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HQIP
Healthcare Quality Improvement Partnership

NATIONAL CONFIDENTIAL INQUIRY

into Suicide and Safety in Mental Health

Annual Report 2018

ANNUAL REPORT:
ENGLAND, NORTHERN IRELAND, SCOTLAND AND WALES
OCTOBER 2018

NCISH IS COMMISSIONED BY THE HEALTHCARE QUALITY IMPROVEMENT PARTNERSHIP (HQIP)

The Healthcare Quality Improvement Partnership (HQIP) is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. HQIP's aim is to promote quality improvement, and it hosts the contract to manage and develop the Clinical Outcome Review Programmes, one of which is the Mental Health Clinical Outcome Review Programme, funded by NHS England, NHS Wales, the Health and Social Care division of the Scottish Government, the Northern Ireland Department of Health, and the States of Jersey and Guernsey. The programmes, which encompass confidential enquiries, are designed to help assess the quality of healthcare, and stimulate improvement in safety and effectiveness by systematically enabling clinicians, managers and policy makers to learn from adverse events and other relevant data.

More details can be found at:
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EXECUTIVE SUMMARY

INTRODUCTION

i. The 2018 annual report from the National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH) provides findings relating to people who died by suicide or were convicted of homicide in 2006-2016 across all UK countries. Additional findings are presented on sudden unexplained deaths under mental health care in England and Wales.

ii. The NCISH database is a national case series of suicide, homicide and sudden unexpected death (SUD) by mental health patients over 20 years. The current suicide database stands at almost 127,000 suicides in the general population, including over 33,500 patients. This large and internationally unique database allows NCISH to examine the circumstances leading up to and surrounding these incidents and make recommendations for clinical practice and policy that will improve safety in mental health care.

iii. As with previous annual reports, the main findings are presented here by country for the baseline year of 2006 and the subsequent 10 years, including the most recent year for which comprehensive data are available (2016). A UK-wide section provides selected findings from the UK as a whole.

METHODOLOGY

iv. The NCISH method of data collection is equivalent across all UK countries and consists of three stages:

- National data used to identify individuals in the general population who die by suicide or are convicted of homicide.
- Those who have been in contact with specialist mental health services in the 12 months before the incident are identified with the help of mental health providers.
- Detailed clinical information obtained for individuals via questionnaires completed by clinicians.

v. Co-operation from front-line professionals is excellent - the questionnaire response rate is around 95% overall. In the final year of a report period - 2016 in this report - the completeness figures are lower and we therefore estimate final figures taking into account the number of outstanding questionnaires and the accuracy of our estimates in previous years.

ANALYSIS

vi. The main findings of the report are presented in a combination of figures, maps and tables. These show changes in key figures in patient safety over the report period.

vii. General population and patient rates for suicide are calculated using the Office for National Statistics (ONS) mid-year population estimates and, where available, denominators based on patient activity obtained from NHS Digital (England).

viii. We examine for statistically significant time trends over the report period. However, because 2016 figures are partly estimates, these are not included in the analysis of trends.

KEY FINDINGS

Suicide numbers and rates

ix. Suicide rates in the general population in UK countries have shown a recent downward trend, though this is less clear in Northern Ireland which continues to have the highest rate.

x. The highest rates during the report period (2006-2016) were in people in middle age except in Northern Ireland where young adults had higher rates. Similarly, the largest differences in rates between UK countries - higher rates in Northern Ireland and Scotland - were in young adults.

xi. There were 1,612 patient suicides in the UK in 2016, this figure having fallen in recent years. During 2006-2016, there were 17,931 suicides by mental health patients, 28% of suicides in the UK general population, although this percentage was slightly higher in Scotland and slightly lower in Wales. In England the number of patient suicides in 2016 was similar to the previous two years but the patient suicide rate fell as patient numbers increased.

Method of suicide

xii. The commonest method of suicide by patients continued to be hanging/strangulation, accounting for 776 deaths UK-wide in 2016, almost half of all patient suicides, though there were variations in methods between UK countries.

xiii. The second commonest suicide method among patients was self-poisoning, accounting for 365 deaths in 2016, almost a quarter of patient suicides. The previously-reported[1] fall in self-poisoning deaths has not continued. The main substances taken in fatal overdose were opiates and the main source (where known) was by prescription.

Clinical care

xiv. There were 106 suicides by in-patients in the UK in 2016, around 7% of all patient suicides, continuing a long-term downward trend. However, the fall has been slower in recent years, reflecting the pattern in England.

xv. There were 227 suicides in the 3 months after hospital discharge in 2016, 17% of all patient suicides, a fall since 2011. The highest risk was in the first 2 weeks after discharge and the highest number of deaths occurred on day 3 post-discharge.

xvi. During 2006-2016 there were 909 suicides per year on average by patients who had a history of alcohol or drug misuse, 56% of all patients who died - this percentage was higher in Scotland and Northern Ireland. Only a minority were in contact with specialist substance misuse services.

Female patients

xvii. In previous reports we have focused on suicide by male patients. In this report we present findings on female patients who died by suicide during 2006-2016. During this period there were 6,016 suicides by female patients in the UK, 38% of suicides by females in the general population, a higher figure than in males. The number per year has risen in England but the rate, i.e. taking into account the rising number of patients, has fallen. Almost half were aged between 35 and 54 years.

xviii. Over a third of female patients died by self-poisoning, most commonly with opiates, antidepressants or antipsychotics. Women were more likely than men to take antidepressants and paracetamol in self-poisoning, and less often used opiates, though these were still common. Hanging/strangulation was also common, particularly in young patients - accounting for 50% of suicides in female patients under 25.

xix. A history of self-harm was especially common, occurring in 74% of female patients overall and 89% of those under 25. We identified suicides by a group of female patients, often younger, with a complex clinical picture including self-harm, additional diagnoses and alcohol or drug misuse.

xx. The most common primary diagnoses for females were affective disorders, followed by personality disorder, and personality disorder was more common in females aged under 45 compared to those aged 45 and over.

xxi. More women had been in contact with services in the week before death compared to men, and risk of suicide was more likely to be viewed by clinicians as moderate/high.

Young people

xxii. We have concluded our study of suicide by young people, presented in previous reports[2,3] and papers[4]. An updated summary of main findings is included here, based on 595 suicides by people under 20 in the general population in the UK during 2014-2016.

xxiii. Key features of suicides in the under 20s were:

- the number of suicides rose rapidly during the late teens
- common antecedents included family problems, bullying, physical health conditions, self-harm, exam stresses, relationship problems
- a quarter had experienced a bereavement and in 9% this was by suicide
- around a quarter had used the internet in a way that was suicide-related, i.e. searching for suicide methods, online bullying, suicidal posts on social media
- 60% had been in contact with services for children or young people at some time, 41% in recent contact.

Students

xxiv. We have examined suicides by students aged 18-21 in England and Wales (as recorded by ONS). During 2006-2016 there were 577 suicides in this group, with numbers rising during the study period. These deaths were more common in January and April, less common in August.

xxv. 69 (12%) were mental health patients, lower than in the general population. Compared to other patients in this age group dying by suicide, they were more likely to be suffering from depression, more often of recent onset, and less likely to have a history of alcohol or drug misuse.

Self-harm as an antecedent of patient suicide

xxvi. We have previously reported [1,5] a rise in recent self-harm (in the previous 3 months) as an antecedent of suicide in mental health patients - self-harm presents an indication of risk and a chance to intervene. In this report we have examined patients who died within 3 months of self-harm. During 2006-2016 there were 4,776 suicides in this group.

xxvii. There was a clear association with age and gender. Half of female patients and one third of male patients under 25 who died by suicide had self-harmed in the previous 3 months.

xxviii. Suicide was more likely to occur by hanging/strangulation than in those with no history of self-harm, suggesting an escalation in intent.

xxix. Most were thought to be at low risk at their final service contact, including those who were seen in the week before they died.

Patient homicide

xxx. During 2006-2016, 11% of homicide convictions in the UK were in mental health patients, a total of 785 patient homicides over the report period, an average of 71 homicides per year. 6% were by people with schizophrenia, an average of 37 per year, including both patients and non-patients. In England, the number of patient homicides since 2009 has been lower than in previous years. Our estimate is for 38 patient homicides in 2016.

xxxi. Our detailed analysis of patient homicide since 1997 has highlighted:

- the victim is most likely to be an acquaintance and less likely to be unknown to the perpetrator than in homicides by non-patients
- most patients had a history of alcohol or drug misuse; homicide in the absence of comorbid substance misuse is unusual
- around half of patients were not receiving care as intended, either through loss of contact or non-adherence with drug treatment
- patients are also at high risk of being victims of homicide.

Sudden unexplained death

xxxii. During 2006-2016, we identified 270 sudden unexplained deaths of mental health in-patients in England and Wales, an average of 25 per year.

xxxiii. We are concluding our study of sudden unexplained death in mental health in-patients. Our detailed analysis of these deaths since 1999 has highlighted:

- sudden unexplained death was often linked to physical health problems; most had a history of cardiovascular or respiratory disease
- polypharmacy with psychotropic drugs was relatively uncommon, occurring in around 9%
- around a quarter were aged under 45; in this group physical illness was less common, polypharmacy more common and this group was also more likely to be male, from a black and minority ethnic group, and to have a diagnosis of schizophrenia
- In the total study period since 1999, there were 32 deaths following restraint, 1-4 deaths per year. It is not possible to say that restraint was related to the deaths.

