APPENDIX I_1: CANDIDATE PREDICTORS

i. PSYCHIATRIC DISORDERS DIAGNOSIS[1]
    - Substance use disorder[2]
        o Alcohol use disorder
        o drug use disorder
    - Mood disorder
        ▪ Major depressive disorder
        ▪ Bipolar disorder
    - Anxiety disorder
    - Schizophrenia
    - Personality disorders
    - ADHD
    - Other diagnosis

derived variables[34]	variable name
Substance use disorder	psydx_subuse_3
Substance use disorder	psydx_subuse_6
Substance use disorder	psydx_subuse_12
Substance use disorder	psydx_subuse_24
Substance use disorder	psydx_subuse_36
Substance use disorder	psydx_subuse_48
Substance use disorder	psydx_subuse_60
Alcohol use disorder	Psydx_alcoholuse_3
Alcohol use disorder	Psydx_alcoholuse_6
Alcohol use disorder	Psydx_alcoholuse_12
Alcohol use disorder	Psydx_alcoholuse_24
Alcohol use disorder	Psydx_alcoholuse_36
Alcohol use disorder	Psydx_alcoholuse_48
Alcohol use disorder	Psydx_alcoholuse_60
Drug use disorder	Psydx_druguse_3
Drug use disorder	Psydx_druguse_6
Drug use disorder	Psydx_druguse_12
Drug use disorder	Psydx_druguse_24
Drug use disorder	Psydx_druguse_36
Drug use disorder	Psydx_druguse_48
Drug use disorder	Psydx_druguse_60

The candidate predictors were captured using timeframes of prior 3, 6, 12, 24, 36, 48, and/or 60 months, indicated by the last digits of the variable name. For instance, "psydx_subuse_3" and "psydx_subuse_6" refer to a diagnosis of substance use disorder in the prior 3 and 6 months, respectively"

mood disorder	Psydx_mood_3
mood disorder	Psydx_mood_6
mood disorder	Psydx_mood_12
mood disorder	Psydx_mood_24
mood disorder	Psydx_mood_36
mood disorder	Psydx_mood_48
mood disorder	Psydx_mood_60
Anxiety disorder	psydx_anx_3
Anxiety disorder	psydx_anx_6
Anxiety disorder	psydx_anx_12
Anxiety disorder	psydx_anx_24
Anxiety disorder	psydx_anx_36
Anxiety disorder	psydx_anx_48
Anxiety disorder	psydx_anx_60
Major Depressive Disorder	Psydx_dep_3
Major Depressive Disorder	Psydx_dep_6
Major Depressive Disorder	Psydx_dep_12
Major Depressive Disorder	Psydx_dep_24
Major Depressive Disorder	Psydx_dep_36
Major Depressive Disorder	Psydx_dep_48
Major Depressive Disorder	Psydx_dep_60
Bipolar disorder	Psydx_bipolar_3
Bipolar disorder	Psydx_bipolar_6
Bipolar disorder	Psydx_bipolar_12
Bipolar disorder	Psydx_bipolar_24
Bipolar disorder	Psydx_bipolar_36
Bipolar disorder	Psydx_bipolar_48
Bipolar disorder	Psydx_bipolar_60
Schizophrenia	psydx_scz_3
Schizophrenia	psydx_scz_6
Schizophrenia	psydx_scz_12
Schizophrenia	psydx_scz_24
Schizophrenia	psydx_scz_36
Schizophrenia	psydx_scz_48
Schizophrenia	psydx_scz_60
Personality disorder	psydx_pd_3
Personality disorder	psydx_pd_6
Personality disorder	psydx_pd_12
Personality disorder	psydx_pd_24
Personality disorder	psydx_pd_36
Personality disorder	psydx_pd_48

Personality disorder	psydx_pd_60
ADHD	psydx_adhd_3
ADHD	psydx_adhd_6
ADHD	psydx_adhd_12
ADHD	psydx_adhd_24
ADHD	psydx_adhd_36
ADHD	psydx_adhd_48
ADHD	psydx_adhd_60
Other diagnosis	psydx_otr_3
Other diagnosis	psydx_otr_6
Other diagnosis	psydx_otr_12
Other diagnosis	psydx_otr_24
Other diagnosis	psydx_otr_36
Other diagnosis	psydx_otr_48
Other diagnosis	psydx_otr_60

ii. PHARMACOLOGICAL TREATMENTS FOR MENTAL HEALTH DISORDERS
- Typical antipsychotics
- Atypical antipsychotics
- Clozapine
- Antidepressant for anxiety or depression
- Antidepressants for other reasons
- Mood stabilizer
- Anxiolytic
- ADHD medication

derived variables[5]	variable name
Typical antipsychotics	rx_psy_antipsych_typ_3
Typical antipsychotics	rx_psy_antipsych_typ_6
Typical antipsychotics	rx_psy_antipsych_typ_12
Typical antipsychotics	rx_psy_antipsych_typ_24
Typical antipsychotics	rx_psy_antipsych_typ_36
Typical antipsychotics	rx_psy_antipsych_typ_48
Typical antipsychotics	rx_psy_antipsych_typ_60
Atypical antipsychotics	rx_psy_antipsych_atyp_3
Atypical antipsychotics	rx_psy_antipsych_atyp_6
Atypical antipsychotics	rx_psy_antipsych_atyp_12
Atypical antipsychotics	rx_psy_antipsych_atyp_24
Atypical antipsychotics	rx_psy_antipsych_atyp_36
Atypical antipsychotics	rx_psy_antipsych_atyp_48

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Atypical antipsychotics	rx_psy_antipsych_atyp_60
Clozapine	rx_psy_clozapine_3
Clozapine	rx_psy_clozapine_6
Clozapine	rx_psy_clozapine_12
Clozapine	rx_psy_clozapine_24
Clozapine	rx_psy_clozapine_36
Clozapine	rx_psy_clozapine_48
Clozapine	rx_psy_clozapine_60
antidepressant for anxiety or depression	rx_psy_antidep_anxdep_3
antidepressant for anxiety or depression	rx_psy_antidep_anxdep_6
antidepressant for anxiety or depression	rx_psy_antidep_anxdep_12
antidepressant for anxiety or depression	rx_psy_antidep_anxdep_24
antidepressant for anxiety or depression	rx_psy_antidep_anxdep_36
antidepressant for anxiety or depression	rx_psy_antidep_anxdep_48
antidepressant for anxiety or depression	rx_psy_antidep_anxdep_60
antidepressant for other reasons	rx_psy_antidep_otr_3
Antidepressant for other reasons	rx_psy_antidep_otr_6
Antidepressant for other reasons	rx_psy_antidep_otr_12
Antidepressant for other reasons	rx_psy_antidep_otr_24
Antidepressant for other reasons	rx_psy_antidep_otr_36
Antidepressant for other reasons	rx_psy_antidep_otr_48
Antidepressant for other reasons	rx_psy_antidep_otr_60
mood stabilizer	rx_psy_mdestb_3
mood stabilizer	rx_psy_mdestb_6
mood stabilizer	rx_psy_mdestb_12
mood stabilizer	rx_psy_mdestb_24
mood stabilizer	rx_psy_mdestb_36
mood stabilizer	rx_psy_mdestb_48
mood stabilizer	rx_psy_mdestb_60
anxiolytics	rx_psy_anx_3
anxiolytics	rx_psy_anx_6
anxiolytics	rx_psy_anx_12
anxiolytics	rx_psy_anx_24
anxiolytics	rx_psy_anx_36
anxiolytics	rx_psy_anx_48
anxiolytics	rx_psy_anx_60
ADHD medication	rx_psy_adhd_3
ADHD medication	rx_psy_adhd_6
ADHD medication	rx_psy_adhd_12
ADHD medication	rx_psy_adhd_24
ADHD medication	rx_psy_adhd_36

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| ADHD medication | rx_psy_adhd_48 |
| ADHD medication | rx_psy_adhd_60 |

iii.   NON-PHARMACOLOGICAL TREATMENTS FOR MENTAL HEALTH DISORDERS
- duration of hospitalisations for mental health reasons (continuous, sum of days)
- number of hospitalisations for mental health reasons (continuous)
- duration of hospitalisations for suicide attempt (continuous, sum of days)
- number of hospitalisations for suicide attempt (continuous)
- Number of care center visits for mental health reasons (continuous)
- number of general practitioner visits for mental health reasons (continuous)
- number of emergency room visits for mental health reasons (continuous)
- number of outpatient psychiatrist visits (continuous)
- number of other specialist visits for mental health reasons (continuous)
- number of psychotherapy visits with a psychiatrist (continuous)
- number of psychotherapy visits with a general practitioner (continuous)
- number of psychotherapy visits with another specialist (continuous)
- Number of outpatient paediatrician visits (continuous)
- No mental health services
- number of ECT treatments received (continuous)
- Acute ECT received (dichotomous)
- Maintenance ECT received (dichotomous)

derived variables	variable name
Duration of hospit for suicide attempt (conti, # days)	duration_hosp_suicide_3
duration of hospit for suicide attempt (conti, # days)	duration_hosp_suicide_6
duration of hospit for suicide attempt (conti, # days)	duration_hosp_suicide_12
duration of hospit for suicide attempt (conti, # days)	duration_hosp_suicide_24
duration of hospit for suicide attempt (conti, # days)	duration_hosp_suicide_36
duration of hospit for suicide attempt (conti, # days)	duration_hosp_suicide_48
duration of hospit for suicide attempt (conti, # days)	duration_hosp_suicide_60
# of hospit for suicide attempt (continuous)	#_hosp_suicide_3
# of hospit for suicide attempt (continuous)	#_hosp_suicide_6
# of hospit for suicide attempt (continuous)	#_hosp_suicide_12
# of hospit for suicide attempt (continuous)	#_hosp_suicide_24
# of hospit for suicide attempt (continuous)	#_hosp_suicide_36
# of hospit for suicide attempt (continuous)	#_hosp_suicide_48
# of hospit for suicide attempt (continuous)	#_hosp_suicide_60
Duration of hospit for mh reasons (conti, # of days)	Duration_hosp_mh_3
Duration of hospit for mh reasons (conti, # of days)	Duration_hosp_mh_6
Duration of hospit for mh reasons (conti, # of days)	Duration_hosp_mh_12
Duration of hospit for mh reasons (conti, # of days)	Duration_hosp_mh_24
Duration of hospit for mh reasons (conti, # of days)	Duration_hosp_mh_36
Duration of hospit for mh reasons (conti, # of days)	Duration_hosp_mh_48
Duration of hospit for mh reasons (conti, # of days)	Duration_hosp_mh_60

