - solvent
E021z00	Drug-induced paranoia or hallucinatory state NOS	Eu18400	[X]Men & beh dis vol solvents: withdrawal state wth delirium
E022.00	Pathological drug intoxication	Eu18500	[X]Mental & behav dis due to vol solvents: psychotic disordr
E023.00	Nicotine withdrawal	Eu18z00	[X]Ment/behav dis due use vol solvents: unsp ment/behav dis
E02y.00	Other drug psychoses	Eu19.00	[X]Men & behav disorder multiple drug use/psychoactive subst
E02y000	Drug-induced delirium	Eu19000	[X]Mental/behav dis multi drg use/psychoac subs: acute intox
E02y100	Drug-induced dementia	Eu19100	[X]Mental and behav dis mlti drg/oth psychoa sbs: harmfl use
E02y300	Drug-induced depressive state	Eu19200	[X]Mental and behav dis mlti/oth psych sbs: dependence syndr
E02y400	Drug-induced personality disorder	Eu19211	[X]Drug addiction NOS
E02yz00	Other drug psychoses NOS	Eu19300	[X]Mental and behav dis mlti/oth psychoa sbs: withdrwl state
E02z.00	Drug psychosis NOS	Eu19400	[X]Mnt/bh dis mlti drg use/oth psy sbs: wthdr state + dlrium
E040.11	Korsakoff's non-alcoholic psychosis	Eu19500	[X]Ment/behav dis mlti drug use/oth psyc sbs: psychotc dis
E23..00	Alcohol dependence syndrome	Eu19600	[X]Mental/behav dis multi drg use/oth psy sbs:

1	E23..11	Alcoholism	Eu19700	amnesic syndr [X]Men/beh dis mlt drg use/oth subs: resid/late psychot dis
2				
3	E23..12	Alcohol problem drinking	Eu19y00	[X]Men/beh dis mlt drg use/oth psy sbs: oth men & behav dis
4				
5	E230.00	Acute alcoholic intoxication in alcoholism	Eu19z00	[X]Ment/beh dis multi drug use/oth psy sbs unsp mnt/beh dis
6				
7	E230.11	Alcohol dependence with acute alcoholic intoxication	Eu1A.00	[X]Mental and behavioural disorders due use of crack cocaine
8				
9	E230000	Acute alcoholic intoxication, unspecified, in alcoholism	Eu1A000	[X]Ment behav dis due use crack cocaine: acute intoxication
10				
11	E230100	Continuous acute alcoholic intoxication in alcoholism	Eu1A100	[X]Mental behav disorders due use crack cocaine: harmful use
12				
13	E230200	Episodic acute alcoholic intoxication in alcoholism	Eu1A200	[X]Mental behav disorders due use crack cocaine: depend synd
14				
15	E230300	Acute alcoholic intoxication in remission, in alcoholism	Eu1A300	[X]Mental behav disord due crack cocaine: withdrawal state
16				
17	E230z00	Acute alcoholic intoxication in alcoholism NOS	Eu1A500	[X]Mental behav disord due crack cocaine: psychotic disorder
18				
19	E231.00	Chronic alcoholism	Eu1Az00	[X]Ment behav dis due crack cocaine: unsp ment and behav dis
20				
21				
22	E231.11	Dipsomania	F11x000	Cerebral degeneration due to alcoholism
23	E231000	Unspecified chronic alcoholism	F11x011	Alcoholic encephalopathy
24	E231100	Continuous chronic alcoholism	F144000	Cerebellar ataxia due to alcoholism
25	E231200	Episodic chronic alcoholism	F25B.00	Alcohol-induced epilepsy
26	E231300	Chronic alcoholism in remission	F375.00	Alcoholic polyneuropathy
27	E231z00	Chronic alcoholism NOS	F394000	Drug-induced myopathy
28				
29	E23z.00	Alcohol dependence syndrome NOS	F394100	Alcoholic myopathy
30	E24..00	Drug dependence	G555.00	Alcoholic cardiomyopathy
31	E24..11	Drug addiction	G852300	Oesophageal varices in alcoholic cirrhosis of the liver
32				
33	E240.00	Opioid type drug dependence	J153.00	Alcoholic gastritis
34	E240.11	Heroin dependence	J610.00	Alcoholic fatty liver
35	E240.12	Methadone dependence	J611.00	Acute alcoholic hepatitis
36	E240.13	Morphine dependence	J612.00	Alcoholic cirrhosis of liver
37	E240.14	Opium dependence	J612000	Alcoholic fibrosis and sclerosis of liver
38	E240000	Unspecified opioid dependence	J613.00	Alcoholic liver damage unspecified
39	E240100	Continuous opioid dependence	J613000	Alcoholic hepatic failure
40	E240200	Episodic opioid dependence	J617.00	Alcoholic hepatitis
41	E240300	Opioid dependence in remission	J617000	Chronic alcoholic hepatitis
42	E240z00	Opioid drug dependence NOS	J61y.00	Other non-alcoholic chronic liver disease
43	E241.00	Hypnotic or anxiolytic dependence	J670800	Alcohol-induced acute pancreatitis
44	E241.11	Anxiolytic dependence	J671000	Alcohol-induced chronic pancreatitis
45	E241.12	Barbiturate dependence	L183.00	Drug dependence in pregnancy, childbirth and the puerperium
46				
47	E241.13	Benzodiazepine dependence	L183.11	Pregnancy and drug dependence
48	E241.14	Diazepam dependence	L183100	Drug dependence during pregnancy - baby delivered
49				
50	E241.15	Librium dependence	L183300	Drug dependence during pregnancy - baby not yet delivered
51				
52	E241.16	Sedative dependence	L183z00	Drug dependence during pregnancy/childbirth/puerperium NOS
53				
54	E241.17	Valium dependence	L255300	Maternal care for (suspected) damage to fetus from alcohol
55				
56	E241000	Hypnotic or anxiolytic dependence, unspecified	SM0..00	Alcohol causing toxic effect
57				
58				
59				
60				

E241100	Hypnotic or anxiolytic dependence, continuous	SM00.00	Ethyl alcohol causing toxic effect
E241200	Hypnotic or anxiolytic dependence, episodic	SM00000	Ethanol causing toxic effect
E241300	Hypnotic or anxiolytic dependence in remission	SM00100	Denatured alcohol causing toxic effect
E241z00	Hypnotic or anxiolytic dependence NOS	SM00z00	Ethyl alcohol causing toxic effect NOS
E242.00	Cocaine type drug dependence	SM01.00	Methyl alcohol causing toxic effect
E242000	Cocaine dependence, unspecified	SM01000	Methanol causing toxic effect
E242100	Cocaine dependence, continuous	SM01100	Wood alcohol causing toxic effect
E242200	Cocaine dependence, episodic	SM02.00	Isopropyl alcohol causing toxic effect
E242300	Cocaine dependence in remission	SM03000	Amyl alcohol causing toxic effect
E242z00	Cocaine drug dependence NOS	SM03100	Butyl alcohol causing toxic effect
E243.00	Cannabis type drug dependence	SM0y.00	Other alcohol causing toxic effect
E243.11	Hashish dependence	SM0z.00	Alcohol causing toxic effect NOS
E243.12	Hemp dependence	SyUG000	[X]Toxic effect of other alcohols
E243.13	Marihuana dependence	Z1Q6200	Methadone maintenance
E243000	Cannabis dependence, unspecified	Z1Q6214	Heroin maintenance
E243100	Cannabis dependence, continuous	ZV11300	[V]Personal history of alcoholism
E243200	Cannabis dependence, episodic	ZV11311	[V]Problems related to lifestyle alcohol use
E243300	Cannabis dependence in remission	ZV11400	[V]Personal history of psychoactive substance abuse
E243z00	Cannabis drug dependence NOS	ZV11500	[V]Personal history of drug abuse by injection
E244.00	Amphetamine or other psychostimulant dependence	ZV4K100	[V]Drug use
E244.11	Psychostimulant dependence	ZV4KC00	[V] Alcohol use
E244.12	Stimulant dependence	E245.11	LSD dependence
E244000	Amphetamine or psychostimulant dependence, unspecified	E245.12	Lysergic acid diethylamide dependence
E244100	Amphetamine or psychostimulant dependence, continuous	E245000	Hallucinogen dependence, unspecified
E244200	Amphetamine or psychostimulant dependence, episodic	E245100	Hallucinogen dependence, continuous
E244300	Amphetamine or psychostimulant dependence in remission	E245200	Hallucinogen dependence, episodic
E244z00	Amphetamine or psychostimulant dependence NOS	E245300	Hallucinogen dependence in remission
E244z11	Amphetamine or psychostimulant dependence NOS	E245.00	Hallucinogen dependence

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ATTEMPTED SUICIDE

At least one ICD-9 in:	
E950	Self-inflicted poisoning
E950.0	Self-inflicted poisoning by analgesics antipyretics and antirheumatics
E950.1	Self-inflicted poisoning by barbiturates
E950.2	Self-inflicted poisoning by other sedatives and hypnotics
E950.3	Self-inflicted poisoning by tranquilizers and other psychotropic agents
E950.4	Self-inflicted poisoning by other specified drugs and medicinal substances
E950.5	Self-inflicted poisoning by unspecified drug or medicinal substance
E950.6	Self-inflicted poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers
E950.7	Self-inflicted poisoning by corrosive and caustic substances
E950.8	Self-inflicted poisoning by arsenic and its compounds
E950.9	Self-inflicted poisoning by other and unspecified solid and liquid substances
E951	Self-inflicted poisoning
E951.0	Self-inflicted poisoning by gas distributed by pipeline
E951.1	Self-inflicted poisoning by liquefied petroleum gas distributed in mobile containers
E951.8	Self-inflicted poisoning by other utility gas
E952	Self-inflicted poisoning
E952.0	Self-inflicted poisoning by motor vehicle exhaust gas
E952.1	Self-inflicted poisoning by other carbon monoxide
E952.8	Self-inflicted poisoning by other specified gases and vapors
E952.9	Self-inflicted poisoning by un specified gases and vapors
E953	Self-inflicted injury by hanging, strangulation and suffocation
E953.0	Self-inflicted injury by hanging
E953.1	Self-inflicted injury by suffocation by plastic bag
E953.8	Self-inflicted injury by other specified means
E953.9	Self-inflicted injury by other unspecified means
E954	Self-inflicted injury by drowning
E955	Self-inflicted injury by firearms and explosives
E955.0	Self-inflicted injury by handgun
E955.1	Self-inflicted injury by shotgun
E955.2	Self-inflicted injury by hunting rifle
E955.3	Self-inflicted injury by military firearms
E955.4	Self-inflicted injury by other and unspecified firearm
E955.5	Self-inflicted injury by explosives
E955.6	Self-inflicted injury by air gun
E955.7	Self-inflicted injury by paintball gun
E955.9	Self-inflicted injury by firearms and explosives unspecified
E956	Self-inflicted injury by cutting and piercing instrument
E957	Self-inflicted injury by jumping from high places
E957.0	Self-inflicted injury by jumping from residential premises
E957.1	Self-inflicted injuries by jumping from other man-made structures
E957.2	Self-inflicted injuries by jumping from natural sites
E957.9	Self-inflicted injuries by jumping from unspecified site
E958	Self-inflicted injury
E958.0	Self-inflicted injury by jumping or lying before a moving object
E958.1-E958.2	Self-inflicted injury by smoke, fire, flames, steam, hot vapours and

hot objects
 E958.3, E958.4, E958.6-E958.9 Self-inflicted injury by other and unspecified means
 E958.5 Self-inflicted injury by crashing of motor vehicle
 E959 Late effects of self-inflicted injury

OR

At least one ICD-10 in:

X60-84 Intentional self-harm
 X60 Intentional self-poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics
 X61 Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified
 X62 Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified
 X63 Intentional self-poisoning by and exposure to other drugs acting on the autonomic nervous system
 X64 Intentional self-poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
 X65 Intentional self-poisoning by and exposure to alcohol
 X66 Intentional self-poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours
 X67 Intentional self-poisoning by and exposure to other gases and vapours
 X68 Intentional self-poisoning by and exposure to pesticides
 X69 Intentional self-poisoning by and exposure to other and unspecified chemicals and noxious substances
 X70 Intentional self-harm by hanging, strangulation and suffocation
 X71 Intentional self-harm by drowning and submersion
 X72 Intentional self-harm by handgun discharge
 X73 Intentional self-harm by rifle, shotgun and larger firearm discharge
 X74 Intentional self-harm by other and unspecified firearm discharge
 X75 Intentional self-harm by explosive material
 X76 Intentional self-harm by smoke, fire and flames
 X77 Intentional self-harm by steam, hot vapours and hot objects
 X78 Intentional self-harm by sharp object
 X79 Intentional self-harm by blunt object
 X80 Intentional self-harm by jumping from a high place
 X81 Intentional self-harm by jumping or lying before moving object
 X82 Intentional self-harm by crashing of motor vehicle
 X83 Intentional self-harm by other specified means
 X84 Intentional self-harm by unspecified means
 Y87.0 Late effects of intentional self-harm

OR

At least one READ code in:			
SL...15	Overdose of drug	U1A4.11	[X]Accidental poisoning with antidepressant
T8...00	Accidental poisoning by drugs, medicines and biologicals	T952.00	Accidental poisoning from other fish
T91z.00	Accidental poisoning by household agents NOS	ZX1C.00	Nipping self
U20...11	[X]Deliberate drug overdose / other poisoning	ZX17.00	Head-banging
T8...11	Cause of overdose - accidental	T938000	Accidental poisoning by cyanides
1BD1.00	Suicidal ideation	U20A000	[X]Intent self pois organ solvent,halogen hydrocarb, home
T803000	Accidental poisoning by aspirin	TK7z.00	Suicide+selfinflicted injury-jump from high place NOS
TK05.00	Suicide + selfinflicted poisoning by drug or medicine NOS	T964200	Accidental poisoning by cadmium and its compounds
T921300	Accidental poisoning by kerosene	ZX1B200	Jumping from bridge
TK...15	Attempted suicide	T953z00	Accidental poisoning from berries or seeds NOS
T930.00	Accidental poisoning by organochlorine insecticides	T80y.00	Accidental poisoning by oth analgesics,antipyretic,antirheum
U1A...12	[X]Accidental drug overdose / other poisoning	TKx0000	Suicide + selfinflicted injury-jumping before moving object
TK...17	Para-suicide	U209z00	[X]Intent self poison alcohol unspecif place
TK...12	Injury - self-inflicted	T930500	Accidental poisoning by toxaphene
U2...13	[X]Suicide	ZX11400	Biting own arm
1BD3.00	Suicidal plans	T954.00	Accidental poisoning from other plants
T924z00	Accidental poisoning by other solvents NOS	T820.00	Accidental poisoning by chloral hydrate
T81...00	Accidental poisoning by barbiturates	U221.00	[X]Intent self harm by drowning/submersn occ resid instit'n
T804100	Accidental poisoning by paracetamol	T935200	Accidental poisoning by chlorates
U2E...00	[X]Self mutilation	T930100	Accidental poisoning by chlordane
1BD4.00	Suicide risk	U1A0z00	[X]Accid poison/expos to nonopioid analgesic unspecif place
TK3y.00	Suicide + selfinflicted inj oth mean hang/strangle/suffocate	U204.13	[X]Overdose - SSRI
TK...11	Cause of overdose - deliberate	T951.00	Accidental poisoning from shellfish
146B.00	H/O: deliberate self harm	U2A1.00	[X]Intent self harm by blunt object occ resident instit'n
U2...15	[X]Para-suicide	T903300	Accidental poisoning by secondary propyl alcohol
1B19.11	Suicidal - symptom	TK3z.00	Suicide + selfinflicted inj by hang/strangle/suffocate NOS
TK60111	Slashed wrists self inflicted	T854.00	Accidental poisoning by anticholinergics
ZX1...13	Deliberate self-harm	TK72.00	Suicide+selfinflicted injury-jump from natural sites
U209.00	[X]Intent self poison/exposure to alcohol	U2zz.00	[X]Intent self harm by unspecif means occ at unspecif place
ZX...00	Self-harm	U1A9z00	[X]Accid poison/expos to alcohol unspecif place
T99y000	Accidental poisoning by chlorine	U409z00	[X]Pois/expos ?intent to alcohol unspecif place
TK...13	Poisoning - self-inflicted	T83yz00	Accidental poisoning by other tranquillisers NOS
U2...11	[X]Self inflicted injury	T842100	Accidental poisoning by caffeine
146A.00	H/O: attempted suicide	T806300	Accidental poisoning by ibuprofen
TK60100	Self inflicted lacerations to wrist	U408z00	[X]Pois/expos ?intent to oth/unsp drug/medic unspecif place

ZX17100	Banging own head against object	U20y200	[X]Int self poison unspecif chemical school/pub admin area
SL...14	Overdose of biological substance	U1A2.00	[X]Accident poisoning/exposure to sedative hypnotic
1BDC.00	Intent of deliberate self harm with detailed plans	TK70.00	Suicide+selfinflicted injury-jump from residential premises
ZX16211	Poking own eyes	TK2..00	Suicide + selfinflicted poisoning by other gases and vapours
ZX13.00	Cutting self	T840200	Accidental poisoning by monoamine oxidase inhibitors
1BDA.00	Thoughts of deliberate self harm	T93z.00	Accidental poisoning agricultural chemical preparations NOS
ZX14200	Pulling out sutures	T832z00	Accidental poisoning- benzodiazepine-based tranquilliser NOS
TK30.00	Suicide and selfinflicted injury by hanging	T932.00	Accidental poisoning by carbamates
14K0.00	H/O: repeated overdose	TN04.00	Injury ?accidental, poisoning by other spec drug/medicament
T967.00	Accidental poisoning by cosmetics	ZX1K.00	Self-incineration
TK00.00	Suicide + selfinflicted poisoning by analgesic/antipyretic	U40y400	[X]Pois/expos ?intent unspecif chemical in street/highway
TK60.00	Suicide and selfinflicted injury by cutting	U40B400	[X]Pois/expos ?intent other gas/vapour in street/highway
1B19.00	Suicidal	T993000	Accidental poisoning by bromobenzyl cyanide
T901.00	Accidental poisoning by other ethyl alcohol and its products	T832100	Accidental poisoning by diazepam
T9...00	Accidental poisoning by other non-drug substances	U405.00	[X]Poisoning/exposure, ? intent, to narcotic drug
TK01.00	Suicide + selfinflicted poisoning by barbiturates	U208000	[X]Int self poison/exposure to oth/unsp drug/medicam home
14K..00	H/O: poisoning	T840.00	Accidental poisoning by antidepressants
U30..11	[X]Deliberate drug poisoning	U1Ayy00	[X]Accid pois/expos to unspecif chemical other spec place
U2...00	[X]Intentional self-harm	T971.00	Accidental poisoning by coal gas NOS
U2...14	[X]Attempted suicide	T99yz00	Accidental poisoning by other gases and vapours NOS
T955.00	Accidental poisoning from mushrooms and other fungi	U2A..00	[X]Intentional self harm by blunt object
T80..00	Accidental poisoning by analgesics,antipyretic,antirheumatic	T840000	Accidental poisoning by amitriptyline
T88..00	Accidental poisoning by other drugs	T805.00	Accidental poisoning by pyrazole derivatives
T8z..00	Accidental poisoning by drugs NOS	U2C4.00	[X]Int self harm jump/lying befr mov obje occ street/highway
T840z00	Accidental poisoning by antidepressants NOS	U274.00	[X]Intent self harm by smoke fire/flame occ street/highway
U1AB.11	[X]Accidental carbon monoxide poisoning	U400.00	[X]Poisoning/exposure, ? intent, to nonopioid analgesic
T90..00	Accidental poisoning by alcohol, NEC	U1ADz00	[X]Acc poison by and exposure to amphetamine - unspec places
U200.11	[X]Overdose - paracetamol	T825.00	Accidental poisoning by mixed sedatives NEC
1BD8.00	At risk of DSH - deliberate self harm	U1A9000	[X]Accident poison/exposure to alcohol at home
ZX13100	Cutting own wrists	T832500	Accidental poisoning by nitrazepam
ZX1P.00	Swallowing substances	U1A2.13	[X]Accidental poisoning with temazepam
ZX1I.00	Self-scalding	T83y.00	Accidental poisoning by other tranquillisers
T91..00	Accidental poisoning by household agents	U4A5.00	[X]Contct wth blunt obj undet intent occ trade/service area

T921200	Accidental poisoning by petrol	TN0..00	Injury ?accidental, poisoning by solid/liquid substances
U2...12	[X]Injury - self-inflicted	T912.00	Accidental poisoning by polishes
U200z00	[X]Intent self poison nonopioid analgesic unspecif place	T916z00	Accidental poisoning by paint or varnish NOS
U1A..11	[X]Accidental drug / other poisoning	U1A9400	[X]Accid poison/expos alcohol in street/highway
TK...14	Suicide and self harm	TN07.00	Injury ?accidental, poisoning by agricultural chemicals
TK...00	Suicide and selfinflicted injury	T980100	Accidental poisoning by butane
U200.00	[X]Intent self poison/exposure to nonopioid analgesic	ZX1L600	Self-mutilation of ears
T910.00	Accidental poisoning by synthetic detergents and shampoos	ZX1L500	Enucleation of own eyes
ZV1B200	[V]Personal history of self-harm	ZX1K.11	Setting fire to self
TK04.00	Suicide + selfinflicted poisoning by other drugs/medicines	T964000	Accidental poisoning by beryllium and its compounds
ZX11.00	Biting self	ZX1E.00	Pinching self
U1Ay.00	[X]Accident poisoning/exposure to unspecif chemical	U20Bz00	[X]Intent self poison other gas/vapour unspecif place
TK3..00	Suicide + selfinflicted injury by hang/strangulate/suffocate	T920z00	Accidental poisoning by petrol solvents NOS
T935.00	Accidental poisoning by herbicides	U211.00	[X]Intent self harm by hangng strangult/suffoct resid instit
T913z00	Accidental poisoning by other cleaning agents NOS	T965100	Accidental poisoning by fertilisers
T884.00	Accidental poisoning by gastrointestinal system drugs	U1A3.00	[X]Accident poisoning/exposure to antiparkinson drug
T96y.00	Accidental poisoning by other solid and liquid substances OS	T983z00	Accidental poisoning by carbon monoxide - domestic fuel NOS
TK7..00	Suicide and selfinflicted injury by jumping from high place	TKx5.00	Suicide and selfinflicted injury by crashing motor vehicle
U40..00	[X]Poisoning/expos to noxious substance,undetermined intent	T822000	Accidental poisoning by bromides
U20A.11	[X]Self poisoning from glue solvent	T930300	Accidental poisoning by dieldrin
T970.00	Accidental poisoning by carbon monoxide from piped gas	T938.00	Accidental poisoning by fumigants
U27..00	[X]Intentional self harm by smoke, fire and flames	U1A6.00	[X]Accident poisoning/exposure to hallucinogen
U20B.11	[X]Self carbon monoxide poisoning	U40A300	[X]Pois/exp ?intent org solvent,halogen hydrocarb,sport area
T95..00	Accidental poisoning from foodstuffs and poisonous plants	ZX1L811	Snapping own bones
U1A..00	[X]Accidental poisoning by + exposure to noxious substances	TK54.00	Suicide and selfinflicted injury by other firearm
ZX11200	Biting own fingers	T961000	Accidental poisoning by mercury, unspecified
ZX11500	Biting own tongue	TK6z.00	Suicide and selfinflicted injury by cutting and stabbing NOS
TN...11	Poisoning undetermined - accidentally or purposely inflicted	U4C..00	[X]Falling lying running befor/into moving obj undet intent
ZX19.00	Hitting self	T843100	Accidental poisoning by opiate antagonists
ZX1G.00	Scratches self	TN21.00	Injury ?accidental, poisoning by other carbon monoxide
1BD7.00	Low suicide risk	T921z00	Accidental poisoning by petrol fuel or cleaner NOS
T911.00	Accidental poisoning by soap products	U1AD000	[X]Accident poisoning by and exposure to

U29..00	[X]Intentional self harm by sharp object	U1A5000	amphetamine - home [X]Accident poison/exposure to narcotic drug at home
TK61.00	Suicide and selfinflicted injury by stabbing	U201.00	[X]Intent self poison/exposure to antiepileptic
TK03.00	Suicide + selfinflicted poisoning tranquilliser/psychotropic	TKxy.00	Suicide and selfinflicted injury by other specified means
T842000	Accidental poisoning by amphetamine	TK01000	Suicide and self inflicted injury by Amylobarbitone
U20..00	[X]Intentional self poisoning/exposure to noxious substances	U201z00	[X]Intent self poison antiepileptic unspecif place
U40y.00	[X]Poisoning/exposure, ? intent, to unspecif chemical	U204z00	[X]Intent self poison psychotropic drug unspecif place
T953000	Accidental poisoning from berries	T936000	Accidental poisoning by organic mercurials
TK07.00	Suicide + selfinflicted poisoning by corrosive/caustic subst	U1A7z00	[X]Accid poison/expos to oth autonomic drug unspecif place
T913.00	Accidental poisoning by other cleaning agents	TK0z.00	Suicide + selfinflicted poisoning by solid/liquid subst NOS
TK51.00	Suicide and selfinflicted injury by shotgun	U207z00	[X]Intent self poison oth autonomic drug unspecif place
U45..00	[X]Other+unspecified firearm discharge undetermined intent	T83z.00	Accidental poisoning by tranquilisers NOS
ZX1LD00	[X]Self mutilation	U402.00	[X]Poisoning/exposure, ? intent, to sedative hypnotic
ZX1..14	Self-abusive behaviour	T84z.00	Accidental poisoning by psychotropic agents NOS
ZX18.00	Hanging self	T96..00	Accidental poisoning by other solid and liquid substances
U205.11	[X]Overdose - heroin	U1AA000	[X]Accid poison/expos organ solvent,halogen hydrocarb, home
T938200	Accidental poisoning by phosphine	U40B.00	[X]Poisoning/exposure, ? intent, to other gas/vapour
U200.13	[X]Overdose - aspirin	U1AC.12	[X]Accidental poisoning with paraquat
U409.00	[X]Poisoning/exposure, ? intent, to alcohol	U1Ay600	[X]Acc pois/expos unspecif chemical indust/construct area
T955000	Accidental poisoning from mushrooms	TK5..00	Suicide and selfinflicted injury by firearms and explosives
U290.00	[X]Intentional self harm by sharp object occurrence at home	TN20.00	Injury ?accidental, poisoning by motor vehicle exhaust gas
TK0..00	Suicide + selfinflicted poisoning by solid/liquid substances	T921.00	Accidental poisoning by petrol fuels and cleaners
U21..00	[X]Intent self harm by hanging strangulation / suffocation	U4A3.00	[X]Contct wth blunt obj undet intent occ sport/athletic area
ZX1H100	Self-strangulation	T831000	Accidental poisoning by haloperidol
T916200	Accidental poisoning by non-lead paints	U280.00	[X]Intent self harm by steam hot vapour/hot obj occ at home
U1A9.00	[X]Accident poisoning/exposure to alcohol	U2y0.00	[X]Intentionl self harm by oth specif means occurrn at home
T935500	Accidental poisoning by paraquat	T935z00	Accidental poisoning by herbicides NOS
TN1..00	Injury ?accidental, poisoning by gases in domestic use	T80yz00	Accidental poisoning-oth analgesic,antipyretic,antirheum NOS
TK4..00	Suicide and selfinflicted injury by drowning	U241.00	[X]Int self harm rifl s'gun/lrg frarm disch occ resid instit
ZX1L.00	Self-mutilation	T955z00	Accidental poisoning from mushrooms and fungi NOS
ZX19300	Head-hitting	U406y00	[X]Pois/exp ?intent to hallucinogen other spec place

ZX1..11	Self-destructive behaviour	T935400	Accidental poisoning by mixtures herbicides+plant food etc
T92..00	Accidental poisoning by petrol products	U4D3.00	[X]Crash of motor vehicle undeterm intent sport/athlet area
TK02.00	Suicide + selfinflicted poisoning by oth sedatives/hypnotics	T82y.00	Accidental poisoning by other sedatives and hypnotics OS
T914.00	Accidental poisoning by disinfectants	U20C.12	[X]Self poisoning with paraquat
T88yz00	Accidental poisoning by other drugs NOS	T940.00	Accidental poisoning by corrosive aromatics
T961.00	Accidental poisoning by mercury and its compounds and fumes	TN05.00	Injury ?accidental, poisoning by drug or medicament NOS
T9z..00	Accidental poisoning NOS	T802.00	Accidental poisoning by other opiates
T85..00	Accidental poisoning by other drugs acting on nervous system	T841.00	Accidental poisoning by hallucinogens
T883.00	Accidental poisoning by cardiovascular system drugs	U1A2.12	[X]Accidental poisoning with diazepam
U2z..00	[X]Intentional self harm by unspecified means	U2A0.00	[X]Intentional self harm by blunt object occurrence at home
U1AA.11	[X]Accidental poisoning from glue solvent	U208z00	[X]Intent self poison oth/unsp drug/medic unspecif place
T886.00	Accidental poisoning by muscle + respiratory system drugs	T991.00	Accidental poisoning by sulphur dioxide
U204.12	[X]Overdose - amitriptyline	U409000	[X]Poison/exposure ?intent, to alcohol at home
T923000	Accidental poisoning by paraffin wax	T99..00	Accidental poisoning by other gases and vapours
T902000	Accidental poisoning by methanol	T850.00	Accidental poisoning by anticonvulsant + anti-parkinson drug
ZX10.00	Swallowing objects	T850.11	Accidental poisoning by anticonvulsant
ZX1L100	Self-mutilation of hands	U205z00	[X]Intent self poison narcotic drug unspecif place
ZX1..00	Self-injurious behaviour	U202z00	[X]Intent self poison sedative hypnotic unspecif place
1BD5.00	High suicide risk	U207.00	[X]Intent self poison/exposure to oth autonomic drug
ZX1LA00	Removing own nails	U20C.00	[X]Intent self poison/exposure to pesticide
ZX11100	Biting own hand	T964700	Accidental poisoning by thallium compounds
ZX11300	Biting own toes	U40y600	[X]Poison/expo ?intent unspec chemic indust/construct area
U4D0.00	[X]Crashng of motor vehicle undetermined intent occ at home	T95y.00	Accidental poisoning by other foods
T800.11	Accidental poisoning by diamorphine	T88y000	Accidental poisoning by central appetite depressants
U2D4.00	[X]Intent self harm by crash motor vehicl occ street/highway	T961z00	Accidental poisoning by mercury, NOS
U208.00	[X]Int self poison/exposure to other/unspec drug/medicament	U1A8y00	[X]Accid pois/expo to oth/unsp drug/medic other spec place
T887000	Accidental poisoning by skin drugs	ZX1K.12	Setting self alight
TKx2.00	Suicide and selfinflicted injury by scald	U720.00	[X]Sequelae of intentional self-harm
U4B..00	[X]Falling jumping/pushed from high place undeterm intent	U2yz.00	[X]Intent self harm by oth specif means occ unspecif place
TK6..00	Suicide and selfinflicted injury by cutting and stabbing	U202y00	[X]Int self poison sedative hypnotic other spec place
T86..00	Accidental poisoning by antibiotics	U404300	[X]Pois/exp ?intent psychotropic drug in sport/athletic area
T98..00	Accidental poisoning by other utility gas + carbon monoxide	T802z00	Accidental poisoning by other opiates NOS

U204.00	[X]Intent self poison/exposure to psychotropic drug	U409200	[X]Pois/exp ?intent alcohol school/pub admin area
ZX13.11	Cuts self	U1Ayz00	[X]Accid poison/expos to unspecif chemical unspecif place
T966000	Accidental poisoning by glues	T950.00	Accidental poisoning from meat
ZX14100	Reopening scars	U1A1.00	[X]Accident poisoning/exposure to antiepileptic
T901100	Accidental poisoning by methylated spirit	T913000	Accidental poisoning by scouring agents
T935300	Accidental poisoning by diquat	TK10.00	Suicide + selfinflicted poisoning by gas via pipeline
T902.00	Accidental poisoning by methyl alcohol	TN08.00	Injury ?accidental, poisoning by arsenic or its compounds
1BD6.00	Moderate suicide risk	T966y00	Accidental poisoning by other adhesives
T83..00	Accidental poisoning by tranquillisers	U205y00	[X]Int self poison narcotic drug other spec place
U1AB.00	[X]Accident poisoning/exposure to other gas/vapour	TK1..00	Suicide + selfinflicted poisoning by gases in domestic use
T942z00	Accidental poisoning by caustic alkalis NOS	U20A400	[X]Int self poison org solvent,halogen hydrocarb,in highway
T841000	Accidental poisoning by cannabis derivatives	T803z00	Accidental poisoning by salicylates NOS
ZX12.00	Burning self	U1A2000	[X]Accident poison/exposure to sedative hypnotic at home
U27z.00	[X]Intent self harm by smoke fire/flames occ unspecif place	T931300	Accidental poisoning by malathion
T901300	Accidental poisoning by ethanol, NOS	TKx0.00	Suicide + selfinflicted injury-jump/lie before moving object
T88z.00	Accidental poisoning by unspecified drugs	TN1z.00	Injury ?accidental, poisoning by gas in domestic use NOS
ZX11600	Biting sides of own cheeks	T85z.00	Accidental poisoning by drugs acting on nervous system NOS
T88y.00	Accidental poisoning by other drugs OS	TKx4.00	Suicide and selfinflicted injury by electrocution
T937300	Accidental poisoning by warfarin	T807.00	Accidental poisoning by other non-narcotic analgesics
U20B200	[X]Int self poison other gas/vapour school/pub admin area	TK11.00	Suicide + selfinflicted poisoning by liquified petrol gas
U2y..00	[X]Intentional self harm by other specified means	TN0z.00	Injury ?accidental, poisoning by solid or liquid subst NOS
T973.00	Accidental poisoning by piped natural gas	ZX...11	Self-damage
T93..00	Accidental poisoning by agricultural chemical preparations	TKxz.00	Suicide and selfinflicted injury by other means NOS
ZX13200	Cutting own throat	T806.00	Accidental poisoning by antirheumatics
T806100	Accidental poisoning by indomethacin	T964600	Accidental poisoning by nickel compounds
ZX1A.00	Inserting foreign bodies into own orifices	T813.00	Accidental poisoning by pentobarbitone
T924.00	Accidental poisoning by other solvents	T806z00	Accidental poisoning by antirheumatics NOS
T97..00	Accidental poisoning by gas distributed by pipeline	ZX19100	Punching self
ZX14300	Poking fingers into wound	U2B0.00	[X]Intent self harm by jumping from high place occ at home
ZX11111	Hand biting	U270.00	[X]Intention self harm by smoke fire/flames occurrn at home
T802200	Accidental poisoning by morphine	U206400	[X]Intent self pois hallucinogen in street/highway
T881.00	Accidental poisoning by primarily systemic agents	C110100	Self-induced hyperinsulinism
U41..00	[X]Hanging strangulation + suffocation undetermined intent	T916000	Accidental poisoning by lacquers
T900.00	Accidental poisoning by alcoholic beverages	T850z00	Accidental poisoning by anticonvulsant/anti-