CLINICAL MESSAGES

xxxiv. Our "10 ways to improve safety" continue to reflect the evidence we have collected over several years on the features of clinical services that are associated with lower patient suicide rates. These include safer wards, personalised risk management and low staff turnover (see below).

xxxv. A renewed emphasis on reducing suicide by in-patients is needed, in particular by (1) improving the physical safety of wards, with the removal of potential ligature points (2) care plans at the time of agreed leave (3) development of nursing observation as a skilled intervention.

xxxvi. The evidence in this year's report also emphasises key measures that services should take to reduce patient suicide risk:
- follow up within 2-3 days after hospital discharge
- safe prescribing of opiates and psychotropic drugs
- reducing alcohol and drug misuse.

xxxvii. Female patients who die by suicide have a unique risk profile and require a particular focus on:
- treatment of depression, following NICE guidance[6]
- developing services that meet quality standards for self-harm care
- improving services for people with a diagnosis of personality disorder, in line with our recent report
- care of females with complex problems including self-harm, additional diagnoses and alcohol or drug misuse.

xxxviii. Recent self-harm is increasingly common as an antecedent of suicide in mental health patients and is particularly associated with younger patients. An episode of self-harm is a strong risk factor for suicide but risk can be under-estimated at assessment. Protocols for managing self-harm patients who are under mental health care should highlight the short term risk.

xxxix. Suicide in people aged under 20 is rising. A broad range of stressors appear to play a part, reflecting the lives of young people in general.
Many young people who die are not known to children's services. Prevention includes bereavement support, improved online safety and measures to tackle bullying. A wide range of professionals have a role in prevention including those working in self-harm, mental health, social care, primary care, youth justice, education and the voluntary sector.

xl. Preventing suicide in students requires specific measures, including:
- prevention, through promotion of mental health on campus
- awareness of risk, including the fact that conventional risk factors, e.g. alcohol or drug misuse, may be absent
- availability of support especially at times of risk, e.g. exam months
- strengthened links to NHS services, including mental health care.

xli. The risk of homicide by mental health patients is strongly linked to other factors in the clinical picture, namely the additional use of drugs or alcohol, and the loss of contact with services. Clinical measures most likely to prevent patient homicides and by implication reduce the risk of interpersonal violence are therefore:
- reducing alcohol and drug misuse
- maintaining treatment and contact in patients at risk of disengaging from services.

Box 1: NCISH methodology

1. NCISH is a comprehensive national project collecting data on all patient suicides and homicides in the UK, with a response rate from clinicians of around 95%.

2. Suicide and homicide are defined legally, e.g. inquest conclusion or determination by a court. This provides consistency of definition but may under-estimate because of the high standard of evidence required.

3. Patients are defined by recorded contact with specialist mental health services in the 12 months prior to suicide/homicide - this omits some contacts, e.g. those seen in A&E but not referred to mental health.

4. NCISH is not a risk factor study but examines in detail circumstances in which deaths occur, e.g. the number of deaths in certain patient groups or settings, and how common remediable factors are. Findings describe the deaths that must be prevented to achieve a major reduction in suicide and homicide.

5. The comprehensive nature of the NCISH database spanning over 20 years gives the opportunity to analyse large numbers, allowing the monitoring of changes in figures over time, including in patient sub-groups.

6. Additional NCISH studies use a range of methodologies, e.g. case control, evaluations, and triangulation with qualitative methods.[7-8, 18,20]

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INTRODUCTION

1. The 2018 annual report from the National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH) provides findings relating to people who died by suicide or were convicted of homicide in 2006-2016 across all UK countries. Additional findings are presented on sudden unexplained deaths under mental health care in England and Wales.

2. NCISH is commissioned by the Healthcare Quality Improvement Partnership (HQIP) to undertake the Mental Health Clinical Outcome Review Programme on behalf of NHS England, NHS Wales, the Health and Social Care Division of the Scottish Government, the Northern Ireland Department of Health, and the States of Jersey and Guernsey.

3. The NCISH database is a national case series of suicide, homicide and sudden unexpected death (SUD) by people who have been in contact with mental health services in the 12 months prior to the incident (see Box 1). The current database stands at almost 127,000 suicides in the general population including over 33,500 patients. This large and internationally unique dataset allows NCISH to:

- examine the antecedents of suicide and homicide by people under the recent care of specialist psychiatric services;
- identify factors in patient care which may have contributed to suicide or homicide;
- recommend measures designed to reduce the number of patient suicides and homicides;
- examine specific topics as part of a rolling programme;
- conduct studies based on other research methods including case control studies and evaluations.

4. For over 20 years, NCISH has provided definitive national figures on suicide and homicide to patients, health services and governments, helping to inform the development of policy and strategies for safer care locally, nationally and internationally. NCISH findings have also contributed to local patient safety audits and national clinical guidelines.

5. Our publications have included major UK and national reports, topic-specific reports and peer-reviewed academic papers (see pages 127-129 for further information).

6. We have previously shown a fall in the number of suicides among in-patients and patients recently discharged from hospital, both NCISH "priority groups", which we believe reflects safer care informed by our findings.[5] We have examined changes in patient suicide rates in relation to service configuration and re-design, showing widespread uptake of our recommendations and improved patient safety subsequently. This has led to our recent "10 ways to improve safety" clinical message.[5]

7. As with previous annual reports, the main findings here are presented by country for the baseline year of 2006 and the following 10 years, including the most recent year for which comprehensive data are available (2016). A UK wide section provides a summary of findings across the UK as a whole and includes data on specific sub-groups.

PRESENTATION OF FINDINGS AND METHODOLOGY

Definitions

Patients

8. Patient cases are those in contact with psychiatric, drug and alcohol, child and adolescent or learning disabilities services (if they are within mental health services) within 12 months of their death or the homicide, with their care usually under a consultant psychiatrist. These include a range of patients from those seen for one-off assessments to those who had been under the long term care of services.

Suicide

9. General population suicides are defined as deaths by intentional self-harm and deaths of undetermined intent by individuals aged 10 and over.

Homicide

10. General population homicides are legally defined as convictions for murder, manslaughter, (culpable homicide in Scotland), infanticide, and verdicts of not guilty by reason of insanity and unfit to plead and are presented by year of conviction. Identification of mental illness in non-patients relies on information from psychiatric reports prepared by psychiatrists for the court.

Sudden unexplained death (SUD)

11. A sudden unexplained death is defined as a death in which a person dies a) from an unknown, uncertain or cardiac cause (other than confirmed myocardial infarction), b) within 1 hour of symptom onset.

Changes to suicide death coding

12. Following an update to the International Statistical Classification of Diseases and Related Health Problems (ICD-10) in 2011, new rules for coding drug misuse deaths were introduced. Some drug-related deaths previously coded as due to 'mental and behavioural disorders due to psychoactive substance use' are now coded as suicide or undetermined deaths. Analysis by the Office for National Statistics (ONS) has shown these new coding rules have had no significant impact on the suicide figures in England.[7] However, they have affected numbers in Scotland and therefore the overall numbers of suicides in Scotland between 2011 and 2016 are not directly comparable with previous years. Unlike previous reports where we have presented the number of suicides using the new coding rules alongside an estimate of the figures using the old coding rules, in this report for Scotland, the number of suicides using the new coding rules only is reported.

Annual report period

13. In this report, findings are presented for England, Northern Ireland, Scotland, and Wales for:

- suicide (based on date of death - this differs from the ONS who present figures by date of death registration)
- homicide (based on year of conviction)
- SUD (this data collection takes place in England and Wales only and is based on date of death)
- homicide-suicide (based on date of offence, England and Wales only).

14. The main findings are presented for the baseline year of 2006 and the subsequent 10 years including the most recent year (2016). The SUD study ended on the 31st March 2018 and includes cases of SUD that occurred up until 31st March 2016.

Method of data collection

15. The NCISH method of data collection is similar across all UK countries. Briefly, to identify patients (i.e. individuals in contact with mental health services within 12 months of suicide or homicide) national data are used to identify the individuals' addresses. Data are then sent to mental health services in each individual's district of residence. Detailed clinical data are obtained for these individuals via questionnaires sent to the consultant psychiatrist who had been responsible for the patient's care. A full explanation is provided in the FAQ section of our website or in our previous national reports: Annual Report (2009, 2010)[8,9], Avoidable Deaths (2006)[10], Suicide and Homicide in Northern Ireland[11], and Lessons for Mental Health Care in Scotland[12] which are accessible on our website at: **www.manchester.ac.uk/ncish**

16. We have carried out a detailed investigation of general population suicides in people aged under 20 by collecting information from a range of investigations by official bodies, mainly from coroners (England and Wales and Northern Ireland) and police death reports (Scotland) - both take evidence from families and professionals, if available.

Data completeness

17. In our annual reports, figures for the most recent year - in this case 2016 - are incomplete, in part because of delays in legal processes. We therefore adjust estimates for the most recent years according to the number of unreturned questionnaires and the accuracy of the previous year's estimates. In analysing trends the final year is not included because of these estimations.

Suicide

18. For the period 2006-2015 overall data completeness for patient suicide is 94% in England and Wales, 95% in Northern Ireland, and 96% in Scotland. Completeness is lower in the more recent years reported, reflecting the time required to receive and process the data. For example, in 2014, 2015 and 2016 completeness for England is 89%, 85% and 73% respectively. For these years, therefore, we have projected the number of total patient cases based on the expected final return of NCISH questionnaires for the previous eight years (2006-2013). These estimations vary by UK country which have differential return rates. Some patient sub-groups are more often subject to late notification - for example in-patient deaths can take up to 4 years to be registered. In these circumstances we have projected the total figures in 2014-2016 using a more individualised approach, i.e. taking into account the proportion of all deaths in recent years in particular sub-groups.

Homicide

19. For the period 2006-2016 we have presented patient homicide numbers notified to NCISH plus additional cases for 2015-2016 in England and 2016 in Scotland which account for questionnaires sent to Trusts/Health Boards but not yet returned at the time of analysis. We have therefore projected the number of cases for these years based on the expected final return of NCISH questionnaires.

20. We are aware that data on homicide convictions for Northern Ireland and Scotland are incomplete, therefore the figures presented may be an underestimate and should be treated with caution. We are unable to present any figures for homicide in Northern Ireland for 2015 and 2016. We are currently working towards resolving these issues.