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# of hospit for mh reasons (continuous)	#_hosp_mh_3
# of hospit for mh reasons (continuous)	#_hosp_mh_6
# of hospit for mh reasons (continuous)	#_hosp_mh_12
# of hospit for mh reasons (continuous)	#_hosp_mh_24
# of hospit for mh reasons (continuous)	#_hosp_mh_36
# of hospit for mh reasons (continuous)	#_hosp_mh_48
# of hospit for mh reasons (continuous)	#_hosp_mh_60
# of outpatient paediatrician visits (continuous)	#_outpat_pediatrician_3
# of outpatient paediatrician visits (continuous)	#_outpat_pediatrician_6
# of outpatient paediatrician visits (continuous)	#_outpat_pediatrician_12
# of outpatient paediatrician visits (continuous)	#_outpat_pediatrician_24
# of outpatient paediatrician visits (continuous)	#_outpat_pediatrician_36
# of outpatient paediatrician visits (continuous)	#_outpat_pediatrician_48
# of outpatient paediatrician visits (continuous)	#_outpat_pediatrician_60
Number of Care center for mental health reasons (continuous)	#_Carectr_mh_3
Number of Care center for mental health reasons (continuous)	#_Carectr_mh_6
Number of Care center for mental health reasons (continuous)	#_Carectr_mh_12
Number of Care center for mental health reasons (continuous)	#_Carectr_mh_24
Number of Care center for mental health reasons (continuous)	#_Carectr_mh_36
Number of Care center for mental health reasons (continuous)	#_Carectr_mh_48
Number of Care center for mental health reasons (continuous)	#_Carectr_mh_60
# of emergency visits for mh reasons (continuous)	#_ER_mh_3
# of emergency visits for mh reasons (continuous)	#_ER_mh_6
# of emergency Visits for mh reasons (continuous)	#_ER_mh_12
# of emergency visits for mh reasons (continuous)	#_ER_mh_24
# of emergency visits for mh reasons (continuous)	#_ER_mh_36
# of emergency visits for mh reasons (continuous)	#_ER_mh_48
# of emergency visits for mh reasons (continuous)	#_ER_mh_60
# of GP visits for mh reasons (continuous)	#_gp_mh_3
# of GP visits for mh reasons (continuous)	#_gp_mh_6
# of GP visits for mh reasons (continuous)	#_gp_mh_12
# of GP visits for mh reasons (continuous)	#_gp_mh_24
# of GP visits for mh reasons (continuous)	#_gp_mh_36
# of GP visits for mh reasons (continuous)	#_gp_mh_48
# of GP visits for mh reasons (continuous)	#_gp_mh_60
# of outpatient psychiatrist visits (continuous)	#_psy_mh_3
# of outpatient psychiatrist visits (continuous)	#_psy_mh_6
# of outpatient psychiatrist visits (continuous)	#_psy_mh_12
# of outpatient psychiatrist visits (continuous)	#_psy_mh_24
# of outpatient psychiatrist visits (continuous)	#_psy_mh_36
# of outpatient psychiatrist visits (continuous)	#_psy_mh_48

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# of outpatient psychiatrist visits (continuous)	#_psy_mh_60
# of psychotherapy visits with a psychiatrist (conti)	#_psychotx_psy_3
# of psychotherapy visits with a psychiatrist (conti)	#_psychotx_psy_6
# of psychotherapy visits with a psychiatrist (conti)	#_psychotx_psy_12
# of psychotherapy visits with a psychiatrist (conti)	#_psychotx_psy_24
# of psychotherapy visits with a psychiatrist (conti)	#_psychotx_psy_36
# of psychotherapy visits with a psychiatrist (conti)	#_psychotx_psy_48
# of psychotherapy visits with a psychiatrist (conti)	#_psychotx_psy_60
# of other specialist visits for mh reasons (conti)	#_spc_mh_3
# of other specialist visits for mh reasons (conti)	#_spc_mh_6
# of other specialist visits for mh reasons (conti)	#_spc_mh_12
# of other specialist visits for mh reasons (conti)	#_spc_mh_24
# of other specialist visits for mh reasons (conti)	#_spc_mh_36
# of other specialist visits for mh reasons (conti)	#_spc_mh_48
# of other specialist visits for mh reasons (conti)	#_spc_mh_60
# of psychotherapy visits with a GP (conti)	#_psychotx_gp_3
# of psychotherapy visits with a GP (conti)	#_psychotx_gp_6
# of psychotherapy visits with a GP (conti)	#_psychotx_gp_12
# of psychotherapy visits with a GP (conti)	#_psychotx_gp_24
# of psychotherapy visits with a GP (conti)	#_psychotx_gp_36
# of psychotherapy visits with a GP (conti)	#_psychotx_gp_48
# of psychotherapy visits with a GP (conti)	#_psychotx_gp_60
# of psychotherapy visits with other specialist (conti)	#_psychotx_other_3
# of psychotherapy visits with other specialist (conti)	#_psychotx_other_6
# of psychotherapy visits with other specialist (conti)	#_psychotx_other_12
# of psychotherapy visits with other specialist (conti)	#_psychotx_other_24
# of psychotherapy visits with other specialist (conti)	#_psychotx_other_36
# of psychotherapy visits with other specialist (conti)	#_psychotx_other_48
# of psychotherapy visits with other specialist (conti)	#_psychotx_other_60
No mental health services	No_mh_services_3
No mental health services	No_mh_services_6
No mental health services	No_mh_services_12
No mental health services	No_mh_services_24
No mental health services	No_mh_services_36
No mental health services	No_mh_services_48
No mental health services	No_mh_services_60
number of ECT received (continuous)	ECT_#_3
number of ECT received (continuous)	ECT_#_6
number of ECT received (continuous)	ECT_#_12
number of ECT received (continuous)	ECT_#_24
number of ECT received (continuous)	ECT_#_36

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number of ECT received (continuous)	ECT_#_48
number of ECT received (continuous)	ECT_#_60
acute ECT (dichotomous)	ECT_acute_3
acute ECT (dichotomous)	ECT_acute_6
acute ECT (dichotomous)	ECT_acute_12
acute ECT (dichotomous)	ECT_acute_24
acute ECT (dichotomous)	ECT_acute_36
acute ECT (dichotomous)	ECT_acute_48
acute ECT (dichotomous)	ECT_acute_60
Maintenance ECT (dichotomous)	ECT_maintenance_3
Maintenance ECT (dichotomous)	ECT_maintenance_6
Maintenance ECT (dichotomous)	ECT_maintenance_12
Maintenance ECT (dichotomous)	ECT_maintenance_24
Maintenance ECT (dichotomous)	ECT_maintenance_36
Maintenance ECT (dichotomous)	ECT_maintenance_48
Maintenance ECT (dichotomous)	ECT_maintenance_60

iv.   PHYSICAL DIAGNOSIS
- Dementia
- Neurological disease
- Endocrine system disorder
- Trauma
- Respiratory disorder
- Infectious disease
- Digestive disorder
- Cardiovascular disorder
- Cancer
- Other physical disorder
- Charlson/elixhauser index with psy (continuous)[6]
- Charlson/elixhauser index without psy (continuous)

derived variables	variable name
dementia	physdx_dem_3
dementia	physdx _dem_6
dementia	physdx _dem_12
dementia	physdx _dem_24
dementia	physdx _dem_36
dementia	physdx _dem_48
dementia	physdx _dem_60
neurological disease	physdx _neuro_3
neurological disease	physdx _neuro_6

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neurological disease	physdx _neuro_12
neurological disease	physdx _neuro_24
neurological disease	physdx _neuro_36
neurological disease	physdx _neuro_48
neurological disease	physdx _neuro_60
endocrine system disorder	physdx _endo_3
endocrine system disorder	physdx _endo_6
endocrine system disorder	physdx _endo_12
endocrine system disorder	physdx _endo_24
endocrine system disorder	physdx _endo_36
endocrine system disorder	physdx _endo_48
endocrine system disorder	physdx _endo_60
trauma	physdx _trauma_3
trauma	physdx _trauma_6
trauma	physdx _trauma_12
trauma	physdx _trauma_24
trauma	physdx _trauma_36
trauma	physdx _trauma_48
trauma	physdx _trauma_60
respiratory disorder	physdx _resp_3
respiratory disorder	physdx _resp_6
respiratory disorder	physdx _resp_12
respiratory disorder	physdx _resp_24
respiratory disorder	physdx _resp_36
respiratory disorder	physdx _resp_48
respiratory disorder	physdx _resp_60
infectious disease	physdx _infec_3
infectious disease	physdx _infec_6
infectious disease	physdx _infec_12
infectious disease	physdx _infec_24
infectious disease	physdx _infec_36
infectious disease	physdx _infec_48
infectious disease	physdx _infec_60
digestive disorder	physdx _diges_3
digestive disorder	physdx _diges_6
digestive disorder	physdx _diges_12
digestive disorder	physdx _diges_24
digestive disorder	physdx _diges_36
digestive disorder	physdx _diges_48
digestive disorder	physdx _diges_60
cardiovascular disorder	physdx _cvd_3