1	ZV15600	[V]Personal history of poisoning	T854000	parkin drug NOS
2	T98z.00	Accidental poisoning by carbon monoxide NOS	T830200	Accidental poisoning by atropine
3	TKz..00	Suicide and selfinflicted injury NOS	T931z00	Accidental poisoning by prochlorperazine
4				Accidental poisoning by organophosphorus insecticides NOS
5	ZX1B.00	Jumping from height	T964.00	Accidental poisoning by other metals + compounds and fumes
6			U29y.00	[X]Intention self harm by sharp object occ oth specif place
7	U22..00	[X]Intentional self harm by drowning and submersion	T81z.00	Accidental poisoning by barbiturates NOS
8	U209000	[X]Int self poison/exposure to alcohol at home	U28z.00	[X]Intent self harm by steam hot vapour/obj occ unspec place
9	U1AB600	[X]Acc pois/expos other gas/vapour indust/construct area	TK2z.00	Suicide + selfinflicted poisoning by gases and vapours NOS
10	U1ABz00	[X]Accid poison/expos to other gas/vapour unspecif place	U26..00	[X]Intentional self harm by explosive material
11	T916.00	Accidental poisoning by other paints and varnishes	U1A8100	[X]Accid poison/expos to oth/unsp drug/medicam res institut
12	U20yz00	[X]Intent self poison unspecif chemical unspecif place	T95z.00	Accidental poisoning by foodstuffs and poisonous plants NOS
13	U2C..00	[X]Intent self harm by jumping / lying before moving object	U207000	[X]Int self poison/exposure to oth autonomic drug at home
14	U2z0.00	[X]Intentional self harm by unspecif means occurrn at home	T936.00	Accidental poisoning by fungicides
15	T981z00	Accidental poisoning by utility gas NOS	U1A8z00	[X]Accid poison/expos to oth/unsp drug/medic unspecif place
16	U20A.00	[X]Intentional self poison organ solvent,halogen hydrocarb	U2Cy.00	[X]Int self harm jump/lying bef mov obje occ oth specif pce
17	TKy..00	Late effects of selfinflicted injury	T963100	Accidental poisoning by arsenic compounds
18	U21z.00	[X]Intent self harm by hangng strangul/suffoct unspecif pce	T903100	Accidental poisoning by isopropanol
19	U1AD.00	[X]Accidental poisoning by and exposure to amfetamine	T855100	Accidental poisoning by noradrenalin
20	T931.00	Accidental poisoning by organophosphorus insecticides	T932200	Accidental poisoning by propoxur
21	U1A0000	[X]Accident poison/exposure to nonopioid analgesic at home	T932100	Accidental poisoning by carbaryl
22	T98yz00	Accidental poisoning by carbon monoxide from oth source NOS	T963.00	Accidental poisoning by arsenic and its compounds and fumes
23	T92z.00	Accidental poisoning by solvent NOS	T853.00	Accidental poisoning by cholinergics
24	TK71.00	Suicide+selfinflicted injury-jump from oth manmade structure	U2y1.00	[X]Intent self harm by oth specif means occ resid instit'n
25	T84..00	Accidental poisoning by other psychotropic agents	T98y200	Accidental poisoning by CO - fuels in industrial use
26	U40C.00	[X]Poisoning/exposure, ? intent, to pesticide	ZX1Q.11	Jumping under train
27			U20C.11	[X]Self poisoning with weedkiller
28	T915.00	Accidental poisoning by lead paints	T961200	Accidental poisoning by mercury fumes
29	U1AC.11	[X]Accidental poisoning with weedkiller	ZX1H200	Self-suffocation
30	U4A..00	[X]Contact with blunt object, undetermined intent	T916300	Accidental poisoning by white washes
31	T937z00	Accidental poisoning by rodenticides NOS	ZX1L900	Pulling own teeth out
32	U204000	[X]Int self poison/exposure to psychotropic drug at home	U294.00	[X]Intention self harm by sharp object occ street/highway
33	U202000	[X]Int self poison/exposure to sedative hypnotic at home		
34	T96z.00	Accidental poisoning by solid and liquid substances NOS		

T934.00	Accidental poisoning by other insecticides	ZX1L300	Self-mutilation of penis
T953100	Accidental poisoning from seeds	U21y.00	[X]Intent self harm by hangng strangul/suffoct oth spec plce
U47...00	[X]Exposure to smoke, fire and flames, undetermined intent	T815.00	Accidental poisoning by quinalbarbitone
T832.00	Accidental poisoning by benzodiazepine-based tranquillisers	U4D7.00	[X]Crashng of motor vehicle undetermined intent occ on farm
T82...00	Accidental poisoning by other sedatives and hypnotics	ZX1R.00	Throwing self in front of vehicle
U200.12	[X]Overdose - ibuprofen	U1Ay200	[X]Acc poison/expos unspecif chemical school/pub admin area
T920.00	Accidental poisoning by petroleum solvents	U1A3500	[X]Accid poison/expos antiparkinson drug trade/service area
ZX1B100	Jumping from building	U1A9500	[X]Accid poison/expos alcohol trade/service area
U2D0.00	[X]Intent self harm by crash of motor vehicl occurrn at home	T832400	Accidental poisoning by medazepam
ZX1F.00	Rubbing own skin	TN2...00	Injury ?accidental, poisoning by other gases
T887300	Accidental poisoning by otorhinolaryngological drugs	U410.00	[X]Hanging strangulat+suffocat undet intent occurrn at home
T880.00	Accidental poisoning by hormones and synthetic substitutes	T920200	Accidental poisoning by petroleum naphtha
U1Ay000	[X]Accident poison/exposure to unspecif chemical at home	T887z00	Accidental poisoning by skin, eye, ENT and dental drug NOS
T885.00	Accidental poisoning by water,mineral,uric acid metab drugs	U2C1.00	[X]Int self harm jump/lying befr mov obje occ resid instit'n
U25...00	[X]Intent self harm by other/unspecified firearm discharge	T921.12	Accidental poisoning by petroleum fuels
U205.00	[X]Intent self poison/exposure to narcotic drug	T940011	Accidental poisoning by phenol
U202.12	[X]Overdose - diazepam	U1AC000	[X]Accident poison/exposure to pesticide at home
U72...00	[X]Sequel intentn self-harm assault+event of undeterm intent	TN11.00	Injury ?accidental, poisoning by liquid petrol gas
ZX1LB00	Eating own flesh	U2Bz.00	[X]Int self harm by jump from high place occ unspecif place
ZX17200	Banging own head against own body parts	TK1z.00	Suicide + selfinflicted poisoning by domestic gases NOS
T983100	Accidental poisoning by CO- coke in domestic stove/fireplace	T98y000	Accidental poisoning by CO - blast furnace gas
U49...00	[X]Contact with sharp object, undetermined intent	TK01400	Suicide and self inflicted injury by Phenobarbitone
ZX15.00	Drowning self	T85y.00	Accid. poisoning by other drugs acting on nervous system OS
U204.11	[X]Overdose - antidepressant	U22y.00	[X]Intent self harm by drown/submersn occ oth specif place
T814.00	Accidental poisoning by phenobarbitone	U20Cy00	[X]Int self poison pesticide other spec place
U1A2.11	[X]Accidental poisoning with sleeping tablets	U206.00	[X]Intent self poison/exposure to hallucinogen
TKx1.00	Suicide and selfinflicted injury by burns or fire	U202.18	[X]Overdose - amobarbital
U2B...00	[X]Intentional self harm by jumping from a high place	T830000	Accidental poisoning by chlorpromazine
T470.00	Accidental poisoning by gases or fumes on ship	ZX16.00	Gouging own body parts
ZX1LC00	Stripping own skin	T807z00	Accidental poisoning by non-narcotic analgesics NOS
ZRLfC12	HoNOS item 2 - non-accidental self injury	T887400	Accidental poisoning by dental drugs
ZX1L911	Extracting own teeth	U1Ay500	[X]Accid poison/expos unspecif chemical trade/service area

1	1BDB.00	Plans for deliberate self harm without intent	T966.00	Accidental poisoning by glues and adhesives
2	ZX11.11	Bites self	ZX1B300	Jumping from cliff
3	U1A2.15	[X]Accidental poisoning with nitrazepam	U2B6.00	[X]Int self harm by jump from high place
4	TKx..00	Suicide and selfinflicted injury by other means	U250.00	[X]Intent self harm oth/unspecif firearm disch
5				occ at home
6	TH02.00	Late effects of accidental poisoning	ZX1L700	Self-inducing a prolapse
7	ZX1..12	SIB - Self-injurious behaviour	T852100	Accidental poisoning by lignocaine
8	T937200	Accidental poisoning by thallium	U1A5z00	[X]Accid poison/expos to narcotic drug
9				unspecif place
10				
11	T981400	Accidental poisoning by cooking gas NOS	U409400	[X]Pois/expos ?intent alcohol in
12				street/highway
13	T921100	Accidental poisoning by gas oils	U2zy.00	[X]Intent self harm by unspecif means occ oth
14				specif place
15	T965000	Accidental poisoning by plant food	ZX1L800	Breaking own bones
16	U202.16	[X]Overdose - benzodiazepine	TKx7.00	Suicide and selfinflicted injury caustic subst,
17				excl poison
18	ZX1N.00	Stabbing self	U200y00	[X]Int self poison nonopioid analgesic other
19				spec place
20	T803.00	Accidental poisoning by salicylates	U204y00	[X]Int self poison psychotropic drug other spec
21				place
22	TK20.00	Suicide + selfinflicted poisoning by motor veh	T852.00	Accidental poisoning by local anaesthetic
23		exhaust gas		
24	T99y.00	Accidental poisoning by other gases and vapours	U408000	[X]Poison/exposure ?intent, to oth/unsp
25		OS		drug/medicam home
26	U200000	[X]Int self poison/exposure to nonopioid	U202400	[X]Intent self pois sedative hypnotic in
27		analgesic at home		street/highway
28	U1A5.00	[X]Accident poisoning/exposure to narcotic drug	U1ABy00	[X]Accid pois/expos to other gas/vapour other
29				spec place
30				
31	TK1y.00	Suicide and selfinflicted poisoning by other utility	U200500	[X]Intent self pois nonopioid analgesic
32		gas		trade/service area
33	T953.00	Accidental poisoning from berries and seeds	U208400	[X]Intent self pois oth/unsp drug/medic in
34				street/highway
35	U202.17	[X]Overdose - barbiturate	U200100	[X]Intent self poison nonopioid analgesic at res
36				institut
37	U1A0.11	[X]Accidental poisoning with paracetamol	U20C000	[X]Int self poison/exposure to pesticide at
38				home
39	T955y00	Accidental poisoning from other fungi	U402z00	[X]Pois/expos ?intent to sedative hypnotic
40				unspecif place
41	T852000	Accidental poisoning by cocaine	U208y00	[X]Int self poison oth/unsp drug/medic other
42				spec place
43	T942000	Accidental poisoning by sodium hydroxide	U209y00	[X]Int self poison alcohol other spec place
44	U1A0.00	[X]Accident poisoning/exposure to nonopioid	U2z2.00	[X]Intent self harm by unspec mean occ
45		analgesic		sch/ins/pub adm area
46	T941000	Accidental poisoning by hydrochloric acid	ZX16100	Gouging own flesh
47	ZX1J.00	Self-electrocution	T841z00	Accidental poisoning by hallucinogen NOS
48	T854200	Accidental poisoning by hyoscine	T982z00	Accidental poisoning by exhaust gas from
49				motor vehicle NOS
50				
51	TN00.00	Injury ?accidental, poisoning by analgesic or anti-	T964500	Accidental poisoning by manganese and its
52		pyretic		compounds
53	T80z.00	Accidental poisoning by	U404.00	[X]Poisoning/exposure, ? intent, to
54		analgesics,antipyretic,antirheum NOS		psychotropic drug
55	ZX19200	Slapping self	U22z.00	[X]Intent self harm by drown/submersn occ
56				unspecified place
57	U1A7.00	[X]Accident poisoning/exposure to oth autonomic	T94y.00	Accidental poisoning by other corrosives and
58		drug		caustics
59				
60				

U1A0.12	[X]Accidental poisoning with ibuprofen	U20Az00	[X]Int self pois org solv,halogen hydrocarb, unspec place
U408.00	[X]Poison/exposure, ?intent, to other/unspec drug/medicament	ZV71600	[V]Observation following other inflicted injury
U48..00	[X]Contact with steam hot vapours+objects undetermn intent	T830z00	Accidental poisoning- phenothiazine-based tranquillisers NOS
T982100	Accidental poisoning by exhaust gas from gas engine	T924000	Accidental poisoning by benzene
ZX15.00	Throwing self onto floor	ZVu0600	[X]Examination & observat following other inflicted injury
U24..00	[X]Intent self harm by rifle shotgun/larger firearm disch	TKx3.00	Suicide and selfinflicted injury by extremes of cold
T942.00	Accidental poisoning by caustic alkalis	T964100	Accidental poisoning by brass fumes
U202.00	[X]Intent self poison/exposure to sedative hypnotic	T960000	Accidental poisoning by lead, unspecified
U20B.00	[X]Intent self poison/exposure to other gas/vapour	U40yz00	[X]Pois/expos ?intent to unspecif chemical unspecif place
TK21.00	Suicide and selfinflicted poisoning by other carbon monoxide	T980200	Accidental poisoning by propane
U1A5.11	[X]Accidental poisoning with heroin	T983.00	Accidental poisoning by carbon monoxide- other domestic fuel
U20y000	[X]Int self poison/exposure to unspecif chemical at home	U204100	[X]Intent self poison psychotropic drug at res institut
ZC15100	Repeated self-induced vomiting	T964z00	Accidental poisoning by metals + compounds and fumes NOS
U202.13	[X]Overdose - temazepam	U1AA100	[X]Acc poison/expos org solvent,halogen hydrocarb,res instit
T802000	Accidental poisoning by codeine	ZX1Q.00	Throwing self in front of train
T82z.00	Accidental poisoning by sedatives and hypnotics NOS	T851.00	Accidental poisoning by oth central nervous syst depressants
T94..00	Accidental poisoning by corrosives and caustics NEC	T806200	Accidental poisoning by naproxen
TK31.00	Suicide + selfinflicted injury by suffocation by plastic bag	TK01100	Suicide and self inflicted injury by Barbitone
U1A4.13	[X]Accidental poisoning with SSRI	T990.00	Accidental poisoning by nitrogen oxides
T960.00	Accidental poisoning by lead and its compounds and fumes	T963000	Accidental poisoning by arsenic, unspecified
U1AB700	[X]Accident poison/exposure to other gas/vapour on farm	14K1.00	Intentional overdose of prescription only medication
T941.00	Accidental poisoning by acids	U212.00	[X]Inten slf harm hang strang/suffc sch oth ins/pub adm area
TN06.00	Injury ?accidental, poisoning by corrosive/caustic substance	T802300	Accidental poisoning by opium
U470.00	[X]Exposure to smoke fire+flame undetermn intent occ at home	U1AD200	[X]Acc pois/expo to amphet - sch, other inst+pub admin area
T981.00	Accidental poisoning by other utility gas	T98y.00	Accidental poisoning by carbon monoxide from other sources
U4D..00	[X]Crashing of motor vehicle, undetermined intent	T802100	Accidental poisoning by pethidine
U49z.00	[X]Contact with sharp obj undetermn intent occ unspecif place	T983300	Accidental poisoning by CO- kerosene in domestic stove/fire
U42..00	[X]Drowning and submersion, undetermined intent	U4Bz.00	[X]Fall jump/push frm high plce undt intnt occ unspecif plce
TK06.00	Suicide + selfinflicted poisoning by agricultural chemical	T850.12	Accidental poisoning by anti-parkinsonism drug
U40A.00	[X]Pois/exposure,?intent,to organ	T98y100	Accidental poisoning by CO - kiln vapour

1	U205000	solvent,halogen hydrocarb	T830.00	Accidental poisoning by phenothiazine-based
2		[X]Int self poison/exposure to narcotic drug at		tranquillisers
3	U1AB000	home	U2By.00	[X]Int self harm by jump from high place occ
4		[X]Accident poison/exposure to other gas/vapour		oth specif plce
5	U29z.00	at home	T941z00	Accidental poisoning by acids NOS
6		[X]Intentional self harm by sharp object occ		
7		unspecif place		
8	U1A4100	[X]Accid poison/expos to psychotropic drug at res	U1A2.16	[X]Accidental poisoning with benzodiazepine
9		institut		
10	T832000	Accidental poisoning by chlordiazepoxide	T936z00	Accidental poisoning by fungicides NOS
11	U291.00	[X]Intent self harm by sharp object occ resident	TK5z.00	Suicide and selfinflicted injury by
12		institut'n		firearms/explosives NOS
13	U202.15	[X]Overdose - nitrazepam	T930200	Accidental poisoning by DDT
14	U1A8000	[X]Accident poison/exposure to oth/unsp	U1A1000	[X]Accident poison/exposure to antiepileptic at
15		drug/medicam home		home
16	U20B000	[X]Int self poison/exposure to other gas/vapour	T811.00	Accidental poisoning by barbitone
17		at home		
18	U1AC.00	[X]Accident poisoning/exposure to pesticide	T901z00	Accidental poisoning by ethyl alcohol NOS
19	T882.00	Accidental poisoning by drugs affecting blood	U200400	[X]Intent self pois nonopioid analgesic in
20		constituents		street/highway
21	T90y.00	Accidental poisoning by other alcohols	T923.00	Accidental poisoning by petroleum solids
22	U201000	[X]Int self poison/exposure to antiepileptic at	TKx6.00	Suicide and selfinflicted injury by crashing of
23		home		aircraft
24	ZX14.00	Damaging own wounds	U2D6.00	[X]Intent self harm crash motor vehic occ
25				indust/constr area
26	U2A3.00	[X]Intent self harm by blunt object occ	U4Az.00	[X]Contact with blunt obj undeterm intent occ
27		sports/athlet area		unspecif place
28	T941200	Accidental poisoning by sulphuric acid	U40C000	[X]Poison/exposure ?intent, to pesticide at
29				home
30	T937400	Accidental poisoning by zinc phosphide	T923z00	Accidental poisoning by petrol solids NOS
31	U1A0.13	[X]Accidental poisoning with aspirin	U4B6.00	[X]Fall jump/push frm high plce undt intrn
32				indust/constr area
33	U1AA.00	[X]Accid poison/exposure to organ	U206000	[X]Int self poison/exposure to hallucinogen at
34		solvent,halogen hydrocarb		home
35	T960z00	Accidental poisoning by lead, NOS	U40y000	[X]Poison/exposure ?intent, to unspecif
36				chemical at home
37	U210.00	[X]Intent self harm by hanging	U220.00	[X]Intent self harm by drowning/submersion
38		strangulat/suffocat occ home		occurrn at home
39	T800.00	Accidental poisoning by heroin	U1Ay700	[X]Accident poison/exposure to unspecif
40				chemical on farm
41	T94z.00	Accidental poisoning by corrosives and caustics	U40yy00	[X]Pois/exp ?intent to unspecif chemical other
42		NOS		spec place
43	U1A8.00	[X]Accident poison/exposure to other/unspec	T941100	Accidental poisoning by nitric acid
44		drug/medicament		
45	U20By00	[X]Int self poison other gas/vapour other spec	U1A9200	[X]Acc poison/expos alcohol school/pub admin
46		place		area
47	T938100	Accidental poisoning by methyl bromide	ZX16300	Gouging own rectum
48	U1A4.12	[X]Accidental poisoning with amitriptyline	T830300	Accidental poisoning by promazine
49	ZX1M.00	Shooting self	U216.00	[X]Intent self harm by hang strangl/suffc
50				indust/constr area
51	U44..00	[X]Rifle shotgun+larger firearm discharge	T887200	Accidental poisoning by ophthalmological
52		undetermin intent		drugs
53	T922.00	Accidental poisoning by lubricating oils	1BDE.00	Suicide risk increased from previous level
54	T964400	Accidental poisoning by iron compounds	ZX1R.11	Jumping in front of vehicle
55	T964300	Accidental poisoning by copper salts	U1A9300	[X]Accid pois/expos alcohol in sport/athletic
56				area
57				
58				
59				
60				

T887100	Accidental poisoning by mucous membrane drugs	U1A9y00	[X]Accid pois/expos to alcohol other spec place
U202.11	[X]Overdose - sleeping tabs	TN02.00	Injury ?accidental, poisoning by other sedative/hypnotic
T90z.00	Accidental poisoning by alcohol NOS	T806000	Accidental poisoning by gold salts
T981300	Accidental poisoning by heating gas NOS	T937100	Accidental poisoning by squill and derivatives
T801.00	Accidental poisoning by methadone	T965z00	Accidental poisoning by plant foods and fertilisers NOS
T841100	Accidental poisoning by lysergide, LSD	T823.00	Accidental poisoning by methaqualone compounds
T840100	Accidental poisoning by imipramine	U1A8600	[X]Acc pois/expos oth/unsp drug/medic indust/construct area
U2B4.00	[X]Intent self harm by jump from high place occ street/h'way	T966z00	Accidental poisoning by glues and adhesives NOS
TN2y.00	Injury ?accidental, poisoning by other spec gas or vapour	TK2y.00	Suicide + selfinflicted poisoning by other gases and vapours
U4A0.00	[X]Contact wth blunt object undetermined intent occ at home	T832300	Accidental poisoning by lorazepam
TK52.00	Suicide and selfinflicted injury by hunting rifle	T822.00	Accidental poisoning by bromine compounds
U242.00	[X]Int slf hrm rifl s'gun/lrg frarm dis sch/ins/pub adm area	T804.00	Accidental poisoning by aromatic analgesics NEC
U28..00	[X]Intentional self harm by steam hot vapours / hot objects	T80y000	Accidental poisoning by pentazocine
U2D..00	[X]Intentional self harm by crashing of motor vehicle	U4A6.00	[X]Contct wth blunt obj undet intent occ industr/constr area
ZX1H.00	Self-asphyxiation	U2y6.00	[X]Intent self harm oth specif means occ indust/constr area
T983000	Accidental poisoning by CO- coal in domestic stove/fireplace	U200600	[X]Int self pois nonopioid analgesic indust/construct area
T87..00	Accidental poisoning by anti-infectives	TN01300	Injury ?accidental poisoning by Pentobarbitone
T77z.00	Accident/poisoning occurred in residential institution NOS	U1A2z00	[X]Accid poison/expos to sedative hypnotic unspecif place
U20y.00	[X]Intent self poison/exposure to unspecif chemical	TK01z00	Suicide and self inflicted injury by barbiturates
T937.00	Accidental poisoning by rodenticides	TKx0z00	Suicide + selfinflicted inj-jump/lie before moving obj NOS
T934z00	Accidental poisoning by insecticides NOS	T805100	Accidental poisoning by phenylbutazone
U1A4.00	[X]Accident poisoning/exposure to psychotropic drug	U1A4200	[X]Acc poison/expos psychotropic drug school/pub admin area
U1A4000	[X]Accident poison/exposure to psychotropic drug at home	U2Dz.00	[X]Intent self harm by crash motor vehic occ unspecif place
ZX1L200	Self-mutilation of genitalia	T804200	Accidental poisoning by phenacetin
T855000	Accidental poisoning by adrenalin	1BDF.00	Suicide risk unchanged from previous level
T99z.00	Accidental poisoning by gases and vapours NOS	U40By00	[X]Pois/exp ?intent to other gas/vapour other spec place
T982.00	Accidental poisoning by motor vehicle exhaust gas	T993.00	Accidental poisoning by tear gas
ZX16200	Gouging own eyes	U1Ay100	[X]Accid poison/expos to unspecif chemical at res institut
T940000	Accidental poisoning by carbolic acid	U2yy.00	[X]Intent self harm oth specif means occ oth specif place

PAIN

At least one ICD-9 in:	
Lumbar pain	724
Back disorders	721, 722, 723, 723, 737
Neck and back problems	721.0, 721.1, 721.2, 721.3, 721.4, 721.5, 721.6, 721.7, 721.8, 721.9, 722.0, 722.1, 722.2, 722.3, 722.4, 722.5, 722.6, 722.7, 722.8, 722.9, 723.0, 723.1, 723.2, 723.3, 723.4, 723.5, 723.7, 723.8, 723.9, 724.0, 724.1, 724.2, 724.3, 724.4, 724.5, 724.6, 724.8, 724.9, 737.1, 737.2, 738.2, 738.4, 738.5, 739.1, 739.2, 739.3, 739.4, 756.1, 846.0, 846.1, 846.2, 846.3, 846.8, 846.9, 847.0, 847.1, 847.2, 847.3, 847.9
Complex regional pain syndrome	337.2, 354.4, 355.7, 355.9
Fibromyalgia	729.1
Painful neuropathic disorders	250.6, 357.2, 053.1, 722.1, 722.2, 722.7, 724.0, 724.3, 724.4, 721.1, 722.0, 723.0, 723.4, 337.2, 353.2, 353.3, 353.4, 354.4, 355.7, 355.9, 729.2, 353.6, 350.1, 350.2, 352.1, 353.0, 353.1, 353.8, 353.9, 354.0, 354.1, 354.2, 354.3, 354.5, 354.8, 354.9, 355.0, 355.1, 355.2, 355.3, 355.4, 355.5, 355.6, 355.8,
Pain	338
Chronic pain	338.2
Chronic pain associated with significant psychosocial dysfunction	338.4
Pain disorders related to psychological factors	307.8
Migraine and headache	346, 784, 339
Osteoarthritis/Rheumatoid Arthritis	714, 715
Irritable bowel syndrome	564.1
Lupus	710.0

OR

At least one READ code in:			
N131.00	cervicalgia - pain in neck	N05..00	osteoarthritis and allied disorders
1B1G.00	headache	N217700	calcaneal spur
1BA5.00	frontal headache	N23y400	spasm of muscle
F26..00	migraine	F260.00	classical migraine
E278100	tension headache	N224.00	ganglion and cyst of synovium, tendon and bursa
N143.00	sciatica	N081000	loose body in joint, unspecified joint
N216500	prepatellar bursitis	PG17.00	spina bifida occulta
J521.11	irritable bowel syndrome	1BA8.00	temporal headache
N090.00	effusion of joint	N140.11	spinal stenosis
N213300	olecranon bursitis	N235.00	hypermobility syndrome
N145.00	backache, unspecified	N37..00	curvature of spine
N12..00	intervertebral disc disorders	N225100	rupture of popliteal space synovial cyst
N217900	plantar fasciitis	F26y000	hemiplegic migraine
F340.00	carpal tunnel syndrome	1B1G000	sinus headache
N040.00	rheumatoid arthritis	N066.00	unspecified monoarthritis
J521.00	irritable colon - irritable bowel syndrome	7H48211	release of trigger finger
N224A00	synovial cyst of popliteal space	N01w.00	reactive arthropathy, unspecified
N371.00	acquired kyphosis	F330.00	brachial plexus lesions
N21z300	exostosis of unspecified site	N224000	synovial cyst unspecified
N221.00	bunion	N043.00	juvenile rheumatoid arthritis - still's

R040.00	[d]headache	SC20z12	disease
N220.00	synovitis and tenosynovitis	F355.00	headache - post traumatic
N20..00	polymyalgia rheumatica	N224200	tarsal tunnel syndrome
F301.00	other specified trigeminal neuralgia	N083.00	ganglion of tendon sheath
N142.14	lumbago	N245.00	recurrent dislocation of joint
1BA6.00	occipital headache	N21..00	pain in limb
			peripheral enthesopathies and allied syndromes
N372.00	acquired lordosis	PG16.00	klippel-feil syndrome
PG12.00	congenital spondylolisthesis	N213200	lateral epicondylitis of the elbow
N11..00	spondylosis and allied disorders	N221000	infected bunion
N244.00	fasciitis unspecified	N141.00	pain in thoracic spine
N220300	trigger finger - acquired	1BB4.00	morning headache
F261.00	common migraine	F262200	abdominal migraine
F262000	cluster headache	N110.00	cervical spondylosis without myelopathy
N370.00	adolescent postural kyphosis	N384.00	acquired spondylolisthesis
N07..00	internal derangement of knee	7K51111	bunionectomy
N234.00	laxity of ligament		

STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation	Page No
Title and abstract	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract	2
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4-5
Objectives	3	State specific objectives, including any prespecified hypotheses	4-5
Methods			
Study design	4	Present key elements of study design early in the paper	5-7
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	5-6
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	5-6
		Case-control study—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls	
		Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants	
		(b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed	
		Case-control study—For matched studies, give matching criteria and the number of controls per case	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	7
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	5-7
Bias	9	Describe any efforts to address potential sources of bias	8
Study size	10	Explain how the study size was arrived at	N/A
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	7-8
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	8
		(b) Describe any methods used to examine subgroups and interactions	N/A
		(c) Explain how missing data were addressed	N/A
		(d) Cohort study—If applicable, explain how loss to follow-up was addressed	N/A
		Case-control study—If applicable, explain how matching of cases and controls was addressed	
		Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy	
	(e) Describe any sensitivity analyses	N/A	

Results			Page No
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	N/A
		(b) Give reasons for non-participation at each stage	N/A
		(c) Consider use of a flow diagram	N/A
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	8
		(b) Indicate number of participants with missing data for each variable of interest	N/A
		(c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount)	N/A
Outcome data	15*	<i>Cohort study</i> —Report numbers of outcome events or summary measures over time	8-9
		<i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure	
		<i>Cross-sectional study</i> —Report numbers of outcome events or summary measures	
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	N/A
		(b) Report category boundaries when continuous variables were categorized	N/A
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A
Discussion			
Key results	18	Summarise key results with reference to study objectives	9-10
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	11
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	10-11
Generalisability	21	Discuss the generalisability (external validity) of the study results	N/A
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	12

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at www.strobe-statement.org.

BMJ Open

Multinational Comparison of New Antidepressant Use in Older Adults: A Cohort Study

Journal:	BMJ Open
Manuscript ID	bmjopen-2018-027663.R1
Article Type:	Research
Date Submitted by the Author:	13-Mar-2019
Complete List of Authors:	Tamblyn, Robyn; McGill University, Department of Medicine and Department of Epidemiology and Biostatistics Bates, David ; Brigham and Women's Hospital, Medicine Buckridge, David; McGill University, Epidemiology, Biostatistics, and Occupational Health; Agence de la Santé et des services Sociaux de Montréal, Direction de santé publique Dixon, Will; University of Manchester, Arthritis Research UK Centre for Epidemiology Forster, Alan; The Ottawa Hospital , Internal Medicine ; The Ottawa Hospital Research Institute, Clinical Epidemiology Program Girard, Nadyne; McGill University, Clinical and Health Informatics Research Group Haas, Jennifer; Brigham and Women's Hospital Habib, Bettina; McGill University, Clinical and Health Informatics Research Group Kurteva, Siyana; McGill University, Epidemiology, Biostatistics, and Occupational Health Li, Jack; Taipei Medical University, Graduate Institute of Biomedical Informatics Sheppard, Therese; University of Manchester
Primary Subject Heading:	Epidemiology
Secondary Subject Heading:	Mental health
Keywords:	Antidepressants, Multinational comparison, Older adults, EPIDEMIOLOGY, pharmacosurveillance

SCHOLARONE™
Manuscripts

Multinational Comparison of New Antidepressant Use in Older Adults: A Cohort Study

Robyn Tamblyn^{1, 2, 3}, David W. Bates⁴, David L. Buckeridge^{1, 3}, William G. Dixon⁵, Alan J. Forster⁶, Nadyne Girard³, Jennifer S. Haas⁴, Bettina Habib³, Siyana Kurteva¹, Jack Li^{7, 8}, Therese Sheppard⁵

¹Department of Epidemiology, Biostatistics and Occupational Health, McGill University, 1020 Pine Avenue West, Montreal, QC H3A 1A2, Canada

²Department of Medicine, McGill University Health Center, 1001 Decarie Boulevard, Montreal, QC H4A 3J1, Canada

³Clinical and Health Informatics Research Group, McGill University, 1140 Pine Avenue West, Montreal, QC H3A 1A3, Canada.

⁴Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115, USA.

⁵Arthritis Research UK Centre for Epidemiology, Centre for Musculoskeletal Research, Manchester Academic Health Science Centre, The University of Manchester, 2nd Floor, Stopford Building, Oxford Road, Manchester M13 9PT, UK.

⁶The Ottawa Hospital, 501 Smyth Road, Ottawa, Ontario K1H 8L6, Canada.

⁷International Center for Health Information Technology (ICHIT), Taipei Medical University, Taipei, Taiwan

⁸Graduate Institute of Biomedical Informatics, College of Medical Science and Technology, Taipei Medical University, Taipei, Taiwan

Corresponding Author

Robyn Tamblyn, BScN, MSc, PhD, FCAHS, CM

McGill University

1140 Pine Avenue West

Montreal, QC H3A 1A3

Tel. 514-934-1934 ext 32999

robyn.tamblyn@mcgill.ca

Word count: 3,934

ABSTRACT

Objectives: We used an international pharmacosurveillance network to estimate the rate and characteristics of antidepressant use in older adults in countries with more conservative (UK) and liberal depression guidelines (Canada, USA).

Setting: Electronic health records and population-based administrative data from six jurisdictions in four countries (UK, Taiwan, USA, and Canada).