Sudden unexplained death

21. For the period 2006-2015 overall data completeness for SUD is 99% in England and Wales.

Changes to homicide data collection

22. We are reducing our homicide programme and in June 2018, we stopped sending questionnaires to clinicians for obtaining data on the characteristics of homicide offenders who had been in contact with mental health services. Therefore, this will be our last report presenting up-to-date detailed clinical information on patient homicides. In the future, we will continue to report only the number of homicides by people in contact with mental health services.

Analysis

23. To examine for statistically significant time trends, trend tests were carried out using categorical data methods in Stata v15.[13] Poisson models were fitted with the number of suicides or homicides per year as the outcome and year as a linear predictor. For rates, general population per year was the exposure. Within the patient sample, the exposure was the total number of suicides or homicides per year. Tests for trends over time were calculated excluding the final year which was least complete (i.e. 2016) for suicide and homicide, for both general population and patients. For each model, the likelihood-ratio-test p-value and the predictor (and 95% confidence intervals) for year were examined. The number of suicides and homicides is small in certain patient sub-groups, particularly in Wales and Northern Ireland, and therefore significant variations are seen year on year.

24. We have followed guidance from the Office for National Statistics (ONS) on disclosure control to protect confidentiality within death statistics, and have suppressed cell counts under 3, including zero. We have applied this rule to all data in this report.

Rates of suicide

25. General population and patient rates for suicide were calculated using ONS mid-year population estimates (age 10 and over) as denominators. These were also used to calculate rates for suicide by Sustainability and Transformation Plan (STP) footprint (England), Health and Social Care Trust (Northern Ireland) and Health Boards (Scotland and Wales). Discrepancies may arise between NCISH national numbers and rates and those presented by the ONS, the Department of Health [14], the Scottish Public Health Observatory website [15], and the Northern Ireland Statistics and Research Agency (NISRA) website [16] due to differences in measurement described in *Avoidable Deaths* [10], *Suicide and Homicide in Northern Ireland* [11], and *Lessons for Mental Health Care in Scotland* [12]. Our website FAQs summarises how discrepancies may be explained. **One important difference in comparison to ONS figures is that our suicide figures are presented by date of death, not date of registration.**

26. Estimated numbers in the final year (2016) are presented as dotted lines in the figures or in a different shade in the bar diagrams. Changes in annual figures will occur subject to further information received.

UK-WIDE FINDINGS

Suicide in the general population

27. Suicide rates for each UK country are shown in Figure 1. Northern Ireland continues to have the highest general population rate, while the rate in Scotland, which was previously the highest, has fallen overall despite a rise in 2016. The rate in England in 2016 fell to a historical low over the report period, though data collection for this year is approximately 95% complete.

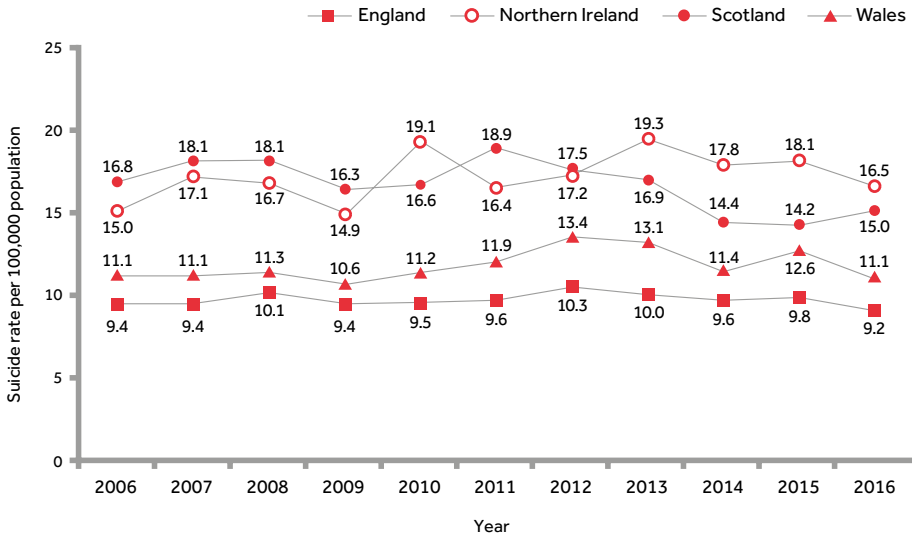


Figure 1: Suicide rates in the general population, by UK country

28. In all countries, except Northern Ireland, the rates were highest in the middle aged groups (Figure 2). The biggest differences between UK rates were in the younger age groups.

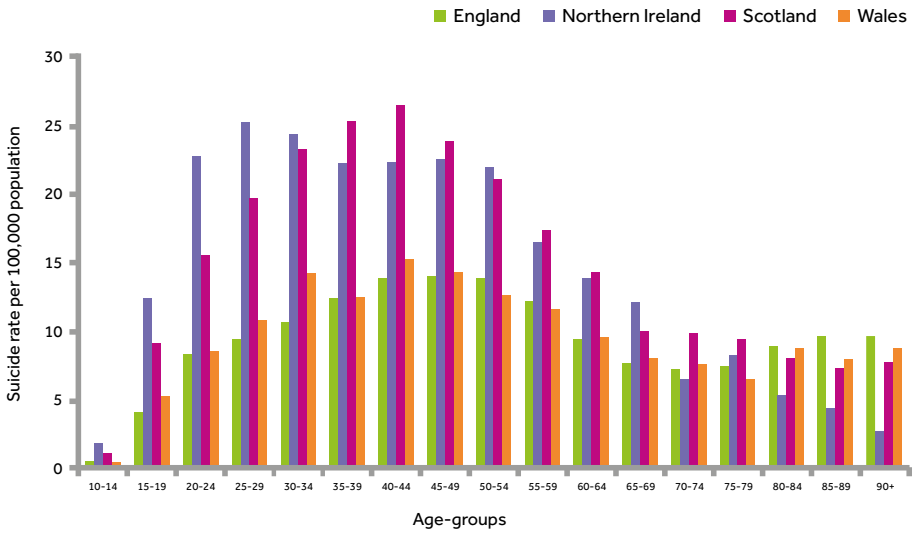


Figure 2: Suicide rates in the general population by age-group, by UK country (2006-2016)

PATIENT SUICIDE

29. There were 17,931 suicides by patients (i.e. individuals in contact with mental health services within 12 months of suicide) in the UK in 2006-2016, 28% of all general population suicides. We were also notified of 20 patient suicides in Jersey, from a general population total of 55 in 2012-2016 (36%). In Guernsey in 2015-2016 (the first years of data collection), we were notified of 15 suicides in the general population, 7 of whom were patients. Overall for the UK, the highest figures were in 2011-13, with an apparent fall since then – this pattern was seen in all countries except Northern Ireland (Table 1).

Table 1: Patient suicide: numbers by year and UK country (2006-2016)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
England	1,124	1,144	1,213	1,167	1,264	1,339	1,375	1,315	1,237	1,253	1,267
N. Ireland	61	76	76	64	73	67	76	73	73	80	73
Scotland	209	282	230	221	239	285	264	266	220	224	218
Wales	59	71	56	70	71	68	95	97	61	79	54
Total	**1,453**	**1,573**	**1,575**	**1,522**	**1,647**	**1,759**	**1,810**	**1,753**	**1,591**	**1,636**	**1,612**

Note: figures from 2014 include estimates based on late notifications

30. 28% of general population suicides were in people who had been in contact with mental health services in the previous 12 months. This figure was similar for all UK countries but slightly higher in Scotland and lower in Wales (Table 2). These are the patients described in this report.

Table 2: Suicide figures by UK country (2006-2016)

	England	Northern Ireland	Scotland	Wales	UK
General population	49,654	2,956	8,601	3,491	64,570
Mental health patients	13,698 (28%)	794 (27%)	2,657 (31%)	781 (22%)	17,931 (28%)

31. Suicides by mental health in-patients continue to fall (Table 3). However, the large fall in the 4 years after 2006 (31%) has become more modest, e.g. in the 4 years after 2012, the rate fell by 11%.

Table 3: Patient suicide: number of in-patient suicides by year and UK country (2006-2016)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
England	142	122	104	100	92	101	91	94	87	88	89
N. Ireland	<3	3	3	5	<3	3	3	3	3	<3	<3
Scotland	15	27	15	11	11	20	19	16	12	17	13
Wales	8	4	3	7	10	3	6	4	3	5	3
Total UK	**166**	**156**	**125**	**123**	**115**	**127**	**119**	**117**	**105**	**112**	**106**

Note: figures from 2014 include estimates based on late notifications

32. Methods of suicide in patients are broadly similar across the UK countries, with hanging/strangulation the most common method (44%) followed by self-poisoning (overdose) (26%) (Figure 3). Opiates are the most commonly used type of drug in fatal overdose and also explain the peak in self-poisoning deaths around 2011. In Scotland, self-poisoning has been as common as hanging/strangulation over the report period as a whole (see Figure 61 on page 91).