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cardiovascular disorder	physdx _cvd_6
cardiovascular disorder	physdx _cvd_12
cardiovascular disorder	physdx _cvd_24
cardiovascular disorder	physdx _cvd_36
cardiovascular disorder	physdx _cvd_48
cardiovascular disorder	physdx _cvd_60
cancer	physdx _cncr_3
cancer	physdx _cncr_6
cancer	physdx _cncr_12
cancer	physdx _cncr_24
cancer	physdx _cncr_36
cancer	physdx _cncr_48
cancer	physdx _cncr_60
other physical disorders	physdx _otr_3
other physical disorders	physdx _otr_6
other physical disorders	physdx _otr_12
other physical disorders	physdx _otr_24
other physical disorders	physdx _otr_36
other physical disorders	physdx _otr_48
other physical disorders	physdx _otr_60
charlson/elixhauser index with psy (conti)	physdx_comorbidity_withpsy_3
charlson/elixhauser index with psy (conti)	physdx_comorbid_withpsy_6
charlson/elixhauser index with psy (conti)	physdx_comorbidity_withpsy_12
charlson/elixhauser index with psy (conti)	physdx_comorbidity_withpsy_24
charlson/elixhauser index with psy (conti)	physdx_comorbidity_withpsy_36
charlson/elixhauser index with psy (conti)	physdx_comorbidity_withpsy_48
charlson/elixhauser index with psy (conti)	physdx_comorbidity_withpsy_60
charlson/elixhauser index without psy (conti)	physdx_comorbidity_withoutpsy_3
charlson/elixhauser index without psy (conti)	physdx_comorbid_withoutpsy_6
charlson/elixhauser index without psy (conti)	physdx_comorbidity_withoutpsy_12
charlson/elixhauser index without psy (conti)	physdx_comorbidity_withoutpsy_24
charlson/elixhauser index without psy (conti)	physdx_comorbidity_withoutpsy_36

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charlson/elixhauser index without psy (conti)	physdx_comorbidity_withoutpsy_48
charlson/elixhauser index without psy (conti)	physdx_comorbidity_withoutpsy_60

v. PHARMACOLOGICAL TREATMENTS FOR PHYSICAL HEALTH DISORDERS
- Medication for diabetes
- Medication for cardiovascular disease
- Medication for respiratory diseases
- Medication for gastro-intestinal disorder
- Anti-infective agent
- Pain medication
- Contraceptive
- Other medication

derived variables	variable name
medication for diabetes	rx_phys_diabetes_3
medication for diabetes	rx_phys_diabetes_6
medication for diabetes	rx_phys_diabetes_12
medication for diabetes	rx_phys_diabetes_24
medication for diabetes	rx_phys_diabetes_36
medication for diabetes	rx_phys_diabetes_48
medication for diabetes	rx_phys_diabetes_60
medication for cardiovascular disease	rx_phys_cvd_3
medication for cardiovascular disease	rx_phys_cvd_6
medication for cardiovascular disease	rx_phys_cvd_12
medication for cardiovascular disease	rx_phys_cvd_24
medication for cardiovascular disease	rx_phys_cvd_36
medication for cardiovascular disease	rx_phys_cvd_48
medication for cardiovascular disease	rx_phys_cvd_60
medication for respiratory disease	rx_phys_resp_3
medication for respiratory disease	rx_phys_resp_6
medication for respiratory disease	rx_phys_resp_12
medication for respiratory disease	rx_phys_resp_24
medication for respiratory disease	rx_phys_resp_36
medication for respiratory disease	rx_phys_resp_48
medication for respiratory disease	rx_phys_resp_60
medication for gastro-intestinal disorder	rx_phys_gi_3
medication for gastro-intestinal disorder	rx_phys_gi_6
medication for gastro-intestinal disorder	rx_phys_gi_12
medication for gastro-intestinal disorder	rx_phys_gi_24
medication for gastro-intestinal disorder	rx_phys_gi_36
medication for gastro-intestinal disorder	rx_phys_gi_48

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medication for gastro-intestinal disorder	rx_phys_gi_60
anti-infective agents	rx_phys_antiinfec_3
anti-infective agents	rx_phys_antiinfec _6
anti-infective agents	rx_phys_antiinfec _12
anti-infective agents	rx_phys_antiinfec _24
anti-infective agents	rx_phys_antiinfec _36
anti-infective agents	rx_phys_antiinfec _48
anti-infective agents	rx_phys_antiinfec _60
pain medication	rx_phys_pain_3
pain medication	rx_phys_pain_6
pain medication	rx_phys_pain_12
pain medication	rx_phys_pain_24
pain medication	rx_phys_pain_36
pain medication	rx_phys_pain_48
pain medication	rx_phys_pain_60
contraceptives	rx_phys_contracep_3
contraceptives	rx_phys_contracep_6
contraceptives	rx_phys_contracep_12
contraceptives	rx_phys_contracep_24
contraceptives	rx_phys_contracep_36
contraceptives	rx_phys_contracep_48
contraceptives	rx_phys_contracep_60
other medication	rx_phys_otr_3
other medication	rx_phys_otr_6
other medication	rx_phys_otr_12
other medication	rx_phys_otr_24
other medication	rx_phys_otr_36
other medication	rx_phys_otr_48
other medication	rx_phys_otr_60

vi. NON-PHARMACOLOGICAL TREATMENTS FOR PHYSICAL HEALTH DISORDERS
- duration of hospitalisations for physical health reasons (continuous, sum of days)
- number of hospitalisations for physical health reasons (continuous)
- care center visits/plays for physical health reasons*
- number of general practitioner visits for physical reasons (continuous)*
- number of emergency room visits for physical reasons (continuous)*
- number of outpatient specialist visits for physical health reasons (continuous)*
- number of outpatient paediatrician visits (continuous)*

derived variables	variable name
Duration of hospit for phys reasons (conti, # of days)	Duration_hosp_phys_3
Duration of hospit for phys reasons (conti, # of days)	Duration_hosp_phys_6
Duration of hospit for phys reasons (conti, # of days)	Duration_hosp_phys_12

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Duration of hospit for phys reasons (conti, # of days)	Duration_hosp_phys_24
Duration of hospit for phys reasons (conti, # of days)	Duration_hosp_phys_36
Duration of hospit for phys reasons (conti, # of days)	Duration_hosp_phys_48
Duration of hospit for phys reasons (conti, # of days)	Duration_hosp_phys_60
# of hospit for phys reasons (continuous)	#_hosp_phys_3
# of hospit for phys reasons (continuous)	#_hosp_phys_6
# of hospit for phys reasons (continuous)	#_hosp_phys_12
# of hospit for phys reasons (continuous)	#_hosp_phys_24
# of hospit for phys reasons (continuous)	#_hosp_phys_36
# of hospit for phys reasons (continuous)	#_hosp_phys_48
# of hospit for phys reasons (continuous)	#_hosp_phys_60
Care center for physical health reasons	Carectr_phys_3
Care center for physical health reasons	Carectr_phys_6
Care center for physical health reasons	Carectr_phys_12
Care center for physical health reasons	Carectr_phys_24
Care center for physical health reasons	Carectr_phys_36
Care center for physical health reasons	Carectr_phys_48
Care center for physical health reasons	Carectr_phys_60
# of outpatient specialist visit for phys reasons (cont)	#_spc_phys_3
# of outpatient specialist visit for phys reasons (cont)	#_spc_phys_6
# of outpatient specialist visit for phys reasons (cont)	#_spc_phys_12
# of outpatient specialist visit for phys reasons (cont)	#_spc_phys_24
# of outpatient specialist visit for phys reasons (cont)	#_spc_phys_36
# of outpatient specialist visit for phys reasons (cont)	#_spc_phys_48
# of outpatient specialist visit for phys reasons (cont)	#_spc_phys_60
# of GP visits for phys reasons (continuous)	#_gp_phys_3
# of GP visits for phys reasons (continuous)	#_gp_phys_6
# of GP visits for phys reasons (continuous)	#_gp_phys_12
# of GP visits for phys reasons (continuous)	#_gp_phys_24
# of GP visits for phys reasons (continuous)	#_gp_phys_36
# of GP visits for phys reasons (continuous)	#_gp_phys_48
# of GP visits for phys reasons (continuous)	#_gp_phys_60
# of emergency visits for phys reasons (continuous)	#_ER_phys_3
# of emergency visits for phys reasons (continuous)	#_ER_phys_6
# of emergency visits for phys reasons (continuous)	#_ER_phys_12
# of emergency visits for phys reasons (continuous)	#_ER_phys_24
# of emergency visits for phys reasons (continuous)	#_ER_phys_36
# of emergency visits for phys reasons (continuous)	#_ER_phys_48
# of emergency visits for phys reasons (continuous)	#_ER_phys_60

vii. INDIVIDUAL SOCIO-DEMOGRAPHIC VARIABLES
   - Age (continuous)
   - age group: 15-24
   - age group: 25-34
   - age group: 35-44
   - age group: 45-54