Participants: A historical cohort of older adults (≥ 65) who had a new episode of antidepressant use between 2009-2014.

Outcome Measures: The age and sex-standardized cumulative incidence of new episodes of antidepressant use in older adults was measured. Descriptive statistics were used to compare the proportion of new users by the antidepressant prescribed, therapeutic class, potential treatment indication, and country, as well as the characteristics of the first treatment episode (standardized daily doses, duration and changes).

Results: The incidence of antidepressant use between 2009-2014 varied from 0.7%(UK), to 18.6% (Taiwan). Tricyclic antidepressants (TCAs) were the most commonly used class in the UK (48.8%) and Taiwan (52.4%) compared to selective serotonin reuptake inhibitors (SSRIs) in North American jurisdictions (42.3%-53.3%). Chronic pain was the most common potential treatment indication (41.2%-68.2%). Among users with chronic pain, TCAs were used most frequently in the UK and Taiwan (55.2%-60.4%) whereas SSRIs were used most frequently in North America (33.5%-46.4%). Treatment was longer (252-525 vs 169-437 days), standardized doses were higher (0.7-1.3 vs 0.5-1.0), and treatment was more likely to be changed (31%-46% vs 21%-34%) among patients with depression (9.1%-43%) than those with chronic pain.

Conclusion: Antidepressant use in older adults varied 24-fold by country, being lowest in the UK, which has the most conservative treatment guidelines. Chronic pain was the most common potential treatment indication. Evaluation of real-world risks of TCAs is a priority for future research, given high rates of use, and the potential for increased toxicity in older adults because of potent anti-cholinergic effects.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Article Summary

Strengths and Limitations of this Study

- Uses an international pharmacosurveillance network to characterize antidepressant use across multiple jurisdictions
- Despite data harmonization efforts, measurement and reporting issues may lead to arbitrary differences between regions and countries.
- Treatment indication is unknown for all but one study cohort. Documentation of health problems in medical services billing data and EMRs was used as a proxy for treatment indication for remaining cohorts, which could have resulted in misclassification bias.
- While some cohorts represented total populations or representative samples, others were assembled from practices supported by specific information technology systems.

INTRODUCTION

Depression affects an estimated 300 million people worldwide[1]. In the past decade, many countries have reported a two to three fold increase in the use of antidepressant medications[2]. The primary increase has been in newer antidepressants such as selective serotonin reuptake inhibitors (SSRIs), which are considered to have better efficacy than older drugs, with fewer side effects[3]. Increasing prevalence of use of antidepressants has also been associated with both an increase in the number of people started on therapy as well as its duration, with 40% of antidepressants being prescribed for more than 180 days [4]. Antidepressants now represent one of the most commonly prescribed medications[5 6], especially among older adults, where the increase in use has been the greatest in the US population[5 7].

The increasing use of antidepressants in older adults may be due to a number of factors. There has been long-standing advocacy for better recognition and treatment of depression in older adults[8 9]. In addition, individuals with multiple chronic conditions are more likely to experience depression. In Canada, 12% of persons 65 years and older have two or more major chronic conditions compared to only 3.6% in younger adults; and 4% of adults with at least one major chronic disease have mood or anxiety disorders, which are other approved indications for antidepressant use[10]. While increasing prevalence of depression, anxiety and other mood disorders in older adults may account for increasing use of antidepressants, there is also evidence that antidepressants are prescribed for unapproved indications that may not be supported by scientific evidence of efficacy[11-14]. One recent study found that nearly 50% of antidepressants were prescribed for unapproved indications including chronic pain, tiredness, and sleep disturbance[11], which are also more common in older adults[15].

Taken together, these factors have led to increasing concern about overuse of antidepressants, particularly in older adults[16]. This concern is heightened because of the reported association between antidepressant use and fall-related injuries, motor vehicle accidents, functional decline, and mortality in older adults[17-19]. Clinical practice guidelines for the management of depression vary considerably in their recommendations for first line treatment[20-24], although most acknowledge the need to consider patient preferences (Table 1). The United Kingdom NICE guidelines are the most conservative, recommending first line treatment with psychotherapy such as cognitive behavioral therapy with pharmacotherapy added only if non-pharmacological therapy is unsuccessful[24]. At the other end of the spectrum, the Canadian 2009 guidelines list pharmacotherapy as a first-line treatment for major depressive disorder, including selective serotonin re-uptake inhibitors (SSRIs), serotonin-norepinephrine reuptake inhibitors (SNRIs), mirtazapine, or bupropion[25-27]. Of note, Canada ranks as the 3rd highest user of anti-depressants among 23 OECD countries, surpassed only by Australia and Iceland[2].

However, few data are available regarding how national guidelines may contribute to differences in how antidepressants are used for older adults. We took advantage of an international pharmacosurveillance network[28] that uses electronic medical record (EMR) and population-based health administrative data to estimate the rate of antidepressant use in older adults in countries that had more conservative (UK) and lenient guidelines (Canada, USA, Taiwan). We evaluated differences in the choice of antidepressant, dose and duration of treatment, the prevalence of dose changes and switches in treatment of older adults

with new episodes of antidepressant use, as well as differences in treatment approach for patients with a recorded diagnosis of depression, other mental health co-morbidities, and chronic pain.

METHODS

Study Design and Population

To characterize antidepressant use in older adults, a cohort of individuals who were 65 years of age or older and had a new episode of antidepressant use between January 1, 2009 and December 31, 2014 following two years during which they had no prescription or dispensation of an antidepressant was assembled. Eligible patients were identified from electronic medical record (EMR) or population-based registries in a total of six jurisdictions in four countries (Canada, United States, UK, and Taiwan).

Data Sources

CANADA

Quebec EMR cohort: Data were extracted from the Medical Office of the 21st Century (MOXXI) EMR, which includes a real-time linkage to the Quebec insurance agency, the Régie de l'assurance maladie du Québec (RAMQ) databases. This linkage provides historical and daily updates of patients' received medical services (diagnosis, procedure, date, location, provider), prescriptions dispensed from community pharmacies for persons who are publicly insured (prescriber, pharmacy, drug, dose, dispensing date, duration, refills), and mortality. Approximately 110 primary care physicians in Quebec use MOXXI for approximately 90,000 of their patients, representing approximately 25% of the patients in the practice, and approximately 5% of the Quebec population in primary care practices.

Quebec Administrative Data cohort: Data were retrieved from the Montreal Population Health Record, a population-based 25% random sample of the 4.1 million residents of Montreal, Canada's second largest city, which is dynamically updated each year to account for in and out-migration. Beneficiary characteristics were measured by linking the RAMQ beneficiary database (age, sex, postal code) with Statistics Canada's census file (postal code level measures of socio-economic status), and the Institute of Statistics birth and death registry (date of birth and death). From this population-based dataset, we identified all non-institutionalized persons 65 years of age or older between 2009-2014. All medical services (date, diagnosis, procedure), hospitalizations (admission and discharge date, primary and secondary diagnoses, in-hospital procedures), and medications (prescriber, pharmacy, drug, dose, dispensing date, duration, refills) received by members of the cohort were retrieved from the RAMQ database and those of the Quebec Ministry of Health.

Ontario Administrative Data Cohort: Data were extracted from the Institute for Clinical Evaluative Sciences population-based repository of health records for the 13.6 million Ontario residents. The data is provided by the Ontario Ministry of Health and Long-Term Care, which pays for all essential health services. For the 2,053,588 Ontario non-institutionalized residents who were 65 year or older between 2007 and 2014 , we randomly sampled 20% and extracted age, sex and date of death from the beneficiary registrants database, all billing claims for medical services provided by Ontario physicians (date of service, diagnosis, procedure code, physician provider), all claims for medications dispensed in the community by Ontario

pharmacies (drug, date dispensed, prescriber, quantity, duration, number of refills), and data from discharge summaries of emergency department visits and hospital stays (date of admission and discharge, primary and secondary diagnoses and procedures).

UNITED STATES

Boston, Massachusetts EMR cohort: Data were extracted from the Partners HealthCare Research Patient Data Registry (RPDR), which provides care for approximately 3 million of 5 million residents in Boston and surrounding areas. RPDR includes data from the Longitudinal Medical Record (LMR), an internally developed, web-based, fully functional EMR that was in use during this period for the participating primary care clinics from Brigham and Women's Hospital (BWH) and Massachusetts General Hospital (MGH), the two founding members of Partners Healthcare in Boston, Massachusetts. Data were retrieved from the structured clinical encounter information from RPDR for all outpatient primary care visits. To ensure complete follow-up, patients were eligible if they were seen in one of 37 BWH- or MGH- affiliated primary care or diabetes clinics.

UNITED KINGDOM

EMR cohort: Data were extracted from the Clinical Practice Research Datalink (CPRD), an anonymised longitudinal medical records database for primary care. The primary care EHR includes information on all primary care interactions, including documented health problems, visit notes, prescriptions, and records of specialty referrals, as well as information on lab results, hospitalizations, and death. The CPRD includes more than 4 million active patients, 76% of whom are in England, representing 6.9% of the 64 million primary care population in the UK, and around 600 primary care practices[29]. Patients were included if their records met minimum quality standards and there were no gaps in registration. A 10% random sample of the 2,436,180 elderly patients in the database were extracted.

TAIWAN

Administrative Data Cohort: Data were extracted from the Taiwanese National Health Insurance (NHI) system databases. The NHI provides health coverage to around 99% of Taiwan's population of 23 million, providing comprehensive coverage for all health services, including dental, preventive, Western medicine, and traditional Chinese medicine services. A random sample of 103,400 of the 3.6 million residents that were 65 years or older in Taiwan between 2007 and 2014 was extracted for this study. The NHI's research databases include a registry for beneficiaries (e.g. registrant's age, sex, residence), an outpatient visit database (date and time of visit, ICD-9-CM codes of existing health problems, service provided), an inpatient visit database (date of hospitalization and discharge, ICD-9-CM codes of existing health problems, procedure codes and dates), and a pharmacy database (drug prescribed, date, duration, dosage, prescribing physician, dispensing pharmacy).

Measurement

Patient Characteristics

Age & Sex: Date of birth and sex were retrieved from the administrative data in Canada and Taiwan as these data are verified at the time of enrollment in the health plan. For the US and United Kingdom, these data were retrieved from the EMR.

Depression, Other Mental Health Comorbidities, and Chronic Pain

We measured the existence of potential indications for antidepressant use[11 12] including depression, other mental health conditions, and chronic pain. Depression included mild, moderate, major single or recurrent depressive disorder with or without psychotic symptoms, adjustment reaction, and mixed anxiety and depression. Other mental health conditions included anxiety, alcohol abuse, illicit drug use, attempted suicide, psychosis, schizophrenia, and bipolar disorder. Anxiety included dissociative and somatoform disorders. We used standard diagnostic codes (ICD 9, ICD 10, and Read codes) retrieved from the EMR, and/or medical services claims, and hospitalizations in the two-years prior to the first antidepressant prescription to measure these conditions (Appendix).

To measure chronic pain, we used a previously validated ICD9 and ICD10 code set for non-cancer pain[30]. The concepts and definitions used in the development and validation of this code set were used to map to Read codes (Appendix available upon request). Chronic non-cancer pain conditions included lumbar pain, back disorders that are often associated with pain (e.g. degenerative disc disease), neck and back problems (e.g. spondylosis), fibromyalgia, complex regional pain syndromes (e.g. mononeuritis), painful neuropathic disorders (e.g. post herpetic neuralgia), pain disorders with psychosocial dysfunction, and unclassified chronic pain problems.

Characterizing Antidepressant Use

The characteristics of antidepressant use were compared in the population of seniors with a new episode of antidepressant use in each country, overall, and then within subgroups that had a diagnosis of a) depression, b) chronic pain, or c) other mental health problems.

Classification of Starting Therapy: The Anatomic Therapeutic Classification (ATC) system[31] was used to map national drug names and identification numbers to a common nomenclature based on the antidepressants that were prescribed during the study time period. Therapeutic classes included tri-cyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), serotonin-norepinephrine reuptake inhibitors (SNRIs), serotonin antagonist and reuptake inhibitors (SARIs), norepinephrine-dopamine reuptake inhibitors (NDRIs), noradrenergic and specific serotonergic antidepressants (NaSSAs), tetracyclic antidepressants (TeCAs), melatonergic agonists (MAs), and norepinephrine reuptake inhibitors (NRIs). Monoamine oxidase inhibitors were excluded as they are rarely used and only for bipolar disorder. Starting therapy was classified by therapeutic class and drug, and by the number of antidepressants prescribed at treatment initiation.

Starting Antidepressant Dose: To enable comparisons in the dose prescribed among antidepressants, we created a standardized dose for each drug by dividing the prescribed dose by the WHO recommended daily dose for adults. The resulting indicator represents the proportion of the recommended daily adult dose that was prescribed. When more than one antidepressant was prescribed concurrently, we summed the standardized dose for each drug.

Analysis

The cumulative incidence of older adults with new episodes of antidepressant use in the period 2009 to 2014 was measured by dividing the number of new users by the total population that was 65 years or older during this time period. Rates were standardized for age and sex using the direct method and the United Kingdom as the reference population. New episodes of use were defined as those who had no prior prescription of an antidepressant in the two years preceding their first prescription. Descriptive statistics were used to compare the proportion of new antidepressant users by the antidepressant prescribed, therapeutic class, country and potential treatment indication, as well as the characteristics of the first treatment episode. As the co-existence of other mental health conditions may modify treatment choices, we used the prevalence ratio to estimate the concurrence of other mental health problems, chronic pain and depression. The prevalence ratio allowed us to compare between countries even if the prevalence of these conditions is different[32] It was calculated as the prevalence of the health problem of interest among individuals with depression, divided by the prevalence of the health problem among individuals without depression.

Patient and Public Involvement

Patients and members of the public were not involved in the development of research questions or outcome measures, design, or implementation of this study. There are no plans to involve patients in dissemination of research results.

RESULTS

The age-standardized cumulative incidence of antidepressant use in persons aged 65 and older in the period 2009-2014 was highest in Taiwan (18.6%) and Ontario, Canada (15.3%), and lowest in Quebec-Montreal (4.7%) and England (6.6%) (Table 2). Similarly, the overall prevalence of antidepressant use in the same time period was lowest in England (10.3%), and highest in Ontario, Canada (26.8%) and Taiwan (23.4%). The distribution of age was similar in all jurisdictions.

Frequency Distribution of the First Antidepressant Prescription by Therapeutic Class

Overall, there were substantial differences between jurisdictions in the choice of starting therapy for new users (Table 3). Tricyclic antidepressants were the most commonly used class of antidepressants in England (48.8%) and Taiwan (52.4%) compared to selective serotonin reuptake inhibitors in North American jurisdictions (42.3%-53.3%). Notably, in the United Kingdom, approximately one-quarter of antidepressant prescriptions were for newer classes of antidepressants: serotonin antagonist & reuptake inhibitors (trazodone), norepinephrine-dopamine reuptake inhibitors (bupropion), and noradrenergic serotonin specific antidepressants (mirtazapine).

Co-Existence of Depression, Other Mental Health Problems and Chronic Pain

The prevalence of a depression diagnosis among new antidepressant users was relatively low, varying from 9.1% (Taiwan) to 21.7% (USA). The exception was the EMR cohort in Quebec where the prevalence was 43.0% (Table 4). Among new antidepressant users with a diagnosis of depression, there was a 30% (UK Prevalence Ratio: 1.3) to 7-fold (USA Prevalence Ratio: 7.3) increase in the likelihood of also having an alcohol or other substance abuse problem. Anxiety, which varied from being present in 12.1% of new antidepressant users in the UK to 47.8% of new users in Taiwan, was the most common mental health problem, and was also more likely to be present among persons with depression (Prevalence Ratio: 1.3 (Ontario, Quebec) to 3.6 (USA)). Although less common in all jurisdictions, both major mental illness and suicide attempt were more likely to be present among antidepressant users with depression compared to those without depression. In contrast, chronic pain was the most prevalent problem among new antidepressant users (41.2% (UK) to 68.2% (Taiwan)), and was as likely to be present among those with or without depression (Prevalence Ratio: 0.9-1.3) (Table 4). For almost one-third of new antidepressant users, there was no documented diagnosis of depression, other mental health problems or chronic pain.

Choice of Anti-depressant by Potential Treatment Indication

Among new antidepressant users with a diagnosis of depression, selective serotonin reuptake inhibitors were selected as the starting therapy for 55.2% (Ontario) to 71.4% (UK), followed by SNRIs in Canadian jurisdictions, and newer antidepressants in Boston, the UK, and Taiwan (Table 5). For antidepressant users with a diagnosis of chronic pain, starting therapy was predominantly with SSRIs in North American jurisdictions (33.5%-46.1%), and with TCAs in the UK and Taiwan (55.2%-60.4%). Selection of therapy for other mental health problems was a mixture of choices made for persons with a diagnosis of depression and chronic pain.

Characteristics of the First Treatment Episode by Potential Treatment Indication

Among patients with a diagnosis of depression who were started on antidepressants, 54% (Ontario) to 68% (Taiwan) remained on their initial course of antidepressant treatment (Table 6A). For this group, the mean duration of treatment varied from 104.7 (Taiwan) to 340.9 (Quebec) days, and the mean dose varied from 0.6 of the recommended adult dose (Taiwan), to the recommended adult dose in the United States site (mean dose: 1.0). Among the 32% (Taiwan) to 46% (Ontario) with a change in treatment, the most common change in all jurisdictions was an increase in dose occurring in 20% (Taiwan) to 33% (Ontario) of patients, followed by a decrease in dose (13% (Taiwan) to 21% (Ontario)), and the addition of a drug from a different therapeutic class (6% (UK) to 18% (Ontario)). Among patients with a change in therapy in their initial treatment episode, the mean duration of treatment was almost double (mean duration 312.6 to 616.9 days) than for patients with no change, and the mean dose during treatment was substantially higher (mean standardized proportion of the adult dose: 0.8 to 1.4).

The first treatment episode for new antidepressant users with a diagnosis of chronic pain was substantially different than patients with a diagnosis of depression (Table 6B). Overall, 66% (Ontario) to 79% (Taiwan) were kept on the initial treatment regimen, for a much shorter duration than for new users with a diagnosis of depression (mean duration: 83.6 days (Taiwan) to 300.9 days (Quebec)), and at lower mean

1
2
3 doses (mean standardized proportion of the adult dose: 0.4 (Taiwan, UK, Montreal) to 0.8 (U.S.)). For the
4 21% to 34% of patients who had a change in treatment, the most common changes in all jurisdictions
5 were an increase in dose (13% to 25%), a decrease in dose (9% to 14%) and the addition of another drug
6 from a different therapeutic class (3% to 11%). For those with a change in treatment, the duration of the
7 treatment episode was considerably longer in all jurisdictions (264.4 to 590.0 days), and the mean dose
8 during the treatment episode was higher (0.5 to 1.1).
9

10 11 12 13 14 **INTERPRETATION**

15
16 This multi-national study is the first to compare the use of antidepressants among comparable cohorts of
17 new users in different countries. We found wide variation in the incidence and prevalence of
18 antidepressant use; the lowest rate was in the UK where guidelines for pharmacotherapy use for
19 depression were the most conservative. Choice of starting therapy also varied widely by country and
20 condition, with the UK and Taiwan more likely to use tricyclic antidepressants for persons with a diagnosis
21 of chronic pain whereas selective serotonin reuptake inhibitors were the most common choice for both
22 depression and pain in North American settings. Overall treatment duration was longer for patients with
23 depression than chronic pain, mean treatment doses were higher, and there were more likely to be
24 changes in therapy.
25

26
27 Differences in the incidence of antidepressant use in different countries as well as the choice of
28 antidepressant therapy may also be influenced by a variety of system-related factors. For example, direct
29 to consumer advertising of prescription drugs is permitted in the USA but banned in Canada, Europe, and
30 the UK because these ads drive demand for specific treatments[33]. Also, drugs available and covered by
31 public insurance plans in the UK, Taiwan and Canada are influenced by rigorous reviews and guidelines
32 for the use of new drugs and technologies by national agencies such as the National Institute for Health
33 and Care Excellence in the United Kingdom[34-36].
34

35
36 A surprisingly large percentage of older adults were prescribed antidepressants for conditions other than
37 depression. We found that chronic pain was the most common problem documented and it appeared to
38 be the most likely reason for antidepressant use. Chronic pain has an estimated prevalence of 11.8%[37]
39 to 43.5%[38] in adults, and increases with age, with an estimated 62% of those 75 years of age or older
40 experiencing this problem[38]. While use of antidepressants for chronic pain has been shown to be
41 effective, particularly tricyclic antidepressants (amitriptyline) and serotonin noradrenalin reuptake
42 inhibitors (duloxetine) for neurogenic pain[39 40], tricyclic antidepressants have been on the lists of
43 potentially contraindicated medications for the elderly for over a decade because of their potent anti-
44 cholinergic effects that can lead to cognitive impairment, and other avoidable morbidity[41 42].
45 Moreover, only one antidepressant, duloxetine has been approved for treatment of chronic pain in North
46 America and Europe[11]. Although the anticholinergic effects of tricyclic antidepressants have been well
47 documented[43-45], the actual “real-world” evidence of harm is limited[46], and should be addressed in
48 future studies given the high rates of use.
49
50
51
52
53
54
55
56
57
58
59
60

Notably, in this study of older adults, depression was documented in only two in ten users; the exception being in Quebec City/Montreal where four out of ten patients were prescribed antidepressants for depression. There are known problems in under-reporting, diagnosis and documentation of depression[47-49], which may account for some or all of these differences between sites. The MOXXI system used in the Quebec cohort likely provides an approximate estimate of the extent to which depression is undocumented. In this cohort, physicians are required to document the treatment indication for each drug prescribed[50], data that has been validated in prior studies[51]. Results from this setting suggest that twice as many patients receive antidepressants for depression, whereas a similar proportion of new antidepressant users had a diagnosis of chronic pain as in other sites.

Also, of interest, among patients with documented depression, antidepressant use in all countries followed current guidelines for depression management[21 24 52 53]. Choice of first-line therapy was predominantly selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors. Starting doses were lower than the recommended adult doses, mean duration of treatment was 251-525 days, and the main changes in treatment were increases in doses and the addition of an antidepressant from a different therapeutic class. Not surprisingly, among patients where there was a change in treatment, both the average antidepressant dose was higher and treatment duration was longer, suggesting a lack of treatment effectiveness. The cohort in Taiwan was different in a number of respects including lower antidepressant doses, shorter treatment duration, and fewer changes in therapy once started. The reason for these differences in approach is not clear. They may represent an innate conservatism in the use of antidepressants in the Taiwanese population where there is an acknowledged absence of evidence to support clinical guidelines[53], or known differences in genetic determinants of drug metabolism that have been established in population-based genomic studies of drug metabolism[54].

This study has several limitations to consider in the interpretation of results. Efforts were made to harmonize data from different sources and countries, however both measurement and reporting issues may lead to arbitrary differences between regions and countries. With the exception of the Quebec cohort, treatment indication is unknown. Documentation of health problems in medical services billing data and EMRs was used as a proxy for treatment indication, which based on past studies has a predictive value of 7.8 – 80.3%[55]. The resulting misclassification will attenuate differences observed in treatment approach between conditions. Moreover, diagnoses of health problems tend to be under-reported in administrative data. Prescription data was used in the three jurisdictions and may overestimate the incidence and prevalence of antidepressant use as approximately 37% of antidepressant prescriptions are not filled[56]. The Ontario, Montreal, and Taiwan cohorts represented total populations or representative samples, the UK, Quebec, and USA cohorts were assembled on the basis of practices supported by specific information technology systems. The trends observed in these more selected populations however are similar to those reported for antidepressant use in older adults in these countries[6 57-62].

In conclusion, antidepressant use in older adults varies up to 24-fold by country (cumulative incidence from 0.7% to 17.0%), and chronic pain appears to be the most common treatment indication in all

jurisdictions, even more so than depression. Evaluation of real-world risks and benefits of antidepressants by treatment indication should be a priority for future research. The relative contraindication of tricyclic antidepressants in older adults because of their potent anticholinergic effects needs to be assessed given their high rate of use, and proven efficacy in pain management[39-42].

Funding: This project was funded by the Canadian Institutes of Health Research (CIHR) operating grant # MOP-111166.

Ethical Approval: This study received ethics approval from the McGill University Institutional Review Board (IRB # A01-B02-02A), the Institute for Clinical Evaluative Sciences, the Partners Human Research Committee IRB (Protocol # 2011P000773/PH), and the Independent Scientific Advisory Committee (ISAC) of CPRD (Protocol # 14_081R).

Transparency Declaration: The lead author, Dr. Robyn Tamblyn, affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted and that any discrepancies from the study as planned have been explained.

Competing interests: None to disclose

Data sharing: No additional data available

Contributors: RT, DWB, DLB, WGD, AJF, JSH, and JL contributed to the study concept and design. NG, TS, and BH contributed to the statistical analysis. RT drafted the manuscript. DWB, DLB, WGD, AJF, NG, JSH, BH, SK, JL, and TS critically reviewed the manuscript for intellectual content. All authors read and approved the final manuscript.

Reference List

1. WHO. Depression. In: Organization WH, ed., 2017.
2. OECD. Health at a Glance 2015: OECD indicators. OECD Indicators, OECD Publishing, Paris. DOI: https://doi.org/10.1787/health_glance-2015-en. Accessed February, 2015:217.
3. Chee KY, Tripathi A, Avasthi A, et al. International study on antidepressant prescription pattern at 40 major psychiatric institutions and hospitals in Asia: A 10-year comparison study. *Asia Pac Psychiatry* 2015;**7**(4):366-74 doi: 10.1111/appy.12176[published Online First: Epub Date]].
4. Burton C, Anderson N, Wilde K, Simpson CR. Factors associated with duration of new antidepressant treatment: analysis of a large primary care database. *Br J Gen Pract* 2012;**62**(595):e104-12 doi: 10.3399/bjgp12X625166[published Online First: Epub Date]].
5. Rotermann M, Sanmartin C, Hennessy D, Arthur M. Prescription medication use by Canadians aged 6 to 79. *Health Rep* 2014;**25**(6):3-9
6. Pratt LA, Brody DJ, Gu Q. Antidepressant use in persons aged 12 and over: United States, 2005-2008. *NCHS Data Brief* 2011(76):1-8
7. Zhong W, Kremers HM, Yawn BP, et al. Time trends of antidepressant drug prescriptions in men versus women in a geographically defined US population. *Arch Womens Ment Health* 2014;**17**(6):485-92 doi: 10.1007/s00737-014-0450-7[published Online First: Epub Date]].
8. Ivanova JI, Bienfait-Beuzon C, Birnbaum HG, Connolly C, Emani S, Sheehy M. Physicians' decisions to prescribe antidepressant therapy in older patients with depression in a US managed care plan. *Drugs Aging* 2011;**28**(1):51-62 doi: 10.2165/11539900-000000000-00000[published Online First: Epub Date]].
9. Singh R, Mazi-Kotwal N, Thalitaya MD. Recognising and Treating Depression in the Elderly. *Psychiatr Danub* 2015;**27** Suppl 1:S231-4
10. PHSA. Chronic disease multi-morbidity. How healthy are Canadians? A Trend analysis of the health of Canadians from a healthy living and chronic disease perspective.: Public Health Agency of Canada, 2014:23-24.
11. Wong J, Motulsky A, Abrahamowicz M, Egale T, Buckeridge DL, Tamblyn R. Off-label indications for antidepressants in primary care: descriptive study of prescriptions from an indication based electronic prescribing system. *BMJ* 2017;**356**:j603 doi: 10.1136/bmj.j603[published Online First: Epub Date]].
12. Wong J, Motulsky A, Egale T, Buckeridge DL, Abrahamowicz M, Tamblyn R. Treatment indications for antidepressants prescribed in primary care in quebec, canada, 2006-2015. *JAMA* 2016;**315**(20):2230-32 doi: 10.1001/jama.2016.3445[published Online First: Epub Date]].
13. Egale T, Buckeridge DL, Winslade NE, Benedetti A, Hanley JA, Tamblyn R. Drug, patient, and physician characteristics associated with off-label prescribing in primary care. *Archives of internal medicine* 2012;**172**(10):781-8 doi: 10.1001/archinternmed.2012.340[published Online First: Epub Date]].
14. Chen H, Reeves JH, Fincham JE, Kennedy WK, Dorfman JH, Martin BC. Off-label use of antidepressant, anticonvulsant, and antipsychotic medications among Georgia medicaid enrollees in 2001. *The Journal of clinical psychiatry* 2006;**67**(6):972-82
15. Mojtabai R, Olfson M. Proportion of antidepressants prescribed without a psychiatric diagnosis is growing. *Health Aff (Millwood)* 2011;**30**(8):1434-42 doi: 10.1377/hlthaff.2010.1024[published Online First: Epub Date]].
16. Mojtabai R. Diagnosing depression in older adults in primary care. *N Engl J Med* 2014;**370**(13):1180-2 doi: 10.1056/NEJMp1311047[published Online First: Epub Date]].
17. Wang CY, Fu SH, Wang CL, Chen PJ, Wu FL, Hsiao FY. Serotonergic antidepressant use and the risk of fracture: a population-based nested case-control study. *Osteoporos Int* 2016;**27**(1):57-63 doi: 10.1007/s00198-015-3213-z[published Online First: Epub Date]].
18. Moura C, Bernatsky S, Abrahamowicz M, et al. Antidepressant use and 10-year incident fracture risk: the population-based Canadian Multicentre Osteoporosis Study (CaMoS). *Osteoporos Int* 2014;**25**(5):1473-81 doi: 10.1007/s00198-014-2649-x[published Online First: Epub Date]].

19. Orriols L, Wilchesky M, Lagarde E, Suissa S. Prescription of antidepressants and the risk of road traffic crash in the elderly: a case-crossover study. *Br J Clin Pharmacol* 2013;**76**(5):810-5 doi: 10.1111/bcp.12090[published Online First: Epub Date] |.
20. McIntyre RS, Suppes T, Tandon R, Ostacher M. Florida Best Practice Psychotherapeutic Medication Guidelines for Adults With Major Depressive Disorder. *The Journal of clinical psychiatry* 2017;**78**(6):703-13 doi: 10.4088/JCP.16cs10885[published Online First: Epub Date] |.
21. Kennedy SH, Lam RW, McIntyre RS, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) 2016 Clinical Guidelines for the Management of Adults with Major Depressive Disorder: Section 3. Pharmacological Treatments. *Can J Psychiatry* 2016;**61**(9):540-60 doi: 10.1177/0706743716659417[published Online First: Epub Date] |.
22. APA. The American Psychiatric Association Practice Guidelines for the Psychiatric Evaluation of Adults. Third ed: American Psychiatric Association, 2016:170.
23. Mulsant BH, Blumberger DM, Ismail Z, Rabheru K, Rapoport MJ. A systematic approach to pharmacotherapy for geriatric major depression. *Clin Geriatr Med* 2014;**30**(3):517-34 doi: 10.1016/j.cger.2014.05.002[published Online First: Epub Date] |.
24. NICE. Depression in adults: recognition and management. UK: National Institute for Health and Care Excellence, 2009.
25. Kennedy SH, Lam RW, Parikh SV, Patten SB, Ravindran AV. Canadian Network for Mood and Anxiety Treatments (CANMAT) clinical guidelines for the management of major depressive disorder in adults. Introduction. *Journal of affective disorders* 2009;**117 Suppl 1**:S1-2 doi: 10.1016/j.jad.2009.06.043[published Online First: Epub Date] |.
26. Parikh SV, Segal ZV, Grigoriadis S, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) clinical guidelines for the management of major depressive disorder in adults. II. Psychotherapy alone or in combination with antidepressant medication. *Journal of affective disorders* 2009;**117 Suppl 1**:S15-25 doi: 10.1016/j.jad.2009.06.042[published Online First: Epub Date] |.
27. Lam RW, Kennedy SH, Grigoriadis S, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) clinical guidelines for the management of major depressive disorder in adults. III. Pharmacotherapy. *Journal of affective disorders* 2009;**117 Suppl 1**:S26-43 doi: 10.1016/j.jad.2009.06.041[published Online First: Epub Date] |.
28. Tamblyn R, Girard N, Dixon WG, et al. Pharmacosurveillance without borders: electronic health records in different countries can be used to address important methodological issues in estimating the risk of adverse events. *Journal of clinical epidemiology* 2016;**77**:101-11 doi: 10.1016/j.jclinepi.2016.03.033[published Online First: Epub Date] |.
29. Herrett E, Gallagher AM, Bhaskaran K, et al. Data Resource Profile: Clinical Practice Research Datalink (CPRD). *International Journal of Epidemiology* 2015;**44**(3):827-36 doi: 10.1093/ije/dyv098[published Online First: Epub Date] |.
30. Lacasse A, Ware MA, Dorais M, Lanctot H, Choiniere M. Is the Quebec provincial administrative database a valid source for research on chronic non-cancer pain? *Pharmacoepidemiology and drug safety* 2015;**24**(9):980-90 doi: 10.1002/pds.3820[published Online First: Epub Date] |.
31. ATC: Structure and Principles. Secondary ATC: Structure and Principles 2018-02-05. https://www.whocc.no/atc/structure_and_principles/.
32. Thompson ML, Myers JE, Kriebel D. Prevalence odds ratio or prevalence ratio in the analysis of cross sectional data: what is to be done? *Occupational and environmental medicine* 1998;**55**(4):272-7
33. Magrini N, Font M. Direct to consumer advertising of drugs in Europe. *BMJ* 2007;**335**(7619):526-26 doi: 10.1136/bmj.39310.506308.AD[published Online First: Epub Date] |.
34. The development and updating of local formularies, NICE good practice guidance: National Institute for Health and Clinical Excellence (NICE), 2012.
35. Technology appraisal guidance. Secondary Technology appraisal guidance. <https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance>.
36. CADTH Common Drug Review (CDR). Secondary CADTH Common Drug Review (CDR). <https://www.cadth.ca/about-cadth/what-we-do/products-services/cdr>.
37. Mansfield KE, Sim J, Jordan JL, Jordan KP. A systematic review and meta-analysis of the prevalence of chronic widespread pain in the general population. *Pain* 2016;**157**(1):55-64 doi: 10.1097/j.pain.0000000000000314[published Online First: Epub Date] |.