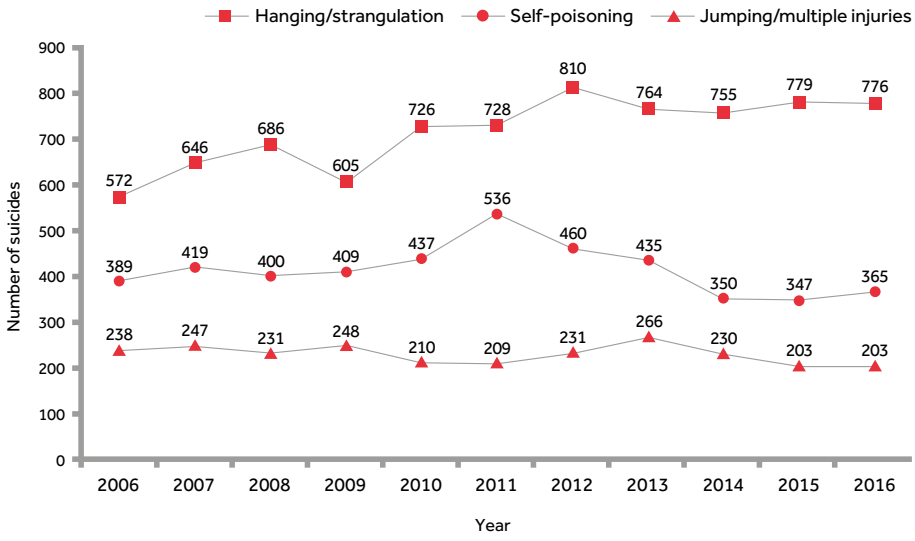


Figure 3: Main methods of suicide by patients in the UK

HOMICIDE IN THE UK

33. During 2006-2016 there were 785 mental health patients convicted of a homicide offence. The number of convictions has fallen steadily during this period.

34. 11% of people convicted of homicide were mental health patients (Table 4). Across countries, this figure was higher in Scotland and Wales where the general population homicide rates are also higher.

35. 6% of the homicides were by people with schizophrenia (compared to a population rate of schizophrenia of around 1%). The number was broadly similar across the UK countries, taking into account population size.

Table 4: Characteristics of homicide offenders by UK country (2006-2016)

General population	England N = 5,699 N (%)	Northern Ireland* N = 188 N (%)	Scotland N = 841 N (%)	Wales N = 277 N (%)	UK N = 7,005 N (%)
Mental health patients	608 (11%)	17 (9%)	123 (15%)	37 (13%)	785 (11%)
Schizophrenia (& other delusional disorders)	326 (6%)	6 (3%)	31 (4%)	23 (8%)	386 (6%)
Alcohol dependence/misuse	211 (4%)	28 (15%)	81 (10%)	14 (5%)	334 (5%)
Drug dependence/misuse	187 (3%)	9 (5%)	98 (12%)	5 (2%)	299 (4%)

* Northern Ireland data between 2006-2014.

36. The primary diagnoses for patients convicted of homicide varied by UK country. The commonest diagnosis in England and Wales was schizophrenia. Alcohol dependence or misuse was the most common in Northern Ireland while drug dependence or misuse was the most common in Scotland.

PATIENT HOMICIDE – SUMMARY OF FINDINGS 1997-2016

37. We are reducing our homicide programme, and this will be the last annual report where we present detailed characteristics of people who have committed homicide. We will continue to report the number of homicides by people in contact with mental health services.

38. In 1997-2016, NCISH was notified of 13,242 homicide convictions, an average of 662 per year. 1,457 were patients (based on actual figures plus additional estimates in 2015-2016 for England and Scotland), 11% of all homicides, an average of 73 per year (Figure 4). There were a total of 1,512 victims. Most victims of patient homicide were an acquaintance (591, 45%) or a family member including spouse (533, 40%).

39. Our research has found patient homicides where the victim was a stranger has fallen over the years and stranger homicides (15%) were less likely to be committed by patients compared to the general population (24%). In a previous study, we found patients were 2.6 times more likely to be a victim of homicide compared to the general population [17].

40. The most common primary diagnosis was schizophrenia and other delusional disorders (411, 29%), followed by drug dependence/misuse (236, 16%). Most patients (1,268, 89%) convicted of homicide also had a co-existing problem of alcohol or drug misuse.

41. Almost half of all patients (628, 48%) were non-adherent with treatment or had lost contact with services. In a recent study, we found homicide offenders diagnosed with schizophrenia were more likely to have been disengaged with services prior to the offence [18]. Therefore, services can help by being aware of the risk of losing patient contact as well as the problems of substance misuse and the higher risk of patients being victims of homicide.

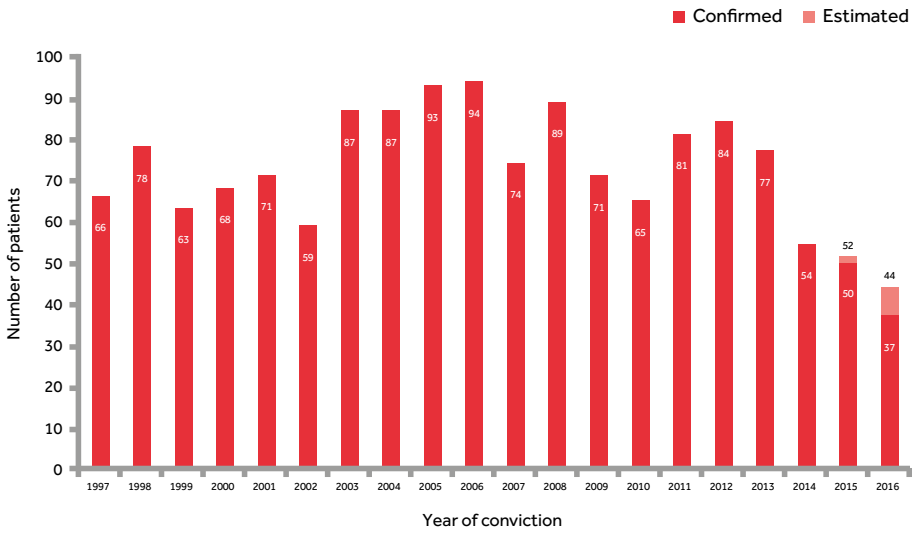


Figure 4: Number of patient homicides in the UK, 1997-2016

SUDDEN UNEXPLAINED DEATH (SUD) IN MENTAL HEALTH IN-PATIENTS (ENGLAND AND WALES)

42. The sudden unexplained death (SUD) study began 1st March 1999 and ended 31st March 2018. This will be the last annual report where we present findings from the SUD study. The following section summarises the key findings for all available cases between 1st January 2006 and 31st March 2016 inclusive.

43. Between 2006 and 2016, there were an estimated 270 sudden unexplained deaths (SUDs) in England and Wales, an average of 25 per year (Figure 5). There was an overall fall in the reported annual number of SUDs over the report period. However, due to a change in data provider, numbers since 2007 are not comparable with those in 2006. The number of SUDs has fallen in recent years since a peak in 2010 – since 2007 the average number has been 22 deaths per year.

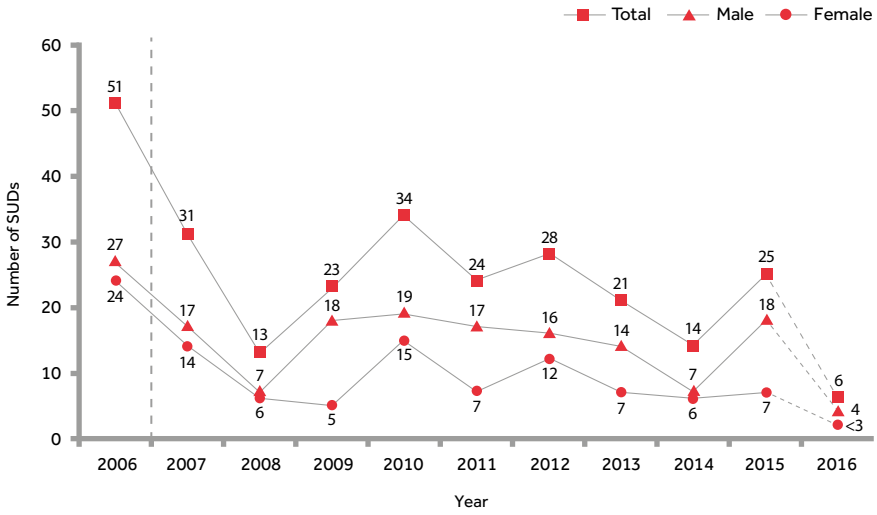


Figure 5: Number of sudden unexplained deaths in England and Wales, by gender

Note: between 2006 and 2007 data providers changed from the NHS-Wide Clearing Service (NWCS) to Hospital Episode Statistics (HES), therefore the numbers in 2006 are not strictly comparable with those in 2007-2016. In 2016, data were collected up until 31st March.

SUD characteristics

44. The majority (164, 61%) were male. A quarter (26%) of all SUDs were aged under 45, 43% were aged 45-64 and 32% were aged 65 and over.

45. There were 42 (16%) SUDs in patients from black and minority ethnic (BME) groups over the report period. The number of these deaths varied from 2-8 per year and showed no trend over time.

46. The most common primary psychiatric diagnoses were schizophrenia and other delusional disorders (120, 49%), bipolar affective disorder (43, 17%) and depressive illness (33, 13%). 24 (10%) had dementia.

47. The majority (174, 71%) had been ill for more than 5 years and 107 (43%) had more than 5 previous admissions.

48. Around half of SUDs had a history of cardiovascular disease and a quarter had a history of respiratory disease (Figure 6). Less common conditions were cerebrovascular disease and epilepsy. Two thirds (65%) had any one of these physical illnesses.

49. 22 (9%) were receiving 2 or more antipsychotic drugs (i.e. polypharmacy). The most common drugs in polypharmacy were clozapine, olanzapine, sodium valproate, and amisulpride (Figure 7).