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- age group: 55-64
- age group: 65-74
- age group: 75-84
- age group: ≥85
- Sex
- Location – rural
- Location – non-rural
- Location – missing data
- rss 01 bas saint-laurent
- rss 02 saguenay-lac-saint-jean
- rss 03 capitale-nationale
- rss 04 mauricie et centre-du-québec
- rss 05 estrie
- rss 06 montréal
- rss 07 outaouais
- rss 08 abitibi-témiscamingue
- rss 09 côte-nord
- rss 10 nord-du-québec
- rss 11gaspésie-îles-de-la-madeleine
- rss 12 chaudière-appalaches
- rss 13 laval
- rss 14 lanaudière
- rss 15 laurentides
- rss 16 montérégie
- Adherence to the public drug plan (RAMQ) (dichotomous)

derived variables	variable name
Age (continuous)	Age_continuous
age group: 15-24	age_15-24
age group: 25-34	age_25-34
age group: 35-44	age_35-44
age group: 45-54	age_45-54
age group: 55-64	age_55-64
age group: 65-74	age_65-74
age group: 75-84	age_75-84
age group: ≥85	age_85+
sex male	sex_m
sex female	sex_f
rss 01 bas-saint-laurent	loc_rss_01_3
rss 01 bas-saint-laurent	loc_rss_01_6
rss 01 bas-saint-laurent	loc_rss_01_12
rss 01 bas-saint-laurent	loc_rss_01_24
rss 01 bas-saint-laurent	loc_rss_01_36

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rss 01 bas-saint-laurent	loc_rss_01_48
rss 01 bas-saint-laurent	loc_rss_01_60
rss 02 saguenay-lac-saint-jean	loc_rss_02_3
rss 02 saguenay-lac-saint-jean	loc_rss_02_6
rss 02 saguenay-lac-saint-jean	loc_rss_02_12
rss 02 saguenay-lac-saint-jean	loc_rss_02_24
rss 02 saguenay-lac-saint-jean	loc_rss_02_36
rss 02 saguenay-lac-saint-jean	loc_rss_02_48
rss 02 saguenay-lac-saint-jean	loc_rss_02_60
rss 03 capitale-nationale	loc_rss_03_3
rss 03 capitale-nationale	loc_rss_03_6
rss 03 capitale-nationale	loc_rss_03_12
rss 03 capitale-nationale	loc_rss_03_24
rss 03 capitale-nationale	loc_rss_03_36
rss 03 capitale-nationale	loc_rss_03_48
rss 03 capitale-nationale	loc_rss_03_60
rss 04 mauricie et centre-du-québec	loc_rss_04_3
rss 04 mauricie et centre-du-québec	loc_rss_04_6
rss 04 mauricie et centre-du-québec	loc_rss_04_12
rss 04 mauricie et centre-du-québec	loc_rss_04_24
rss 04 mauricie et centre-du-québec	loc_rss_04_36
rss 04 mauricie et centre-du-québec	loc_rss_04_48
rss 04 mauricie et centre-du-québec	loc_rss_04_60
rss 05 estrie	loc_rss_05_3
rss 05 estrie	loc_rss_05_6
rss 05 estrie	loc_rss_05_12
rss 05 estrie	loc_rss_05_24
rss 05 estrie	loc_rss_05_36
rss 05 estrie	loc_rss_05_48
rss 05 estrie	loc_rss_05_60
rss 06 montréal	loc_rss_06_3
rss 06 montréal	loc_rss_06_6
rss 06 montréal	loc_rss_06_12
rss 06 montréal	loc_rss_06_24
rss 06 montréal	loc_rss_06_36
rss 06 montréal	loc_rss_06_48
rss 06 montréal	loc_rss_06_60
rss 07 outaouais	loc_rss_07_3
rss 07 outaouais	loc_rss_07_6
rss 07 outaouais	loc_rss_07_12
rss 07 outaouais	loc_rss_07_24

Supplemental material

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BMJ Open

rss 07 outaouais	loc_rss_07_36
rss 07 outaouais	loc_rss_07_48
rss 07 outaouais	loc_rss_07_60
08 abitibi-témiscamingue	loc_rss_08_3
rss 08 abitibi-témiscamingue	loc_rss_08_6
rss 08 abitibi-témiscamingue	loc_rss_08_12
rss 08 abitibi-témiscamingue	loc_rss_08_24
08 abitibi-témiscamingue	loc_rss_08_36
rss 08 abitibi-témiscamingue	loc_rss_08_48
rss 08 abitibi-témiscamingue	loc_rss_08_60
rss 09 côte-nord	loc_rss_09_3
rss 09 côte-nord	loc_rss_09_6
rss 09 côte-nord	loc_rss_09_12
rss 09 côte-nord	loc_rss_09_24
rss 09 côte-nord	loc_rss_09_36
rss 09 côte-nord	loc_rss_09_48
rss 09 côte-nord	loc_rss_09_60
rss 10 nord-du-québec	loc_rss_10_3
rss 10 nord-du-québec	loc_rss_10_6
rss 10 nord-du-québec	loc_rss_10_12
rss 10 nord-du-québec	loc_rss_10_24
rss 10 nord-du-québec	loc_rss_10_36
rss 10 nord-du-québec	loc_rss_10_48
rss 10 nord-du-québec	loc_rss_10_60
rss 11 gaspésie-îles-de-la-madeleine	loc_rss_11_3
rss 11 gaspésie-îles-de-la-madeleine	loc_rss_11_6
rss 11 gaspésie-îles-de-la-madeleine	loc_rss_11_12
rss 11 gaspésie-îles-de-la-madeleine	loc_rss_11_24
rss 11 gaspésie-îles-de-la-madeleine	loc_rss_11_36
rss 11 gaspésie-îles-de-la-madeleine	loc_rss_11_48
rss 11 gaspésie-îles-de-la-madeleine	loc_rss_11_60
rss 12 chaudière-appalaches	loc_rss_12_3
rss 12 chaudière-appalaches	loc_rss_12_6
rss 12 chaudière-appalaches	loc_rss_12_12
rss 12 chaudière-appalaches	loc_rss_12_24
rss 12 chaudière-appalaches	loc_rss_12_36
rss 12 chaudière-appalaches	loc_rss_12_48
rss 12 chaudière-appalaches	loc_rss_12_60
rss 13 laval	loc_rss_13_3
rss 13 laval	loc_rss_13_6
rss 13 laval	loc_rss_13_12

rss 13 laval	loc_rss_13_24
rss 13 laval	loc_rss_13_36
rss 13 laval	loc_rss_13_48
rss 13 laval	loc_rss_13_60
rss 14 lanaudière	loc_rss_14_3
rss 14 lanaudière	loc_rss_14_6
rss 14 lanaudière	loc_rss_14_12
rss 14 lanaudière	loc_rss_14_24
rss 14 lanaudière	loc_rss_14_36
rss 14 lanaudière	loc_rss_14_48
rss 14 lanaudière	loc_rss_14_60
rss 15 laurentides	loc_rss_15_3
rss 15 laurentides	loc_rss_15_6
rss 15 laurentides	loc_rss_15_12
rss 15 laurentides	loc_rss_15_24
rss 15 laurentides	loc_rss_15_36
rss 15 laurentides	loc_rss_15_48
rss 15 laurentides	loc_rss_15_60
rss 16 montérégie	loc_rss_16_3
rss 16 montérégie	loc_rss_16_6
rss 16 montérégie	loc_rss_16_12
rss 16 montérégie	loc_rss_16_24
rss 16 montérégie	loc_rss_16_36
rss 16 montérégie	loc_rss_16_48
rss 16 montérégie	loc_rss_16_60
location nonrural	nonrural_3
location nonrural	nonrural_6
location nonrural	nonrural_12
location nonrural	nonrural_24
location nonrural	nonrural_36
location nonrural	nonrural_48
location nonrural	nonrural_60
location rural	rural_3
location rural	rural_6
location rural	rural_12
location rural	rural_24
location rural	rural_36
location rural	rural_48
location rural	rural_60
location missing data	loc_missing_3
location missing data	loc_missing_6

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location missing data	loc_missing_12
location missing data	loc_missing_24
location missing data	loc_missing_36
location missing data	loc_missing_48
location missing data	loc_missing_60
adherence to the public drug plan (RAMQ)	PublicRxPlan _3
adherence to the public drug plan (RAMQ)	PublicRxPlan _6
adherence to the public drug plan (RAMQ)	PublicRxPlan _12
adherence to the public drug plan (RAMQ)	PublicRxPlan_24
adherence to the public drug plan (RAMQ)	PublicRxPlan _36
adherence to the public drug plan (RAMQ)	PublicRxPlan_48
adherence to the public drug plan (RAMQ)	PublicRxPlan_60

ENVIRONMENTAL VARIABLES

     i.   DEPRIVATION INDEX
- Material deprivation (from 1, least deprived to 5, most deprived)
- Social deprivation (from 1, least deprived to 5, most deprived)

derived variables[7]	variable name
material deprivation (1-5)	matdep_3
material deprivation (1-5)	matdep_6
material deprivation (1-5)	matdep_12
material deprivation (1-5)	matdep_24
material deprivation (1-5)	matdep_36
material deprivation (1-5)	matdep_48
material deprivation (1-5)	matdep_60
social deprivation (1-5)	socdep_3
social deprivation (1-5)	socdep_6
social deprivation (1-5)	socdep_12
social deprivation (1-5)	socdep_24
social deprivation (1-5)	socdep_36
social deprivation (1-5)	socdep_48
social deprivation (1-5)	socdep_60