38. Fayaz A, Croft P, Langford RM, Donaldson LJ, Jones GT. Prevalence of chronic pain in the UK: a systematic review and meta-analysis of population studies. *BMJ Open* 2016;**6**(6) doi: 10.1136/bmjopen-2015-010364[published Online First: Epub Date]].

39. Fennema J, Petrykiv S, de Jonge L, Arts M. Efficacy and safety of antidepressants as analgesics in chronic pain: A review. *European Psychiatry* 2017;**41**:S234 doi: <https://doi.org/10.1016/j.eurpsy.2017.01.2248>[published Online First: Epub Date]].

40. Finnerup NB, Attal N, Haroutounian S, et al. Pharmacotherapy for neuropathic pain in adults: a systematic review and meta-analysis. *The Lancet Neurology* 2015;**14**(2):162-73 doi: 10.1016/S1474-4422(14)70251-0[published Online First: Epub Date]].

41. O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age and ageing 2015;**44**(2):213-8 doi: 10.1093/ageing/afu145[published Online First: Epub Date]].

42. American Geriatrics Society 2015 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. *J Am Geriatr Soc* 2015;**63**(11):2227-46 doi: 10.1111/jgs.13702[published Online First: Epub Date]].

43. Chew ML, Mulsant BH, Pollock BG, et al. Anticholinergic activity of 107 medications commonly used by older adults. *J Am Geriatr Soc* 2008;**56**(7):1333-41 doi: 10.1111/j.1532-5415.2008.01737.x[published Online First: Epub Date]].

44. Pollock BG, Mulsant BH, Nebes R, et al. Serum anticholinergic activity in elderly depressed patients treated with paroxetine or nortriptyline. *The American journal of psychiatry* 1998;**155**(8):1110-2 doi: 10.1176/ajp.155.8.1110[published Online First: Epub Date]].

45. Duran CE, Azermay M, Vander Stichele RH. Systematic review of anticholinergic risk scales in older adults. *European journal of clinical pharmacology* 2013;**69**(7):1485-96 doi: 10.1007/s00228-013-1499-3[published Online First: Epub Date]].

46. Collamati A, Martone AM, Poscia A, et al. Anticholinergic drugs and negative outcomes in the older population: from biological plausibility to clinical evidence. *Aging clinical and experimental research* 2016;**28**(1):25-35 doi: 10.1007/s40520-015-0359-7[published Online First: Epub Date]].

47. Bharadwaj P, Pai MM, Suziedelyte A. Mental health stigma. *Economics Letters* 2017;**159**:57-60 doi: <https://doi.org/10.1016/j.econlet.2017.06.028>[published Online First: Epub Date]].

48. Hunt M, Auriemma J, Cashaw ACA. Self-Report Bias and Underreporting of Depression on the BDI-II. *Journal of Personality Assessment* 2003;**80**(1):26-30 doi: 10.1207/S15327752JPA8001_10[published Online First: Epub Date]].

49. Cepoiu M, McCusker J, Cole MG, Sewitch M, Belzile E, Ciampi A. Recognition of Depression by Non-psychiatric Physicians—A Systematic Literature Review and Meta-analysis. *Journal of General Internal Medicine* 2008;**23**(1):25-36 doi: 10.1007/s11606-007-0428-5[published Online First: Epub Date]].

50. Tamblyn R, Huang A, Kawasumi Y, et al. The Development and Evaluation of an Integrated Electronic Prescribing and Drug Management System for Primary Care. *Journal of the American Medical Informatics Association* 2006;**13**(2):148-59 doi: 10.1197/jamia.M1887[published Online First: Epub Date]].

51. Eguale T, Winslade N, Hanley JA, Buckeridge DL, Tamblyn R. Enhancing Pharmacosurveillance with Systematic Collection of Treatment Indication in Electronic Prescribing. *Drug Safety* 2010;**33**(7):559-67 doi: 10.2165/11534580-000000000-00000[published Online First: Epub Date]].

52. Gelenberg AJF, M. P.; Markowitz, J. C.; Rosenbaum, J. F.; Thase, M. E.; Trivedi, M. H.; Van Rhoads, R. S. Practice Guideline for the Treatment of Patients with Major Depressive Disorder: American Psychiatric Association, 2010.

53. Treuer T, Liu CY, Salazar G, et al. Use of antidepressants in the treatment of depression in Asia: guidelines, clinical evidence, and experience revisited. *Asia Pac Psychiatry* 2013;**5**(4):219-30 doi: 10.1111/appy.12090[published Online First: Epub Date]].

54. Kirchheiner J, Nickchen K, Bauer M, et al. Pharmacogenetics of antidepressants and antipsychotics: the contribution of allelic variations to the phenotype of drug response. *Molecular Psychiatry* 2004;**9**:442 doi: 10.1038/sj.mp.4001494[published Online First: Epub Date]].

55. Jenna W, Michal A, L. BD, Robyn T. Assessing the accuracy of using diagnostic codes from administrative data to infer antidepressant treatment indications: a validation study. *Pharmacoepidemiology and drug safety*;0(0) doi: doi:10.1002/pds.4436[published Online First: Epub Date]].

BMJ Open: first published as 10.1136/bmjopen-2018-027663 on 14 May 2019. Downloaded from <http://bmjopen.bmj.com/> on June 13, 2025 at Agence Bibliographique de l'Enseignement Supérieur (ABES). Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

56. Tamblyn R, Egale T, Huang A, Winslade N, Doran P. The Incidence and Determinants of Primary Nonadherence With Prescribed Medication in Primary Care: A Cohort Study. *Annals of Internal Medicine* 2014;**160**(7):441-50 doi: 10.7326/M13-1705 [published Online First: Epub Date].
57. Gobert M, D'hoore W. Prevalence of psychotropic drug use in nursing homes for the aged in Quebec and in the French-speaking area of Switzerland. *International Journal of Geriatric Psychiatry* 2005;**20**(8):712-21 doi: 10.1002/gps.1349 [published Online First: Epub Date].
58. Beck CA, Williams JV, Wang JL, et al. Psychotropic Medication Use in Canada. *The Canadian Journal of Psychiatry* 2005;**50**(10):605-13 doi: 10.1177/070674370505001006 [published Online First: Epub Date].
59. Beck CA, Patten SB, Williams JVA, et al. Antidepressant utilization in Canada. *Social Psychiatry and Psychiatric Epidemiology* 2005;**40**(10):799 doi: 10.1007/s00127-005-0968-0 [published Online First: Epub Date].
60. Lewer D, O'Reilly C, Mojtabai R, Evans-Lacko S. Antidepressant use in 27 European countries: Associations with sociodemographic, cultural and economic factors. *British Journal of Psychiatry* 2018;**207**(3):221-26 doi: 10.1192/bjp.bp.114.156786 [published Online First: Epub Date].
61. Petty DR, House A, Knapp P, Raynor T, Zermansky A. Prevalence, duration and indications for prescribing of antidepressants in primary care. *Age and ageing* 2006;**35**(5):523-26 doi: 10.1093/ageing/af023 [published Online First: Epub Date].
62. Mark TL, Joish VN, Hay JW, Sheehan DV, Johnston SS, Cao Z. Antidepressant Use in Geriatric Populations: The Burden of Side Effects and Interactions and Their Impact on Adherence and Costs. *The American Journal of Geriatric Psychiatry* 2011;**19**(3):211-21 doi: <https://doi.org/10.1097/JGP.0b013e3181f1803d> [published Online First: Epub Date].

Table 1. Summary of Depression Guidelines

	US – APA guidelines (2010)	UK – NICE guidelines (2009)	Canada – CANMAT (2009)	Taiwan - Taiwan Association Against Depression (2012)
First line treatment	<p>Antidepressant medications for patients with mild, moderate, or severe MDD, especially patients with a history of prior positive response, moderate to severe symptoms, significant sleep or appetite disturbances, agitation, patient preference, etc.</p> <p><u>Psychotherapy</u> for patients with mild/moderate MDD, especially in the presence of significant psychosocial stressors, intrapsychic conflict, interpersonal difficulties, a co-occurring Axis II disorder, treatment availability, or patient preference.</p> <p>The <u>combination of psychotherapy and antidepressant medication</u> for patients with moderate to severe MDD, as well as in milder cases for patients with psychosocial or interpersonal problems, intrapsychic conflict, or co-occurring Axis II disorder.</p>	<p>For patients with persistent subthreshold depressive symptoms or mild to moderate depression, first-line treatment is <u>low-intensity psychosocial interventions</u>. Antidepressants should only be considered for patients with a past history of moderate or severe depression, initial presentation of symptoms that have been present for a long period (at least 2 years), or subthreshold depressive symptoms or mild depression that persists after other interventions.</p> <p>For patients with persistent subthreshold depressive symptoms or mild to moderate depression with inadequate response to initial interventions, an <u>antidepressant or a high-intensity psychological intervention</u> should be considered.</p> <p>For patients with moderate or severe depression, a <u>combination of antidepressant medication and a high-intensity psychological intervention</u> should be provided.</p>	<p>Second-generation antidepressants are first line treatments for patients with a major depressive episode of moderate or greater severity.</p> <p>First line treatments for individuals with depression of mild severity include <u>cognitive behavioral therapy (CBT)</u> and <u>interpersonal therapy (IPT)</u>.</p> <p><u>Psychotherapy</u> should be considered for patients with treatment resistant depression.</p>	<p>Pharmacotherapy (preferred) or <u>psychotherapy</u></p>
Pharmacotherapy first-line treatment	<p>Antidepressant selection should be based on the tolerability, safety, and cost of the medication, as well as patient preference and history of prior medication treatment.</p> <p>SSRIs, SNRIs, mirtazapine, and bupropion are optimal for most patients.</p> <p>MAOIs are limited to patients who do not respond to other treatments.</p>	<p>Prescribed antidepressant should normally be an SSRI in a generic form.</p> <p>When prescribing drugs other than SSRIs, the following should be considered:</p> <ul style="list-style-type: none">• The increased likelihood of the person stopping treatment because of side effects (and the consequent need to increase the dose gradually) with venlafaxine, duloxetine and TCAs.• The specific cautions, contraindications, and monitoring requirements for some drugs• Non-reversible MAOIs, such as phenelzine, should normally be prescribed only by specialist mental health professionals.• Dosulepin should not be prescribed	<p>Choice of antidepressant should be based on patient factors (clinical features, patient preference, etc.) and medication factors (drug-drug interactions, cost, availability, efficacy and tolerability etc.).</p> <p>First-line treatments include SSRIs, SNRIs, agomelatine, bupropion, mirtazapine, mianserin and vortioxetine.</p> <p>Second-line treatments include TCAs, quetiapine and trazodone, moclobemide and selegiline, levomilnacipran, and vilazodone.</p> <p>Third-line treatments include MAOIs and reboxetine.</p>	<p>SSRIs, SNRIs, or any one of the newer antidepressive agents except MAOIs.</p>

Table 2 Comparisons in the Cumulative Incidence and Prevalence of Episodes of Antidepressant Use in Adults 65 Years of Age or Older Between Regions and Countries

Elderly Population	Canada			United States	United Kingdom	Taiwan
	Ontario Sample (Admin. Data) ^{1,3}	Montreal Sample (Admin. Data) ^{1,3}	Quebec City & Mtl (EMR Data) ²	Boston (EMR Data) ²	CPRD Sample (EMR Data) ^{2,3}	NHIRDB (Admin. Data) ¹
Total Population Elderly	405,141	120,777	28,273	83,394	244,333	103,400
All Users of Antidepressants⁵						
Number of Users	108,577	23,422	4,450	17,359	24,885	24,239
Prevalence in Elderly (%)	26.8%	19.4%	15.7%	20.8%	10.2%	23.4%
New Episodes of Antidepressant Use⁴						
Number of New Users	60,366	13,303	1,308	10,131	15,881	17,580
Incidence in Elderly (%)	14.9%	11.0%	4.6%	12.2%	6.5%	17.0%
Age Standardized Incidence (%)	15.3%	12.1%	4.7%	12.3%	6.6% (ref. 100)	18.6%
Sex Standardized Incidence (%)	14.9%	11.0%	4.6%	12.1%	6.6% (ref. 100)	17.0%
Demographics						
Between 65 – 74 years old	32,115 (53.2%)	5,713 (42.9%)	699 (53.4%)	5,826 (57.5%)	7,129 (46.8%)	8,811 (50.1%)
75 years or older	28,251 (46.8%)	7,590 (57.1%)	609 (46.6%)	4,305 (42.5%)	8,739 (55.5%)	8,769 (49.9%)
% Female	36,884 (61.1%)	8,986 (67.5%)	853 (65.2%)	6,136 (60.6%)	10,041 (63.1%)	9,539 (54.3%)

¹Administrative data is retrieved from population-based health insurance claims for medical visits, and prescriptions.

²EMR data are extracted from primary care clinic electronic health records in the USA (Partners Inc.), Quebec (MOXXI), and the United Kingdom (Primary Practice Research Database)

³Ontario represents a 20% random sample of elderly, Montreal represents a 25% annual random sample of Montreal residents, and the United Kingdom is a 10% random sample of elderly in the CPRD

⁴New Episodes of Use of Antidepressants were defined as no prescription or dispensing of an antidepressant in the two years prior to the first antidepressant in the period 2009-2014

⁵All users include persons with an active prescription or dispensed supply of antidepressants between 2007-2008 as well as all new users between the period 2009-2014

Table 3 Frequency Distribution of the First Antidepressant Prescribed for New Antidepressant Users by Therapeutic Class by Country and Jurisdiction

Antidepressant	Canada			United States	United Kingdom	Taiwan
	Ontario Sample	Montreal Sample	Quebec City & Mtl	Boston	CPHR	NHIRDB
	(N=60,366 patients N=61,696 Rx)	(N=13,303 patients N=14,217 Rx)	(N=1,308 patients N=1,324 Rx)	(N=10,131 patients N=10,586 Rx)	(N=15,868 patients N=15,958 Rx)	(N=17,580 patients N=17,790 Rx)
	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)
Selective Serotonin Reuptake Inhibitors						
Citalopram	8,760 (14.2%)	4,708 (33.1%)	410 (30.9%)	2,117 (19.9%)	32 (26.4%)	335 (1.8%)
Escitalopram	9,000 (14.6%)	1 (0.0%)	73 (5.5%)	438 (4.1%)	145 (0.9%)	825 (4.6%)
Fluoxetine	697 (1.1%)	114 (0.8%)	8(0.6%)	1,156 (10.9%)	76 (5.4%)	773 (4.3%)
Fluvoxamine	172 (0.3%)	44 (0.3%)	6 (0.4%)	29 (0.2%)	1 (0.0%)	101 (0.5%)
Paroxetine	1,924 (3.1%)	515 (3.6%)	23 (1.7%)	432 (4.0%)	92 (0.5%)	435 (2.4%)
Sertraline	2,561 (4.2%)	640 (4.5%)	132 (20.2%)	1,481 (13.9%)	90 (6.1%)	1,174 (32.2%)
Subtotal	23,114 (37.4%)	6,022 (42.3%)	652 (49.2%)	5,653 (53.3%)	6 (39.6%)	3,643 (20.4%)
Selective Noradrenaline Reuptake Inhibitors						
Desvenlafaxine	0 (0.0%)	1 (0.0%)	4 (0.3%)	28 (0.2%)	-	-
Duloxetine	3,190 (5.2%)	161 (1.1%)	57 (4.3%)	267 (2.5%)	56 (0.9%)	241 (1.3%)
Milnacipran	0 (0.0%)	-	-	2 (0.0%)	-	18 (0.1%)
Venlafaxine	3,323 (5.4%)	1,514 (10.6%)	105 (7.9%)	434 (4.0%)	44 (0.8%)	206 (1.1%)
Subtotal	6,513 (10.5%)	1,676 (11.7%)	166 (12.5%)	731 (6.9%)	90 (1.8%)	465 (2.6%)
Tricyclic Antidepressants						
Amitriptyline	10,448 (16.9%)	2,629 (18.4%)	120 (9.0%)	796 (7.5%)	7,35 (45.4%)	1,181 ((6.6%)
Dosulepin	-	-	-	-	77 (1.1%)	25 (0.2%)
Imipramine	-	-	-	32(0.3%)	54 (0.3%)	7,340 (41.2%)
Nortriptyline	3,158 (5.1%)	95(0.6%)	18 (1.3%)	566 (5.3%)	208 (1.3%)	-
Other TCAs	1,860 (12.0%)	263 (1.8%)	24 (1.8%)	117 (1.1%)	113 (0.7%)	778 (4.4%)
Subtotal	15,466 (25.0%)	2,987 (21.0%)	162 (12.2%)	1,511 (14.2%)	7,897 (48.8%)	9,324 (52.4%)
Serotonin Antagonist & Reuptake Inhibitors						
Trazodone	12,373 (20.1%)	2,362 (16.6%)	192 (14.5%)	1,279 (12.0%)	60 (2.2%)	3,574 (20.0%)
Norepinephrine-Dopamine Reuptake Inhibitors						
Bupropion	1,406 (2.3%)	278 (1.9%)	49 (3.7%)	1,056 (9.9%)	34 (0.2%)	215 (1.2%)
Noradrenergic Serotonin Specific Antidepressants						
Mirtazapine	2,819 (4.6%)	892 (6.2%)	103 ((7.7%)	354 (3.3%)	1,41 (7.1%)	535 (3.0%)
Subtotal	16,598 (26.9%)	3,532 (24.8%)	344 (26.0%)	2,689 (25.4%)	1,335 (9.6%)	4,324 (24.3%)
Other Antidepressants	5 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.0%)	2 (0.0%)	34 (0.2%)

1. Other tricyclic antidepressants include Amoxapine, Clomipramine, Desipramine, Doxepin, Lofepramine, and Trimipramine
2. Other antidepressants include Nefazodone, Maprotiline, Agomelatine, and Roboxetine

Table 4 The Prevalence of Potential Therapeutic Indications; Depression, Other Mental Health Problems, and Chronic Pain Among New Antidepressant Users, and the Proportion of Persons with Depression who had Other Concurrent Mental Health Problems or Pain by Jurisdiction

	Canada			USA	United Kingdom	Taiwan
	Ontario Sample (N=60,366 patients)	Montreal Sample (N=13,303 patients)	Quebec City & Mtl (N=1,308 patients)	Boston (N=10,131 patients)	PRISM (N=15,668 patients)	NHIRDB (N=17,580 patients)
Depression						
Prevalence, N (%)	7,484 (12.4%)	2333 (17.5%)	563 (43.0%)	2203 (21.7%)	2477 (15.8%)	1603 (9.1%)
Alcohol/Drug Abuse						
Prevalence, N (%)	1989 (3.3%)	326 (2.5%)	23 (1.8%)	290 (2.9%)	418 (2.6%)	224 (1.3%)
Abuse in Depressed, N (%)	450 (6.0%)	97 (4.2%)	12 (2.1%)	194 (8.8%)	799 (5.1%)	25 (1.6%)
Prevalence Ratio	2.1	2.0	1.4	7.3		1.3
Anxiety						
Prevalence, N (%)	23374 (38.7%)	3641 (27.4%)	465 (35.6%)	1798 (17.7%)	1911 (12.2%)	6277 (35.7%)
Anxiety in Depressed, N (%)	3684 (49.2%)	807 (34.6%)	218 (38.7%)	905 (41.1%)	588 (3.8%)	767 (47.8%)
Prevalence Ratio	1.3	1.3	1.2	3.6		1.4
Major Mental Illness						
Prevalence, N (%)	2627 (4.4%)	692 (5.2%)	50 (3.8%)	502 (5.0%)	259 (1.6%)	570 (3.2%)
Mental Ill. In Depressed, N (%)	1473 (19.7%)	225 (9.6%)	23 (4.1%)	323 (14.7%)	79 (0.5%)	95 (5.9%)
Prevalence Ratio	9.0	2.3	1.1	6.5		2.0
Suicide Attempt						
Prevalence, N (%)	101 (0.2%)	30 (0.2%)	-	72 (0.7%)	12 (0.0%)	6 (0.0%)
Suicide Att. in Depressed, N (%)	80 (1.1%)	8 (0.3%)	-	67 (3.0%)	6 (2.7%)	2 (0.1%)
Prevalence Ratio	26.9	1.7	-	48.2	5.8	5.0
Chronic Pain						
Prevalence, N (%)	28687 (47.5%)	6379 (48.0%)	571 (43.7%)	5200 (51.3%)	653 (4.1%)	11994 (68.2%)
Pain in Depressed, N (%)	3591 (48.0%)	1105 (47.4%)	235 (41.7%)	1365 (62.0%)	102 (4.1%)	994 (62.0%)
Prevalence Ratio	1.0	1.0	0.9	1.3	1.0	0.9

Table 5 Starting Therapy for New Users of Antidepressants by Potential Therapeutic Indication by Therapeutic Class and Country

Therapeutic Class	Canada			United States	United Kingdom	Taiwan
	Ontario Sample (N=60,366 patients)	Montreal Sample (N=13,303 patients)	Quebec City & Mtl (N=1,308 patients)	Boston (N=10,131 patients)	CRD (N=5,863 patients)	NHIRDB (N=17,580 patients)
	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)	N Rx (%)
Starting Therapy for Persons with a Diagnosis of Depression						
Selective Serotonin Re. Inh.	4,357 (55.2%)	1,548 (59.5%)	386 (67.5%)	1,388 (59.0%)	397 (71.4%)	930 (55.8%)
Selective Noradrenaline Re. Inh.	1,039 (13.2%)	408 (15.7%)	72 (12.6%)	162 (6.9%)	67 (2.7%)	104 (6.2%)
Tricyclic Antidepressants	647 (8.2%)	129 (5.0%)	20 (3.5%)	179 (7.6%)	19 (12.7%)	138 (8.3%)
Serotonin Antagonist & Re. Inh.	940 (11.9%)	212 (8.2%)	32 (5.6%)	269 (11.4%)	56 (2.2%)	263 (15.8%)
Norepinephrine-Dopam Re. Inh.	321 (4.1%)	81 (3.1%)	30 (5.2%)	233 (9.9%)	1 (0.0%)	43 (2.6%)
Noradrenergic serotonin specific	590 (7.5%)	224 (8.6%)	32 (5.6%)	120 (5.1%)	77 (11.0%)	184 (11.0%)
Other	1 (0.0%)	-	-	1 (0.0%)	-	4 (0.2%)
Starting Therapy for Persons with a Diagnosis of Chronic Pain						
Selective Serotonin Re. Inh.	9,823 (33.5%)	2,643 (39.0%)	268 (46.4%)	2,481 (46.1%)	85 (31.8%)	2,291 (18.9%)
Selective Noradrenaline Re. Inh.	3,516 (12.0%)	762 (11.2%)	83 (14.4%)	395 (7.3%)	95 (1.5%)	315 (2.6%)
Tricyclic Antidepressants	8,771 (29.9%)	1,863 (27.5%)	100 (17.3%)	1,176 (21.8%)	363 (60.4%)	6,703 (55.2%)
Serotonin Antagonist & Re. Inh.	5,410 (18.5%)	1,020 (15.0%)	65 (11.3%)	703 (13.0%)	89 (1.4%)	2,353 (19.4%)
Norepinephrine-Dopam Re. Inh.	551 (1.9%)	108 (1.6%)	24 (4.2%)	424 (7.9%)	17 (0.3%)	126 (1.0%)
Noradrenergic serotonin specific	1,221 (4.2%)	386 (5.7%)	38 (6.6%)	211 (3.9%)	315 (4.8%)	330 (2.7%)
Other	3 (0.0%)	-	-	2 (0.0%)	1 (0.02%)	27 (0.2%)
Starting Therapy for Persons with a Diagnosis of Other Mental Health Problems						
Selective Serotonin Re. Inh.	13,018 (49.5%)	2,459 (53.3%)	309 (61.1%)	1,384 (61.4%)	265 (45.1%)	2,212 (32.3%)
Selective Noradrenaline Re. Inh.	3,099 (11.8%)	550 (11.9%)	61 (12.1%)	147 (6.5%)	105 (1.9%)	254 (3.7%)
Tricyclic Antidepressants	3,823 (14.5%)	563 (12.2%)	28 (5.5%)	186 (8.2%)	218 (44.3%)	2,250 (32.8%)
Serotonin Antagonist & Re. Inh.	4,107 (15.6%)	591 (12.8%)	53 (10.5%)	280 (12.4%)	102 (1.8%)	1,684 (24.6%)
Norepinephrine-Dopam Re. Inh.	773 (2.9%)	98 (2.1%)	18 (3.6%)	163 (7.2%)	20 (0.4%)	126 (1.8%)
Noradrenergic serotonin specific	1,480 (5.6%)	357 (7.7%)	37 (7.3%)	94 (4.2%)	374 (6.6%)	318 (4.6%)
Other	3 (0.0%)	-	-	2 (0.1%)	1 (0.0%)	15 (0.2%)

Table 6A Characteristics of the First Antidepressant Treatment Episode Among Persons with a Diagnosis of Depression

Characteristics	Canada				United States				United Kingdom	Taiwan
	Ontario		Montreal Sample		Quebec City & Mtl		Boston		CES-D	NHIRDB
	N	%	N	%	N	%	N	%	N	%
All patients	4,407	100%	1,221	100%	324	100%	1,259	100%	2,152	100%
No treatment change	2,383	54%	680	56%	220	68%	757	60%	1,117	61%
Treatment change	2,024	46%	541	44%	104	32%	502	40%	1,035	39%
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
All patients										
Dose*	1.3	1.0	0.9	0.6	0.9	0.5	1.3	0.8	0.5	0.4
Duration (days)	519.5	285.1	462.5	298.9	467.7	255.0	395.6	266.2	309.9	248.0
No treatment change**										
Dose	0.9	0.7	0.7	0.4	0.8	0.4	1.0	0.9	0.4	0.4
Duration (days)	289.1	309.6	246.3	290.4	340.9	243.2	225.7	212.3	122.0	179.7
Treatment change**										
Dose	1.5	1.0	1.0	0.6	1.1	0.6	1.4	0.8	0.6	0.4
Duration (days)	616.9	209.8	569.0	240.8	574.7	213.9	507.7	239.4	407.6	260.2
	N	%	N	%	N	%	N	%	N	%
Type of changes***										
Added molecule (different class)	796	18%	139	11%	31	10%	125	10%	25	6%
Added molecule (same class)	174	4%	22	2%	6	2%	42	3%	54	3%
Dose decrease	921	21%	246	20%	38	12%	151	12%	107	19%
Dose increase	1,464	33%	387	32%	64	20%	348	28%	111	28%
Removed molecule (different class)	710	16%	132	11%	26	8%	34	3%	19	1%
Removed molecule (same class)	178	4%	23	2%	5	2%	6	0%	6	0%
Switch class	10	0%	48	4%	-	-	56	4%	70	3%
Switch molecule (same class)	5	0%	11	1%	-	-	19	2%	24	1%

*Dose is the proportion of the WHO recommended daily dose (dose prescribed/recommended daily dose)

**Treatment change in the first antidepressant episode, defined as continuous therapy with gaps of no greater than 90 days

***Patients can have >1 type of change in the episode of antidepressant use.

Table 6B. Characteristics of the First Antidepressant Treatment Episode Among Persons with a Diagnosis of Chronic Pain

Characteristics	Canada						United States		United Kingdom	Taiwan	
	Ontario		Montreal Sample		Quebec City & Mtl		Boston		UK RD	NHIRDB	
	N	%	N	%	N	%	N	%	%	N	%
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	SD	Mean	SD
All patients, all changes	16045	100%	3276	100%	349	100%	2657	100%	5368	6029	100%
No treatment change	10650	66%	2220	68%	261	75%	1793	67%	4014	4761	79%
Treatment change	5395	34%	1056	32%	88	25%	864	33%	1354	1268	21%
All patients, all changes											
Dose*	0.9	0.7	0.7	0.5	0.8	0.6	1.0	0.8	0.5	0.5	0.4
Duration (days)	416.3	312.8	407.8	313.7	437.0	263.6	384.6	261.7	270.8	168.9	227.3
No treatment change**											
Dose	0.6	0.5	0.4	0.3	0.6	0.5	0.8	0.7	0.4	0.4	0.3
Duration (days)	198.7	271.4	202.1	270.2	300.9	238.6	247.4	223.3	192	83.6	154.6
Treatment change**											
Dose	1	0.7	0.8	0.5	1.0	0.6	1.1	0.7	0.5	0.5	0.4
Duration (days)	534.6	260.5	534.7	265.1	590.0	201.5	482.2	239.6	266.9	264.4	252.8
Type of changes***	N	%	N	%	N	%	N	%	%	N	%
Added molecule (different class)	1776	11%	267	8%	30	9%	189	7%	15	245	4%
Added molecule (same class)	375	2%	31	1%	5	1%	69	3%	9	90	1%
Dose decrease	2291	14%	455	14%	32	9%	243	9%	62	569	9%
Dose increase	3980	25%	818	25%	58	17%	611	23%	103	809	13%
Removed molecule (different class)	1547	10%	245	7%	26	7%	47	2%	14	262	4%
Removed molecule (same class)	372	2%	32	1%	4	1%	6	0%	14	95	2%
Switch class	30	0%	120	4%	-	-	92	3%	7	15	0%
Switch molecule (same class)	22	0%	30	1%	-	-	27	1%	2	4	0%

*Dose is the proportion of the WHO recommended daily dose (dose prescribed/recommended daily dose)
**Treatment change in the first antidepressant episode, defined as continuous therapy with gaps of no greater than 90 days
***Patients can have >1 type of change in the episode of antidepressant use.