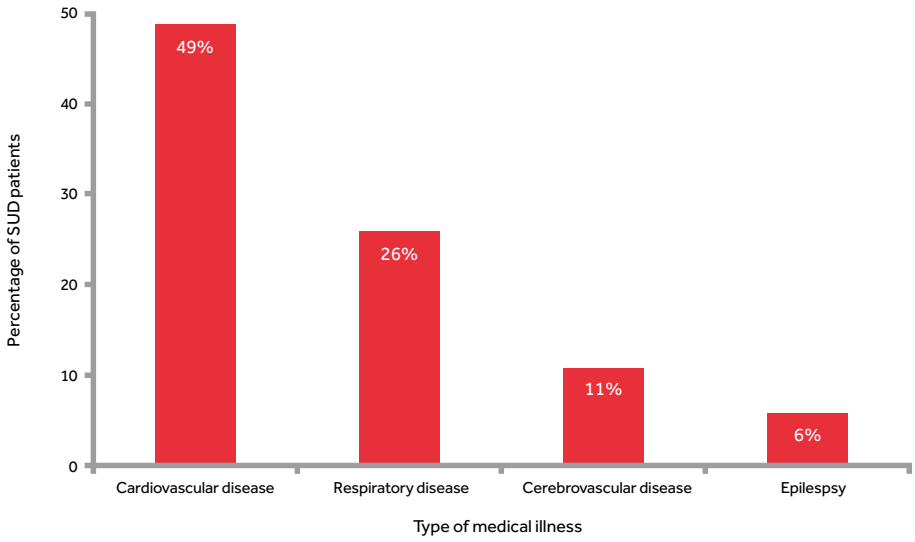


Figure 6: Medical characteristics of SUD in mental health in-patients (England and Wales, 2006-2016)

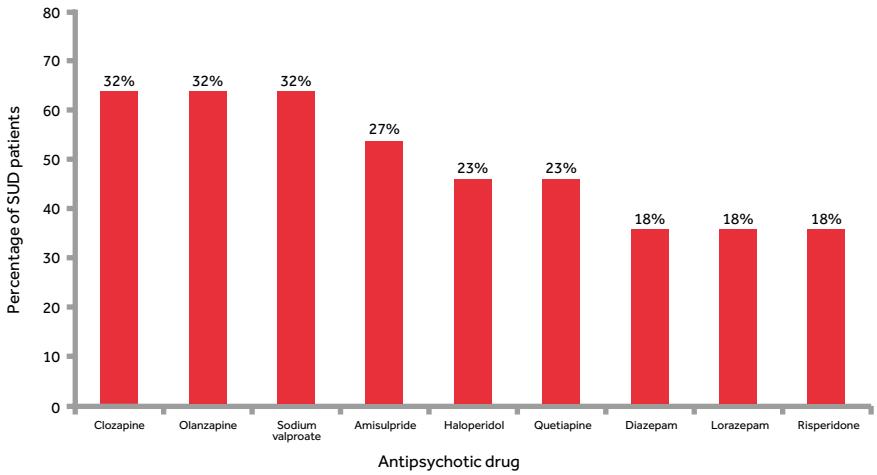


Figure 7: Antipsychotic drugs in polypharmacy (England and Wales, 2006-2016)

Restraint

50. There were 4 deaths within 1 hour of restraint in 2006-2015. We do not know whether restraint caused these deaths.

51. There were 26 deaths within 24 hours of restraint in 2006-2015, ranging from 1-4 per year. The number of post-restraint deaths is too small to identify a trend. 9 deaths were in BME patients, representing 42% (excluding unknowns) of all deaths within 24 hours of restraint.

Patients aged under 45

52. There were 68 (26%) patients under 45 years, an average of 6 per year. The number of patients aged under 45 fell over the report period, for example the average figure was 9 for 2006-2010 and 4 for 2011-2016.

53. Patients aged under 45 were more likely to be from a BME group compared to older patients (20, 30% v. 20, 11%).

54. The majority (37, 62%) had a primary diagnosis of schizophrenia and other delusional disorders. 8 (13%) patients had bipolar affective disorder and 6 (10%) had personality disorder.

55. Around a fifth had a history of cardiovascular disease or respiratory disease and 8% had a history of epilepsy (Table 5). 42% had any one of these 3 physical illnesses.

56. 11 (18%) patients were receiving 2 or more antipsychotic drugs (i.e. polypharmacy).

Table 5: Medical characteristics of SUD in mental health in-patients aged under 45

History of:	N	%
Cardiovascular disease	13	22
Respiratory disease	14	23
Epilepsy	5	8
Any of the above illnesses	25	42

SUDS – SUMMARY OF FINDINGS 1999-2016

57. In 1999-2016, NCISH was notified of 559 SUDs in England and Wales, an average of 31 per year.

58. The majority (336, 60%) were male, 139 (25%) were aged under 45, and 65 (15%) were patients from a BME group.

59. The most common primary diagnoses were schizophrenia and other delusional disorders (224, 42%), bipolar affective disorder (81, 15%) and depressive illness (76, 14%). 80 (15%) had dementia. The number and proportion of patients with dementia fell between 1999 and 2015.

60. Most patients (375, 71%) had been ill for more than 5 years and 204 (38%) had more than 5 previous admissions. Nearly half (253, 47%) had a history of cardiovascular disease; 143 (26%) had a history of respiratory disease; 81 (15%) had a history of cerebrovascular disease, and 43 (8%) had a history of epilepsy. Two thirds (351, 66%) had any one of these physical illnesses.

61. 47 (9%) were receiving 2 or more antipsychotic drugs (i.e. polypharmacy). The most common drugs in polypharmacy were haloperidol (32%), olanzapine (30%), lorazepam (30%), sodium valproate (26%) and clozapine (23%).

62. There were 9 deaths within 1 hour of restraint in 1999-2015 and 32 deaths within 24 hours of restraint.

SUICIDE IN PEOPLE AGED UNDER 20

63. Detailed findings for suicide by children and young people in England and Wales were published in July 2017 (see page 128 for a summary of the report) and can be found on our website at: **www.manchester.ac.uk/ncish**. In this published report, findings from Scotland and Northern Ireland were not included. However, we are able to report on the combined findings here. In general, the police reports from Scotland were less detailed than coroners' reports; therefore the true figure for some of the factors related to suicide in young people may be under-estimated and should be treated with caution, especially in sensitive areas such as abuse or sexuality. This study has now concluded, though we continue to use similar methodology to explore suicide in the general population.

64. During 2014-2016, there were 595 suicides (includes undetermined) by people aged under 20 in England, Scotland, Northern Ireland and Wales, an average of 198 deaths per year. The number of suicides increased steadily with age, particularly in the mid to late teens (Figure 8). The number of male suicides was higher than females (425, 71% v. 170, 29%), with similar proportions in England, Northern Ireland and Scotland. In Wales, the proportion of male suicides was slightly higher (30, 81%).

65. The most common methods of suicide were hanging/strangulation (380, 64%) and jumping/multiple injuries (93, 16%). There were 54 (9%) deaths by self-poisoning (overdose). Significantly fewer young people in England (31, 7%) died by self-poisoning than in Northern Ireland (8, 25%) and in Scotland (11, 16%).

66. Information was sought on all of the 595 deaths in people aged under 20. In total, information was received from one or more data sources for 544 (91%) of these children and young people (Table 6). If an item, e.g. abuse, bullying, was not recorded in any data source then it was assumed to be absent or not relevant.

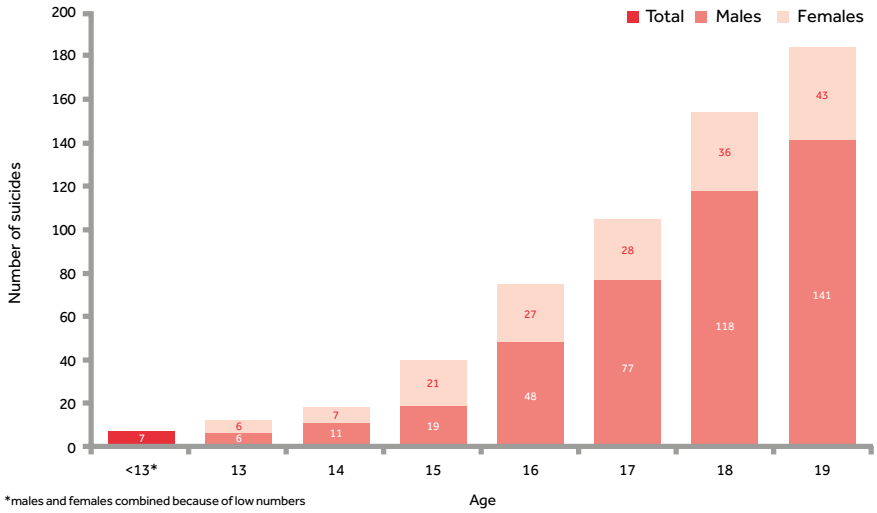


Figure 8: Number of suicides in people aged under 20 by gender and age

Table 6: Suicide by children and young people: numbers by UK country (2014-2016)

	England	Northern Ireland	Scotland	Wales	Total
Deaths by suicide in children and young people	459	32	67	37	595
Deaths on which at least 1 report obtained	419	27	61	37	544

67. Table 7 shows the key features of young people dying by suicide across the UK in the three year study period. For many (127, 23%), there was evidence of disruption to the family environment by mental illness, physical illness or substance misuse. A total of 60 (11%) young people had a history of abuse and/or neglect. In 25% an experience of bereavement had been recorded, 9% had been bereaved by suicide. In 102 (19%) there were reports of bullying, with on-line bullying being less common than face to face bullying. Suicide-related internet use (i.e. searching the internet for information on suicide method) was reported for 128 (24%) children and young people. 164 (30%) had a physical health condition, and excessive alcohol use or illicit drug use were common (226, 42%). Many had indicated their risk through previous self-harm (267, 49%) and 319 (59%) had expressed thoughts of suicide.

68. Many of the common themes in suicide by children and young people (e.g. abuse, academic pressures, suicide-related internet use, bullying) were less common in Scotland and Northern Ireland. However, this is probably a reflection of data availability and these figures should be treated with caution.

69. A history of alcohol and/or drug misuse was significantly more likely in Northern Ireland (20, 74%) compared to Scotland (20, 33%), England (168, 40%) and Wales (18, 49%). Unemployment was significantly more common in young people in Scotland (14, 23%) compared to England (56, 13%). Bereavement, physical health conditions and self-harm were reported more often in children and young people who died by suicide in Northern Ireland compared to the other UK nations, although these differences did not reach statistical significance.