SYSTEM VARIABLES

     i.   HEALTH SYSTEM ENVIRONMENT (HEALTH SYSTEM)
- Mental health budget

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- Bas-Saint-Laurent
- Saguenay-Lac-Saint-Jean
- Capitale-Nationale
- Mauricie et Centre-du-Québec
- Estrie
- Montréal
- Outaouais
- Abitibi-Témiscamingue
- Côte-Nord
- Nord-du-Québec
- Gaspésie-îles-de-la-Madeleine
- Chaudière-Appalaches
- Laval
- Lanaudière
- Laurentides
- Montérégie
- Addictions budget
  - Bas-Saint-Laurent
  - Saguenay-Lac-Saint-Jean
  - Capitale-Nationale
  - Mauricie et Centre-du-Québec
  - Estrie
  - Montréal
  - Outaouais
  - Abitibi-Témiscamingue
  - Côte-Nord
  - Nord-du-Québec
  - Gaspésie-îles-de-la-Madeleine
  - Chaudière-Appalaches
  - Laval
  - Lanaudière
  - Laurentides
  - Montérégie
- regional mental health budget ($/capita)
  - 2018-2019
  - 2017-2018
  - 2016-2017
  - 2015-2016
- regional addictions health budget ($/capita)
  - 2018-2019
  - 2017-2018
  - 2016-2017
  - 2015-2016

derived variables	variable name
rss 01 bas-saint-laurent mental health budget	rss_01_mh_3
rss 01 bas-saint-laurent mental health budget	rss_01_mh_6
rss 01 bas-saint-laurent mental health budget	rss_01_mh_12

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rss 01 bas-saint-laurent mental health budget	rss_01_mh_24
rss 01 bas-saint-laurent mental health budget	rss_01_mh_36
rss 01 bas-saint-laurent mental health budget	rss_01_mh_48
rss 01 bas-saint-laurent mental health budget	rss_01_mh_60
rss 02 saguenay-lac-saint-jean mental health budget	rss_02_mh_3
rss 02 saguenay-lac-saint-jean mental health budget	rss_02_mh_6
rss 02 saguenay-lac-saint-jean mental health budget	rss_02_mh_12
rss 02 saguenay-lac-saint-jean mental health budget	rss_02_mh_24
rss 02 saguenay-lac-saint-jean mental health budget	rss_02_mh_36
rss 02 saguenay-lac-saint-jean mental health budget	rss_02_mh_48
rss 02 saguenay-lac-saint-jean mental health budget	rss_02_mh_60
rss 03 capitale-nationale mental health budget	rss_03_mh_3
rss 03 capitale-nationale mental health budget	rss_03_mh_6
rss 03 capitale-nationale mental health budget	rss_03_mh_12
rss 03 capitale-nationale mental health budget	rss_03_mh_14
rss 03 capitale-nationale mental health budget	rss_03_mh_36
rss 03 capitale-nationale mental health budget	rss_03_mh_48
rss 03 capitale-nationale mental health budget	rss_03_mh_60
rss 04 mauricie et centre-du-québec mental health budget	rss_04_mh_3
rss 04 mauricie et centre-du-québec mental health budget	rss_04_mh_6
rss 04 mauricie et centre-du-québec mental health budget	rss_04_mh_12
rss 04 mauricie et centre-du-québec mental health budget	rss_04_mh_24
rss 04 mauricie et centre-du-québec mental health budget	rss_04_mh_36
rss 04 mauricie et centre-du-québec mental health budget	rss_04_mh_48
rss 04 mauricie et centre-du-québec mental health budget	rss_04_mh_60
rss 05 estrie mental health budget	rss_05_mh_3
rss 05 estrie mental health budget	rss_05_mh_6
rss 05 estrie mental health budget	rss_05_mh_12
rss 05 estrie mental health budget	rss_05_mh_24
rss 05 estrie mental health budget	rss_05_mh_36
rss 05 estrie mental health budget	rss_05_mh_48
rss 05 estrie mental health budget	rss_05_mh_60
rss 06 montréal mental health budget	rss_06_mh_3
rss 06 montréal mental health budget	rss_06_mh_6
rss 06 montréal mental health budget	rss_06_mh_12
rss 06 montréal mental health budget	rss_06_mh_24
rss 06 montréal mental health budget	rss_06_mh_36
rss 06 montréal mental health budget	rss_06_mh_48
rss 06 montréal mental health budget	rss_06_mh_60
rss 07 outaouais mental health budget	rss_07_mh_3
rss 07 outaouais mental health budget	rss_07_mh_6

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rss 07 outaouais mental health budget	rss_07_mh_12
rss 07 outaouais mental health budget	rss_07_mh_24
rss 07 outaouais mental health budget	rss_07_mh_36
rss 07 outaouais mental health budget	rss_07_mh_48
rss 07 outaouais mental health budget	rss_07_mh_60
rss 08 abitibi-témiscamingue mental health budget	rss_08_mh_3
rss 08 abitibi-témiscamingue mental health budget	rss_08_mh_6
rss 08 abitibi-témiscamingue mental health budget	rss_08_mh_12
rss 08 abitibi-témiscamingue mental health budget	rss_08_mh_24
rss 08 abitibi-témiscamingue mental health budget	rss_08_mh_36
rss 08 abitibi-témiscamingue mental health budget	rss_08_mh_48
rss 08 abitibi-témiscamingue mental health budget	rss_08_mh_60
rss 09 côte-nord mental health budget	rss_09_mh_3
rss 09 côte-nord mental health budget	rss_09_mh_6
rss 09 côte-nord mental health budget	rss_09_mh_12
rss 09 côte-nord mental health budget	rss_09_mh_24
rss 09 côte-nord mental health budget	rss_09_mh_36
rss 09 côte-nord mental health budget	rss_09_mh_48
rss 09 côte-nord mental health budget	rss_09_mh_60
rss 10 nord-du-québec mental health budget	rss_10_mh_3
rss 10 nord-du-québec mental health budget	rss_10_mh_6
rss 10 nord-du-québec mental health budget	rss_10_mh_12
rss 10 nord-du-québec mental health budget	rss_10_mh_24
rss 10 nord-du-québec mental health budget	rss_10_mh_36
rss 10 nord-du-québec mental health budget	rss_10_mh_48
rss 10 nord-du-québec mental health budget	rss_10_mh_60
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rss 11 gaspésie-îles-de-la-madeleine mental health budget	rss_11_mh_6
rss 11 gaspésie-îles-de-la-madeleine mental health budget	rss_11_mh_12
rss 11 gaspésie-îles-de-la-madeleine mental health budget	rss_11_mh_24
rss 11 gaspésie-îles-de-la-madeleine mental health budget	rss_11_mh_36
rss 11 gaspésie-îles-de-la-madeleine mental health budget	rss_11_mh_48
rss 11 gaspésie-îles-de-la-madeleine mental health budget	rss_11_mh_60
rss 12 chaudière-appalaches mental health budget	rss_12_mh_3
rss 12 chaudière-appalaches mental health budget	rss_12_mh_6
rss 12 chaudière-appalaches mental health budget	rss_12_mh_12
rss 12 chaudière-appalaches mental health budget	rss_12_mh_24
rss 12 chaudière-appalaches mental health budget	rss_12_mh_36
rss 12 chaudière-appalaches mental health budget	rss_12_mh_48
rss 12 chaudière-appalaches mental health budget	rss_12_mh_60
rss 13 laval mental health budget	rss_13_mh_3

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rss 13 laval mental health budget	rss_13_mh_6
rss 13 laval mental health budget	rss_13_mh_12
rss 13 laval mental health budget	rss_13_mh_24
rss 13 laval mental health budget	rss_13_mh_36
rss 13 laval mental health budget	rss_13_mh_48
rss 13 laval mental health budget	rss_13_mh_60
rss 14 lanaudière mental health budget	rss_14_mh_3
rss 14 lanaudière mental health budget	rss_14_mh_6
rss 14 lanaudière mental health budget	rss_14_mh_12
rss 14 lanaudière mental health budget	rss_14_mh_24
rss 14 lanaudière mental health budget	rss_14_mh_36
rss 14 lanaudière mental health budget	rss_14_mh_48
rss 14 lanaudière mental health budget	rss_14_mh_60
rss 15 laurentides mental health budget	rss_15_mh_3
rss 15 laurentides mental health budget	rss_15_mh_6
rss 15 laurentides mental health budget	rss_15_mh_12
rss 15 laurentides mental health budget	rss_15_mh_24
rss 15 laurentides mental health budget	rss_15_mh_36
rss 15 laurentides mental health budget	rss_15_mh_48
rss 15 laurentides mental health budget	rss_15_mh_60
rss 16 montérégie mental health budget	rss_16_mh_3
rss 16 montérégie mental health budget	rss_16_mh_6
rss 16 montérégie mental health budget	rss_16_mh_12
rss 16 montérégie mental health budget	rss_16_mh_24
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rss 16 montérégie mental health budget	rss_16_mh_48
rss 16 montérégie mental health budget	rss_16_mh_60
rss 01 bas-saint-laurent addictions budget	rss_01_a_3
rss 01 bas-saint-laurent addictions budget	rss_01_a_6
rss 01 bas-saint-laurent addictions budget	rss_01_a_12
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rss 01 bas-saint-laurent addictions budget	rss_01_a_36
rss 01 bas-saint-laurent addictions budget	rss_01_a_48
rss 01 bas-saint-laurent addictions budget	rss_01_a_60
rss 02 saguenay-lac-saint-jean addictions budget	rss_02_a_3
rss 02 saguenay-lac-saint-jean addictions budget	rss_02_a_6
rss 02 saguenay-lac-saint-jean addictions budget	rss_02_a_12
rss 02 saguenay-lac-saint-jean addictions budget	rss_02_a_24
rss 02 saguenay-lac-saint-jean addictions budget	rss_02_a_36
rss 02 saguenay-lac-saint-jean addictions budget	rss_02_a_48
rss 02 saguenay-lac-saint-jean addictions budget	rss_02_a_60