136/bmjopen-2018-020662 on 14 May 2019. Downloaded from <http://bmjopen.bmj.com/> by June 13, 2025 at Agence Bibliographique de l'Enseignement Supérieur (A.B.E.S.). All rights reserved. No reuse allowed without permission. For peer review only - <http://bmjopen.bmj.com/site/about/guidelines.xhtml>

APPENDIX**DEPRESSION****At least one ICD-9 in:**

311	Depressive disorder, not elsewhere classified
296.2	Major depressive disorder, single episode
296.3	Major depressive disorder, recurrent episode
309	Adjustment reaction
309.0	Adjustment disorder with depressed mood
309.1	Prolonged depressive reaction
309.2	With predominant disturbance of other emotions
309.3	Adjustment disorder with disturbance of conduct
309.4	Adjustment disorder with mixed disturbance of emotions and conduct
309.8	Other specified adjustment reactions
309.9	Unspecified adjustment reaction

OR

At least one ICD-10 in:

F32	Depressive episode
F32.0	Mild depressive episode
F32.1	Moderate depressive episode
F32.2	Severe depressive episode without psychotic symptoms
F32.3	Severe depressive episode with psychotic symptoms
F32.8	Other depressive episodes
F32.9	Depressive episode, unspecified
F33	Recurrent depressive disorder
F33.0	Recurrent depressive disorder, current episode mild
F33.1	Recurrent depressive disorder, current episode moderate
F33.2	Recurrent depressive disorder, current episode severe without psychotic symptoms
F33.3	Recurrent depressive disorder, current episode severe with psychotic symptoms
F33.4	Recurrent depressive disorder, currently in remission
F33.8	Other recurrent depressive disorders
F33.9	Recurrent depressive disorder, unspecified
F41.2	Mixed anxiety and depressive disorder

OR

At least one READ code in:†:

E2B..00	Depressive disorder NEC	Eu32311	[X]Single episode of major depression and psychotic symptoms
Eu32z11	[X]Depression NOS	E113400	Recurrent major depressive episodes, severe, with

1	E112.14	Endogenous depression	psychosis
2	E200300	Anxiety with depression	E113z00 Recurrent major depressive episode NOS
3			E113300 Recurrent major depressive episodes, severe, no
4			psychosis
5	E135.00	Agitated depression	E11y200 Atypical depressive disorder
6	E204.00	Neurotic depression reactive type	E001300 Presenile dementia with depression
7	E290.00	Brief depressive reaction	Eu02z16 [X] Senile dementia, depressed or paranoid type
8	2257.00	O/E - depressed	Eu32z13 [X]Prolonged single episode of reactive depression
9	1B17.00	Depressed	Eu33.14 [X]Seasonal depressive disorder
10	E11..12	Depressive psychoses	Eu32314 [X]Single episode of reactive depressive psychosis
11	E204.11	Postnatal depression	E113100 Recurrent major depressive episodes, mild
12	1465.00	H/O: depression	Eu33100 [X]Recurrent depressive disorder, current episode
13			moderate
14	62T1.00	Puerperal depression	R007z13 [D]Postoperative depression
15	Eu32z00	[X]Depressive episode, unspecified	Eu33000 [X]Recurrent depressive disorder, current episode
16			mild
17			Eu33314 [X]Recurr severe episodes/psychogenic depressive
18	E2B0.00	Postviral depression	psychosis
19			E112400 Single major depressive episode, severe, with
20	Eu32z12	[X]Depressive disorder NOS	psychosis
21			Eu92000 [X]Depressive conduct disorder
22	Eu33.00	[X]Recurrent depressive disorder	Eu33313 [X]Recurr severe episodes/major
23	E2B1.00	Chronic depression	depression+psychotic symptom
24			Eu33200 [X]Recurr depress disorder cur epi severe without
25	Eu32.00	[X]Depressive episode	psyc sympt
26			E112000 Single major depressive episode, unspecified
27	1B17.11	C/O - feeling depressed	E113000 Recurrent major depressive episodes, unspecified
28	Eu53012	[X]Postpartum depression NOS	E290z00 Brief depressive reaction NOS
29	E112.11	Agitated depression	Eu33z11 [X]Monopolar depression NOS
30	Eu32z14	[X] Reactive depression NOS	Eu33316 [X]Recurrent severe episodes/reactive depressive
31	E113700	Recurrent depression	psychosis
32			E002z00 Senile dementia with depressive or paranoid
33			features NOS
34	E112.12	Endogenous depression first episode	Eu32211 [X]Single episode agitated depressn w/out
35			psychotic symptoms
36	Eu32y00	[X]Other depressive episodes	E004300 Arteriosclerotic dementia with depression
37			E112500 Single major depressive episode, partial or unspec
38	E113.11	Endogenous depression - recurrent	remission
39	E112.13	Endogenous depression first episode	Eu33z00 [X]Recurrent depressive disorder, unspecified
40			E002.00 Senile dementia with depressive or paranoid
41			features
42	E112z00	Single major depressive episode NOS	E02y300 Drug-induced depressive state
43	Eu32.13	[X]Single episode of reactive depression	Eu33300 [X]Recurrent depress disorder cur epi severe with
44			psyc symp
45	Eu34113	[X]Neurotic depression	Eu33y00 [X]Other recurrent depressive disorders
46	Eu41211	[X]Mild anxiety depression	Eu32312 [X]Single episode of psychogenic depressive
47			psychosis
48	Eu34100	[X]Dysthymia	E113600 Recurrent major depressive episodes, in full
49	Eu34111	[X]Depressive neurosis	remission
50			E113500 Recurrent major depressive
51			episodes,partial/unspec remission
52	Eu33.15	[X]SAD - Seasonal affective disorder	Eu32y12 [X]Single episode of masked depression NOS
53			
54	Eu33.11	[X]Recurrent episodes of depressive	
55		reaction	
56	Eu33.13	[X]Recurrent episodes of reactive	
57		depression	
58			
59			
60			

Eu32.11	[X]Single episode of depressive reaction	E112600	Single major depressive episode, in full remission
E11z200	Masked depression	Eu32213	[X]Single episode vital depression w/out psychotic symptoms
Eu32100	[X]Moderate depressive episode	Eu33214	[X]Vital depression, recurrent without psychotic symptoms
Eu32200	[X]Severe depressive episode without psychotic symptoms	Eu32600	[X]Major depression, moderately severe
1B1U.00	Symptoms of depression	Eu32500	[X]Major depression, mild
1BT..00	Depressed mood	Eu32700	[X]Major depression, severe without psychotic symptoms
1B1U.11	Depressive symptoms	Eu32800	[X]Major depression, severe with psychotic symptoms
E112.00	Single major depressive episode	Eu32900	[X]Single major depr ep, severe with psych, psych in remiss
Eu32400	[X]Mild depression	Eu32A00	[X]Recurr major depr ep, severe with psych, psych in remiss
Eu32y11	[X]Atypical depression	Eu32B00	[X]Antenatal depression
E118.00	Seasonal affective disorder	Eu34114	[X]Persistant anxiety depression
Eu33212	[X]Major depression, recurrent without psychotic symptoms	E112100	Single major depressive episode, mild
Eu33211	[X]Endogenous depression without psychotic symptoms	E291.00	Prolonged depressive reaction
Eu32000	[X]Mild depressive episode	Eu33315	[X]Recurrent severe episodes of psychotic depression
Eu41200	[X]Mixed anxiety and depressive disorder	Eu32.12	[X]Single episode of psychogenic depression
Eu32300	[X]Severe depressive episode with psychotic symptoms	Eu3y111	[X]Recurrent brief depressive episodes
Eu53011	[X]Postnatal depression NOS	Eu33.12	[X]Recurrent episodes of psychogenic depression
E113200	Recurrent major depressive episodes, moderate	Eu20400	[X]Post-schizophrenic depression
E113.00	Recurrent major depressive episode	E002100	Senile dementia with depression
E112200	Single major depressive episode, moderate	Eu33400	[X]Recurrent depressive disorder, currently in remission
E112300	Single major depressive episode, severe, without psychosis	Eu32212	[X]Single episode major depression w/out psychotic symptoms
Eu32313	[X]Single episode of psychotic depression	Eu33311	[X]Endogenous depression with psychotic symptoms

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ANXIETY

At least one ICD-9 in:	
300	Anxiety, dissociative and somatoform disorders

OR

At least one ICD-10 in:	
F40	Phobic anxiety disorders
F41	Other anxiety disorders (except F41.2)
F42	Obsessive-compulsive disorder
F43	Reaction to severe stress, and adjustment disorders
F44	Dissociative and conversion disorders
F45	Somatoform disorders
F48	Other nonpsychotic mental disorders

OR

At least one READ code in:			
1B13.00	Anxiousness	Eu42.11	[X]Anankastic neurosis
E28..00	Acute reaction to stress	Eu45213	[X]Hypochondriacal neurosis
E200111	Panic attack	Eu93100	[X]Phobic anxiety disorder of childhood
E200.00	Anxiety states	Eu45000	[X]Somatization disorder
E200300	Anxiety with depression	E201C00	Phantom pregnancy
E20z.11	Nervous breakdown	E201z12	Ataxia - hysterical
Eu41111	[X]Anxiety neurosis	E283100	Acute posttrauma stress state
E202B00	Cancer phobia	Eu41z11	[X]Anxiety NOS
E205.11	Nervous exhaustion	E28z.00	Acute stress reaction NOS
E202800	Claustrophobia	Z4I7211	Reducing anxiety
E200400	Chronic anxiety	E29y400	Adjustment reaction due to hospitalisation
E202.00	Phobic disorders	Eu44.13	[X]Hysteria
E203100	Obsessional neurosis	Eu44600	[X]Dissociative anaesthesia and sensory loss
E201.00	Hysteria	Eu40y00	[X]Other phobic anxiety disorders
E202000	Phobia unspecified	E28z.13	Stage fright
E202C00	Dental phobia	Eu46.00	[X]Other neurotic disorders
Eu40000	[X]Agoraphobia	E202600	Acrophobia
E29..00	Adjustment reaction	E28z.11	Examination fear
E264200	Cyclical vomiting - psychogenic	Eu41y11	[X]Anxiety hysteria
E202100	Agoraphobia with panic attacks	E292312	Specific work inhibition
E203.00	Obsessive-compulsive disorders	Z4I7200	Alleviating anxiety
E205.00	Neurasthenia - nervous debility	E202700	Animal phobia
1466.00	H/O: anxiety state	E201B00	Compensation neurosis
E201100	Hysterical blindness	Eu45413	[X]Psychogenic headache
E20y100	Writer's cramp neurosis	E262.00	Psychogenic cardiovascular symptoms
E264400	Psychogenic dyspepsia	E263.00	Psychogenic skin symptoms
E200100	Panic disorder	E283z00	Other acute stress reaction NOS
Eu41012	[X]Panic state	Eu93200	[X]Social anxiety disorder of childhood

E201z11	Aphonia - hysterical	Eu45400	[X]Persistent somatoform pain disorder
E201612	Globus hystericus	Eu45212	[X]Dysmorphophobia nondelusional
E202A0	Fear of flying	E262300	Psychogenic cardiovascular disorder
0			
Eu43100	[X]Post - traumatic stress disorder	E264.00	Psychogenic gastrointestinal tract symptoms
E26..00	Physiological malfunction arising from mental factors	Eu43z00	[X]Reaction to severe stress, unspecified
E201700	Hysterical amnesia	E2D0.00	Disturbance of anxiety and fearfulness childhood/adolescent
E200z00	Anxiety state NOS	E202900	Fear of crowds
E200500	Recurrent anxiety	E202400	Social phobia, fear of public speaking
E200200	Generalised anxiety disorder	E261000	Psychogenic air hunger
E201800	Hysterical fugue	Eu43111	[X]Traumatic neurosis
E264000	Psychogenic aerophagy	E29y100	Other post-traumatic stress disorder
E26z.00	Psychosomatic disorder NOS	Eu45312	[X]Da Costa's syndrome
E20..00	Neurotic disorders	E201511	Fit - hysterical
Eu42.00	[X]Obsessive - compulsive disorder	Eu40z00	[X]Phobic anxiety disorder, unspecified
E206.00	Depersonalisation syndrome	E261z00	Psychogenic respiratory symptom NOS
Eu41.00	[X]Other anxiety disorders	E201400	Hysterical paralysis
E203000	Compulsive neurosis	Eu45111	[X]Undifferentiated psychosomatic disorder
1B13.11	Anxiousness - symptom	Eu44400	[X]Dissociative motor disorders
E202E00	Fear of pregnancy	Eu44.11	[X]Conversion hysteria
E293000	Adjustment reaction with aggression	E2D0z00	Disturbance anxiety and fearfulness childhood/adolescent NOS
E292000	Separation anxiety disorder	E2D0000	Childhood and adolescent overanxiousness disturbance
Eu41011	[X]Panic attack	E29y200	Adjustment reaction with physical symptoms
E200000	Anxiety state unspecified	Eu41112	[X]Anxiety reaction
Eu40z11	[X]Phobia NOS	E293100	Adjustment reaction with antisocial behaviour
Eu45200	[X]Hypochondriacal disorder	Eu45y14	[X]Psychogenic torticollis
E29y300	Elective mutism due to an adjustment reaction	Eu45414	[X]Somatoform pain disorder
Eu41211	[X]Mild anxiety depression	Eu43211	[X]Culture shock
Eu43015	[X]Psychic shock	Eu43011	[X]Acute crisis reaction
Eu41000	[X]Panic disorder [episodic paroxysmal anxiety]	E29z.00	Adjustment reaction NOS
Eu46100	[X]Depersonalization - derealization syndrome	E264.11	Globus abdominalis
Eu40.00	[X]Phobic anxiety disorders	E261.00	Psychogenic respiratory symptoms
Eu46011	[X]Fatigue syndrome	Eu45412	[X]Psychogenic backache
Eu40200	[X]Specific (isolated) phobias	E283.00	Other acute stress reactions
E202.12	Phobic anxiety	Eu42y00	[X]Other obsessive-compulsive disorders
Eu41100	[X]Generalized anxiety disorder	E20y200	Other occupational neurosis
E202D0	Fear of death	Eu44300	[X]Trance and possession disorders
0			
Eu43012	[X]Acute reaction to stress	Eu44100	[X]Dissociative fugue
Eu43.00	[X]Reaction to severe stress, and adjustment disorders	Eu44y12	[X]Multiple personality
Eu40213	[X]Claustrophobia	E201z13	Ganser's syndrome - hysterical
Eu43200	[X]Adjustment disorders	E278.00	Psychalgia
Eu46y13	[X]Occupational neurosis, including writer's cramp	Eu44000	[X]Dissociative amnesia
Eu44511	[X]Pseudoseizures	Eu45300	[X]Somatoform autonomic dysfunction
Eu40100	[X]Social phobias	Eu43213	[X]Hospitalism in children

1	Eu43000	[X]Acute stress reaction	E29y.00	Other adjustment reactions
2	146G.00	H/O: agoraphobia	E201000	Hysteria unspecified
3	1B1V.00	C/O - panic attack	E261500	Psychogenic aphonia
4	Eu41200	[X]Mixed anxiety and depressive disorder	E20y.00	Other neurotic disorders
5	E280.00	Acute panic state due to acute stress reaction	E2z..00	Neuroses or other mental disorder NOS
6				
7	Eu44411	[X]Psychogenic aphonia	E281.00	Acute fugue state due to acute stress reaction
8	Eu45500	[X]Globus pharyngeus	Eu40112	[X]Social neurosis
9	Eu40300	[X]Needle phobia	E20yz00	Other neurotic disorder NOS
10	Eu40214	[X]Simple phobia	E201900	Multiple personality
11	Eu45316	[X]Psychogenic cough	Eu45317	[X]Psychogenic diarrhoea
12	Eu45322	[X]Psychogenic hyperventilat	E28..11	Combat fatigue
13	E202200	Agoraphobia without mention of panic attacks	E260.00	Psychogenic musculoskeletal symptoms
14				
15	2258.00	O/E - anxious	Eu45311	[X]Cardiac neurosis
16	E202z00	Phobic disorder NOS	Eu41300	[X]Other mixed anxiety disorders
17	E20z.00	Neurotic disorder NOS	Eu46y00	[X]Other specified neurotic disorders
18	Eu40012	[X]Panic disorder with agoraphobia	E265200	Psychogenic dysmenorrhea
19	E262z00	Psychogenic cardiovascular symptom NOS	Eu46y16	[X]Psychogenic syncope
20	E260z00	Psychogenic musculoskeletal symptoms NOS	E201200	Hysterical deafness
21	Eu34114	[X]Persistant anxiety depression	E278200	Psychogenic backache
22	E263z00	Psychogenic skin symptoms NOS	E294.00	Adjustment reaction with disturbance emotion and conduct
23				
24	E262200	Neurocirculatory asthenia	E201611	Astasia - abasia, hysterical
25	E262000	Cardiac neurosis	Eu44y11	[X]Ganser's syndrome
26	E20y000	Somatization disorder	Eu45y11	[X]Psychogenic dysmenorrhoea
27	E264300	Psychogenic diarrhoea	E203.11	Anancastic neurosis
28	E201600	Other conversion disorder	Eu46y12	[X]Dhat syndrome
29	E261100	Psychogenic cough	Eu45320	[X]Psychogenic flatulence
30	E282.00	Acute stupor state due to acute stress reaction	E261200	Psychogenic hiccough
31				
32	E203z00	Obsessive-compulsive disorder NOS	E260000	Psychogenic paralysis
33	E292z00	Adjustment reaction with disturbance of other emotion NOS	E292y00	Adjustment reaction with mixed disturbance of emotion
34				
35	E264500	Psychogenic constipation	Eu45z00	[X]Somatoform disorder, unspecified
36	E263000	Psychogenic pruritus	Eu44z00	[X]Dissociative [conversion] disorder, unspecified
37				
38	E202300	Social phobia, fear of eating in public	Eu46z00	[X]Neurotic disorder, unspecified
39	E293.00	Adjustment reaction with predominant disturbance of conduct	E2y..00	Other specified neuroses or other mental disorders
40				
41	E201500	Hysterical seizures	Eu44611	[X]Psychogenic deafness
42	Eu45324	[X]Psychogenic IBS	Eu41113	[X]Anxiety state
43	Eu46000	[X]Neurasthenia	Eu45314	[X]Neurocirculatory asthenia
44	E202.11	Social phobic disorders	Eu44.12	[X]Conversion reaction
45	Eu45y13	[X]Psychogenic pruritis	Eu45319	[X]Psychogenic dysuria
46	Eu45318	[X]Psychogenic dyspepsia	E29y000	Concentration camp syndrome
47	Eu40011	[X]Agoraphobia without history of panic disorder	Eu45321	[X]Psychogenic hiccough
48				
49	Eu44y13	[X]Psychogenic confusion	E278000	Psychogenic pain unspecified
50	Eu45323	[X]Psychogenic freq micturit	E278z00	Psychalgia NOS
51	Eu51511	[X]Dream anxiety disorder	Eu45411	[X]Psychalgia
52	Eu93000	[X]Separation anxiety disorder of childhood	E292200	Early adult emancipation disorder
53	Eu45.00	[X]Somatoform disorders	E265300	Psychogenic dysuria
54	Eu40212	[X]Animal phobias	Eu44200	[X]Dissociative stupor
55				
56				
57				
58				
59				

Eu42200	[X]Mixed obsessional thoughts and acts	E260100	Psychogenic torticollis
E202500	Social phobia, fear of public washing	E292400	Adjustment reaction with anxious mood
Eu44412	[X]Psychogenic dysphonia	E20y011	Briquet's disorder
225J.00	O/E - panic attack	Eu44500	[X]Dissociative convulsions
Eu45z11	[X]Psychosomatic disorder NOS	Eu45100	[X]Undifferentiated somatoform disorder
E29y500	Other adjustment reaction with withdrawal	E292500	Culture shock
E261300	Psychogenic hyperventilation	Eu45012	[X]Briquet's syndrome
E265100	Psychogenic vaginismus	Eu93y12	[X]Childhood overanxious disorder
E283000	Acute situational disturbance	Eu46y14	[X]Psychasthenia
Eu42000	[X]Predominantly obsessional thoughts or ruminations	Eu45y00	[X]Other somatoform disorders
Eu05400	[X]Organic anxiety disorder	E292300	Specific academic or work inhibition
E28z.12	Flying phobia	E26y.00	Other psychogenic malfunction
Eu45y12	[X]Globus hystericus	Z4I7100	Recognising anxiety
Eu46z11	[X]Neurosis NOS	Eu45313	[X]Gastric neurosis
Eu43014	[X]Crisis state	Eu44y00	[X]Other dissociative [conversion] disorders
Eu43y00	[X]Other reactions to severe stress	E293200	Adjustment reaction with destructiveness
Eu42.12	[X]Obsessive-compulsive neurosis	Eu45215	[X]Nosophobia
Eu42100	[X]Predominantly compulsive acts [obsessional rituals]	E292311	Specific academic or work inhibition
Eu44.00	[X]Dissociative [conversion] disorders	Eu40z12	[X]Phobic state NOS
Z4I7.00	Acknowledging anxiety	Eu40211	[X]Acrophobia
Eu42z00	[X]Obsessive-compulsive disorder, unspecified	Eu44y14	[X]Psychogenic twilight state
E292100	Adolescent emancipation disorder	E265.00	Psychogenic genitourinary tract symptoms
E201z00	Hysteria NOS	Eu43013	[X]Combat fatigue
E261400	Psychogenic yawning	E264z00	Psychogenic gastrointestinal tract symptom NOS
E29yz00	Other adjustment reactions NOS	E20y300	Psychasthenic neurosis
E201A0	Dissociative reaction unspecified	E265z00	Psychogenic genitourinary tract symptom NOS
0		Eu44700	[X]Mixed dissociative [conversion] disorders
E201300	Hysterical tremor	E267.00	Psychogenic symptom of special sense organ
Eu45011	[X]Multiple psychosomatic disorder	Eu46y15	[X]Psychasthenia neurosis
Eu4..00	[X]Neurotic, stress - related and somoform disorders	Eu45325	[X]Psychogenic pylorospasm
Eu41z00	[X]Anxiety disorder, unspecified	1B13.12	Anxious
E284.00	Stress reaction causing mixed disturbance of emotion/conduct	E26yz00	Other psychogenic malfunction NOS
Eu41y00	[X]Other specified anxiety disorders	Eu45511	[X]Globus hystericus
E292.00	Adjustment reaction, predominant disturbance other emotions	Eu46y11	[X]Briquet's disorder
E293z00	Adjustment reaction with predominant disturbance conduct NOS	Eu43400	[X]Chron post-traumatic stress disorder follow military comb
Eu45013	[X]Briquet's disorder	Eu43300	[X]Acute post-traumatic stress disorder follow military comb

MENTAL DISORDERS

At least one ICD-9 in:	
295	Schizophrenic disorders
296	Episodic mood disorders (except 296.2 & 296.3)
297	Delusional disorders
298	Other nonorganic psychoses
299	Pervasive developmental disorders
301	Personality disorders

OR

At least one ICD-10 in:	
F20	Schizophrenia
F21	Schizotypal disorder
F22	Delusional disorders
F23	Brief psychotic disorder
F24	Shared psychotic disorder
F25	Schizoaffective disorders
F28	Other psychotic disorder not due to a substance or known physiological condition
F29	Unspecified psychosis not due to a substance or known physiological condition
F30	Manic episode
F31	Bipolar disorder
F34	Persistent mood [affective] disorders
F39	Unspecified mood [affective] disorder

OR

At least one READ code in:			
E104.00	Acute schizophrenic episode	Eu6y100	[X]Intent product/feign of symptom/disab eith physical/psych
Eu2z.11	[X]Psychosis NOS	Eu50400	[X]Overeating associated with other psychological disturbncs
E21z.11	Psychopathic personality	Eu60711	[X]Asthenic personality disorder
E10..00	Schizophrenic disorders	E04z.00	Chronic organic psychosis NOS
E2F3z00	Speech or language developmental disorder NOS	Eu34z00	[X]Persistent mood affective disorder, unspecified
E214100	Obsessional personality	Eu6z.00	[X]Unspecified disorder of adult personality and behaviour
E21y500	Immature personality disorder	Eu10600	[X]Mental and behav dis due to use alcohol: amnesic syndrome
E103.00	Paranoid schizophrenia	E214.11	Anancastic personality
Eu31.11	[X]Manic-depressive illness	Eu60800	[X]Addictive personality
E2A1200	Change in personality	Eu53000	[X]Mild mental/behav disorder assoc with the puerperium NEC
1B1E.00	Hallucinations	Eu21.15	[X]Prodromal schizophrenia
1BH..00	Delusions	Eu53100	[X]Severe mental and behav disorder assoc with puerperium NEC
ZV40.13	[V]Psychological problems	Eu22y11	[X]Delusional dysmorphophobia

E21..00	Personality disorders	Eu25112	[X]Schizophreniform psychosis, depressive type
Eu22011	[X]Paranoid psychosis	E141100	Residual disintegrative psychoses
E03y300	Unspecified puerperal psychosis	Eu13.00	[X]Mental and behavioural disorder due to use of sedatives/hypnotics
E107.00	Schizo-affective schizophrenia	Eu05y00	[X]Other specific mental disorder brain damage/dysfunction/physical disorder
R001.00	[D]Hallucinations	E11z.00	Other and unspecified affective psychoses
E11..12	Depressive psychoses	1S04.00	C/O - illusions seen
E21y711	Neurotic personality	E2z..00	Neuroses or other mental disorder NOS
Eu30000	[X]Hypomania	Eu11000	[X]Mental & behavioural disorder due to use of opioids: acute intoxication
E00z.00	Senile or presenile psychoses NOS	Eu60z00	[X]Personality disorder, unspecified
Eu63300	[X]Trichotillomania	Eu34.00	[X]Persistent mood affective disorders
E212.00	Schizoid personality disorder	E110300	Single manic episode, severe without mention of psychosis
E11z100	Rebound mood swings	Eu15.00	[X]Mental & behavioural disorder due to other stimulants including caffeine
E2F3.00	Speech or language developmental disorder	E14..00	Psychoses with origin in childhood
E....00	Mental disorders	Eu20100	[X]Hebephrenic schizophrenia
E13z.11	Psychotic episode NOS	1B0.00	Delusion of persecution
E114.00	Bipolar affective disorder, currently manic	Eu60400	[X]Histrionic personality disorder
E215200	Emotionally unstable personality	E107200	Chronic schizo-affective schizophrenia
E121.00	Chronic paranoid psychosis	E215000	Unspecified histrionic personality disorder
E100200	Chronic schizophrenic	Eu10000	[X]Mental & behavioural disorder due to use of alcohol: acute intoxication
E12..00	Paranoid states	Eu23300	[X]Other acute predominantly delusional psychotic disorders
285..11	Psychotic condition, insight present	Eu84z00	[X]Pervasive developmental disorder, unspecified
E011000	Korsakov's alcoholic psychosis	Eu13200	[X]Mental and behavioural disorder due to sedatives/hypnotics: dependence syndrome
E216.00	Inadequate personality disorder	Eu81y00	[X]Other developmental disorders of scholastic skills
E115.00	Bipolar affective disorder, currently depressed	E100400	Acute exacerbation of chronic schizophrenia
Eu30z11	[X]Mania NOS	Eu23y00	[X]Other acute and transient psychotic disorders
Eu31500	[X]Bipolar affective disorder current episode severe depression with psychotic symptoms	Eu30z00	[X]Manic episode, unspecified
E215.11	Hysterical personality disorders	Eu8y.00	[X]Other disorders of psychological development
Eu22015	[X]Paranoia	Eu31600	[X]Bipolar affective disorder, current episode mixed
Eu10.00	[X]Mental and behavioural disorders due to use of alcohol	Eu60215	[X]Sociopathic personality disorder
E210.00	Paranoid personality disorder	Eu19200	[X]Mental and behavioural disorder multiple/other psychological subtypes: dependence syndrome
Eu3..00	[X]Mood - affective disorders	ZV40z00	[V]Unspecified mental or behavioural problem
146..00	H/O: psychiatric disorder	Eu0z.00	[X]Unspecified organic or symptomatic mental disorder
Eu80.00	[X]Specific developmental disorders of speech and language	Eu80y00	[X]Other developmental disorders of speech and language
1464.00	H/O: schizophrenia	E111z00	Recurrent manic episode NOS
E213.11	Aggressive personality	E111100	Recurrent manic episodes, mild
Eu83.00	[X]Mixed specific developmental disorders	E114200	Bipolar affective disorder, currently manic, moderate
Eu80z00	[X]Developmental disorder of speech and language unspecified	Eu6y200	[X]Munchausen's by proxy
Eu81z00	[X]Developmental disorder of scholastic skills, unspecified	L184.00	Mental disorders in pregnancy, childbirth and the puerperium
Eu05y11	[X]Epileptic psychosis NOS	Eu33300	[X]Recurrent depressive disorder current episode severe with psychotic symptoms
Eu31.12	[X]Manic-depressive psychosis	Eu24.12	[X]Induced paranoid disorder
Eu31.00	[X]Bipolar affective disorder	Eu11.00	[X]Mental and behavioural disorders due to use of opioids
Eu84.00	[X]Pervasive developmental disorders	Eu02z12	[X]Presenile psychosis NOS
Eu...00	Organic psychotic conditions	Eu14100	[X]Mental and behavioural disorder due to use of cocaine:

1	Eu82.00	[X]Specific developmental disorder of motor function	Eu22013	harmful use [X]Paraphrenia - late
2				
3	E132.00	Reactive confusion	Eu84y00	[X]Other pervasive developmental disorders
4	Eu60300	[X]Emotionally unstable personality disorder	E101z00	Hebephrenic schizophrenia NOS
5	E10z.00	Schizophrenia NOS	Eu62000	[X]Enduring personality change after catastrophic experience
6			1S40.00	Dysphoric mood
7	Eu60600	[X]Anxious [avoidant] personality disorder	Eu06013	[X]Limbic epilepsy personality
8	E130.00	Reactive depressive psychosis	Eu30212	[X]Mania with mood-incongruent psychotic symptoms
9	E11..11	Bipolar psychoses	Eu60014	[X]Sensitive paranoid personality disorder
10	Eu0z.12	[X]Symptomatic psychosis NOS	E216.11	Asthenic personality
11	E103z00	Paranoid schizophrenia NOS	Eu66z00	[X]Psychosexual development disorder, unspecified
12	Eu25.00	[X]Schizoaffective disorders	Eu22z00	[X]Persistent delusional disorder, unspecified
13	Eu30.11	[X]Bipolar disorder, single manic episode	Eu20y00	[X]Other schizophrenia
14	E2...00	Neurotic, personality and other nonpsychotic disorders		
15			E2A..00	Nonpsychotic mental disorders following organic brain damage
16	Eu...00	[X]Mental and behavioural disorders	Eu14500	[X]Mental & behav dis due to use cocaine: psychotic disorder
17			Eu14000	[X]Mental & behav dis due to use cocaine: acute intoxication
18	Eu34112	[X]Depressive personality disorder	Eu60y00	[X]Other specific personality disorders
19			Eu60z12	[X]Pathological personality NOS
20	E211200	Depressive personality disorder	E10yz00	Other schizophrenia NOS
21				
22	E03y000	Organic delusional syndrome	E117000	Unspecified bipolar affective disorder, unspecified
23	E107z00	Schizo-affective schizophrenia NOS	Eu60y13	[X]Immature personality disorder
24	Eu12.00	[X]Mental and behavioural disorders due to use cannabinoids	Eu21.16	[X]Pseudoneurotic schizophrenia
25			Eu15500	[X]Mental/behav dis oth stims inc caffeine: psychotic dis
26	Eu19.00	[X]Men & behav disorder multiple drug use/psychoactive subst	Eu23011	[X]Bouffee delirante
27			Eu20011	[X]Paraphrenic schizophrenia
28	Ez...00	Mental disorders NOS	Eu05z00	[X]Unspec mental disorder brain damag/dysfunction/physcal dr
29	Eu25100	[X]Schizoaffective disorder, depressive type	E2y..00	Other specified neuroses or other mental disorders
30	E011100	Korsakov's alcoholic psychosis with peripheral neuritis	Eu18000	[X]Mental & behav dis due vol solvents: acute intoxication
31			Eu60.00	[X]Specific personality disorders
32	Eu22012	[X]Paranoid state	E110400	Single manic episode, severe, with psychosis
33	Eu2z.00	[X]Unspecified nonorganic psychosis	Eu34y00	[X]Other persistent mood affective disorders
34	146D.00	H/O: manic depressive disorder	Eu22y12	[X]Involutional paranoid state
35				
36	E11y000	Unspecified manic-depressive psychoses	Eu16.00	[X]Mental and behavioural disorders due to use hallucinogens
37	Eu10611	[X]Korsakov's psychosis, alcohol induced	Eu14200	[X]Mental and behav dis due to use cocaine: dependence syndr
38			Eu52800	[X]Erotomania
39	Eu23200	[X]Acute schizophrenia-like psychotic disorder	Eu12100	[X]Mental and behav dis due to use cannabinoids: harmful use
40	Eu24.13	[X]Induced psychotic disorder	Eu60y16	[X]Psychoneurotic personality disorder
41	R001400	[D]Visual hallucinations	E123.11	Folie a deux
42	Eu32300	[X]Severe depressive episode with psychotic symptoms	Eu11500	[X]Mental & behav dis due to use opioids: psychotic disorder
43			Eu3y000	[X]Other single mood affective disorders
44	R001000	[D]Hallucinations, auditory	Eu31y12	[X]Recurrent manic episodes
45			E02y.00	Other drug psychoses
46	Eu30.00	[X]Manic episode	Eu19300	[X]Mental and behav dis mlti/oth psychoa sbs:
47				
48	E211100	Hypomanic personality disorder		
49	Eu10500	[X]Mental & behav dis due to use alcohol: psychotic disorder		
50				
51	225E.00	O/E - paranoid delusions		
52	Eu45211	[X]Body dysmorphic disorder		
53	E211300	Cyclothymic personality disorder		
54				
55	E12z.00	Paranoid psychosis NOS		
56	146H.00	H/O: psychosis		
57	E115.11	Manic-depressive - now depressed		
58	Eu30100	[X]Mania without psychotic symptoms		
59				

			withdrwl state
1	E11..00	Affective psychoses	Eu24.00 [X]Induced delusional disorder
2	E110100	Single manic episode, mild	E103300 Acute exacerbation of subchronic paranoid schizophrenia
3			Eu84511 [X]Autistic psychopathy
4	E120.00	Simple paranoid state	E00y.11 Presbyophrenic psychosis
5	E212z00	Schizoid personality disorder NOS	E211z00 Affective personality disorder NOS
6	E117.00	Unspecified bipolar affective disorder	Eu25012 [X]Schizophreniform psychosis, manic type
7	E13z.00	Nonorganic psychosis NOS	Eu60500 [X]Anankastic personality disorder
8	E122.00	Paraphrenia	225F.00 O/E - delusion of persecution
9	E211.00	Affective personality disorder	Eu32312 [X]Single episode of psychogenic depressive psychosis
10	E133.00	Acute paranoid reaction	Eu18200 [X]Mental and behav dis due to vol solvents: dependence synd
11	F481K00	Visual hallucinations	E14z.00 Child psychosis NOS
12			Eu06y00 [X]Oth organ personality behav disorders brain dis dam dysf
13	E21z.00	Personality disorder NOS	E22y500 Nymphomania
14	E00y.00	Other senile and presenile organic psychoses	E103400 Acute exacerbation of chronic paranoid schizophrenia
15			Eu60y14 [X]Narcissistic personality disorder
16	E100000	Unspecified schizophrenia	Eu62013 [X]Personality change aft prolong captiv+possib/being killed
17	E115000	Bipolar affective disorder, currently depressed, unspecified	E100z00 Simple schizophrenia NOS
18	E1...00	Non-organic psychoses	Ryu5300 [X]Other hallucinations
19	E21yz00	Other personality disorder NOS	Eu31y00 [X]Other bipolar affective disorders
20			Eu84314 [X]Symbiotic psychosis
21	E211000	Unspecified affective personality disorder	Eu20111 [X]Disorganised schizophrenia
22	E01..00	Alcoholic psychoses	R001100 [D]Hallucinations, gustatory
23	E02..00	Drug psychoses	E116400 Mixed bipolar affective disorder, severe, with psychosis
24	E13y.00	Other reactive psychoses	Eu21.12 [X]Borderline schizophrenia
25	E13y.00	Other reactive psychoses	E11z000 Unspecified affective psychoses NOS
26	E114300	Bipolar affect disord, currently manic, severe, no psychosis	Eu34012 [X]Cycloid personality
27	E1y..00	Other specified non-organic psychoses	Eu16500 [X]Mental & behav dis due to hallucinogens: psychotic disord
28			E116600 Mixed bipolar affective disorder, in full remission
29	Eu31300	[X]Bipolar affect disorder cur epi mild or moderate depressn	E03..00 Transient organic psychoses
30	Eu20000	[X]Paranoid schizophrenia	Eu22111 [X]Capgras syndrome
31	Eu31000	[X]Bipolar affective disorder, current episode hypomanic	Eu22y13 [X]Paranoia querulans
32	Eu33315	[X]Recurrent severe episodes of psychotic depression	1BH2.00 Ideas of reference
33	Eu25011	[X]Schizoaffective psychosis, manic type	ZV40y00 [V]Other specified mental or behavioural problem
34	Eu2..00	[X]Schizophrenia, schizotypal and delusional disorders	E114400 Bipolar affect disord, currently manic,severe with psychosis
35	E114.11	Manic-depressive - now manic	Eu60y11 [X]Eccentric personality disorder
36	Eu60513	[X]Obsessive-compulsive personality disorder	E141.00 Disintegrative psychosis
37	Eu10514	[X]Alcoholic psychosis NOS	Eu17100 [X]Mental and behav dis due to use of tobacco: harmful use
38	Eu53111	[X]Puerperal psychosis NOS	Eu16300 [X]Mental and behav dis due hallucinogens: withdrawal state
39	E130.11	Psychotic reactive depression	Eu62.00 [X]Enduring personality change not attrib to brain damag/dis
40	1BH..11	Delusion	E107500 Schizo-affective schizophrenia in remission
41	Eu20y13	[X]Schizophrenifrm psychos NOS	Eu60213 [X]Asocial personality disorder
42	E21y200	Borderline personality disorder	Eu12200 [X]Mental and behav dis due to cannabinoids: dependence synd
43			
44	E110.11	Hypomanic psychoses	
45	212T.00	Psychosis, schizophrenia + bipolar affective disord resolved	
46	1B1b.00	Transient hallucinations	
47	R001z00	[D]Hallucinations NOS	
48	E215100	Munchausen's syndrome	