70. Figure 9 shows the pattern of contact with frontline agencies. Overall, 60% (329) of under 20s were in lifetime contact with any agency or service: 41% (222) were in recent (<3 months) contact. This was mainly mental health services – 184 (34%) had contact with child and adolescent mental health services (CAMHS), 98 (18%) with adult mental health services. A diagnosis of mental illness was reported in 217 (40%) children and young people who died by suicide in the UK. The most common primary diagnoses were affective disorders (101, 19%), especially depression (94, 17%).

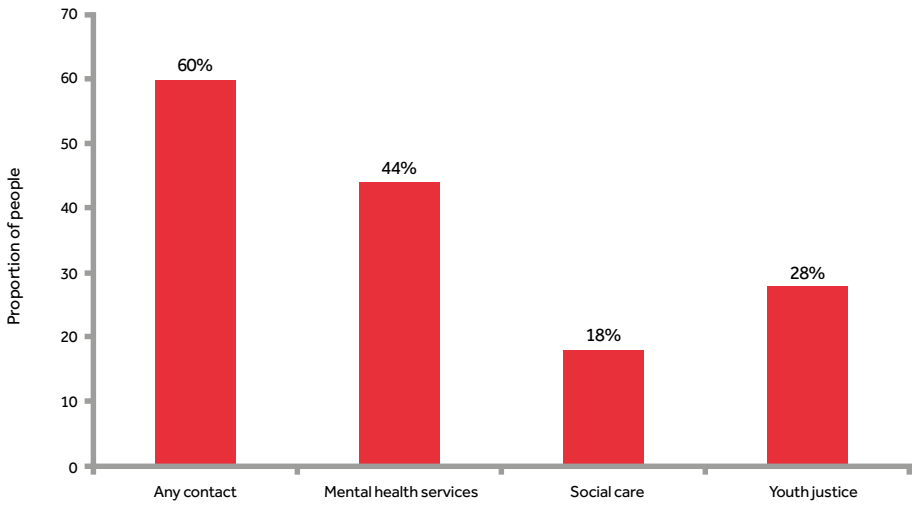


Figure 9: Suicide by children and young people in the UK: contact with services (at any time) (2014-2016)

Table 7: Characteristics of children and young people who died by suicide in the UK (2014-2016)

	Number = 544 Number	 %
Demographic features		
Male	388	71%
LGBT (or uncertain of sexuality)	32	6%
In education (i.e. school pupil, student in further or higher education)	275	51%
Living with parents (including step-parents)	247	45%
Living with single parent	113	21%
Looked after child	42	8%
Family environment		
Family (parent, carer, sibling) history of:		
– Mental illness	80	15%
– Physical illness	46	8%
– Substance misuse	44	8%
– Witness to domestic violence	36	7%
Abuse and neglect		
Abuse (emotional, physical or sexual)	50	9%
Neglect	23	4%
Experience of loss		
Bereaved	134	25%
Bereaved by suicide	51	9%
Suicide-related internet use		
Suicide-related internet use overall	128	24%
Academic pressures (of those in education)		
Academic pressures overall	174/275	63%
Current exams, impending exams or exam results at the time of death	74/275	27%
Bullying		
Bullying (any)	102	19%
Face to face bullying	89	16%
On-line bullying	29	5%
Medical history		
Physical health condition	164	30%
Excessive alcohol use	117	22%
Illicit drug use	196	36%
Self-harm and suicidal ideas		
Previous self-harm	267	49%
Suicidal ideas (at any time)	319	59%
Economic adversity		
Unemployment	84	15%
Workplace problems	83	15%
Housing instability	80	15%

SUICIDE BY FEMALE PATIENTS (UK)

71. Previous annual reports have reported on male patient suicide; this year, we report information about female patients who died by suicide. Some of these findings are presented in comparison to men who died by suicide. Comparison is included to highlight characteristics associated with suicide by women that differ from overall trends, which are driven by the larger number of male deaths.

72. In the UK in 2006-2016, there were 15,634 general population suicides by females, an average of 1,421 deaths per year. In England, there was an increase in female suicide rates in those aged under 25.

73. The most common methods of suicide by women were self-poisoning and hanging/strangulation. Compared to males, suicide by women was significantly more often by self-poisoning and drowning and less often by hanging/strangulation, gas inhalation, and firearms.

74. 38% (n=6,016) of female general population suicides were in people who had been in contact with mental health services in the previous 12 months, an average of 547 per year (Figure 10). This figure was similar across countries but slightly higher in Scotland (42%) and lower in Northern Ireland (35%) and Wales (32%). This figure was also higher compared to males in contact with services (24%).

75. The number of female patient suicides increased over the report period in England only – a 15% increase between 2006 and 2015. There was an increase in those aged under 25 and those aged 45-54 but the number did not change in any other age-group.

76. However, when we examined the female suicide rate taking into account the number of patients under mental health care in England [19] there was a 27% fall between 2006 and 2015 which is likely to reflect the increase in people in contact with services. Changes to the methodology in collecting service contact data [20] means rates in 2006-2010 are not comparable with 2011-2015.

Figure 10: Suicide by female patients in the UK

77. Figure 11 shows the age distribution of female and male patient suicide deaths. The proportion of females was greater than males in the older rather than younger age-groups.

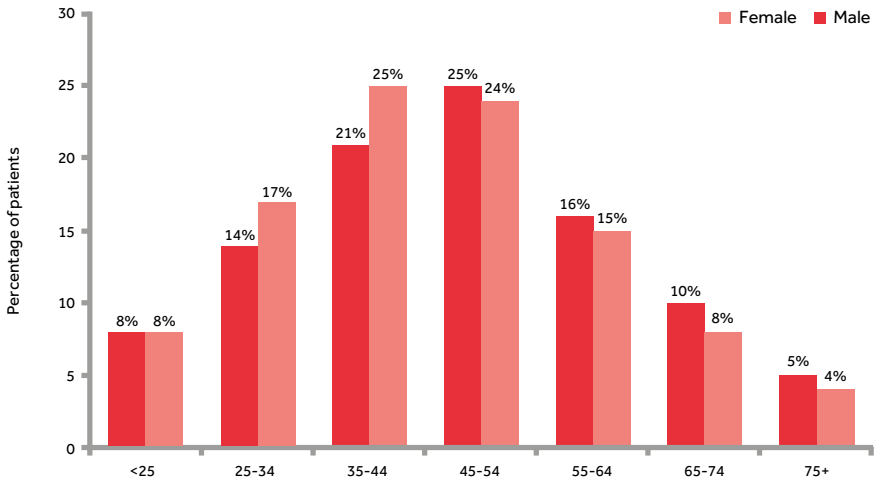


Figure 11: Patient suicides by gender and age-group (UK, 2006-2016)

78. Over a third (35%) of female patients died by self-poisoning (Figure 12). The most common substances used in self-poisonings were opiates (26%), antidepressants (including tricyclics and SSRI/SNRIs, 22%), and antipsychotics (10%). Females more often used antidepressants (22% v. 16%) and paracetamol (8% v. 4%) compared to males, and less often used opiates (26% v. 33%). In 35%, hanging/strangulation was the method of suicide; this was particularly common among females aged under 25, 50% of whom died by hanging/strangulation compared to 34% of older females.

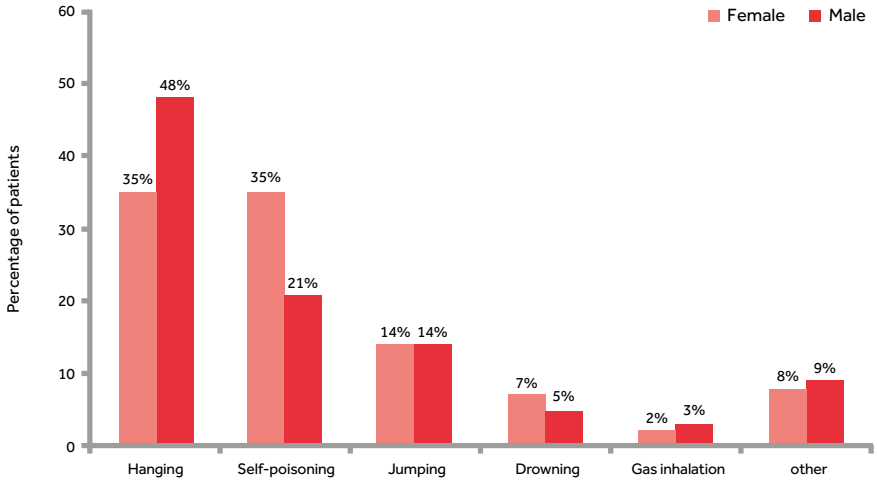


Figure 12: Method of suicide in patients by gender (UK, 2006-2016)

79. Ten percent of female patients were living with children only. There were 74 suicides by women who were pregnant or who had died within a year of childbirth, 1% of all female suicides, an average of 7 per year.

80. The most common primary diagnoses were affective disorders followed by personality disorder, both of which were more common in female than male patients (Table 8). Female patients less often had a primary diagnosis of schizophrenia and other delusional disorders or alcohol or drug dependence/misuse.

81. 4,225 (74%) women had a history of self-harm. 27% (n=1,541) had previous self-harm, a co-morbid diagnosis (mostly personality disorder or alcohol/drug dependence) and a history of alcohol or drug misuse, indicating clinical complexity. These figures were higher for women aged under 25, i.e. 35% (n=151) had previous self-harm, co-morbidity, and a history of substance misuse.

82. Previous self-harm was a particular feature among females (74%), especially in those aged under 25 (89%) and those aged 25-44 (80%). Younger (aged under 45) females were also more likely to have personality disorder (24% v. 8%), alcohol dependence/misuse (9% v. 5%) or an eating disorder (5% v. 2%) compared to those aged 45 and over. They also had higher rates of missed last contact (29% v. 19%). In contrast, females aged 45 and over were more often diagnosed with affective disorder (59% v. 34%).