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rss 03 capitale-nationale addictions budget	rss_03_a_3
rss 03 capitale-nationale addictions budget	rss_03_a_6
rss 03 capitale-nationale addictions budget	rss_03_a_12
rss 03 capitale-nationale addictions budget	rss_03_a_24
rss 03 capitale-nationale addictions budget	rss_03_a_36
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rss 03 capitale-nationale addictions budget	rss_03_a_60
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rss 04 mauricie et centre-du-québec addictions budget	rss_04_a_48
rss 04 mauricie et centre-du-québec addictions budget	rss_04_a_60
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rss 05 estrie addictions budget	rss_05_a_6
rss 05 estrie addictions budget	rss_05_a_12
rss 05 estrie addictions budget	rss_05_a_24
rss 05 estrie addictions budget	rss_05_a_36
rss 05 estrie addictions budget	rss_05_a_48
rss 05 estrie addictions budget	rss_05_a_60
rss 06 montréal addictions budget	rss_06_a_3
rss 06 montréal addictions budget	rss_06_a_6
rss 06 montréal addictions budget	rss_06_a_12
rss 06 montréal addictions budget	rss_06_a_24
rss 06 montréal addictions budget	rss_06_a_36
rss 06 montréal addictions budget	rss_06_a_48
rss 06 montréal addictions budget	rss_06_a_60
rss 07 outaouais addictions budget	rss_07_a_3
rss 07 outaouais addictions budget	rss_07_a_6
rss 07 outaouais addictions budget	rss_07_a_12
rss 07 outaouais addictions budget	rss_07_a_24
rss 07 outaouais addictions budget	rss_07_a_36
rss 07 outaouais addictions budget	rss_07_a_48
rss 07 outaouais addictions budget	rss_07_a_60
rss 08 abitibi-témiscamingue addictions budget	rss_08_a_3
rss 08 abitibi-témiscamingue addictions budget	rss_08_a_6
rss 08 abitibi-témiscamingue addictions budget	rss_08_a_12
rss 08 abitibi-témiscamingue addictions budget	rss_08_a_24
rss 08 abitibi-témiscamingue addictions budget	rss_08_a_36
rss 08 abitibi-témiscamingue addictions budget	rss_08_a_48

rss 08 abitibi-témiscamingue addictions budget	rss_08_a_60
rss 09 côte-nord addictions budget	rss_09_a_3
rss 09 côte-nord addictions budget	rss_09_a_6
rss 09 côte-nord addictions budget	rss_09_a_12
rss 09 côte-nord addictions budget	rss_09_a_24
rss 09 côte-nord addictions budget	rss_09_a_36
rss 09 côte-nord addictions budget	rss_09_a_48
rss 09 côte-nord addictions budget	rss_09_a_60
rss 10 nord-du-québec addictions budget	rss_10_a_3
rss 10 nord-du-québec addictions budget	rss_10_a_6
rss 10 nord-du-québec addictions budget	rss_10_a_12
rss 10 nord-du-québec addictions budget	rss_10_a_24
rss 10 nord-du-québec addictions budget	rss_10_a_36
rss 10 nord-du-québec addictions budget	rss_10_a_48
rss 10 nord-du-québec addictions budget	rss_10_a_60
rss 11 gaspésie--îles-de-la-madeleine addictions budget	rss_11_a_3
rss 11 gaspésie--îles-de-la-madeleine addictions budget	rss_11_a_6
rss 11 gaspésie--îles-de-la-madeleine addictions budget	rss_11_a_12
rss 11 gaspésie--îles-de-la-madeleine addictions budget	rss_11_a_24
rss 11 gaspésie--îles-de-la-madeleine addictions budget	rss_11_a_36
rss 11 gaspésie--îles-de-la-madeleine addictions budget	rss_11_a_48
rss 11 gaspésie--îles-de-la-madeleine addictions budget	rss_11_a_60
rss 12 chaudière-appalaches addictions budget	rss_12_a_3
rss 12 chaudière-appalaches addictions budget	rss_12_a_6
rss 12 chaudière-appalaches addictions budget	rss_12_a_12
rss 12 chaudière-appalaches addictions budget	rss_12_a_24
rss 12 chaudière-appalaches addictions budget	rss_12_a_36
rss 12 chaudière-appalaches addictions budget	rss_12_a_48
rss 12 chaudière-appalaches addictions budget	rss_12_a_60
rss 13 laval addictions budget	rss_13_a_3
rss 13 laval addictions budget	rss_13_a_6
rss 13 laval addictions budget	rss_13_a_12
rss 13 laval addictions budget	rss_13_a_24
rss 13 laval addictions budget	rss_13_a_36
rss 13 laval addictions budget	rss_13_a_48
rss 13 laval addictions budget	rss_13_a_60
rss 14 lanaudière addictions budget	rss_14_a_3
rss 14 lanaudière addictions budget	rss_14_a_6
rss 14 lanaudière addictions budget	rss_14_a_12
rss 14 lanaudière addictions budget	rss_14_a_24
rss 14 lanaudière addictions budget	rss_14_a_36

rss 14 lanaudière addictions budget	rss_14_a_48
rss 14 lanaudière addictions budget	rss_14_a_60
rss 15 laurentides addictions budget	rss_15_a_3
rss 15 laurentides addictions budget	rss_15_a_6
rss 15 laurentides addictions budget	rss_15_a_12
rss 15 laurentides addictions budget	rss_15_a_24
rss 15 laurentides addictions budget	rss_15_a_36
rss 15 laurentides addictions budget	rss_15_a_48
rss 15 laurentides addictions budget	rss_15_a_60
rss 16 montérégie addictions budget	rss_16_a_3
rss 16 montérégie addictions budget	rss_16_a_6
rss 16 montérégie addictions budget	rss_16_a_12
rss 16 montérégie addictions budget	rss_16_a_24
rss 16 montérégie addictions budget	rss_16_a_36
rss 16 montérégie addictions budget	rss_16_a_48
rss 16 montérégie addictions budget	rss_16_a_60
regional mental health budget ($/capita)	region_mhbudget_2018-2019
regional mental health budget ($/capita)	region_mhbudget_2017-2018
regional mental health budget ($/capita)	region_mhbudget_2016-2017
regional mental health budget ($/capita)	region_mhbudget_2015-2016
regional addictions budget ($/capita)	region_abudget_2018-2019
regional addictions budget ($/capita)	region_abudget_2017-2018
regional addictions budget ($/capita)	region_abudget_2016-2017
regional addictions budget ($/capita)	region_abudget_2015-2016

ii. QUALITY OF CARE INDICATORS (QUALITYCARE)

- quality of anxiety or depressive disorders mental health services follow-up in primary care (continuous)
- quality of mental health services depression disorder mental health services follow-up in primary care (continuous)
- quality of substance use disorder mental health services follow-up in primary care (continuous)
- quality of mental health care services follow-up after hospitalization: readmission within 30 days (continuous)
- quality of mental health services follow-up in primary care after suicide attempt (continuous)
- quality of community mental health services (continuous)
- quality of community mental health services of patients with severe mental illness (continuous)
- quality of community mental health services of patients with common mental disorders (continuous)
- quality of community mental health services of patients with personality disorders (continuous)
- adequate use of emergency room for mental health service (continuous)

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derived variables	variable name
quality of anxiety or depressive disorders mental health services follow-up in primary care (continuous)	qfu_primcare_anxdep_3
quality of anxiety or depressive disorders mental health services follow-up in primary care (continuous)	qfu_primcare_anxdep_6
quality of anxiety or depressive disorders mental health services follow-up in primary care (continuous)	qfu_primcare_anxdep_12
quality of anxiety or depressive disorders mental health services follow-up in primary care (continuous)	qfu_primcare_anxdep_24
quality of anxiety or depressive disorders mental health services follow-up in primary care (continuous)	qfu_primcare_anxdep_36
quality of anxiety or depressive disorders mental health services follow-up in primary care (continuous)	qfu_primcare_anxdep_48
quality of anxiety or depressive disorders mental health services follow-up in primary care (continuous)	qfu_primcare_anxdep_60
quality of depression disorder mental health services follow-up in primary care (continuous)	qfu_primcare_dep_3
quality of depression disorder mental health services follow-up in primary care (continuous)	qfu_primcare_dep_6
quality of depression disorder mental health services follow-up in primary care (continuous)	qfu_primcare_dep_12
quality of depression disorder mental health services follow-up in primary care (continuous)	qfu_primcare_dep_24
quality of depression disorder mental health services follow-up in primary care (continuous)	qfu_primcare_dep_36
quality of depression disorder mental health services follow-up in primary care (continuous)	qfu_primcare_dep_48
quality of depression disorder mental health services follow-up in primary care (continuous)	qfu_primcare_dep_60
quality of substance use disorder mental health services follow-up in primary care (continuous)	qfu_primcare_sud_3
quality of substance use disorder mental health services follow-up in primary care (continuous)	qfu_primcare_sud_6
quality of substance use disorder mental health services follow-up in primary care (continuous)	qfu_primcare_sud_12

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quality of substance use disorder mental health services follow-up in primary care (continuous)	qfu_primcare_sud_24
quality of substance use disorder mental health services follow-up in primary care (continuous)	qfu_primcare_sud_36
quality of substance use disorder mental health services follow-up in primary care (continuous)	qfu_primcare_sud_48
quality of substance use disorder mental health services follow-up in primary care (continuous)	qfu_primcare_sud_60
quality of mental health care services follow-up after hospitalization: readmission within 30 days (continuous)	qfu_posthosp_readmit30_3
quality of mental health care services follow-up after hospitalization: readmission within 30 days (continuous)	qfu_posthosp_readmit30_6
quality of mental health care services follow-up after hospitalization: readmission within 30 days (continuous)	qfu_posthosp_readmit30_12
quality of mental health care services follow-up after hospitalization: readmission within 30 days (continuous)	qfu_posthosp_readmit30_24
quality of mental health care services follow-up after hospitalization: readmission within 30 days (continuous)	qfu_posthosp_readmit30_36
quality of mental health care services follow-up after hospitalization: readmission within 30 days (continuous)	qfu_posthosp_readmit30_48
quality of mental health care services follow-up after hospitalization: readmission within 30 days (continuous)	qfu_posthosp_readmit30_60
quality of mental health services followup in primary care after suicide attempt (continuous)	qfu_primcare_postsuicideattempt_3
quality of mental health services followup in primary care after suicide attempt (continuous)	qfu_primcare_postsuicideattempt_6
quality of mental health services followup in primary care after suicide attempt (continuous)	qfu_primcare_postsuicideattempt_12
quality of mental health services followup in primary care after suicide attempt (continuous)	qfu_primcare_postsuicideattempt_24
quality of mental health services followup in primary care after suicide attempt (continuous)	qfu_primcare_postsuicideattempt_36
quality of mental health services followup in primary care after suicide attempt (continuous)	qfu_primcare_postsuicideattempt_48
quality of mental health services followup in primary care after suicide attempt (continuous)	qfu_primcare_postsuicideattempt_60
quality of community mental health services (continuous)	qcomserv_3