E216.13	Labile personality	Eu19700	[X]Men/beh dis mlt drg use/oth subs: resid/late psychot dis
E111000	Recurrent manic episodes, unspecified	Eu8z.00	[X]Unspecified disorder of psychological development
E2C3200	Kleptomania	Z57C611	Schizophrenic language
E21yz11	Manipulative personality	Eu62011	[X]Personality change after concentration camp experiences
E110000	Single manic episode, unspecified	E115600	Bipolar affective disorder, now depressed, in full remission
E13..11	Reactive psychoses	Eu12700	[X]Mnt/bh dis due cannabinds: resid & late-onset psychot dis
E2C3300	Pyromania	E114z00	Bipolar affective disorder, currently manic, NOS
Eu10300	[X]Mental and behav dis due to use alcohol: withdrawal state	E03z.00	Transient organic psychoses NOS
Eu20211	[X]Catatonic stupor	E100300	Acute exacerbation of subchronic schizophrenia
Eu20400	[X]Post-schizophrenic depression	Eu03.11	[X]Korsakov's psychosis, nonalcoholic
Eu60311	[X]Aggressive personality disorder	Eu25y00	[X]Other schizoaffective disorders
E214.00	Compulsive personality disorders	E100500	Schizophrenia in remission
Eu6..00	[X]Disorders of adult personality and behaviour	Eu60313	[X]Explosive personality disorder
Eu30200	[X]Mania with psychotic symptoms	E102000	Unspecified catatonic schizophrenia
E21y700	Psychoneurotic personality disorder	E107000	Unspecified schizo-affective schizophrenia
Eu81.00	[X]Specific developmental disorders of scholastic skills	E111500	Recurrent manic episodes, partial or unspecified remission
Eu60000	[X]Paranoid personality disorder	E107300	Acute exacerbation subchronic schizo-affective schizophrenia
Eu23012	[X]Cycloid psychosis	Eu60714	[X]Self defeating personality disorder
Eu34000	[X]Cyclothymia	Eu18100	[X]Mental and behav dis due volatile solvents: harmful use
Eu23100	[X]Acute polymorphic psychot disord with symp of schizophren	E114500	Bipolar affect disord,currently manic, part/unspec remission
E216.12	Dependent personality	Eu23211	[X]Brief schizophreniform disorder
Eu60214	[X]Psychopathic personality disorder	Eu15700	[X]Mnt/bh dis oth stm inc caffne resid/late-onset psycht dis
Eu10100	[X]Mental and behav dis due to use of alcohol: harmful use	E03yz00	Other transient organic psychoses NOS
Eu0z.11	[X]Organic psychosis NOS	Eu84512	[X]Schizoid disorder of childhood
Eu05200	[X]Organic delusional [schizophrenia-like] disorder	Eu06000	[X]Organic personality disorder
Eu04.15	[X]Acute / subacute psycho-organic reaction	Eu20300	[X]Undifferentiated schizophrenia
ZV11112	[V]Personal history of manic-depressive psychosis	E11y.00	Other and unspecified manic-depressive psychoses
E02y400	Drug-induced personality disorder	E2Az.00	Nonpsychotic mental disorder post-organic brain damage NOS
ZV11000	[V]Personal history of schizophrenia	E215z00	Histrionic personality disorder NOS
E13y000	Psychogenic stupor	Eu19000	[X]Mental/behav dis multi drg use/psychoac subs: acute intox
E1z..00	Non-organic psychosis NOS	E107100	Subchronic schizo-affective schizophrenia
Eu60512	[X]Obsessional personality disorder	Eu84013	[X]Infantile psychosis
Euz..11	[X]Mental illness NOS	Eu13300	[X]Mental and behav dis due seds/hypntcs: withdrawal state
1BH3.00	Paranoid ideation	Eu20200	[X]Catatonic schizophrenia
286..11	Poor insight into psychotic condition	Eu17.00	[X]Mental and behavioural disorder due to use of tobacco
1S42.00	Manic mood	E212200	Schizotypal personality
Eu0..00	[X]Organic, including symptomatic, mental disorders	Eu10700	[X]Men & behav dis due alcoh: resid & late-onset psychot dis
E13y100	Brief reactive psychosis	E04..00	Other chronic organic psychoses
E213.00	Explosive personality disorder	Eu84312	[X]Disintegrative psychosis
E100100	Subchronic schizophrenia	Eu22100	[X]Delusional misidentification syndrome
Eu53z00	[X]Puerperal mental disorder, unspecified	Eu21.14	[X]Prepsychotic schizophrenia

E04y.00	Other specified chronic organic psychoses	E123.00	Shared paranoid disorder
Eu06.00	[X]Personality and behav disorder brain dis dam and dysfunct	E2Ay.00	Other specific mental disorder post-organic brain damage
Eu31400	[X]Bipol aff disord, curr epis sev depress, no psychot symp	Eu19100	[X]Mental and behav dis mlti drg/oth psychoa sbs: harmfl use
Eu33311	[X]Endogenous depression with psychotic symptoms	E116200	Mixed bipolar affective disorder, moderate
E040.11	Korsakoff's non-alcoholic psychosis	E116300	Mixed bipolar affective disorder, severe, without psychosis
Eu34013	[X]Cyclothymic personality	E107400	Acute exacerbation of chronic schizo-affective schizophrenia
ZV11111	[V]Personal history of manic-depressive psychosis	E116z00	Mixed bipolar affective disorder, NOS
E217.00	Antisocial or sociopathic personality disorder	E116500	Mixed bipolar affective disorder, partial/unspec remission
Eu05300	[X]Organic mood [affective] disorders	E117100	Unspecified bipolar affective disorder, mild
Eu84111	[X]Atypical childhood psychosis	E115400	Bipolar affect disord, now depressed, severe with psychosis
Eu20511	[X]Chronic undifferentiated schizophrenia	E114600	Bipolar affective disorder, currently manic, full remission
Eu32313	[X]Single episode of psychotic depression	ZV40200	[V]Other mental problems
Eu32311	[X]Single episode of major depression and psychotic symptoms	E2A1z00	Organic personality syndrome NOS
E113400	Recurrent major depressive episodes, severe, with psychosis	E102z00	Catatonic schizophrenia NOS
E117600	Unspecified bipolar affective disorder, in full remission	Eu06z00	[X]Unspec organ personality behav disorder brain dam dysfunc
E14y000	Atypical childhood psychoses	R001300	[D]Hallucinations, tactile
E134.00	Psychogenic paranoid psychosis	Eu13000	[X]Mental & behav dis due seds/hypntcs: acute intoxication
Eu04.13	[X]Acute / subacute infective psychosis	Eu20500	[X]Residual schizophrenia
146Z.00	H/O: psychiatric disorder NOS	Eu20212	[X]Schizophrenic catalepsy
Eu19500	[X]Ment/behav dis mlti drug use/oth psyc sbs: psychotc dis	Eu6y.00	[X]Other disorders of adult personality and behaviour
E110200	Single manic episode, moderate	Eu21.13	[X]Latent schizophrenia
E116100	Mixed bipolar affective disorder, mild	Eu22014	[X]Sensitiver Beziehungswahn
Eu53.00	[X]Mental and behav disorders assoc with the puerperium NEC	Eu12300	[X]Mental and behav dis due cannabinoids: withdrawal state
Eu23.00	[X]Acute and transient psychotic disorders	Eu62012	[X]Personality change after disasters
Eu04.00	[X]Delirium, not induced by alcohol+other psychoactive sbs	E111300	Recurrent manic episodes, severe without mention psychosis
E2A1.00	Organic personality syndrome	Eu16200	[X]Mental and behav dis due to hallucinogens: dependence syn
ZV40.00	[V]Mental and behavioural problems	Eu22y00	[X]Other persistent delusional disorders
E21y.00	Other personality disorders	Eu31.13	[X]Manic-depressive reaction
Eu8..00	[X]Disorders of psychological development	Eu16000	[X]Mental & behav dis due hallucinogens: acute intoxicatn
R001200	[D]Hallucinations, olfactory	E105.00	Latent schizophrenia
E102.00	Catatonic schizophrenia	E101000	Unspecified hebephrenic schizophrenia
Eu54.00	[X]Psychological/behav factor assoc with disorder or dis EC	E0y..00	Other specified organic psychoses
E02z.00	Drug psychosis NOS	E14yz00	Other childhood psychoses NOS
E13yz00	Other reactive psychoses NOS	E12y000	Paranoia querulans
Eu23112	[X]Cycloid psychosis with symptoms of schizophrenia	E212000	Unspecified schizoid personality disorder
E11..13	Manic psychoses	Eu16100	[X]Mental and behav dis due to use hallucinogens: harmfl use
E111.00	Recurrent manic episodes	Eu14300	[X]Mental and behav dis due to use cocaine: withdrawal state

1	Eu31100	[X]Bipolar affect disorder cur epi manic wout psychotic symp	E215300	Psychoinfantile personality
2	Eu34011	[X]Affective personality disorder	E01z.00	Alcoholic psychosis NOS
3	Eu21.18	[X]Schizotypal personality disorder	E101500	Hebephrenic schizophrenia in remission
4	E215.00	Histrionic personality disorders	E217.11	Amoral personality
5	Eu31700	[X]Bipolar affective disorder, currently in remission	E133.11	Bouffe delirante
6				
7	Eu11700	[X]Men & beh dis due opioids: resid & late-onset psychot dis	E01yz00	Other alcoholic psychosis NOS
8				
9	Eu66.00	[X]Psychol and behav disorder assoc with sex dev and orienta	E03y.00	Other transient organic psychoses
10				
11	Ey...00	Other specified mental disorders	E117400	Unspecified bipolar affective disorder,severe with psychosis
12				
13	E111200	Recurrent manic episodes, moderate	E117200	Unspecified bipolar affective disorder, moderate
14	Eu02z16	[X] Senile dementia, depressed or paranoid type	Eu60013	[X]Querulant personality disorder
15				
16	Eu23312	[X]Psychogenic paranoid psychosis	Eu13500	[X]Mental & behav dis due to seds/hypntcs: psychotic disordr
17				
18	E21y400	Eccentric personality disorder	E14y100	Borderline psychosis of childhood
19	E115200	Bipolar affective disorder, currently depressed, moderate	Eu60412	[X]Psychoinfantile personality disorder
20				
21	Eu02z15	[X] Senile psychosis NOS	E110600	Single manic episode in full remission
22	Eu60411	[X]Hysterical personality disorder	E11y300	Other mixed manic-depressive psychoses
23	Eu05.00	[X]Oth mental disorder brain damag/dysfunction/physical disr	E117500	Unspecified bipolar affect disord, partial/unspec remission
24				
25	E117z00	Unspecified bipolar affective disorder, NOS	Eu23212	[X]Brief schizophrenifrm psych
26	Eu3y.00	[X]Other mood affective disorders	E21y600	Masochistic personality disorder
27	Eu44.14	[X]Hysterical psychosis	E11y100	Atypical manic disorder
28	E21..11	Neurotic personality disorder	Eu21.17	[X]Pseudopsychopathic schizophrenia
29	Eu31200	[X]Bipolar affect disorder cur epi manic with psychotic symp	Eu60y12	[X]Haltlose type personality disorder
30				
31	Eu22.00	[X]Persistent delusional disorders	E14y.00	Other childhood psychoses
32	Eu33312	[X]Manic-depress psychosis,depressed type+psychotic symptoms	E115500	Bipolar affect disord, now depressed, part/unspec remission
33				
34	E02yz00	Other drug psychoses NOS	E100.11	Schizophrenia simplex
35	Eu32314	[X]Single episode of reactive depressive psychosis	E117300	Unspecified bipolar affective disorder, severe, no psychosis
36				
37	Eu33213	[X]Manic-depress psychosis,depressd,no psychotic symptoms	ZVu6K00	[X]Personal history/other mental and behavioural disorders
38				
39	Eu3yy00	[X]Other specified mood affective disorders	Eu31y11	[X]Bipolar II disorder
40	Eu23z12	[X]Reactive psychosis	ZV11z00	[V]Personal history of unspecified mental disorder
41	Eu3y100	[X]Other recurrent mood affective disorders	212V.00	Bipolar affective disorder resolved
42	E131.00	Acute hysterical psychosis	1B1e.00	Hypnopompic hallucination
43	Eu1..00	[X]Mental and behavioural disorders due to psychoactive subs	212X.00	Psychosis resolved
44				
45	ZV11.00	[V]Personal history of mental disorder	Eu1A100	[X]Mental behav disorders due use crack cocaine: harmful use
46				
47	ZRby100	Profile of mood states, bipolar	1B1d.00	Hypnagogic hallucination
48	E214000	Anankastic personality	Eu62z00	[X]Enduring personality change, unspecified
49	Eu66y00	[X]Other psychosexual development disorders	212W.00	Schizophrenia resolved
50	Eu61.00	[X]Mixed and other personality disorders	Eu21.11	[X]Latent schizophrenic reaction
51	E101.00	Hebephrenic schizophrenia	Eu20311	[X]Atypical schizophrenia
52	Eu3y011	[X]Mixed affective episode	E10y.11	Cenesthopathic schizophrenia
53	Eu2y.00	[X]Other nonorganic psychotic disorders	Eu13100	[X]Mental and behav dis due to use seds/hypntcs: harmful use
54				
55	ZV71000	[V]Observation for mental disorder	ZV11y00	[V]Personal history of other specified mental disorder
56	Eu6y111	[X] Munchausens syndrome	Eu06011	[X]Organic pseudopsychopathic personality
57	E116.00	Mixed bipolar affective disorder	Eu20y12	[X]Schizophreniform disord NOS
58				
59				
60				

E103200	Chronic paranoid schizophrenia	E105200	Chronic latent schizophrenia
E12yz00	Other paranoid states NOS	Eu23214	[X]Schizophrenic reaction
Eu20214	[X]Schizophrenic flexibilatis cerea	E105500	Latent schizophrenia in remission
E116000	Mixed bipolar affective disorder, unspecified	Eu12600	[X]Mental and behav dis due to use cannabinoids: amnesic syn
E12y.00	Other paranoid states	Eu05z12	[X]Organic mental disorder NOS
Eu60200	[X]Dissocial personality disorder	E101400	Acute exacerbation of chronic hebephrenic schizophrenia
Eu3z.11	[X]Affective psychosis NOS	Eu32800	[X]Major depression, severe with psychotic symptoms
ZV40.12	[V]Mental problems	Eu18500	[X]Mental & behav dis due to vol solvents: psychotic disorder
Eu23z11	[X]Brief reactive psychosis NOS	Eu22200	[X]Cotard syndrome
Eu18.00	[X]Mental & behav disorders due to use of volatile solvents	E107.11	Cyclic schizophrenia
Eu2y.11	[X]Chronic hallucinatory psychosis	E10y100	Coenesthopathic schizophrenia
Eu33314	[X]Recurr severe episodes/psychogenic depressive psychosis	E102100	Subchronic catatonic schizophrenia
Eu60312	[X]Borderline personality disorder	Eu94211	[X]Affectionless psychopathy
Eu62015	[X]Personality change after torture	Eu3y200	[X]Premenstrual dysphoric disorder
Eu60700	[X]Dependent personality disorder	14g..00	History of developmental disorder
Eu05212	[X]Schizophrenia-like psychosis in epilepsy	L184400	Mental disorder in puerperium - baby previously delivered
E13..00	Other nonorganic psychoses	Eu32900	[X]Single major depr ep, severe with psych, psych in remiss
Eu14.00	[X]Mental and behavioural disorders due to use of cocaine	Eu32A00	[X]Recurr major depr ep, severe with psych, psych in remiss
Eu30y00	[X]Other manic episodes	Eu17300	[X]Mental and behav dis due to use tobacco: withdrawal state
E112400	Single major depressive episode, severe, with psychosis	Eu22300	[X]Paranoid state in remission
E100.00	Simple schizophrenia	Eu1A300	[X]Mental behav disord due crack cocaine: withdrawal state
E111400	Recurrent manic episodes, severe, with psychosis	Eu26.00	[X]Nonorganic psychosis in remission
Eu1A.00	[X]Mental and behavioural disorders due use of crack cocaine	E105000	Unspecified latent schizophrenia
Eu60212	[X]Antisocial personality disorder	E102500	Catatonic schizophrenia in remission
1BH1.00	Grandiose delusions	E105z00	Latent schizophrenia NOS
Eu33313	[X]Recurr severe episodes/major depression+psychotic symptom	Eu1A500	[X]Mental behav disord due crack cocaine: psychotic disorder
E10y000	Atypical schizophrenia	Eu1A200	[X]Mental behav disorders due use crack cocaine: depend synd
E103000	Unspecified paranoid schizophrenia	Eu14700	[X]Men & beh dis due cocaine: resid & late-onset psychot dis
Eu25z11	[X]Schizoaffective psychosis NOS	L184200	Mental disorder in the puerperium - baby delivered
E11zz00	Other affective psychosis NOS	Eu31900	[X]Bipolar affective disorder type II
E11yz00	Other and unspecified manic-depressive psychoses NOS	Eu11600	[X]Mental and behav dis due to use opioids: amnesic syndrome
Eu15200	[X]Mental and behav dis oth stim inc caffen: dependnce synd	Eu31911	[X]Bipolar II disorder
E01y.00	Other alcoholic psychosis	Eu31800	[X]Bipolar affective disorder type I
Eu25200	[X]Schizoaffective disorder, mixed type	E103100	Subchronic paranoid schizophrenia
E00..00	Senile and presenile organic psychotic conditions	Eu25211	[X]Cyclic schizophrenia
Eu60713	[X]Passive personality disorder	Eu60211	[X]Amoral personality disorder
Eu31z00	[X]Bipolar affective disorder, unspecified	Eu16700	[X]Mnt/bh dis due hallucngns: resid & late-onset psychot dis
E2Fz.00	Developmental disorder NOS	Eu24.11	[X]Folie a deux
Eu25000	[X]Schizoaffective disorder, manic type	Eu19600	[X]Mental/behav dis multi drg use/oth psy sbs:

		amnesic syndr	
1	Eu23z00	[X]Acute and transient psychotic disorder, unspecified	E102400 Acute exacerbation of chronic catatonic schizophrenia
2			
3	Eu20.00	[X]Schizophrenia	Eu8z.11 [X]Psychological developmental disorder NOS
4	Eu11200	[X]Mental and behav dis due to use opioids: dependence syndr	Eu17200 [X]Mental and behav dis due to use tobacco: dependence syndr
5			
6	Eu22000	[X]Delusional disorder	E21y000 Narcissistic personality disorder
7	E214z00	Compulsive personality disorder NOS	E115z00 Bipolar affective disorder, currently depressed, NOS
8	Eu62y11	[X]Chronic pain personality syndrome	Eu12000 [X]Mental & behav dis due cannabinoids: acute intoxication
9			
10	Eu6yy00	[X]Other specified disorders of adult personality/behaviour	E14z.11 Childhood schizophrenia NOS
11			
12	Eu20z00	[X]Schizophrenia, unspecified	Eu62100 [X]Enduring personality change after psychiatric illness
13	Euz..00	[X]Mental disorder, not otherwise specified	Eu11100 [X]Mental and behav dis due to use of opioids: harmful use
14			
15	Eu62y00	[X]Other enduring personality changes	Eu25212 [X]Mixed schizophrenic and affective psychosis
16	Eu25111	[X]Schizoaffective psychosis, depressive type	Eu6y000 [X]Elaboration of physical symptoms for psychological reason
17			
18			
19	E115300	Bipolar affect disord, now depressed, severe, no psychosis	Eu25z00 [X]Schizoaffective disorder, unspecified
20			
21	E21y100	Avoidant personality disorder	Eu33316 [X]Recurrent severe episodes/reactive depressive psychosis
22			
23	E115100	Bipolar affective disorder, currently depressed, mild	Eu60712 [X]Inadequate personality disorder
24			
25	E114000	Bipolar affective disorder, currently manic, unspecified	E106.00 Residual schizophrenia
26			
27	E21y300	Passive-aggressive personality disorder	Eu60511 [X]Compulsive personality disorder
28	Eu20600	[X]Simple schizophrenia	Eu60100 [X]Schizoid personality disorder
29	Eu20213	[X]Schizophrenic catatonia	Eu12500 [X]Mental & behav dis due to cannabinoids: psychotic disordr
30			
31	E213.12	Quarrelsome personality	E212100 Introverted personality
32	E114100	Bipolar affective disorder, currently manic, mild	E10y.00 Other schizophrenia
33			
34	E103500	Paranoid schizophrenia in remission	ZS34.00 Developmental disorder of scholastic skill
35	Eu11300	[X]Mental and behav dis due to use opioids: withdrawal state	Eu21.00 [X]Schizotypal disorder
36			
37	E110z00	Manic disorder, single episode NOS	Eu10200 [X]Mental and behav dis due to use alcohol: dependence syndr
38			
39			
40	Eu23000	[X]Acute polymorphic psychot disord without symp of schizoph	Eu3z.00 [X]Unspecified mood affective disorder
41			
42	E0z..00	Organic psychoses NOS	Eu30211 [X]Mania with mood-congruent psychotic symptoms
43	E110.00	Manic disorder, single episode	E111600 Recurrent manic episodes, in full remission
44			

ALCOHOL AND DRUG DEPENDENCE

At least one ICD-9 in:

- 303 Alcohol dependence syndrome
- 305.00 Non dependent alcohol abuse
 - 305.00 Alcohol abuse, unspecified
 - 305.01 Alcohol abuse, continuous
 - 305.03** Alcohol abuse, episodic
 - 305.03 Alcohol abuse, in remission
- 304 Drug dependence
 - 304.0 Opioid type dependence
 - 304.1 Sedative, hypnotic or anxiolytic dependence
 - 304.2 Cocaine dependence
 - 304.3 Cannabis dependence
 - 304.4 Amphetamine and other psychostimulant dependence
 - 304.5 Hallucinogen dependence
 - 304.6 Other specified drug dependence
 - 304.7 Combinations of opioid type drug with any other drug dependence
 - 304.8 Combinations of drug dependence excluding opioid type drug
 - 304.9 Unspecified drug dependence

OR

At least one ICD-10 in:

- F10 Alcohol related disorders
 - F10.0 acute intoxication
 - F10.1 harmful use
 - F10.2 dependence syndrome
 - F10.3 withdrawal state
 - F10.4 withdrawal state with delirium
 - F10.5 psychotic disorder
 - F10.6 amnesic syndrome
 - F10.7 Residual and late-onset psychotic disorder
 - F10.8 other mental and behavioural disorder
 - F10.9 unspecified mental and behavioural disorder
- F11 Opioids related disorders
- F12 Cannabis related disorders
- F13 Sedative, hypnotic, or anxiolytic related disorders
- F14 Cocaine related disorders
- F15 Other stimulant related disorders
- F16 Hallucinogen related disorders
- F17 Nicotine dependence
- F18 Inhalant related disorders
- F19 Other psychoactive substance related disorders

OR

At least one READ code in:			
136..00	Alcohol consumption	E245z00	Hallucinogen dependence NOS
136K.00	Alcohol intake above recommended sensible limits	E246.00	Glue sniffing dependence
136S.00	Hazardous alcohol use	E246000	Glue sniffing dependence, unspecified
136T.00	Harmful alcohol use	E246100	Glue sniffing dependence, continuous
136W.00	Alcohol misuse	E246200	Glue sniffing dependence, episodic
136Z.00	Alcohol consumption NOS	E246300	Glue sniffing dependence in remission
13c..00	Drug user	E246z00	Glue sniffing dependence NOS
13c0.00	Injecting drug user	E247.00	Other specified drug dependence
13c1.00	Intravenous drug user	E247.11	Absinthe addiction
13c2.00	Never injecting drug user	E247000	Other specified drug dependence, unspecified
13c3.00	Intramuscular drug user	E247100	Other specified drug dependence, continuous
13c4.00	Intranasal drug user	E247200	Other specified drug dependence, episodic
13c7.00	Current drug user	E247300	Other specified drug dependence in remission
13c9.00	Subcutaneous drug user	E247z00	Other specified drug dependence NOS
13cA.00	Smokes drugs	E248.00	Combined opioid with other drug dependence
13cB.00	Misuses drugs orally	E248000	Combined opioid with other drug dependence, unspecified
13cC.00	Continuous use of drugs	E248100	Combined opioid with other drug dependence, continuous
13cD.00	Episodic use of drugs	E248200	Combined opioid with other drug dependence, episodic
13cE.00	Prolonged high dose use of cannabis	E248300	Combined opioid with other drug dependence in remission
13cH.00	Persistent substance misuse	E248z00	Combined opioid with other drug dependence NOS
13cJ.00	Previously injecting drug user	E249.00	Combined drug dependence, excluding opioids
13cK.00	Current non recreational drug user	E249000	Combined drug dependence, excluding opioid, unspecified
1462.00	H/O: alcoholism	E249100	Combined drug dependence, excluding opioid, continuous
1463.00	H/O: drug dependency	E249200	Combined drug dependence, excluding opioid, episodic
146E.00	H/O: recreational drug use	E249300	Combined drug dependence, excluding opioid, in remission
146F.00	H/O: drug abuse	E249z00	Combined drug dependence, excluding opioid, NOS
1B1c.00	Alcohol induced hallucinations	E24A.00	Ecstasy type drug dependence
1P30.00	Compulsive uncontrollable drug taking	E24z.00	Drug dependence NOS
1P31.00	Compulsive drug taking	E250.11	Drunkenness NOS
1P6..00	Craving for drugs	E250.12	Hangover (alcohol)
1P62.00	Abnormal craving for drugs	E250.13	Inebriety NOS
1T...00	History of substance misuse	E250.14	Intoxication - alcohol
1T0..00	H/O heroin misuse	E254.11	Barbiturate abuse
1T00.00	H/O daily heroin misuse	E254.12	Hypnotic or anxiolytic abuse
1T01.00	H/O weekly heroin misuse	E254.13	Sedative abuse
1T02.00	Previous history of heroin misuse	E254.14	Tranquilliser abuse
1T03.00	H/O infrequent heroin misuse	E257.11	Psychostimulant abuse
1T1..00	H/O methadone misuse	E257.12	Stimulant abuse
1T10.00	H/O daily methadone misuse	E259400	Misuse of prescription only drugs
1T11.00	H/O weekly methadone misuse	E25y.11	Analgesic abuse
1T12.00	H/O infrequent methadone misuse	E25y.12	Laxative abuse
1T13.00	Previous history of methadone misuse	E25y.13	Steroid abuse

1T2..00	H/O ecstasy misuse	E25z.00	Misuse of drugs NOS
1T20.00	H/O daily ecstasy misuse	Eu1..00	[X]Mental and behavioural disorders due to psychoactive subs
1T21.00	H/O weekly ecstasy misuse	Eu10.00	[X]Mental and behavioural disorders due to use of alcohol
1T22.00	H/O infrequent ecstasy misuse	Eu10000	[X]Mental & behav dis due to use alcohol: acute intoxication
1T23.00	Previous history of ecstasy misuse	Eu10011	[X]Acute alcoholic drunkenness
1T3..00	H/O benzodiazepine misuse	Eu10100	[X]Mental and behav dis due to use of alcohol: harmful use
1T30.00	H/O daily benzodiazepine misuse	Eu10200	[X]Mental and behav dis due to use alcohol: dependence syndr
1T31.00	H/O weekly benzodiazepine misuse	Eu10211	[X]Alcohol addiction
1T32.00	H/O infrequent benzodiazepine misuse	Eu10212	[X]Chronic alcoholism
1T33.00	Previous history of benzodiazepine misuse	Eu10213	[X]Dipsomania
1T4..00	H/O amphetamine misuse	Eu10300	[X]Mental and behav dis due to use alcohol: withdrawal state
1T40.00	H/O daily amphetamine misuse	Eu10400	[X]Men & behav dis due alcohol: withdrawal state with delirium
1T41.00	H/O weekly amphetamine misuse	Eu10411	[X]Delirium tremens, alcohol induced
1T42.00	H/O infrequent amphetamine misuse	Eu10500	[X]Mental & behav dis due to use alcohol: psychotic disorder
1T43.00	Previous history of amphetamine misuse	Eu10511	[X]Alcoholic hallucinosis
1T5..00	H/O cocaine misuse	Eu10512	[X]Alcoholic jealousy
1T50.00	H/O daily cocaine misuse	Eu10513	[X]Alcoholic paranoia
1T51.00	H/O weekly cocaine misuse	Eu10514	[X]Alcoholic psychosis NOS
1T52.00	H/O infrequent cocaine misuse	Eu10600	[X]Mental and behav dis due to use alcohol: amnesic syndrome
1T53.00	Previous history of cocaine misuse	Eu10611	[X]Korsakov's psychosis, alcohol induced
1T6..00	H/O crack cocaine misuse	Eu10700	[X]Men & behav dis due alcohol: resid & late-onset psychot dis
1T60.00	H/O daily crack cocaine misuse	Eu10711	[X]Alcoholic dementia NOS
1T61.00	H/O weekly crack cocaine misuse	Eu10712	[X]Chronic alcoholic brain syndrome
1T62.00	H/O infrequent crack cocaine misuse	Eu10800	[X]Alcohol withdrawal-induced seizure
1T63.00	Previous history of crack cocaine misuse	Eu10y00	[X]Men & behav dis due to use alcohol: oth men & behav dis
1T7..00	H/O hallucinogen misuse	Eu10z00	[X]Ment & behav dis due use alcohol: unsp ment & behav dis
1T73.00	Previous history of hallucinogen misuse	Eu11.00	[X]Mental and behavioural disorders due to use of opioids
1T8..00	H/O cannabis misuse	Eu11000	[X]Mental & behav dis due to use opioids: acute intoxication
1T80.00	H/O daily cannabis misuse	Eu11100	[X]Mental and behav dis due to use of opioids: harmful use
1T81.00	H/O weekly cannabis misuse	Eu11200	[X]Mental and behav dis due to use opioids: dependence syndr
1T82.00	H/O infrequent cannabis misuse	Eu11211	[X]Drug addiction - opioids
1T83.00	Previous history of cannabis misuse	Eu11212	[X]Heroin addiction
1T9..00	H/O solvent misuse	Eu11300	[X]Mental and behav dis due to use opioids: withdrawal state
1T90.00	H/O daily solvent misuse	Eu11311	[X]Cold turkey, opiate withdrawal
1T91.00	H/O weekly solvent misuse	Eu11400	[X]Men & behav dis due opioid: withdrawal state with delirium
1T93.00	Previous history of solvent misuse	Eu11500	[X]Mental & behav dis due to use opioids: psychotic disorder
1TA..00	H/O barbiturate misuse	Eu11600	[X]Mental and behav dis due to use opioids: amnesic syndrome
1TB..00	H/O major tranquilliser misuse	Eu11700	[X]Men & beh dis due opioids: resid & late-onset psychot dis

1	1TB0.00	H/O daily major tranquilliser misuse	Eu11y00	[X]Men & behav dis due to use opioids: oth men & behav dis
2	1TC..00	H/O anti-depressant misuse	Eu11z00	[X]Ment & behav dis due use opioids: unsp ment & behav dis
3				
4	1TC0.00	H/O daily anti-depressant misuse	Eu12.00	[X]Mental and behavioural disorders due to use cannabinoids
5				
6	1TC3.00	Previous history of anti-depressant misuse	Eu12000	[X]Mental & behav dis due cannabinoids: acute intoxication
7				
8	1TD..00	H/O opiate misuse	Eu12100	[X]Mental and behav dis due to use cannabinoids: harmful use
9				
10	1TD0.00	H/O daily opiate misuse	Eu12200	[X]Mental and behav dis due to cannabinoids: dependence synd
11				
12	1TD1.00	H/O weekly opiate misuse	Eu12211	[X]Drug addiction - cannabis
13	1TD2.00	H/O infrequent opiate misuse	Eu12300	[X]Mental and behav dis due cannabinoids: withdrawal state
14				
15	1TD3.00	Previous history of opiate misuse	Eu12500	[X]Mental & behav dis due to cannabinoids: psychotic disorder
16				
17	1TE..00	Uses heroin on top of substitution therapy	Eu12600	[X]Mental and behav dis due to use cannabinoids: amnesic syn
18				
19	1V...00	Drug misuse behaviour	Eu12700	[X]Mnt/bh dis due cannabinds: resid & late-onset psychot dis
20				
21	1V0..00	Misuses drugs	Eu12y00	[X]Men/behav dis due to use cannabinoids: oth men/behav disd
22				
23	1V01.00	Long-term drug misuser	Eu12z00	[X]Ment/behav dis due use cannabinoids: unsp ment/behav disd
24				
25	1V02.00	Poly-drug misuser	Eu13.00	[X]Mental and behavioural dis due use sedatives/hypnotics
26				
27	1V08.00	Smokes drugs in cigarette form	Eu13000	[X]Mental & behav dis due seds/hypntcs: acute intoxication
28				
29	1V09.00	Smokes drugs through a pipe	Eu13100	[X]Mental and behav dis due to use seds/hypntcs: harmful use
30				
31	1V0A.00	Chases the dragon	Eu13200	[X]Mental and behav dis due to seds/hypntcs: dependence synd
32				
33	1V0B.00	Sniffs drugs	Eu13211	[X]Drug addiction- sedative / hypnotics
34	1V0C.00	Drug addict	Eu13300	[X]Mental and behav dis due seds/hypntcs: withdrawal state
35				
36	1V0E.00	Health problem secondary to drug misuse	Eu13400	[X]Men & beh dis due seds/hypns: withdrwl state wth delirium
37				
38	1V26.00	Misused drugs in past	Eu13500	[X]Mental & behav dis due to seds/hypntcs: psychotic disorder
39				
40	1V3..00	Drug injection behaviour	Eu14.00	[X]Mental and behavioural disorders due to use of cocaine
41				
42	1V4..00	Priority of drug-related activities	Eu14000	[X]Mental & behav dis due to use cocaine: acute intoxication
43				
44	1V5..00	Routine of drug-related activities	Eu14100	[X]Mental and behav dis due to use of cocaine: harmful use
45				
46	1V6..00	Drug-related offending behaviour	Eu14200	[X]Mental and behav dis due to use cocaine: dependence syndr
47				
48	1V64.00	Illicit drug use	Eu14211	[X]Drug addiction - cocaine
49	1V65.00	Heroin misuse	Eu14300	[X]Mental and behav dis due to use cocaine: withdrawal state
50				
51	1V66.00	Ecstasy misuse	Eu14500	[X]Mental & behav dis due to use cocaine: psychotic disorder
52				
53	222N.00	O/E - signs of drug withdrawal	Eu14700	[X]Men & beh dis due cocaine: resid & late-onset psychot dis
54				
55	C150500	Alcohol-induced pseudo-Cushing's syndrome	Eu15.00	[X]Mental & behav disorder due other stimulants inc caffein
56				
57	E01..00	Alcoholic psychoses	Eu15000	[X]Mnt/beh dis due oth stim inc caffein: acute intoxication
58				
59	E010.00	Alcohol withdrawal delirium	Eu15100	[X]Ment/behav dis due to use oth stims inc caff: harmful use