83. Recent adverse life events were more often experienced by females aged under 45 compared to those aged 45 and over (46% v. 37%), most commonly family issues (20% v. 13%), relationship break-up (18% v. 9%) and problems with their (ex)partner (11% v. 9%). In addition, younger females were more likely to be a victim of a violent crime (6% v. 2%). In contrast, female patients aged 45 and over more often experienced physical health problems (20% v. 8%) or health problems in a significant other (9% v. 3%).

84. More females had been in contact with services in the week before suicide compared to males and risk of suicide was more likely to be viewed by clinicians as moderate/high (Table 9).

Table 8: Characteristics of patients who died by suicide in the UK by gender (2006-2016)

	Female N = 6,016 N (%)	Male N = 11,915 N (%)
Demographic features		
Age: median (range)	47 (12-97)	45 (10-100)
Aged under 25	449 (8)	890 (8)
Not currently married	3,887 (69)	8,154 (73)
Living alone	2,529 (45)	5,467 (50)
Unemployed	2,261 (41)	5,329 (49)
On long-term sick leave	827 (15)	1,469 (13)
Black and minority ethnic group	342 (6)	740 (7)
Homeless	68 (1)	350 (3)
Clinical features		
Primary diagnosis:		
– Schizophrenia & other delusional disorders	677 (12)	2,141 (19)
– Affective disorders	2,777 (48)	4,370 (38)
– Alcohol dependence/misuse	388 (7)	1,254 (11)
– Drug dependence/misuse	211 (4)	780 (7)
– Personality disorder	862 (15)	746 (7)
– Eating disorders	180 (3)	304 (3)
Any secondary diagnosis	2,971 (52)	5,845 (52)
Duration of illness (<12 months)	887 (16)	2,408 (22)
First contact with mental health services		
<12 months	1,215 (23)	3,234 (31)
>5 years	2,652 (51)	4,432 (42)
Last admission was a re-admission	521 (16)	700 (12)
Behavioural features		
History of self-harm	4,225 (74)	7,121 (64)
History of violence	740 (13)	2,950 (27)
History of alcohol misuse	2,216 (39)	5,859 (53)
History of drug misuse	1,460 (26)	4,564 (41)

Table 9: Service characteristics of patients who died by suicide in the UK by gender (2006-2016)

Characteristics	Female N = 6,016 N (%)	Male N = 11,915 N (%)
In-patients	489 (8)	797 (7)
Recent (<3 months) discharge	951 (18)	1,765 (17)
Under crisis resolution/home treatment services	811 (15)	1,450 (14)
Missed last contact in previous month	1,239 (24)	2,672 (25)
Non-adherence with medication in previous month	622 (12)	1,331 (13)
Contact with services		
Last contact within 7 days of death	2976 (51)	5078 (44)
Short-term risk: low or none	4402 (83)	8987 (86)
Long-term risk: low or none	2900 (56)	6138 (61)

PATIENTS WITH A RECENT HISTORY OF SELF-HARM (UK)

85. In the UK, there were 4,776 suicides by patients who had a recent history of self-harm (less than 3 months before suicide), 29% of all patient suicides, an average of 434 deaths per year. A higher proportion of female patients had recent history of self-harm compared to males (34% v. 26%).

86. Based on actual figures, which do not include estimations for recent years, there were 486 patient suicides under the age of 25 with a recent history of self-harm, 39% of all suicides in this age-group. A higher proportion of younger females had a history of self-harm compared to younger males (Figure 13). For instance, around half of all females aged under 25 (214, 51%) had a recent history of self-harm, a higher proportion than males (272, 33%). The proportion of females with a recent history of self-harm was also higher in ages 25-34, 35-44 and 45-54 compared to males.

87. Almost half of all patients with a history of self-harm died by hanging/strangulation, more often than patients with no self-harm history (49% v. 43%). 22% died by self-poisoning, less often than other patients (22% v. 27%).

88. Patients with a history of self-harm were less likely to have a diagnosis of schizophrenia and other delusional disorders (10% v. 19%) and affective disorders (40% v. 43%) compared to other patients. They more often had a diagnosis of personality disorder compared to other patients (17% v. 6%). 57% had a secondary diagnosis, a higher proportion compared to other patients (57% v. 49%).

89. Over a quarter of patients had been ill for less than a year, a higher proportion compared to patients with no history of self-harm (27% v. 19%).

90. Immediate risk of suicide at last contact was judged to be low or not present in 76% of patients, a lower proportion compared to other patients (89%). Immediate risk of suicide of patients seen less than a week before death was judged to be low or not present in 71% of patients, a lower proportion compared to patients with no history of self-harm seen less than a week before death (82%). Long-term risk was judge to be low or not present in 41% of patients, lower than other patients (65%).

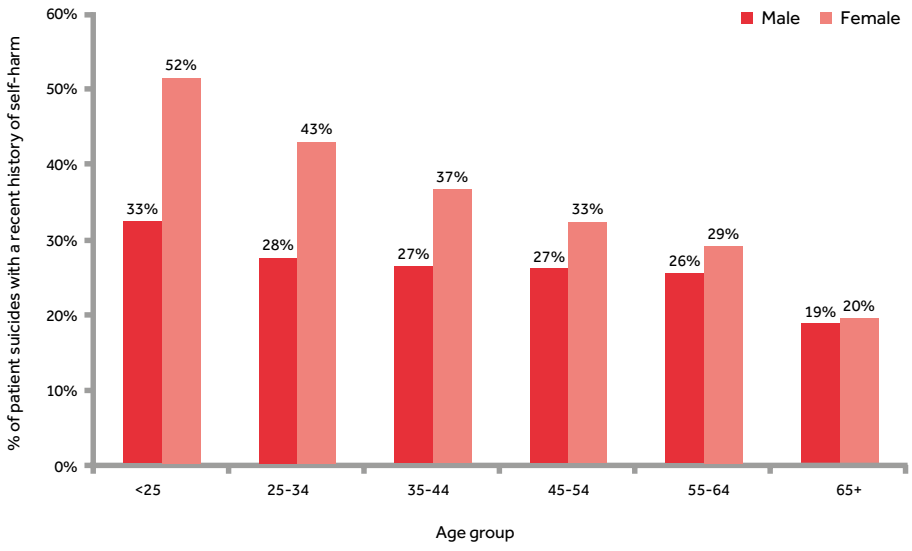


Figure 13: Proportion of suicide by patients with a recent (<3 months) history of self-harm by gender (UK, 2006-2016)

STUDENT SUICIDE (ENGLAND AND WALES)

91. Analysis on student suicides was based on the occupation information from national suicide data we receive from ONS and from our questionnaire data for patients. Our analysis on those aged between 18-21 is likely to differ to a recent ONS study on student suicides, which focussed on higher education students only.[21] During 2006-2016 there were 577 deaths in England and Wales by those aged between 18-21 who were identified as students, an average of 52 suicides per year. The number of student suicides has increased over the report period, with a peak in recent years not seen since 2010 (Figure 14).

92. 431 (75%) were male. Over half (313, 54%) of all deaths were by hanging/strangulation, a lower proportion compared to other young people aged 18-21 (54% v. 64%). Male students were more likely to die by jumping/multiple injuries than other young males (19% v. 14%).

93. The highest number of suicide deaths by students were in January (66, 11%), followed by April (64, 11%). Suicide deaths in January were higher compared to other young people (11% v. 8%). The lowest number of suicides were in August (28, 5%), lower compared to other young people (5% v. 8%).

94. 69 were patients, 12% of all student suicides aged 18-21, lower than non-students aged 18-21 who were patients (21%), and 1% of all patient suicides. There was a peak in the number of patient suicides by students in 2010, but otherwise there was no trend over the report period and recent figures show 8-9 per year (Figure 14).

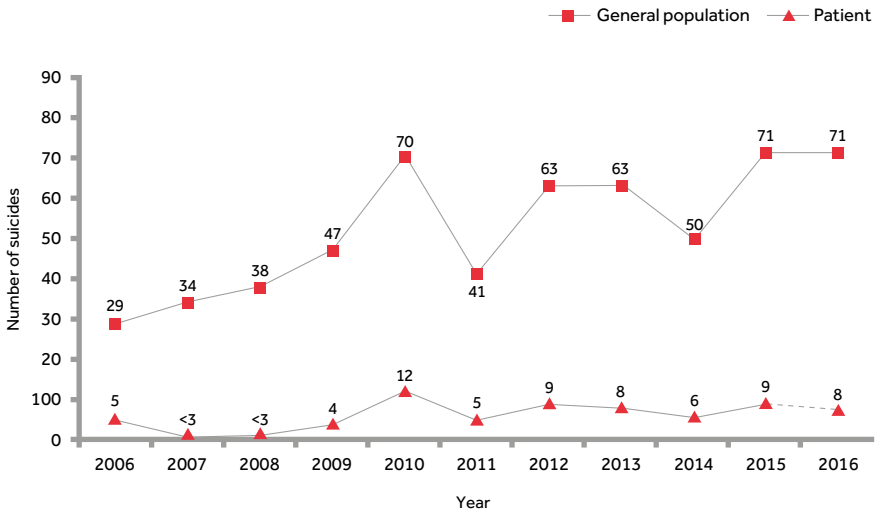


Figure 14: Number of general population and patient suicides by students in England and Wales

95. 39 (57%) of patient suicides by students were male. Hanging/strangulation (33, 49%) was the most common method of suicide. 30 (45%) students had a primary diagnosis of affective disorders, a higher proportion compared to other young patients (45% v. 21%).