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quality of community mental health services (continuous)	qcomserv_6
quality of community mental health services (continuous)	qcomserv_12
quality of community mental health services (continuous)	qcomserv_24
quality of community mental health services (continuous)	qcomserv_36
quality of community mental health services (continuous)	qcomserv_48
quality of community mental health services (continuous)	qcomserv_60
quality of community mental health services of patients with severe mental illness (continuous)	qcomserv_severe_3
quality of community mental health services of patients with severe mental illness (continuous)	qcomserv_severe_6
quality of community mental health services of patients with severe mental illness (continuous)	qcomserv_severe_12
quality of community mental health services of patients with severe mental illness (continuous)	qcomserv_severe_24
quality of community mental health services of patients with severe mental illness (continuous)	qcomserv_severe_36
quality of community mental health services of patients with severe mental illness (continuous)	qcomserv_severe_48
quality of community mental health services of patients with severe mental illness (continuous)	qcomserv_severe_60
quality of community mental health services of patients with common mental disorders (continuous)	qcomserv_cmd_3
quality of community mental health services of patients with common mental disorders (continuous)	qcomserv_cmd_6
quality of community mental health services of patients with common mental disorders (continuous)	qcomserv_cmd_12
quality of community mental health services of patients with common mental disorders (continuous)	qcomserv_cmd_24
quality of community mental health services of patients with common mental disorders (continuous)	qcomserv_cmd_36
quality of community mental health services of patients with common mental disorders (continuous)	qcomserv_cmd_48

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quality of community mental health services of patients with common mental disorders (continuous)	qcomserv_cmd_60
quality of community mental health services of patients with personality disorders (continuous)	qcomserv_pd_3
quality of community mental health services of patients with personality disorders (continuous)	qcomserv_pd_6
quality of community mental health services of patients with personality disorders (continuous)	qcomserv_pd_12
quality of community mental health services of patients with personality disorders (continuous)	qcomserv_pd_24
quality of community mental health services of patients with personality disorders (continuous)	qcomserv_pd_36
quality of community mental health services of patients with personality disorders (continuous)	qcomserv_pd_48
quality of community mental health services of patients with personality disorders (continuous)	qcomserv_pd_60
adequate use of emergency room for mental health service (continuous)	aduse_er_3
adequate use of emergency room for mental health service (continuous)	aduse_er_6
adequate use of emergency room for mental health service (continuous)	aduse_er_12
adequate use of emergency room for mental health service (continuous)	aduse_er_24
adequate use of emergency room for mental health service (continuous)	aduse_er_36
adequate use of emergency room for mental health service (continuous)	aduse_er_48
adequate use of emergency room for mental health service (continuous)	aduse_er_60

APPENDIX A: CLASSES_MEDICAMENTS_CAROLINE SIROIS 30 AVRIL.XLSX

Mental health mediation

Psychotropic medications							
Group	Sub-group		Medications		Common denomination codes		

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Antipsychotics					
	Typical				
		Chlopromazine	1924		
		Flupenthixol	41863		
			43202		
		Fluphenazine	4056		
			4069		
			34284		
		Haloperidol	4394		
			43540		
			43826		
			46292		
		Loxapine	34219		
			37612		
			40745		
		Methotrimeprazine	6045		
		Perphenazine	7176		
			46011	(In combination with amitryptiline)	
		Pimozide	33465		
		Pipotiazine	41707		
		Prochlorperazine	45458		
			45528		
			8125		
		Thioridazine	9594		
		Thioproperazine	9568		
		Trifluoperazine	9802		
			34440		
			46108	(In combination with isopropamide)	
		Zuclopenthixol	47136		
			47137		
			47138		
	Atypical	Asenapine	47921		
		Aripiprazole	47801		
		Brexpiprazole	48153		
		Clozapine	45580		
		Lurasidone	47939		

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		Olanzapine	46318		
			47197		
		Paliperidone	47708		
			47861		
		Quetiapine	47267		
		Risperidone	46156		
			47052		
		Ziprazidone	47717		
Antidepressants - Those mostly used for depression and anxiety disorders					
	SSRIs	Citalopram	46543		
			47317		
		Escitalopram	47553		
			47971		
		Fluoxetine	45504		
		Fluvoxamine	45633		
		Paroxetine	47061		
		Sertraline	45630		
	SNRIs	Desvenlafaxine	47770		
		Duloxetine	47714		
		Levomilnacipran	48075		
		Venlafaxine	46244		
			47118		
	NDRIs	Bupropion	46435	(Also used for tobacco cessation)	
			47285		
			48205	(In combination with naltrexone)	
	NaSSAs	Mirtazapine	46744	(Also used in low doses for insomnia)	
			47408		
	MAOI	Phenelzine	7280		

		Tranylcypromine	9698		
	IRMA	Moclobemide	46427		
			47005		
	SRI+ 5HT1a partial agonist	Vilazodone	48227		
	Serotonin modulator	Vortioxetine	48038		
Other antidepressants - Those mostly used for other indications than depression or anxiety disorders					
	Tricyclics	Amitryptiline	429		
			46011	(Combination with perphenazine)	
		Clomipramine	14781		
		Desipramine	2522		
		Doxepine	3198		
		Imipramine	4784		
		Nortriptyline	6578		
		Trimipramine	9906		
	Inh. S recap + antag 5-HT2	Trazodone	43137		
Mood stabilizers (other than antipsychotics and other medications included in other classes)					
		Carbamazepine	1404		
			10270		
		Gabapentin	46229		
			47100		
		Lamotrigine	47110		
			46248		
		Lithium	47071		
			47237		

			47589		
			5330		
		Oxcarbazepine	46805		
			47430		
		Topiramate	46359		
			47229		
		Valproic acid	38951		
			39393		
			44073		
Anxiolytics					
	Benzodiazépines	Alprazolam	43501		
		Bromazepam	43488		
		Chlordiazépoxide	1807		
		Clobazam	45591		
		Clonazépam	37872		
		Clorazépate	14768		
		Diazépam	2717		
		Flurazépam	4095		
		Lorazépam	37950		
		Nitrazépam	42045		
		Oxazepam	6786		
		Temazepam	41590		
		Triazolam	39029		
	Buspirone	Buspirone	45609		
ADHD					
		Amphetamine	507		
			47601		
			48001		
		Amphetamine/dexamphetamine	47486		
		Atomoxetine	47547		
		Dexamphetamine	2626		
		Lisdexamfetamine	47818		
			48000		
		Methylphenidate	48003		

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			39302		
		Guanfacine	47979		
Alzheimer's disease					
	Inh. Acetylcholinesterase	Donepezil	47352		
		Galantamine	47415		
			46767		
		Rivastigmine	47726		
			46673		
			47368		
	NMDA	Memantine	47542		

Medication classes – other

MAIN CLASSES	Sub-classes that may be studied	**AHFS codes or Medications**			
Diabetes		AHFS sub-class			
		68:20	Antidiabetes		
Cardiovascular diseases					
		AFHS sub-class			
	Antithrombotics	20:12	Antithrombotics (anticoagulants, antiplatelets)		et ajouter les CODES DÉNOMINATIONS COMMUNE ASPIRINE: 143 et 46353
	Antihpertensive agents	24:08	Antihypertensives (alpha-agonists, vasodilatators)		
		24:20	Alpha-blockers		
		24:24	Beta-blockers		
		24:28	Calcium chanel blockers		
		24:32	ACE inhibitors and ARBs		

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		40:28		Diuretics				
	Antiarythmic and cardiotonic	24:04		Cardiotropic (antiarythmics, cariotonics)				
	Hypolipemiants	24:06		Hypolipemiants (statins, fibrates, etc)				
	Vasodilatators	24:12		Nitrates and other vasodilatators				
Respiratory diseases (mediations used to treat COPD and asthma)								
		Medications		Code denomination commune				
		Aclidinium		47986				
		Glycopyrronium		47949				
		Tiotropium		46856				
		Uméclidinium		48109				
		Formotérol		47916				
		Indacatérol		47923				
		Salmétérol		46247				
				47112				
		Olodatérol						
		Glycopyrronium/indacatérol		48033				
		Uméclidinium/vilantérol		48224				
				48029				
		Aclinidium/formotérol						
		Tiotropium/Olodatérol		48064				
		Budésonide/formotérol		47428				
				46800				
				47917				
				47925				
		Fluticasone/salmétérol		46597				
				47335				
		Fluticasone/vilantérol		48006				
		Salbutamol		10530			Exclure les codes de forme: 116, 203,435, 2262, 2088, 2117, 4147	
				33634				
				46737				