E010.11	DTs - delirium tremens	Eu15200	[X]Mental and behav dis oth stim inc caffein: dependnce synd
E010.12	Delirium tremens	Eu15211	[X]Drug addiction-other stimul
E011.00	Alcohol amnestic syndrome	Eu15300	[X]Mnt/behav dis other stimInts inc caffeine: withdrwl state
E011000	Korsakov's alcoholic psychosis	Eu15500	[X]Mental/behav dis oth stims inc caffeine: psychotic dis
E011100	Korsakov's alcoholic psychosis with peripheral neuritis	Eu15700	[X]Mnt/bh dis oth stm inc caffne resid/late-onset psycht dis
E011z00	Alcohol amnestic syndrome NOS	Eu15z00	[X]Ment/beh dis oth stims inc caffeine: unsp ment/behav disd
E012.00	Other alcoholic dementia	Eu16.00	[X]Mental and behavioural disorders due to use hallucinogens
E012.11	Alcoholic dementia NOS	Eu16000	[X]Mental & behav dis due hallucinogens: acute intoxicatn
E012000	Chronic alcoholic brain syndrome	Eu16100	[X]Mental and behav dis due to use hallucinogens: harmfl use
E013.00	Alcohol withdrawal hallucinosis	Eu16200	[X]Mental and behav dis due to hallucinogens: dependence syn
E014.00	Pathological alcohol intoxication	Eu16211	[X]Drug addiction - hallucinogen
E015.00	Alcoholic paranoia	Eu16300	[X]Mental and behav dis due hallucinogens: withdrawal state
E01y.00	Other alcoholic psychosis	Eu16500	[X]Mental & behav dis due to hallucinogens: psychotic disord
E01y000	Alcohol withdrawal syndrome	Eu16700	[X]Mnt/bh dis due hallucngns: resid & late-onset psychot dis
E01yz00	Other alcoholic psychosis NOS	Eu16711	[X]Post hallucinogen perception disorder
E01z.00	Alcoholic psychosis NOS	Eu16z00	[X]Ment/behav dis due use hallucinogens: unsp ment/behav dis
E02..00	Drug psychoses	Eu18.00	[X]Mental & behav disorders due to use of volatile solvents
E020.00	Drug withdrawal syndrome	Eu18000	[X]Mental & behav dis due vol solvents: acute intoxication
E021.00	Drug-induced paranoia or hallucinatory states	Eu18100	[X]Mental and behav dis due volatile solvents: harmful use
E021000	Drug-induced paranoid state	Eu18200	[X]Mental and behav dis due to vol solvents: dependence synd
E021100	Drug-induced hallucinosis	Eu18211	[X]Drug addiction - solvent
E021z00	Drug-induced paranoia or hallucinatory state NOS	Eu18400	[X]Men & beh dis vol solvents: withdrawal state wth delirium
E022.00	Pathological drug intoxication	Eu18500	[X]Mental & behav dis due to vol solvents: psychotic disordr
E023.00	Nicotine withdrawal	Eu18z00	[X]Ment/behav dis due use vol solvents: unsp ment/behav dis
E02y.00	Other drug psychoses	Eu19.00	[X]Men & behav disorder multiple drug use/psychoactive subst
E02y000	Drug-induced delirium	Eu19000	[X]Mental/behav dis multi drg use/psychoac subs: acute intox
E02y100	Drug-induced dementia	Eu19100	[X]Mental and behav dis mlti drg/oth psychoa sbs: harmfl use
E02y300	Drug-induced depressive state	Eu19200	[X]Mental and behav dis mlti/oth psych sbs: dependence syndr
E02y400	Drug-induced personality disorder	Eu19211	[X]Drug addiction NOS
E02yz00	Other drug psychoses NOS	Eu19300	[X]Mental and behav dis mlti/oth psychoa sbs: withdrwl state
E02z.00	Drug psychosis NOS	Eu19400	[X]Mnt/bh dis mlti drg use/oth psy sbs: wthdr state + dlrium
E040.11	Korsakoff's non-alcoholic psychosis	Eu19500	[X]Ment/behav dis mlti drug use/oth psyc sbs: psychotc dis
E23..00	Alcohol dependence syndrome	Eu19600	[X]Mental/behav dis multi drg use/oth psy sbs:

1	E23..11	Alcoholism	Eu19700	amnesic syndr [X]Men/beh dis mlt drg use/oth subs: resid/late psychot dis
2				
3	E23..12	Alcohol problem drinking	Eu19y00	[X]Men/beh dis mlt drg use/oth psy sbs: oth men & behav dis
4				
5	E230.00	Acute alcoholic intoxication in alcoholism	Eu19z00	[X]Ment/beh dis multi drug use/oth psy sbs unsp mnt/beh dis
6				
7	E230.11	Alcohol dependence with acute alcoholic intoxication	Eu1A.00	[X]Mental and behavioural disorders due use of crack cocaine
8				
9	E230000	Acute alcoholic intoxication, unspecified, in alcoholism	Eu1A000	[X]Ment behav dis due use crack cocaine: acute intoxication
10				
11	E230100	Continuous acute alcoholic intoxication in alcoholism	Eu1A100	[X]Mental behav disorders due use crack cocaine: harmful use
12				
13	E230200	Episodic acute alcoholic intoxication in alcoholism	Eu1A200	[X]Mental behav disorders due use crack cocaine: depend synd
14				
15	E230300	Acute alcoholic intoxication in remission, in alcoholism	Eu1A300	[X]Mental behav disord due crack cocaine: withdrawal state
16				
17	E230z00	Acute alcoholic intoxication in alcoholism NOS	Eu1A500	[X]Mental behav disord due crack cocaine: psychotic disorder
18				
19	E231.00	Chronic alcoholism	Eu1Az00	[X]Ment behav dis due crack cocaine: unsp ment and behav dis
20				
21				
22	E231.11	Dipsomania	F11x000	Cerebral degeneration due to alcoholism
23	E231000	Unspecified chronic alcoholism	F11x011	Alcoholic encephalopathy
24	E231100	Continuous chronic alcoholism	F144000	Cerebellar ataxia due to alcoholism
25	E231200	Episodic chronic alcoholism	F25B.00	Alcohol-induced epilepsy
26	E231300	Chronic alcoholism in remission	F375.00	Alcoholic polyneuropathy
27	E231z00	Chronic alcoholism NOS	F394000	Drug-induced myopathy
28				
29	E23z.00	Alcohol dependence syndrome NOS	F394100	Alcoholic myopathy
30	E24..00	Drug dependence	G555.00	Alcoholic cardiomyopathy
31	E24..11	Drug addiction	G852300	Oesophageal varices in alcoholic cirrhosis of the liver
32				
33	E240.00	Opioid type drug dependence	J153.00	Alcoholic gastritis
34	E240.11	Heroin dependence	J610.00	Alcoholic fatty liver
35	E240.12	Methadone dependence	J611.00	Acute alcoholic hepatitis
36	E240.13	Morphine dependence	J612.00	Alcoholic cirrhosis of liver
37	E240.14	Opium dependence	J612000	Alcoholic fibrosis and sclerosis of liver
38	E240000	Unspecified opioid dependence	J613.00	Alcoholic liver damage unspecified
39	E240100	Continuous opioid dependence	J613000	Alcoholic hepatic failure
40	E240200	Episodic opioid dependence	J617.00	Alcoholic hepatitis
41	E240300	Opioid dependence in remission	J617000	Chronic alcoholic hepatitis
42	E240z00	Opioid drug dependence NOS	J61y.00	Other non-alcoholic chronic liver disease
43	E241.00	Hypnotic or anxiolytic dependence	J670800	Alcohol-induced acute pancreatitis
44	E241.11	Anxiolytic dependence	J671000	Alcohol-induced chronic pancreatitis
45	E241.12	Barbiturate dependence	L183.00	Drug dependence in pregnancy, childbirth and the puerperium
46				
47	E241.13	Benzodiazepine dependence	L183.11	Pregnancy and drug dependence
48	E241.14	Diazepam dependence	L183100	Drug dependence during pregnancy - baby delivered
49				
50	E241.15	Librium dependence	L183300	Drug dependence during pregnancy - baby not yet delivered
51				
52	E241.16	Sedative dependence	L183z00	Drug dependence during pregnancy/childbirth/puerperium NOS
53				
54	E241.17	Valium dependence	L255300	Maternal care for (suspected) damage to fetus from alcohol
55				
56	E241000	Hypnotic or anxiolytic dependence, unspecified	SM0..00	Alcohol causing toxic effect
57				
58				
59				
60				

E241100	Hypnotic or anxiolytic dependence, continuous	SM00.00	Ethyl alcohol causing toxic effect
E241200	Hypnotic or anxiolytic dependence, episodic	SM00000	Ethanol causing toxic effect
E241300	Hypnotic or anxiolytic dependence in remission	SM00100	Denatured alcohol causing toxic effect
E241z00	Hypnotic or anxiolytic dependence NOS	SM00z00	Ethyl alcohol causing toxic effect NOS
E242.00	Cocaine type drug dependence	SM01.00	Methyl alcohol causing toxic effect
E242000	Cocaine dependence, unspecified	SM01000	Methanol causing toxic effect
E242100	Cocaine dependence, continuous	SM01100	Wood alcohol causing toxic effect
E242200	Cocaine dependence, episodic	SM02.00	Isopropyl alcohol causing toxic effect
E242300	Cocaine dependence in remission	SM03000	Amyl alcohol causing toxic effect
E242z00	Cocaine drug dependence NOS	SM03100	Butyl alcohol causing toxic effect
E243.00	Cannabis type drug dependence	SM0y.00	Other alcohol causing toxic effect
E243.11	Hashish dependence	SM0z.00	Alcohol causing toxic effect NOS
E243.12	Hemp dependence	SyUG000	[X]Toxic effect of other alcohols
E243.13	Marihuana dependence	Z1Q6200	Methadone maintenance
E243000	Cannabis dependence, unspecified	Z1Q6214	Heroin maintenance
E243100	Cannabis dependence, continuous	ZV11300	[V]Personal history of alcoholism
E243200	Cannabis dependence, episodic	ZV11311	[V]Problems related to lifestyle alcohol use
E243300	Cannabis dependence in remission	ZV11400	[V]Personal history of psychoactive substance abuse
E243z00	Cannabis drug dependence NOS	ZV11500	[V]Personal history of drug abuse by injection
E244.00	Amphetamine or other psychostimulant dependence	ZV4K100	[V]Drug use
E244.11	Psychostimulant dependence	ZV4KC00	[V] Alcohol use
E244.12	Stimulant dependence	E245.11	LSD dependence
E244000	Amphetamine or psychostimulant dependence, unspecified	E245.12	Lysergic acid diethylamide dependence
E244100	Amphetamine or psychostimulant dependence, continuous	E245000	Hallucinogen dependence, unspecified
E244200	Amphetamine or psychostimulant dependence, episodic	E245100	Hallucinogen dependence, continuous
E244300	Amphetamine or psychostimulant dependence in remission	E245200	Hallucinogen dependence, episodic
E244z00	Amphetamine or psychostimulant dependence NOS	E245300	Hallucinogen dependence in remission
E244z11	Amphetamine or psychostimulant dependence NOS	E245.00	Hallucinogen dependence

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ATTEMPTED SUICIDE

At least one ICD-9 in:	
E950	Self-inflicted poisoning
E950.0	Self-inflicted poisoning by analgesics antipyretics and antirheumatics
E950.1	Self-inflicted poisoning by barbiturates
E950.2	Self-inflicted poisoning by other sedatives and hypnotics
E950.3	Self-inflicted poisoning by tranquilizers and other psychotropic agents
E950.4	Self-inflicted poisoning by other specified drugs and medicinal substances
E950.5	Self-inflicted poisoning by unspecified drug or medicinal substance
E950.6	Self-inflicted poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers
E950.7	Self-inflicted poisoning by corrosive and caustic substances
E950.8	Self-inflicted poisoning by arsenic and its compounds
E950.9	Self-inflicted poisoning by other and unspecified solid and liquid substances
E951	Self-inflicted poisoning
E951.0	Self-inflicted poisoning by gas distributed by pipeline
E951.1	Self-inflicted poisoning by liquefied petroleum gas distributed in mobile containers
E951.8	Self-inflicted poisoning by other utility gas
E952	Self-inflicted poisoning
E952.0	Self-inflicted poisoning by motor vehicle exhaust gas
E952.1	Self-inflicted poisoning by other carbon monoxide
E952.8	Self-inflicted poisoning by other specified gases and vapors
E952.9	Self-inflicted poisoning by un specified gases and vapors
E953	Self-inflicted injury by hanging, strangulation and suffocation
E953.0	Self-inflicted injury by hanging
E953.1	Self-inflicted injury by suffocation by plastic bag
E953.8	Self-inflicted injury by other specified means
E953.9	Self-inflicted injury by other unspecified means
E954	Self-inflicted injury by drowning
E955	Self-inflicted injury by firearms and explosives
E955.0	Self-inflicted injury by handgun
E955.1	Self-inflicted injury by shotgun
E955.2	Self-inflicted injury by hunting rifle
E955.3	Self-inflicted injury by military firearms
E955.4	Self-inflicted injury by other and unspecified firearm
E955.5	Self-inflicted injury by explosives
E955.6	Self-inflicted injury by air gun
E955.7	Self-inflicted injury by paintball gun
E955.9	Self-inflicted injury by firearms and explosives unspecified
E956	Self-inflicted injury by cutting and piercing instrument
E957	Self-inflicted injury by jumping from high places
E957.0	Self-inflicted injury by jumping from residential premises
E957.1	Self-inflicted injuries by jumping from other man-made structures
E957.2	Self-inflicted injuries by jumping from natural sites
E957.9	Self-inflicted injuries by jumping from unspecified site
E958	Self-inflicted injury
E958.0	Self-inflicted injury by jumping or lying before a moving object
E958.1-E958.2	Self-inflicted injury by smoke, fire, flames, steam, hot vapours and

hot objects
 E958.3, E958.4, E958.6-E958.9 Self-inflicted injury by other and unspecified means
 E958.5 Self-inflicted injury by crashing of motor vehicle
 E959 Late effects of self-inflicted injury

OR

At least one ICD-10 in:

X60-84 Intentional self-harm
 X60 Intentional self-poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics
 X61 Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified
 X62 Intentional self-poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified
 X63 Intentional self-poisoning by and exposure to other drugs acting on the autonomic nervous system
 X64 Intentional self-poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
 X65 Intentional self-poisoning by and exposure to alcohol
 X66 Intentional self-poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours
 X67 Intentional self-poisoning by and exposure to other gases and vapours
 X68 Intentional self-poisoning by and exposure to pesticides
 X69 Intentional self-poisoning by and exposure to other and unspecified chemicals and noxious substances
 X70 Intentional self-harm by hanging, strangulation and suffocation
 X71 Intentional self-harm by drowning and submersion
 X72 Intentional self-harm by handgun discharge
 X73 Intentional self-harm by rifle, shotgun and larger firearm discharge
 X74 Intentional self-harm by other and unspecified firearm discharge
 X75 Intentional self-harm by explosive material
 X76 Intentional self-harm by smoke, fire and flames
 X77 Intentional self-harm by steam, hot vapours and hot objects
 X78 Intentional self-harm by sharp object
 X79 Intentional self-harm by blunt object
 X80 Intentional self-harm by jumping from a high place
 X81 Intentional self-harm by jumping or lying before moving object
 X82 Intentional self-harm by crashing of motor vehicle
 X83 Intentional self-harm by other specified means
 X84 Intentional self-harm by unspecified means
 Y87.0 Late effects of intentional self-harm

OR

At least one READ code in:			
SL...15	Overdose of drug	U1A4.11	[X]Accidental poisoning with antidepressant
T8...00	Accidental poisoning by drugs, medicines and biologicals	T952.00	Accidental poisoning from other fish
T91z.00	Accidental poisoning by household agents NOS	ZX1C.00	Nipping self
U20...11	[X]Deliberate drug overdose / other poisoning	ZX17.00	Head-banging
T8...11	Cause of overdose - accidental	T938000	Accidental poisoning by cyanides
1BD1.00	Suicidal ideation	U20A000	[X]Intent self pois organ solvent,halogen hydrocarb, home
T803000	Accidental poisoning by aspirin	TK7z.00	Suicide+selfinflicted injury-jump from high place NOS
TK05.00	Suicide + selfinflicted poisoning by drug or medicine NOS	T964200	Accidental poisoning by cadmium and its compounds
T921300	Accidental poisoning by kerosene	ZX1B200	Jumping from bridge
TK...15	Attempted suicide	T953z00	Accidental poisoning from berries or seeds NOS
T930.00	Accidental poisoning by organochlorine insecticides	T80y.00	Accidental poisoning by oth analgesics,antipyretic,antirheum
U1A...12	[X]Accidental drug overdose / other poisoning	TKx0000	Suicide + selfinflicted injury-jumping before moving object
TK...17	Para-suicide	U209z00	[X]Intent self poison alcohol unspecif place
TK...12	Injury - self-inflicted	T930500	Accidental poisoning by toxaphene
U2...13	[X]Suicide	ZX11400	Biting own arm
1BD3.00	Suicidal plans	T954.00	Accidental poisoning from other plants
T924z00	Accidental poisoning by other solvents NOS	T820.00	Accidental poisoning by chloral hydrate
T81...00	Accidental poisoning by barbiturates	U221.00	[X]Intent self harm by drowning/submersn occ resid instit'n
T804100	Accidental poisoning by paracetamol	T935200	Accidental poisoning by chlorates
U2E...00	[X]Self mutilation	T930100	Accidental poisoning by chlordane
1BD4.00	Suicide risk	U1A0z00	[X]Accid poison/expos to nonopioid analgesic unspecif place
TK3y.00	Suicide + selfinflicted inj oth mean hang/strangle/suffocate	U204.13	[X]Overdose - SSRI
TK...11	Cause of overdose - deliberate	T951.00	Accidental poisoning from shellfish
146B.00	H/O: deliberate self harm	U2A1.00	[X]Intent self harm by blunt object occ resident instit'n
U2...15	[X]Para-suicide	T903300	Accidental poisoning by secondary propyl alcohol
1B19.11	Suicidal - symptom	TK3z.00	Suicide + selfinflicted inj by hang/strangle/suffocate NOS
TK60111	Slashed wrists self inflicted	T854.00	Accidental poisoning by anticholinergics
ZX1...13	Deliberate self-harm	TK72.00	Suicide+selfinflicted injury-jump from natural sites
U209.00	[X]Intent self poison/exposure to alcohol	U2zz.00	[X]Intent self harm by unspecif means occ at unspecif place
ZX...00	Self-harm	U1A9z00	[X]Accid poison/expos to alcohol unspecif place
T99y000	Accidental poisoning by chlorine	U409z00	[X]Pois/expos ?intent to alcohol unspecif place
TK...13	Poisoning - self-inflicted	T83yz00	Accidental poisoning by other tranquillisers NOS
U2...11	[X]Self inflicted injury	T842100	Accidental poisoning by caffeine
146A.00	H/O: attempted suicide	T806300	Accidental poisoning by ibuprofen
TK60100	Self inflicted lacerations to wrist	U408z00	[X]Pois/expos ?intent to oth/unsp drug/medic unspecif place

ZX17100	Banging own head against object	U20y200	[X]Int self poison unspecif chemical school/pub admin area
SL...14	Overdose of biological substance	U1A2.00	[X]Accident poisoning/exposure to sedative hypnotic
1BDC.00	Intent of deliberate self harm with detailed plans	TK70.00	Suicide+selfinflicted injury-jump from residential premises
ZX16211	Poking own eyes	TK2..00	Suicide + selfinflicted poisoning by other gases and vapours
ZX13.00	Cutting self	T840200	Accidental poisoning by monoamine oxidase inhibitors
1BDA.00	Thoughts of deliberate self harm	T93z.00	Accidental poisoning agricultural chemical preparations NOS
ZX14200	Pulling out sutures	T832z00	Accidental poisoning- benzodiazepine-based tranquilliser NOS
TK30.00	Suicide and selfinflicted injury by hanging	T932.00	Accidental poisoning by carbamates
14K0.00	H/O: repeated overdose	TN04.00	Injury ?accidental, poisoning by other spec drug/medicament
T967.00	Accidental poisoning by cosmetics	ZX1K.00	Self-incineration
TK00.00	Suicide + selfinflicted poisoning by analgesic/antipyretic	U40y400	[X]Pois/expos ?intent unspecif chemical in street/highway
TK60.00	Suicide and selfinflicted injury by cutting	U40B400	[X]Pois/expos ?intent other gas/vapour in street/highway
1B19.00	Suicidal	T993000	Accidental poisoning by bromobenzyl cyanide
T901.00	Accidental poisoning by other ethyl alcohol and its products	T832100	Accidental poisoning by diazepam
T9...00	Accidental poisoning by other non-drug substances	U405.00	[X]Poisoning/exposure, ? intent, to narcotic drug
TK01.00	Suicide + selfinflicted poisoning by barbiturates	U208000	[X]Int self poison/exposure to oth/unsp drug/medicam home
14K..00	H/O: poisoning	T840.00	Accidental poisoning by antidepressants
U30..11	[X]Deliberate drug poisoning	U1Ayy00	[X]Accid pois/expos to unspecif chemical other spec place
U2...00	[X]Intentional self-harm	T971.00	Accidental poisoning by coal gas NOS
U2...14	[X]Attempted suicide	T99yz00	Accidental poisoning by other gases and vapours NOS
T955.00	Accidental poisoning from mushrooms and other fungi	U2A..00	[X]Intentional self harm by blunt object
T80..00	Accidental poisoning by analgesics,antipyretic,antirheumatic	T840000	Accidental poisoning by amitriptyline
T88..00	Accidental poisoning by other drugs	T805.00	Accidental poisoning by pyrazole derivatives
T8z..00	Accidental poisoning by drugs NOS	U2C4.00	[X]Int self harm jump/lying befr mov obje occ street/highway
T840z00	Accidental poisoning by antidepressants NOS	U274.00	[X]Intent self harm by smoke fire/flame occ street/highway
U1AB.11	[X]Accidental carbon monoxide poisoning	U400.00	[X]Poisoning/exposure, ? intent, to nonopioid analgesic
T90..00	Accidental poisoning by alcohol, NEC	U1ADz00	[X]Acc poison by and exposure to amphetamine - unspec places
U200.11	[X]Overdose - paracetamol	T825.00	Accidental poisoning by mixed sedatives NEC
1BD8.00	At risk of DSH - deliberate self harm	U1A9000	[X]Accident poison/exposure to alcohol at home
ZX13100	Cutting own wrists	T832500	Accidental poisoning by nitrazepam
ZX1P.00	Swallowing substances	U1A2.13	[X]Accidental poisoning with temazepam
ZX1I.00	Self-scalding	T83y.00	Accidental poisoning by other tranquillisers
T91..00	Accidental poisoning by household agents	U4A5.00	[X]Contct with blunt obj undet intent occ trade/service area

T921200	Accidental poisoning by petrol	TN0..00	Injury ?accidental, poisoning by solid/liquid substances
U2...12	[X]Injury - self-inflicted	T912.00	Accidental poisoning by polishes
U200z00	[X]Intent self poison nonopioid analgesic unspecif place	T916z00	Accidental poisoning by paint or varnish NOS
U1A..11	[X]Accidental drug / other poisoning	U1A9400	[X]Accid poison/expos alcohol in street/highway
TK...14	Suicide and self harm	TN07.00	Injury ?accidental, poisoning by agricultural chemicals
TK...00	Suicide and selfinflicted injury	T980100	Accidental poisoning by butane
U200.00	[X]Intent self poison/exposure to nonopioid analgesic	ZX1L600	Self-mutilation of ears
T910.00	Accidental poisoning by synthetic detergents and shampoos	ZX1L500	Enucleation of own eyes
ZV1B200	[V]Personal history of self-harm	ZX1K.11	Setting fire to self
TK04.00	Suicide + selfinflicted poisoning by other drugs/medicines	T964000	Accidental poisoning by beryllium and its compounds
ZX11.00	Biting self	ZX1E.00	Pinching self
U1Ay.00	[X]Accident poisoning/exposure to unspecif chemical	U20Bz00	[X]Intent self poison other gas/vapour unspecif place
TK3..00	Suicide + selfinflicted injury by hang/strangulate/suffocate	T920z00	Accidental poisoning by petrol solvents NOS
T935.00	Accidental poisoning by herbicides	U211.00	[X]Intent self harm by hangng strangult/suffoct resid instit
T913z00	Accidental poisoning by other cleaning agents NOS	T965100	Accidental poisoning by fertilisers
T884.00	Accidental poisoning by gastrointestinal system drugs	U1A3.00	[X]Accident poisoning/exposure to antiparkinson drug
T96y.00	Accidental poisoning by other solid and liquid substances OS	T983z00	Accidental poisoning by carbon monoxide - domestic fuel NOS
TK7..00	Suicide and selfinflicted injury by jumping from high place	TKx5.00	Suicide and selfinflicted injury by crashing motor vehicle
U40..00	[X]Poisoning/expos to noxious substance,undetermined intent	T822000	Accidental poisoning by bromides
U20A.11	[X]Self poisoning from glue solvent	T930300	Accidental poisoning by dieldrin
T970.00	Accidental poisoning by carbon monoxide from piped gas	T938.00	Accidental poisoning by fumigants
U27..00	[X]Intentional self harm by smoke, fire and flames	U1A6.00	[X]Accident poisoning/exposure to hallucinogen
U20B.11	[X]Self carbon monoxide poisoning	U40A300	[X]Pois/exp ?intent org solvent,halogen hydrocarb,sport area
T95..00	Accidental poisoning from foodstuffs and poisonous plants	ZX1L811	Snapping own bones
U1A..00	[X]Accidental poisoning by + exposure to noxious substances	TK54.00	Suicide and selfinflicted injury by other firearm
ZX11200	Biting own fingers	T961000	Accidental poisoning by mercury, unspecified
ZX11500	Biting own tongue	TK6z.00	Suicide and selfinflicted injury by cutting and stabbing NOS
TN...11	Poisoning undetermined - accidentally or purposely inflicted	U4C..00	[X]Falling lying running befor/into moving obj undet intent
ZX19.00	Hitting self	T843100	Accidental poisoning by opiate antagonists
ZX1G.00	Scratches self	TN21.00	Injury ?accidental, poisoning by other carbon monoxide
1BD7.00	Low suicide risk	T921z00	Accidental poisoning by petrol fuel or cleaner NOS
T911.00	Accidental poisoning by soap products	U1AD000	[X]Accident poisoning by and exposure to

U29..00	[X]Intentional self harm by sharp object	U1A5000	amphetamine - home [X]Accident poison/exposure to narcotic drug at home
TK61.00	Suicide and selfinflicted injury by stabbing	U201.00	[X]Intent self poison/exposure to antiepileptic
TK03.00	Suicide + selfinflicted poisoning tranquilliser/psychotropic	TKxy.00	Suicide and selfinflicted injury by other specified means
T842000	Accidental poisoning by amphetamine	TK01000	Suicide and self inflicted injury by Amylobarbitone
U20..00	[X]Intentional self poisoning/exposure to noxious substances	U201z00	[X]Intent self poison antiepileptic unspecif place
U40y.00	[X]Poisoning/exposure, ? intent, to unspecif chemical	U204z00	[X]Intent self poison psychotropic drug unspecif place
T953000	Accidental poisoning from berries	T936000	Accidental poisoning by organic mercurials
TK07.00	Suicide + selfinflicted poisoning by corrosive/caustic subst	U1A7z00	[X]Accid poison/expos to oth autonomic drug unspecif place
T913.00	Accidental poisoning by other cleaning agents	TK0z.00	Suicide + selfinflicted poisoning by solid/liquid subst NOS
TK51.00	Suicide and selfinflicted injury by shotgun	U207z00	[X]Intent self poison oth autonomic drug unspecif place
U45..00	[X]Other+unspecified firearm discharge undetermined intent	T83z.00	Accidental poisoning by tranquilisers NOS
ZX1LD00	[X]Self mutilation	U402.00	[X]Poisoning/exposure, ? intent, to sedative hypnotic
ZX1..14	Self-abusive behaviour	T84z.00	Accidental poisoning by psychotropic agents NOS
ZX18.00	Hanging self	T96..00	Accidental poisoning by other solid and liquid substances
U205.11	[X]Overdose - heroin	U1AA000	[X]Accid poison/expos organ solvent,halogen hydrocarb, home
T938200	Accidental poisoning by phosphine	U40B.00	[X]Poisoning/exposure, ? intent, to other gas/vapour
U200.13	[X]Overdose - aspirin	U1AC.12	[X]Accidental poisoning with paraquat
U409.00	[X]Poisoning/exposure, ? intent, to alcohol	U1Ay600	[X]Acc pois/expos unspecif chemical indust/construct area
T955000	Accidental poisoning from mushrooms	TK5..00	Suicide and selfinflicted injury by firearms and explosives
U290.00	[X]Intentional self harm by sharp object occurrence at home	TN20.00	Injury ?accidental, poisoning by motor vehicle exhaust gas
TK0..00	Suicide + selfinflicted poisoning by solid/liquid substances	T921.00	Accidental poisoning by petrol fuels and cleaners
U21..00	[X]Intent self harm by hanging strangulation / suffocation	U4A3.00	[X]Contct wth blunt obj undet intent occ sport/athletic area
ZX1H100	Self-strangulation	T831000	Accidental poisoning by haloperidol
T916200	Accidental poisoning by non-lead paints	U280.00	[X]Intent self harm by steam hot vapour/hot obj occ at home
U1A9.00	[X]Accident poisoning/exposure to alcohol	U2y0.00	[X]Intentionl self harm by oth specif means occurrn at home
T935500	Accidental poisoning by paraquat	T935z00	Accidental poisoning by herbicides NOS
TN1..00	Injury ?accidental, poisoning by gases in domestic use	T80yz00	Accidental poisoning-oth analgesic,antipyretic,antirheum NOS
TK4..00	Suicide and selfinflicted injury by drowning	U241.00	[X]Int self harm rifl s'gun/lrg frarm disch occ resid instit
ZX1L.00	Self-mutilation	T955z00	Accidental poisoning from mushrooms and fungi NOS
ZX19300	Head-hitting	U406y00	[X]Pois/exp ?intent to hallucinogen other spec place

ZX1..11	Self-destructive behaviour	T935400	Accidental poisoning by mixtures herbicides+plant food etc
T92..00	Accidental poisoning by petrol products	U4D3.00	[X]Crash of motor vehicle undeterm intent sport/athlet area
TK02.00	Suicide + selfinflicted poisoning by oth sedatives/hypnotics	T82y.00	Accidental poisoning by other sedatives and hypnotics OS
T914.00	Accidental poisoning by disinfectants	U20C.12	[X]Self poisoning with paraquat
T88yz00	Accidental poisoning by other drugs NOS	T940.00	Accidental poisoning by corrosive aromatics
T961.00	Accidental poisoning by mercury and its compounds and fumes	TN05.00	Injury ?accidental, poisoning by drug or medicament NOS
T9z..00	Accidental poisoning NOS	T802.00	Accidental poisoning by other opiates
T85..00	Accidental poisoning by other drugs acting on nervous system	T841.00	Accidental poisoning by hallucinogens
T883.00	Accidental poisoning by cardiovascular system drugs	U1A2.12	[X]Accidental poisoning with diazepam
U2z..00	[X]Intentional self harm by unspecified means	U2A0.00	[X]Intentional self harm by blunt object occurrence at home
U1AA.11	[X]Accidental poisoning from glue solvent	U208z00	[X]Intent self poison oth/unsp drug/medic unspecif place
T886.00	Accidental poisoning by muscle + respiratory system drugs	T991.00	Accidental poisoning by sulphur dioxide
U204.12	[X]Overdose - amitriptyline	U409000	[X]Poison/exposure ?intent, to alcohol at home
T923000	Accidental poisoning by paraffin wax	T99..00	Accidental poisoning by other gases and vapours
T902000	Accidental poisoning by methanol	T850.00	Accidental poisoning by anticonvulsant + anti-parkinson drug
ZX10.00	Swallowing objects	T850.11	Accidental poisoning by anticonvulsant
ZX1L100	Self-mutilation of hands	U205z00	[X]Intent self poison narcotic drug unspecif place
ZX1..00	Self-injurious behaviour	U202z00	[X]Intent self poison sedative hypnotic unspecif place
1BD5.00	High suicide risk	U207.00	[X]Intent self poison/exposure to oth autonomic drug
ZX1LA00	Removing own nails	U20C.00	[X]Intent self poison/exposure to pesticide
ZX11100	Biting own hand	T964700	Accidental poisoning by thallium compounds
ZX11300	Biting own toes	U40y600	[X]Poison/expo ?intent unspec chemic indust/construct area
U4D0.00	[X]Crashng of motor vehicle undetermined intent occ at home	T95y.00	Accidental poisoning by other foods
T800.11	Accidental poisoning by diamorphine	T88y000	Accidental poisoning by central appetite depressants
U2D4.00	[X]Intent self harm by crash motor vehicl occ street/highway	T961z00	Accidental poisoning by mercury, NOS
U208.00	[X]Int self poison/exposure to other/unspec drug/medicament	U1A8y00	[X]Accid pois/expo to oth/unsp drug/medic other spec place
T887000	Accidental poisoning by skin drugs	ZX1K.12	Setting self alight
TKx2.00	Suicide and selfinflicted injury by scald	U720.00	[X]Sequelae of intentional self-harm
U4B..00	[X]Falling jumping/pushed from high place undeterm intent	U2yz.00	[X]Intent self harm by oth specif means occ unspecif place
TK6..00	Suicide and selfinflicted injury by cutting and stabbing	U202y00	[X]Int self poison sedative hypnotic other spec place
T86..00	Accidental poisoning by antibiotics	U404300	[X]Pois/exp ?intent psychotropic drug in sport/athletic area
T98..00	Accidental poisoning by other utility gas + carbon monoxide	T802z00	Accidental poisoning by other opiates NOS

