Appendix 1. Clinical definitions used to identify long-term or severe mental illness

Condition	Definition
Long-term anxiety disorder	Patients were defined as having severe anxiety disorder if they had two or more relevant coded (Docle, Pyefinch) or free text entries – recorded at least six months apart but within two consecutive years – in one of the three diagnosis fields recorded at any time from the patient's earliest record up to the download date. Relevant terms include: agoraphobia, anxiety, anxiety/depression, anxiety disorder, depressive anxiety disorder, GAD, generalised anxiety disorder, mixed anxiety/depressive disorder, nervous anxiety, neurotic anxiety, panic disorder, phobia, phobic anxiety, social anxiety disorder, social phobia
Bipolar disorder	Patients were defined as having bipolar disorder, if they had a relevant coded (Docle, Pyefinch) or free text entry in one of the three diagnosis fields recorded at any time from the patient's earliest record up to the download date. Relevant terms include: bipolar affective disorder, bipolar 1 disorder, bipolar 2 disorder, bipolar spectrum disorder, manic depressive illness, manic depressive psychosis
Long-term depression	Patients were defined as having severe depression if they had two or more relevant coded (Docle, Pyefinch) or free text entries – recorded at least six months apart but within two consecutive years – in one of the three diagnosis fields recorded at any time from the patient's earliest record up to the download date. Relevant terms include: depression (disorder, endogenous, major, melancholic, organic, non-melancholic, organic, psychotic or recurrent), anxiety/depression, neurotic depression
Schizophrenia	Patients were defined as having schizophrenia or schizoaffective disorder, if they met either of the below criteria: 1. relevant coded (Docle, Pyefinch) or free text entry in one of the three diagnosis fields recorded at any time from the patient's earliest record up to the download date. Relevant terms include: schizophrenia (catatonic, chronic, disorganised, hebephrenic, paranoid, undifferentiated), schizoaffective disorder, schizophreniform disorder, psychosis senile, senile dementia with psychosis 2. two or more relevant entries in one of the three diagnosis fields 'ever' separated by at least six months to indicate chronicity. Relevant terms include: borderline schizophrenia, brief reactive schizophrenia, para schizophrenia
Substance use disorder	Patients were defined as having an opioid or alcohol use disorder if they met any of the below criteria: 1. relevant coded (Docle, Pyefinch) or free text entry in one of the three diagnosis fields recorded at any time from the patient's earliest record up to the download date. Relevant terms include: (abuse or dependence or addiction) of an opiate, IDU, injecting drug user, intravenous drug use, IV drug use, long term opiate use 2. relevant coded (Docle, Pyefinch) or free text entry in one of the three diagnosis fields recorded at any time from the patient's earliest record up to the download date. Relevant terms include: (abuse or dependence or addiction) of alcohol, alcohol addiction, alcohol dependence, alcohol related brain injury, alcohol use disorder, alcoholic, alcohol withdrawal, alcoholism, Antabuse type reaction, delirium tremens, Korsakoff's dementia 3. relevant medicines recorded in the scripts issued table or prescription history/current medication table. Relevant medications include: naltrexone, buprenorphine or methadone products when solely indicated for opiate substitution therapy 4. relevant medicines recorded in the scripts issued table or prescription history/current medication table. Relevant medications include: acamprosate (Campral) disulfiram (Antabuse), naltrexone