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		Terbutaline		34180		
		Ipratropium		43124		Exclure les codes de forme: 4321, 5582, 5583
				46640		
		Fénotérol/ipratropium		46288		
		Salbutamol/ipratropium		46302		
				47186		
		Roflumilast		47854		
		Théophyline		9464		
				9490		
				9503		
		Oxtriphylline		43475		
		Aminophylline		46428		
				364		
		Béclométhasone		780		
		Budénoside		45499		
		Ciclésonide		47626		
		Fluticasone		47712		
				47050		
				46345		
		Fluticasone/azélastine		48092		
		Fluticasone/vilantérol/uméclidinium		48224		
		Fluticasone/salmétérol		47335		
				46597		
		Mométasone		47299		
		Mométasone/Formotérol		48115		
				47914		
				47884		
		Montélukast		47303		
				47302		
				46467		
		Zafirlukast		46401		
				47266		
Gastro-intestinal disorders		**AHFS class**		(Example of sub-classes that are included in the 56. class)		
		56.xx		56:08	Antidiarrhea agents	

				56:14	Cholelitholytics	
				56:16	Digestives	
				56:22	Anti-emetics	
				56:28	Anti-acids	
				56:32	Pro-kinetics	
				56:36	Gastro-intestinal anti-inflammatory drugs	
				56:92	Miscellaneous	
Anti-infective agents		**AHFS class**		(Example of sub-classes that are included in the the 08. class)		
		08.xx		8:08	Anthelmintics	
				8:12	Antibacterials	
				8:14	Antifungals	
				8:16	Antimycobacterials	
				8:18	Antivirals	
				8:30	Antiprotozoals	
				8:36	Urinary Anti-infectives	
				9:32	Anti-Infectives, Miscellaneous	
Antineoplastic agents		**AHFS class**				
		10.xx				
Pain		**AHFS subclass**				
		28:08	Analgesic and antipyretics (NSAIDs, opiods, etc)			SAUF
		Specific medicaitons		**Codes denomination commune**		
		Cyclobenzaprine		46516		
				38873		

		Baclofene		41447			
				46337			
		Orphenadrine		46094			
				46254			
				6734			
Contraceptives		AHFS subclass	68:12	Anovulants			
Not included: Glaucoma, Osteoporosis, ear/eyes/nose drugs, corticosteroids, skin medications, Parkinson disease							

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APPENDIX I_2: LIST OF THE CANDIDATE INDICATORS AT THE PROGRAMMATIC AND SYSTEM LEVELS SUPPORTED BY THE HEALTH SERVICES AND PUBLIC HEALTH LITERATURE OR PRACTICES

TABLE 2
List of the candidate indicators at the programmatic and system levels supported by the health services and public health literature or practices

Candidate indicators	Aim	Literature support	Description	Measure	Data sources
1. Quality of anxiety or depressive disorders mental health services follow-up in primary care	Determine adequate care for patient diagnosed with anxiety and depressive disorders in primary care	Based on number of physician visits by Wang, et al.[44] and other studies[47,48]	Denominator: Individuals aged 15+ years with an anxiety or depressive disorder diagnosis by a General Practitioner (GP) in a given year Numerator: Received ≥ 4 visits for mental health in that year	Prevalence of individuals 15+ years who received an anxiety or depressive disorder diagnosis with ≥ 4 visits for mental health	QICDSS
2. Quality of depression disorder mental health services follow-up in primary care	Determine adequate care for patient diagnosed with depression in primary care	Based on number of physician visits by Wang, et al.[44] and other studies[47,48]	Denominator: Individuals aged 15+ years with a diagnosis of depression by a General Practitioner (GP) in a given year Numerator: Received ≥ 4 visits for mental health in that year	Prevalence of individuals 15+ years who received a depression diagnosis with ≥ 4 visits for mental health	QICDSS
3. Quality of substance use disorder mental health services follow-up in primary care	Determine adequate care for patient diagnosed with substance use disorder in primary care	Based on 4 visits with a family physician for counseling as recommended by NICE[58] and the guidelines for American primary care clinicians[58]	Denominator: Individuals aged 15+ years with a diagnosis of substance use disorder by a General Practitioner (GP) in a given year Numerator: Received ≥ 4 visits for mental health in that year	Prevalence of individuals 15+ years who received a substance use disorder diagnosis with ≥ 4 visits for mental health	QICDSS
4. Quality of mental health care services follow-up after hospitalization: readmission within 30 days	Determine the quality of mental specialist health care and in-hospital care	Based on the work of the Canadian Institute for Health Information (CIHI)[45,47,48]	Denominator: Individuals aged 15+ years admitted in a hospital with a mental health diagnosis in a given year Numerator: Individual readmitted for mental health within 30 days of initial discharge	Prevalence of individuals 15+ years who were readmitted to a hospital for a mental health diagnosis within 30 days of initial discharge	QICDSS
5. Quality of mental health services follow-up in primary care after suicide attempt	Determine the quality of mental health care of readmission rates in the region compared to others	Based on the work of the Canadian Institute for Health Information (CIHI)[45,47,48]	Denominator: Individuals aged 15+ years admitted to a hospital for suicide attempt in a given year Numerator: Received ≥ 1 visit to a physician for mental health within 30 days of hospital discharge for suicide attempt	Prevalence of individuals 15+ years who received ≥ 1 visit from a physician within 30 days of initial discharge for suicide attempt	QICDSS (linked to MedEcho for suicide attempt)[40,41,50]
6. Quality of community mental health services	Determine the balance of the community-oriented mental health care system	Based on the typologies of primary and specialist (including in-hospital care) mental health care[a,45,46,54] used in the study of suicide attempts[55]	Denominator: Individuals aged 15+ years with a mental health diagnosis in a given year Numerator: Individuals with exclusively outpatient services – psychiatric or general practitioner (GP)	Prevalence of individuals 15+ years who received a mental health disorder diagnosis with exclusively outpatient services (psychiatric or GP)	QICDSS
7. Quality of community mental health services of patients with severe mental illness	Determine the balance of psychiatric outpatient and primary outpatient care depending on the profiles used[a,55]	Based on the associations found for the balance between primary and specialist mental health care and suicide rates[2,46,60,61]	Denominator: Individuals aged 15+ years with exclusively a GP or a psychiatric outpatient visit for psychotic disorder Numerator: Number of individuals with exclusively a GP or psychiatrist outpatient visits	Prevalence of individuals 15+ years who received a severe mental illness disorder diagnosis and used exclusively outpatient services by a GP	QICDSS
8. Quality of community mental health services of patients with common mental disorders	Determine the balance of psychiatric outpatient and primary outpatient care depending on the profiles used[a,55]	Based on the associations found for the balance between primary and specialist mental health care and suicide rates[2,46,60,61]	Denominator: Individuals aged 15+ years with a psychiatric or a GP outpatient visit for depression Numerator: Number of individuals with exclusively GP outpatient visits	Prevalence of individuals 15+ years who received a common mental disorder diagnosis and used exclusively outpatient services by a GP	QICDSS

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TABLE 2 (continued)
List of the candidate indicators at the programmatic and system levels supported by the health services and public health literature or practices

Candidate indicators	Aim	Literature support	Description	Measure	Data sources
9. Quality of community mental health services of patients with substance use disorders	Determine the balance of psychiatric outpatient and primary outpatient care depending on the profiles used[a,55]	Based on the associations found for the balance between primary and specialist mental health care and suicide rates[2,46,60,61]	Denominator: Individuals aged 15+ years with a psychiatric or a GP outpatient visit for substance use disorder Numerator: Number of individuals with exclusively GP outpatient visits	Prevalence of individuals 15+ years who received a substance use disorder diagnosis and used exclusively outpatient services by a GP	QICDSS
10. Quality of community mental health services of patients with personality disorders	Determine the balance of psychiatric outpatient and primary outpatient care depending on the profiles used[a,55]	Based on the associations found for the balance between primary and specialist mental health care and suicide rates[2,46,60,61]	Denominator: Individuals aged 15+ years with exclusively a GP or a psychiatric outpatient visit for personality disorder Numerator: Number of individuals with exclusively a GP or psychiatric outpatient visits	Prevalence of individuals 15+ years who received a personality disorder diagnosis and used exclusively outpatient services by a GP	QICDSS
11. Adequate use of emergency room for mental health services	Determine the balance of utilization of emergency room (ER) for mental health reasons[a,55]	Based on the associations found for the balance between primary and specialist mental health care and suicide rates[46,60,61]	Denominator: Individuals aged 15+ years with a diagnosis of a mental health disorder Numerator: Number of individuals with ER visits without being admitted	Prevalence of individuals 15+ years who received a diagnosis of mental health disorder with exclusively ER visits without being admitted	QICDSS
12. Program expenditures for mental health services	Determine the strength of the relationship between changes in suicide rates and expenditures for mental health (regional and provincial)	Based on associations found between mental health budget and suicide rates[21,23]	Refer to the Gouvernement du Québec[43]	Dollars per capita spent on mental health programs (provincial and regional)	Annual financial reports from the Ministère de la santé et des services sociaux (MSSS)[43]
13. Program expenditures for addiction services	Determine the strength of the relationship between changes in suicide rates and expenditures for addiction services (regional and provincial)	Based on associations found between mental health budget and suicide rates[21,23]	Refer to the Gouvernement du Québec[43]	Dollars per capita spent on health programs for addiction services (provincial and regional)	Annual financial reports from the MSSS[43]

Abbreviations: CIHI, Canadian Institute for Health Information; ER, emergency room; GP, general practitioner; MSSS, Ministère de la santé et des services sociaux; QICDSS, Quebec Integrated Chronic Disease Surveillance System.

[a] Profile 1: psychiatric inpatient care; profile 2: hospital emergency room (ER); profile 3: psychiatric outpatient care; profile 4: general practitioner (GP) clinics; and profile 5: other medical specialist.

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