U204.00	[X]Intent self poison/exposure to psychotropic drug	U409200	[X]Pois/exp ?intent alcohol school/pub admin area
ZX13.11	Cuts self	U1Ayz00	[X]Accid poison/expos to unspecif chemical unspecif place
T966000	Accidental poisoning by glues	T950.00	Accidental poisoning from meat
ZX14100	Reopening scars	U1A1.00	[X]Accident poisoning/exposure to antiepileptic
T901100	Accidental poisoning by methylated spirit	T913000	Accidental poisoning by scouring agents
T935300	Accidental poisoning by diquat	TK10.00	Suicide + selfinflicted poisoning by gas via pipeline
T902.00	Accidental poisoning by methyl alcohol	TN08.00	Injury ?accidental, poisoning by arsenic or its compounds
1BD6.00	Moderate suicide risk	T966y00	Accidental poisoning by other adhesives
T83..00	Accidental poisoning by tranquillisers	U205y00	[X]Int self poison narcotic drug other spec place
U1AB.00	[X]Accident poisoning/exposure to other gas/vapour	TK1..00	Suicide + selfinflicted poisoning by gases in domestic use
T942z00	Accidental poisoning by caustic alkalis NOS	U20A400	[X]Int self poison org solvent,halogen hydrocarb,in highway
T841000	Accidental poisoning by cannabis derivatives	T803z00	Accidental poisoning by salicylates NOS
ZX12.00	Burning self	U1A2000	[X]Accident poison/exposure to sedative hypnotic at home
U27z.00	[X]Intent self harm by smoke fire/flames occ unspecif place	T931300	Accidental poisoning by malathion
T901300	Accidental poisoning by ethanol, NOS	TKx0.00	Suicide + selfinflicted injury-jump/lie before moving object
T88z.00	Accidental poisoning by unspecified drugs	TN1z.00	Injury ?accidental, poisoning by gas in domestic use NOS
ZX11600	Biting sides of own cheeks	T85z.00	Accidental poisoning by drugs acting on nervous system NOS
T88y.00	Accidental poisoning by other drugs OS	TKx4.00	Suicide and selfinflicted injury by electrocution
T937300	Accidental poisoning by warfarin	T807.00	Accidental poisoning by other non-narcotic analgesics
U20B200	[X]Int self poison other gas/vapour school/pub admin area	TK11.00	Suicide + selfinflicted poisoning by liquified petrol gas
U2y..00	[X]Intentional self harm by other specified means	TN0z.00	Injury ?accidental, poisoning by solid or liquid subst NOS
T973.00	Accidental poisoning by piped natural gas	ZX...11	Self-damage
T93..00	Accidental poisoning by agricultural chemical preparations	TKxz.00	Suicide and selfinflicted injury by other means NOS
ZX13200	Cutting own throat	T806.00	Accidental poisoning by antirheumatics
T806100	Accidental poisoning by indomethacin	T964600	Accidental poisoning by nickel compounds
ZX1A.00	Inserting foreign bodies into own orifices	T813.00	Accidental poisoning by pentobarbitone
T924.00	Accidental poisoning by other solvents	T806z00	Accidental poisoning by antirheumatics NOS
T97..00	Accidental poisoning by gas distributed by pipeline	ZX19100	Punching self
ZX14300	Poking fingers into wound	U2B0.00	[X]Intent self harm by jumping from high place occ at home
ZX11111	Hand biting	U270.00	[X]Intention self harm by smoke fire/flames occurrn at home
T802200	Accidental poisoning by morphine	U206400	[X]Intent self pois hallucinogen in street/highway
T881.00	Accidental poisoning by primarily systemic agents	C110100	Self-induced hyperinsulinism
U41..00	[X]Hanging strangulation + suffocation undetermined intent	T916000	Accidental poisoning by lacquers
T900.00	Accidental poisoning by alcoholic beverages	T850z00	Accidental poisoning by anticonvulsant/anti-

1	ZV15600	[V]Personal history of poisoning			parkin drug NOS
2	T98z.00	Accidental poisoning by carbon monoxide NOS	T854000	Accidental poisoning by atropine	
3	TKz..00	Suicide and selfinflicted injury NOS	T830200	Accidental poisoning by prochlorperazine	
4			T931z00	Accidental poisoning by organophosphorus insecticides NOS	
5	ZX1B.00	Jumping from height	T964.00	Accidental poisoning by other metals + compounds and fumes	
6			U29y.00	[X]Intention self harm by sharp object occ oth specif place	
7	U22..00	[X]Intentional self harm by drowning and submersion	T81z.00	Accidental poisoning by barbiturates NOS	
8	U209000	[X]Int self poison/exposure to alcohol at home	U28z.00	[X]Intent self harm by steam hot vapour/obj occ unspec place	
9	U1AB600	[X]Acc pois/expos other gas/vapour indust/construct area	TK2z.00	Suicide + selfinflicted poisoning by gases and vapours NOS	
10	U1ABz00	[X]Accid poison/expos to other gas/vapour unspecif place	U26..00	[X]Intentional self harm by explosive material	
11	T916.00	Accidental poisoning by other paints and varnishes	U1A8100	[X]Accid poison/expos to oth/unsp drug/medicam res institut	
12	U20yz00	[X]Intent self poison unspecif chemical unspecif place	T95z.00	Accidental poisoning by foodstuffs and poisonous plants NOS	
13	U2C..00	[X]Intent self harm by jumping / lying before moving object	U207000	[X]Int self poison/exposure to oth autonomic drug at home	
14	U2z0.00	[X]Intentional self harm by unspecif means occurrn at home	T936.00	Accidental poisoning by fungicides	
15	T981z00	Accidental poisoning by utility gas NOS	U1A8z00	[X]Accid poison/expos to oth/unsp drug/medic unspecif place	
16	U20A.00	[X]Intentional self poison organ solvent,halogen hydrocarb	U2Cy.00	[X]Int self harm jump/lying bef mov obje occ oth specif pce	
17	TKy..00	Late effects of selfinflicted injury	T963100	Accidental poisoning by arsenic compounds	
18	U21z.00	[X]Intent self harm by hangng strangul/suffoct unspecif pce	T903100	Accidental poisoning by isopropanol	
19	U1AD.00	[X]Accidental poisoning by and exposure to amfetamine	T855100	Accidental poisoning by noradrenalin	
20	T931.00	Accidental poisoning by organophosphorus insecticides	T932200	Accidental poisoning by propoxur	
21	U1A0000	[X]Accident poison/exposure to nonopioid analgesic at home	T932100	Accidental poisoning by carbaryl	
22	T98yz00	Accidental poisoning by carbon monoxide from oth source NOS	T963.00	Accidental poisoning by arsenic and its compounds and fumes	
23	T92z.00	Accidental poisoning by solvent NOS	T853.00	Accidental poisoning by cholinergics	
24	TK71.00	Suicide+selfinflicted injury-jump from oth manmade structure	U2y1.00	[X]Intent self harm by oth specif means occ resid instit'n	
25	T84..00	Accidental poisoning by other psychotropic agents	T98y200	Accidental poisoning by CO - fuels in industrial use	
26	U40C.00	[X]Poisoning/exposure, ? intent, to pesticide	ZX1Q.11	Jumping under train	
27			U20C.11	[X]Self poisoning with weedkiller	
28	T915.00	Accidental poisoning by lead paints	T961200	Accidental poisoning by mercury fumes	
29	U1AC.11	[X]Accidental poisoning with weedkiller	ZX1H200	Self-suffocation	
30	U4A..00	[X]Contact with blunt object, undetermined intent	T916300	Accidental poisoning by white washes	
31	T937z00	Accidental poisoning by rodenticides NOS	ZX1L900	Pulling own teeth out	
32	U204000	[X]Int self poison/exposure to psychotropic drug at home	U294.00	[X]Intention self harm by sharp object occ street/highway	
33	U202000	[X]Int self poison/exposure to sedative hypnotic at home			
34	T96z.00	Accidental poisoning by solid and liquid substances NOS			

T934.00	Accidental poisoning by other insecticides	ZX1L300	Self-mutilation of penis
T953100	Accidental poisoning from seeds	U21y.00	[X]Intent self harm by hangng strangul/suffoct oth spec plce
U47...00	[X]Exposure to smoke, fire and flames, undetermined intent	T815.00	Accidental poisoning by quinalbarbitone
T832.00	Accidental poisoning by benzodiazepine-based tranquillisers	U4D7.00	[X]Crashng of motor vehicle undetermined intent occ on farm
T82...00	Accidental poisoning by other sedatives and hypnotics	ZX1R.00	Throwing self in front of vehicle
U200.12	[X]Overdose - ibuprofen	U1Ay200	[X]Acc poison/expos unspecif chemical school/pub admin area
T920.00	Accidental poisoning by petroleum solvents	U1A3500	[X]Accid poison/expos antiparkinson drug trade/service area
ZX1B100	Jumping from building	U1A9500	[X]Accid poison/expos alcohol trade/service area
U2D0.00	[X]Intent self harm by crash of motor vehicl occurrn at home	T832400	Accidental poisoning by medazepam
ZX1F.00	Rubbing own skin	TN2...00	Injury ?accidental, poisoning by other gases
T887300	Accidental poisoning by otorhinolaryngological drugs	U410.00	[X]Hanging strangulat+suffocat undet intent occurrn at home
T880.00	Accidental poisoning by hormones and synthetic substitutes	T920200	Accidental poisoning by petroleum naphtha
U1Ay000	[X]Accident poison/exposure to unspecif chemical at home	T887z00	Accidental poisoning by skin, eye, ENT and dental drug NOS
T885.00	Accidental poisoning by water,mineral,uric acid metab drugs	U2C1.00	[X]Int self harm jump/lying befr mov obje occ resid instit'n
U25...00	[X]Intent self harm by other/unspecified firearm discharge	T921.12	Accidental poisoning by petroleum fuels
U205.00	[X]Intent self poison/exposure to narcotic drug	T940011	Accidental poisoning by phenol
U202.12	[X]Overdose - diazepam	U1AC000	[X]Accident poison/exposure to pesticide at home
U72...00	[X]Sequel intentn self-harm assault+event of undeterm intent	TN11.00	Injury ?accidental, poisoning by liquid petrol gas
ZX1LB00	Eating own flesh	U2Bz.00	[X]Int self harm by jump from high place occ unspecif place
ZX17200	Banging own head against own body parts	TK1z.00	Suicide + selfinflicted poisoning by domestic gases NOS
T983100	Accidental poisoning by CO- coke in domestic stove/fireplace	T98y000	Accidental poisoning by CO - blast furnace gas
U49...00	[X]Contact with sharp object, undetermined intent	TK01400	Suicide and self inflicted injury by Phenobarbitone
ZX15.00	Drowning self	T85y.00	Accid. poisoning by other drugs acting on nervous system OS
U204.11	[X]Overdose - antidepressant	U22y.00	[X]Intent self harm by drown/submersn occ oth specif place
T814.00	Accidental poisoning by phenobarbitone	U20Cy00	[X]Int self poison pesticide other spec place
U1A2.11	[X]Accidental poisoning with sleeping tablets	U206.00	[X]Intent self poison/exposure to hallucinogen
TKx1.00	Suicide and selfinflicted injury by burns or fire	U202.18	[X]Overdose - amobarbital
U2B...00	[X]Intentional self harm by jumping from a high place	T830000	Accidental poisoning by chlorpromazine
T470.00	Accidental poisoning by gases or fumes on ship	ZX16.00	Gouging own body parts
ZX1LC00	Stripping own skin	T807z00	Accidental poisoning by non-narcotic analgesics NOS
ZRLfC12	HoNOS item 2 - non-accidental self injury	T887400	Accidental poisoning by dental drugs
ZX1L911	Extracting own teeth	U1Ay500	[X]Accid poison/expos unspecif chemical trade/service area

1	1BDB.00	Plans for deliberate self harm without intent	T966.00	Accidental poisoning by glues and adhesives
2	ZX11.11	Bites self	ZX1B300	Jumping from cliff
3	U1A2.15	[X]Accidental poisoning with nitrazepam	U2B6.00	[X]Int self harm by jump from high place
4	TKx..00	Suicide and selfinflicted injury by other means	U250.00	[X]Intent self harm oth/unspecif firearm disch
5				occ at home
6	TH02.00	Late effects of accidental poisoning	ZX1L700	Self-inducing a prolapse
7	ZX1..12	SIB - Self-injurious behaviour	T852100	Accidental poisoning by lignocaine
8	T937200	Accidental poisoning by thallium	U1A5z00	[X]Accid poison/expos to narcotic drug
9				unspecif place
10				
11	T981400	Accidental poisoning by cooking gas NOS	U409400	[X]Pois/expos ?intent alcohol in
12				street/highway
13	T921100	Accidental poisoning by gas oils	U2zy.00	[X]Intent self harm by unspecif means occ oth
14				specif place
15	T965000	Accidental poisoning by plant food	ZX1L800	Breaking own bones
16	U202.16	[X]Overdose - benzodiazepine	TKx7.00	Suicide and selfinflicted injury caustic subst,
17				excl poison
18	ZX1N.00	Stabbing self	U200y00	[X]Int self poison nonopioid analgesic other
19				spec place
20	T803.00	Accidental poisoning by salicylates	U204y00	[X]Int self poison psychotropic drug other spec
21				place
22	TK20.00	Suicide + selfinflicted poisoning by motor veh	T852.00	Accidental poisoning by local anaesthetic
23		exhaust gas		
24	T99y.00	Accidental poisoning by other gases and vapours	U408000	[X]Poison/exposure ?intent, to oth/unsp
25		OS		drug/medicam home
26	U200000	[X]Int self poison/exposure to nonopioid	U202400	[X]Intent self pois sedative hypnotic in
27		analgesic at home		street/highway
28	U1A5.00	[X]Accident poisoning/exposure to narcotic drug	U1ABy00	[X]Accid pois/expos to other gas/vapour other
29				spec place
30				
31	TK1y.00	Suicide and selfinflicted poisoning by other utility	U200500	[X]Intent self pois nonopioid analgesic
32		gas		trade/service area
33	T953.00	Accidental poisoning from berries and seeds	U208400	[X]Intent self pois oth/unsp drug/medic in
34				street/highway
35	U202.17	[X]Overdose - barbiturate	U200100	[X]Intent self poison nonopioid analgesic at res
36				institut
37	U1A0.11	[X]Accidental poisoning with paracetamol	U20C000	[X]Int self poison/exposure to pesticide at
38				home
39	T955y00	Accidental poisoning from other fungi	U402z00	[X]Pois/expos ?intent to sedative hypnotic
40				unspecif place
41	T852000	Accidental poisoning by cocaine	U208y00	[X]Int self poison oth/unsp drug/medic other
42				spec place
43	T942000	Accidental poisoning by sodium hydroxide	U209y00	[X]Int self poison alcohol other spec place
44	U1A0.00	[X]Accident poisoning/exposure to nonopioid	U2z2.00	[X]Intent self harm by unspec mean occ
45		analgesic		sch/ins/pub adm area
46	T941000	Accidental poisoning by hydrochloric acid	ZX16100	Gouging own flesh
47	ZX1J.00	Self-electrocution	T841z00	Accidental poisoning by hallucinogen NOS
48	T854200	Accidental poisoning by hyoscine	T982z00	Accidental poisoning by exhaust gas from
49				motor vehicle NOS
50				
51	TN00.00	Injury ?accidental, poisoning by analgesic or anti-	T964500	Accidental poisoning by manganese and its
52		pyretic		compounds
53	T80z.00	Accidental poisoning by	U404.00	[X]Poisoning/exposure, ? intent, to
54		analgesics,antipyretic,antirheum NOS		psychotropic drug
55	ZX19200	Slapping self	U22z.00	[X]Intent self harm by drown/submersn occ
56				unspecified place
57	U1A7.00	[X]Accident poisoning/exposure to oth autonomic	T94y.00	Accidental poisoning by other corrosives and
58		drug		caustics
59				
60				

U1A0.12	[X]Accidental poisoning with ibuprofen	U20Az00	[X]Int self pois org solv,halogen hydrocarb, unspec place
U408.00	[X]Poison/exposure, ?intent, to other/unspec drug/medicament	ZV71600	[V]Observation following other inflicted injury
U48..00	[X]Contact with steam hot vapours+objects undetermn intent	T830z00	Accidental poisoning- phenothiazine-based tranquillisers NOS
T982100	Accidental poisoning by exhaust gas from gas engine	T924000	Accidental poisoning by benzene
ZX15.00	Throwing self onto floor	ZVu0600	[X]Examination & observat following other inflicted injury
U24..00	[X]Intent self harm by rifle shotgun/larger firearm disch	TKx3.00	Suicide and selfinflicted injury by extremes of cold
T942.00	Accidental poisoning by caustic alkalis	T964100	Accidental poisoning by brass fumes
U202.00	[X]Intent self poison/exposure to sedative hypnotic	T960000	Accidental poisoning by lead, unspecified
U20B.00	[X]Intent self poison/exposure to other gas/vapour	U40yz00	[X]Pois/expos ?intent to unspecif chemical unspecif place
TK21.00	Suicide and selfinflicted poisoning by other carbon monoxide	T980200	Accidental poisoning by propane
U1A5.11	[X]Accidental poisoning with heroin	T983.00	Accidental poisoning by carbon monoxide- other domestic fuel
U20y000	[X]Int self poison/exposure to unspecif chemical at home	U204100	[X]Intent self poison psychotropic drug at res institut
ZC15100	Repeated self-induced vomiting	T964z00	Accidental poisoning by metals + compounds and fumes NOS
U202.13	[X]Overdose - temazepam	U1AA100	[X]Acc poison/expos org solvent,halogen hydrocarb,res instit
T802000	Accidental poisoning by codeine	ZX1Q.00	Throwing self in front of train
T82z.00	Accidental poisoning by sedatives and hypnotics NOS	T851.00	Accidental poisoning by oth central nervous syst depressants
T94..00	Accidental poisoning by corrosives and caustics NEC	T806200	Accidental poisoning by naproxen
TK31.00	Suicide + selfinflicted injury by suffocation by plastic bag	TK01100	Suicide and self inflicted injury by Barbitone
U1A4.13	[X]Accidental poisoning with SSRI	T990.00	Accidental poisoning by nitrogen oxides
T960.00	Accidental poisoning by lead and its compounds and fumes	T963000	Accidental poisoning by arsenic, unspecified
U1AB700	[X]Accident poison/exposure to other gas/vapour on farm	14K1.00	Intentional overdose of prescription only medication
T941.00	Accidental poisoning by acids	U212.00	[X]Inten slf harm hang strang/suffc sch oth ins/pub adm area
TN06.00	Injury ?accidental, poisoning by corrosive/caustic substance	T802300	Accidental poisoning by opium
U470.00	[X]Exposure to smoke fire+flame undetermn intent occ at home	U1AD200	[X]Acc pois/expo to amphet - sch, other inst+pub admin area
T981.00	Accidental poisoning by other utility gas	T98y.00	Accidental poisoning by carbon monoxide from other sources
U4D..00	[X]Crashing of motor vehicle, undetermined intent	T802100	Accidental poisoning by pethidine
U49z.00	[X]Contact with sharp obj undetermn intent occ unspecif place	T983300	Accidental poisoning by CO- kerosene in domestic stove/fire
U42..00	[X]Drowning and submersion, undetermined intent	U4Bz.00	[X]Fall jump/push frm high plce undt intnt occ unspecif plce
TK06.00	Suicide + selfinflicted poisoning by agricultural chemical	T850.12	Accidental poisoning by anti-parkinsonism drug
U40A.00	[X]Pois/exposure,?intent,to organ	T98y100	Accidental poisoning by CO - kiln vapour

1	U205000	solvent,halogen hydrocarb	T830.00	Accidental poisoning by phenothiazine-based
2		[X]Int self poison/exposure to narcotic drug at		tranquillisers
3	U1AB000	home	U2By.00	[X]Int self harm by jump from high place occ
4		[X]Accident poison/exposure to other gas/vapour		oth specif plce
5	U29z.00	at home	T941z00	Accidental poisoning by acids NOS
6		[X]Intentional self harm by sharp object occ		
7		unspecif place		
8	U1A4100	[X]Accid poison/expos to psychotropic drug at res	U1A2.16	[X]Accidental poisoning with benzodiazepine
9		institut		
10	T832000	Accidental poisoning by chlordiazepoxide	T936z00	Accidental poisoning by fungicides NOS
11	U291.00	[X]Intent self harm by sharp object occ resident	TK5z.00	Suicide and selfinflicted injury by
12		institut'n		firearms/explosives NOS
13	U202.15	[X]Overdose - nitrazepam	T930200	Accidental poisoning by DDT
14	U1A8000	[X]Accident poison/exposure to oth/unsp	U1A1000	[X]Accident poison/exposure to antiepileptic at
15		drug/medicam home		home
16	U20B000	[X]Int self poison/exposure to other gas/vapour	T811.00	Accidental poisoning by barbitone
17		at home		
18	U1AC.00	[X]Accident poisoning/exposure to pesticide	T901z00	Accidental poisoning by ethyl alcohol NOS
19	T882.00	Accidental poisoning by drugs affecting blood	U200400	[X]Intent self pois nonopioid analgesic in
20		constituents		street/highway
21	T90y.00	Accidental poisoning by other alcohols	T923.00	Accidental poisoning by petroleum solids
22	U201000	[X]Int self poison/exposure to antiepileptic at	TKx6.00	Suicide and selfinflicted injury by crashing of
23		home		aircraft
24	ZX14.00	Damaging own wounds	U2D6.00	[X]Intent self harm crash motor vehic occ
25				indust/constr area
26	U2A3.00	[X]Intent self harm by blunt object occ	U4Az.00	[X]Contact with blunt obj undeterm intent occ
27		sports/athlet area		unspecif place
28	T941200	Accidental poisoning by sulphuric acid	U40C000	[X]Poison/exposure ?intent, to pesticide at
29				home
30	T937400	Accidental poisoning by zinc phosphide	T923z00	Accidental poisoning by petrol solids NOS
31	U1A0.13	[X]Accidental poisoning with aspirin	U4B6.00	[X]Fall jump/push frm high plce undt intrn
32				indust/constr area
33	U1AA.00	[X]Accid poison/exposure to organ	U206000	[X]Int self poison/exposure to hallucinogen at
34		solvent,halogen hydrocarb		home
35	T960z00	Accidental poisoning by lead, NOS	U40y000	[X]Poison/exposure ?intent, to unspecif
36				chemical at home
37	U210.00	[X]Intent self harm by hanging	U220.00	[X]Intent self harm by drowning/submersion
38		strangulat/suffocat occ home		occurrn at home
39	T800.00	Accidental poisoning by heroin	U1Ay700	[X]Accident poison/exposure to unspecif
40				chemical on farm
41	T94z.00	Accidental poisoning by corrosives and caustics	U40yy00	[X]Pois/exp ?intent to unspecif chemical other
42		NOS		spec place
43	U1A8.00	[X]Accident poison/exposure to other/unspec	T941100	Accidental poisoning by nitric acid
44		drug/medicament		
45	U20By00	[X]Int self poison other gas/vapour other spec	U1A9200	[X]Acc poison/expos alcohol school/pub admin
46		place		area
47	T938100	Accidental poisoning by methyl bromide	ZX16300	Gouging own rectum
48	U1A4.12	[X]Accidental poisoning with amitriptyline	T830300	Accidental poisoning by promazine
49	ZX1M.00	Shooting self	U216.00	[X]Intent self harm by hang strangl/suffc
50				indust/constr area
51	U44..00	[X]Rifle shotgun+larger firearm discharge	T887200	Accidental poisoning by ophthalmological
52		undetermin intent		drugs
53	T922.00	Accidental poisoning by lubricating oils	1BDE.00	Suicide risk increased from previous level
54	T964400	Accidental poisoning by iron compounds	ZX1R.11	Jumping in front of vehicle
55	T964300	Accidental poisoning by copper salts	U1A9300	[X]Accid pois/expos alcohol in sport/athletic
56				area
57				
58				
59				
60				

T887100	Accidental poisoning by mucous membrane drugs	U1A9y00	[X]Accid pois/expos to alcohol other spec place
U202.11	[X]Overdose - sleeping tabs	TN02.00	Injury ?accidental, poisoning by other sedative/hypnotic
T90z.00	Accidental poisoning by alcohol NOS	T806000	Accidental poisoning by gold salts
T981300	Accidental poisoning by heating gas NOS	T937100	Accidental poisoning by squill and derivatives
T801.00	Accidental poisoning by methadone	T965z00	Accidental poisoning by plant foods and fertilisers NOS
T841100	Accidental poisoning by lysergide, LSD	T823.00	Accidental poisoning by methaqualone compounds
T840100	Accidental poisoning by imipramine	U1A8600	[X]Acc pois/expos oth/unsp drug/medic indust/construct area
U2B4.00	[X]Intent self harm by jump from high place occ street/h'way	T966z00	Accidental poisoning by glues and adhesives NOS
TN2y.00	Injury ?accidental, poisoning by other spec gas or vapour	TK2y.00	Suicide + selfinflicted poisoning by other gases and vapours
U4A0.00	[X]Contact wth blunt object undetermined intent occ at home	T832300	Accidental poisoning by lorazepam
TK52.00	Suicide and selfinflicted injury by hunting rifle	T822.00	Accidental poisoning by bromine compounds
U242.00	[X]Int slf hrm rifl s'gun/lrg frarm dis sch/ins/pub adm area	T804.00	Accidental poisoning by aromatic analgesics NEC
U28..00	[X]Intentional self harm by steam hot vapours / hot objects	T80y000	Accidental poisoning by pentazocine
U2D..00	[X]Intentional self harm by crashing of motor vehicle	U4A6.00	[X]Contct wth blunt obj undet intent occ industr/constr area
ZX1H.00	Self-asphyxiation	U2y6.00	[X]Intent self harm oth specif means occ indust/constr area
T983000	Accidental poisoning by CO- coal in domestic stove/fireplace	U200600	[X]Int self pois nonopioid analgesic indust/construct area
T87..00	Accidental poisoning by anti-infectives	TN01300	Injury ?accidental poisoning by Pentobarbitone
T77z.00	Accident/poisoning occurred in residential institution NOS	U1A2z00	[X]Accid poison/expos to sedative hypnotic unspecif place
U20y.00	[X]Intent self poison/exposure to unspecif chemical	TK01z00	Suicide and self inflicted injury by barbiturates
T937.00	Accidental poisoning by rodenticides	TKx0z00	Suicide + selfinflicted inj-jump/lie before moving obj NOS
T934z00	Accidental poisoning by insecticides NOS	T805100	Accidental poisoning by phenylbutazone
U1A4.00	[X]Accident poisoning/exposure to psychotropic drug	U1A4200	[X]Acc poison/expos psychotropic drug school/pub admin area
U1A4000	[X]Accident poison/exposure to psychotropic drug at home	U2Dz.00	[X]Intent self harm by crash motor vehic occ unspecif place
ZX1L200	Self-mutilation of genitalia	T804200	Accidental poisoning by phenacetin
T855000	Accidental poisoning by adrenalin	1BDF.00	Suicide risk unchanged from previous level
T99z.00	Accidental poisoning by gases and vapours NOS	U40By00	[X]Pois/exp ?intent to other gas/vapour other spec place
T982.00	Accidental poisoning by motor vehicle exhaust gas	T993.00	Accidental poisoning by tear gas
ZX16200	Gouging own eyes	U1Ay100	[X]Accid poison/expos to unspecif chemical at res institut
T940000	Accidental poisoning by carbolic acid	U2yy.00	[X]Intent self harm oth specif means occ oth specif place

PAIN

At least one ICD-9 in:	
Lumbar pain	724
Back disorders	721, 722, 723, 723, 737
Neck and back problems	721.0, 721.1, 721.2, 721.3, 721.4, 721.5, 721.6, 721.7, 721.8, 721.9, 722.0, 722.1, 722.2, 722.3, 722.4, 722.5, 722.6, 722.7, 722.8, 722.9, 723.0, 723.1, 723.2, 723.3, 723.4, 723.5, 723.7, 723.8, 723.9, 724.0, 724.1, 724.2, 724.3, 724.4, 724.5, 724.6, 724.8, 724.9, 737.1, 737.2, 738.2, 738.4, 738.5, 739.1, 739.2, 739.3, 739.4, 756.1, 846.0, 846.1, 846.2, 846.3, 846.8, 846.9, 847.0, 847.1, 847.2, 847.3, 847.9
Complex regional pain syndrome	337.2, 354.4, 355.7, 355.9
Fibromyalgia	729.1
Painful neuropathic disorders	250.6, 357.2, 053.1, 722.1, 722.2, 722.7, 724.0, 724.3, 724.4, 721.1, 722.0, 723.0, 723.4, 337.2, 353.2, 353.3, 353.4, 354.4, 355.7, 355.9, 729.2, 353.6, 350.1, 350.2, 352.1, 353.0, 353.1, 353.8, 353.9, 354.0, 354.1, 354.2, 354.3, 354.5, 354.8, 354.9, 355.0, 355.1, 355.2, 355.3, 355.4, 355.5, 355.6, 355.8,
Pain	338
Chronic pain	338.2
Chronic pain associated with significant psychosocial dysfunction	338.4
Pain disorders related to psychological factors	307.8
Migraine and headache	346, 784, 339
Osteoarthritis/Rheumatoid Arthritis	714, 715
Irritable bowel syndrome	564.1
Lupus	710.0

OR

At least one READ code in:			
N131.00	cervicalgia - pain in neck	N05..00	osteoarthritis and allied disorders
1B1G.00	headache	N217700	calcaneal spur
1BA5.00	frontal headache	N23y400	spasm of muscle
F26..00	migraine	F260.00	classical migraine
E278100	tension headache	N224.00	ganglion and cyst of synovium, tendon and bursa
N143.00	sciatica	N081000	loose body in joint, unspecified joint
N216500	prepatellar bursitis	PG17.00	spina bifida occulta
J521.11	irritable bowel syndrome	1BA8.00	temporal headache
N090.00	effusion of joint	N140.11	spinal stenosis
N213300	olecranon bursitis	N235.00	hypermobility syndrome
N145.00	backache, unspecified	N37..00	curvature of spine
N12..00	intervertebral disc disorders	N225100	rupture of popliteal space synovial cyst
N217900	plantar fasciitis	F26y000	hemiplegic migraine
F340.00	carpal tunnel syndrome	1B1G000	sinus headache
N040.00	rheumatoid arthritis	N066.00	unspecified monoarthritis
J521.00	irritable colon - irritable bowel syndrome	7H48211	release of trigger finger
N224A00	synovial cyst of popliteal space	N01w.00	reactive arthropathy, unspecified
N371.00	acquired kyphosis	F330.00	brachial plexus lesions
N21z300	exostosis of unspecified site	N224000	synovial cyst unspecified
N221.00	bunion	N043.00	juvenile rheumatoid arthritis - still's

R040.00	[d]headache	SC20z12	disease
N220.00	synovitis and tenosynovitis	F355.00	headache - post traumatic
N20..00	polymyalgia rheumatica	N224200	tarsal tunnel syndrome
F301.00	other specified trigeminal neuralgia	N083.00	ganglion of tendon sheath
N142.14	lumbago	N245.00	recurrent dislocation of joint
1BA6.00	occipital headache	N21..00	pain in limb
			peripheral enthesopathies and allied syndromes
N372.00	acquired lordosis	PG16.00	klippel-feil syndrome
PG12.00	congenital spondylolisthesis	N213200	lateral epicondylitis of the elbow
N11..00	spondylosis and allied disorders	N221000	infected bunion
N244.00	fasciitis unspecified	N141.00	pain in thoracic spine
N220300	trigger finger - acquired	1BB4.00	morning headache
F261.00	common migraine	F262200	abdominal migraine
F262000	cluster headache	N110.00	cervical spondylosis without myelopathy
N370.00	adolescent postural kyphosis	N384.00	acquired spondylolisthesis
N07..00	internal derangement of knee	7K51111	bunionectomy
N234.00	laxity of ligament		

STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation	Page No
Title and abstract	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract	2
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4-5
Objectives	3	State specific objectives, including any prespecified hypotheses	4-5
Methods			
Study design	4	Present key elements of study design early in the paper	5-7
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	5-6
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	5-6
		Case-control study—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls	
		Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants	
		(b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed	
		Case-control study—For matched studies, give matching criteria and the number of controls per case	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	7
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	5-7
Bias	9	Describe any efforts to address potential sources of bias	8
Study size	10	Explain how the study size was arrived at	N/A
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	7-8
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	8
		(b) Describe any methods used to examine subgroups and interactions	N/A
		(c) Explain how missing data were addressed	N/A
		(d) Cohort study—If applicable, explain how loss to follow-up was addressed	N/A
		Case-control study—If applicable, explain how matching of cases and controls was addressed	
		Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy	
	(e) Describe any sensitivity analyses	N/A	

Results			Page No
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	N/A
		(b) Give reasons for non-participation at each stage	N/A
		(c) Consider use of a flow diagram	N/A
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	8
		(b) Indicate number of participants with missing data for each variable of interest	N/A
		(c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount)	N/A
Outcome data	15*	<i>Cohort study</i> —Report numbers of outcome events or summary measures over time	8-9
		<i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure	
		<i>Cross-sectional study</i> —Report numbers of outcome events or summary measures	
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	N/A
		(b) Report category boundaries when continuous variables were categorized	N/A
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A
Discussion			
Key results	18	Summarise key results with reference to study objectives	9-10
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	11
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	10-11
Generalisability	21	Discuss the generalisability (external validity) of the study results	N/A
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	12

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at www.strobe-statement.org.