96. 10 students (15%) died within 3 months of discharge from in-patient care, similar to other young patients (20%). Two-thirds had been ill for less than 12 months, a higher proportion compared to other young patients (67% v. 25%). 52 (75%) had a history of self-harm. Compared to other young patients, students were less likely to have a history of alcohol misuse (27% v. 49%) and drug misuse (27% v. 58%). 27 (39%) had been in recent (<7 days) contact with mental health services.

97. Short-term risk was viewed as low/none in most students (88%), similar to other young patients (82%). Long-term risk was viewed as low/none in 33 (61%), similar to other young patients (58%).

YOU ASKED US

98. We publish our responses to requests for information on our website. Here we present data requests from the previous 12 months. We are unable to release any information that would identify a healthcare organisation, and we will only publish aggregate figures of 3 or more. We only provide analysis on datasets that have been used in our most recent annual report. If you have a question that you think we could answer, please email us at **ncish@manchester.ac.uk**.

22 August 2018

In-patient suicides using electrical cords

99. (1) Proportion of in-patient suicides using electrical cords
Based on our England and Wales report sample (2005-2015), there were 285 deaths by hanging on the ward. Where the information was known, 10 (4%) of these deaths used electrical cords, including chargers for electronic devices.

20 July 2018

In-patient suicides on secure units

100. (1) Proportion of in-patient suicides occurring on secure units
Based on our UK report sample (2005-2015), there were 1,162 in-patient suicides (actual numbers). Of these, 359 (31%) died on the ward itself. 27 of those in-patient deaths occurred on a low or medium secure unit, or in a high secure hospital.

14 June 2018

In-patient suicides occurring at night

101. (1) Proportion of in-patient suicide deaths occurring at night (e.g. 11pm to 7am)
Between 2011-2016, there were 464 in-patient suicides (actual numbers). Of these, 54 (16% excluding unknowns [out of 338]) died at night between 11pm-7am (24 on the ward, 30 off the ward). 150 (33%) in-patients died on the ward. Of these, 24 (20% excluding unknowns) died at night. 20 (83%) died by hanging/strangulation, 18 of those in either a single bedroom or shared room.

20 March 2018

Suicide by people with dementia

102. (1) Place of residence at time of suicide by people with dementia
(2) Proportion of in-patients
Based on our UK report sample (2005-2015), there were 193 patients with a primary or secondary diagnosis of dementia who died by suicide – this number was projected up to 203 cases to take into account delays in data received from the Office for National Statistics (ONS). Of the 193 cases, the majority (154, 80%) were living at home and 26 (13%) were in a nursing home/residential care. There were 13 in-patients with dementia, representing 7%, similar to the total patient population (8%).

15 March 2018

Homicides by older people

103. (1) Total number of homicides committed by older people.
For the 11 years between 01/01/2005 and 31/12/2015 there were 86 (1.4%) (N=6,004) homicide offenders who were aged over 65 at the time of their offence.

2 March 2018

Rates of suicide in young men

104. (1) Rates of suicide in men aged under 25 in the report sample 2005-2015
(2) Rates of suicide in men aged 25-34 in the report sample 2005-2015
(3) Key features of male patients who died by suicide in 2015
(4) Age breakdown of male patients who died by suicide in 2015

Rates of suicide in men aged under 25 in England, 2005-2015
NO SIGNIFICANT TREND OVER TIME

	Population	Suicide number	Suicide rate
2005	4948132	327	6.6
2006	4983674	316	6.3
2007	5036803	310	6.2
2008	5044646	356	7.1
2009	5040274	308	6.1
2010	5065872	342	6.8
2011	5086875	332	6.5
2012	5058852	378	7.5
2013	5023751	332	6.6
2014	5017622	344	6.9
2015	5018219	361	7.2

Rates of suicide in men aged 25-34 in England, 2005-2015
SIGNIFICANT FALL IN RATES, NO TREND IN NUMBER

	Population	Suicide number	Suicide rate
2005	3395099	596	17.6
2006	3394391	553	16.3
2007	3404257	587	17.2
2008	3448486	593	17.2
2009	3482400	551	15.8
2010	3524521	539	15.3
2011	3591206	545	15.2
2012	3623605	581	16.0
2013	3672381	583	15.9
2014	3705510	535	14.4
2015	3745263	563	15.0

Characteristics of male patients who died by suicide in England in 2015

	Number = 751	%
Demographic features		
Age: median (range)	47 (15-94)	
Aged under 25	46	8
Not currently married	518	73
Living alone	343	49
Unemployed	66	45
On long-term sick leave	50	9
Black and minority ethnic group	48	7
Homeless	16	2
Service-related features		
In-patients	36	5
Recent (<3 months) discharge	93	13
Under crisis resolution/home treatment services	102	15
Missed last contact in previous month	146	21
Non-adherence with medication in previous month	78	12
Clinical features		
Any secondary diagnosis	377	51
Duration of illness (<12 months)	167	24
Over 5 previous admissions	42	6
First contact with mental health services:		
<12 months	182	25
>5 years	339	47
Last admission was a re-admission	39	11
Behavioural features		
History of self-harm	442	62
History of violence	178	26
History of alcohol misuse	333	48
History of drug misuse	289	41
Contact with services		
Last contact within 7 days of death	315	42
Symptoms of mental illness at last contact	434	62

Note: projected figures to account for delays in data return

Age	Number = 751	%
Under 25	61	8
25-34	122	16
35-44	154	21
45-54	171	23
55-64	130	17
65+	113	15

Age breakdown male suicides, 2015

5 Feb 2018

Suicide by burning

105. (1) The number of suicide by burning
(2) The number of in-patient suicides by burning
The most recent year on which NCISH data are available is 2015. For the UK, we can provide the number of people who died by suicide by burning, and the number of patients who died by suicide by burning for the calendar years 2014 and 2015, and for our most recent report period 2005-2015, with patients defined as those in contact with mental health services in the 12 months prior to death.

106. Due to small numbers, we are unable to provide the number of in-patients who died by suicide by burning for individual years. This is consistent with our previous practice, and on advice from ONS about suppression of numbers below which patient identification would be likely.

Suicide by burning (UK-wide)

	2014	2015
General population	59	46
Patient	17	10

	2005-2015
Patient	59
In-patient	17

ENGLAND

ENGLAND

SUICIDE

107. Between 2006-2016, NCISH was notified of 49,654 deaths in the general population that were registered as suicide or "undetermined", an average of 4,514 per year. These are referred to as suicides throughout the report.

SUICIDE IN THE GENERAL POPULATION

108. Our suicide rates differ from ONS rates because we base our figures on date of death rather than the date when the death was registered. In addition, our figures include people aged 10-14 and are not age-standardised, i.e. they are not adjusted to reflect differences in the age of the population.

109. Some inquests do not take place for several months which means that our confirmed figures for the most recent years underestimate the final figures.

110. The pattern of suicide since 2006 is (a) a rise in 2008 and 2012, with intervening years being lower, influenced by under-recording of "narrative" conclusions, (b) falling rates since 2012 with the lowest rate over the report period in 2016 (Figure 15).

Figure 15: Rates of suicide in the general population in England, by gender. Number of suicides are included on the figure and are shown above the rates

Variation in suicide rates by local health and care systems (Sustainability and Transformation Plan (STP) 'footprints')

111. Suicide rates varied by the 44 Sustainability and Transformation Plan (STP) 'footprints'. Average rates for 2014-2016 are shown in Figure 16. The highest rate of suicide was in Cornwall and the Isles of Scilly, at 14.4 per 100,000 population, and the lowest in Nottingham and Nottinghamshire, at 6.9 per 100,000 population. In general the highest rates were in the north and south-west, with the lowest rates in London and the south-central areas. However, there were also high rates in rural areas such as Norfolk and Lincolnshire.

112. Information on the 44 areas that make up the STP footprints can be found on the NHS England website at: **https://www.england.nhs.uk/stps/view-stps/**. ONS suicide rates mapped to English local authorities can be found on the Public Health England website at: **https://fingertips.phe.org.uk/search/suicide**

Area	Rate
14. Nottingham & Nottinghamshire	6.9
30. South East London	7.3
29. North East London	7.4
16. The Black Country	7.4
25. Hertfordshire and West Essex	7.6
31. South West London	7.7
24. Milton Keynes, Bedfordshire and Luton	7.9
17. Birmingham and Solihull	8.0
21. Cambridgeshire and Peterborough	8.1
27. North West London	8.2
44. Buckingham, Oxfordshire and Berkshire West	8.3
40. Bath, Swindon and Wiltshire	8.4
15. Leicester, Leicestershire and Rutland	8.4
34. Frimley Health	8.6
35. Surrey Heartlands	8.9
11. Shropshire, Telford and Wrekin	9.0
12. Derbyshire	9.0
26. Mid and South Essex	9.2
28. North Central London	9.3
42. Hampshire and the Isle of Wight	9.5
7. Greater Manchester	9.5
1. Northumberland, Tyne and Wear	9.6
39. Bristol, North Somerset and South Gloucestershire	9.8
10. Staffordshire	9.9
9. South Yorkshire and Bassetlaw	10.0
2. West, North and East Cumbria	10.0
5. West Yorkshire	10.0
38. Somerset	10.2
8. Cheshire and Merseyside	10.2
13. Lincolnshire	10.2
32. Kent and Medway	10.2
43. Gloucestershire	10.2
20. Northamptonshire	10.4
23. Suffolk and North East Essex	10.4
18. Coventry and Warwickshire	10.5
37. Devon	10.5
6. Coast, Humber and Vale	10.5
19. Herefordshire and Worcestershire	10.6
33. Sussex and East Surrey	10.9
41. Dorset	11.0
22. Norfolk and Waveney	11.1
3. Durham, Darlington, Tees, Hambleton, Richmondshire and Whitby	11.9
4. Lancashire and South Cumbria	12.2
36. Cornwall and the Isles of Scilly	14.4

Note: rates have been colour coded by approximate quintile

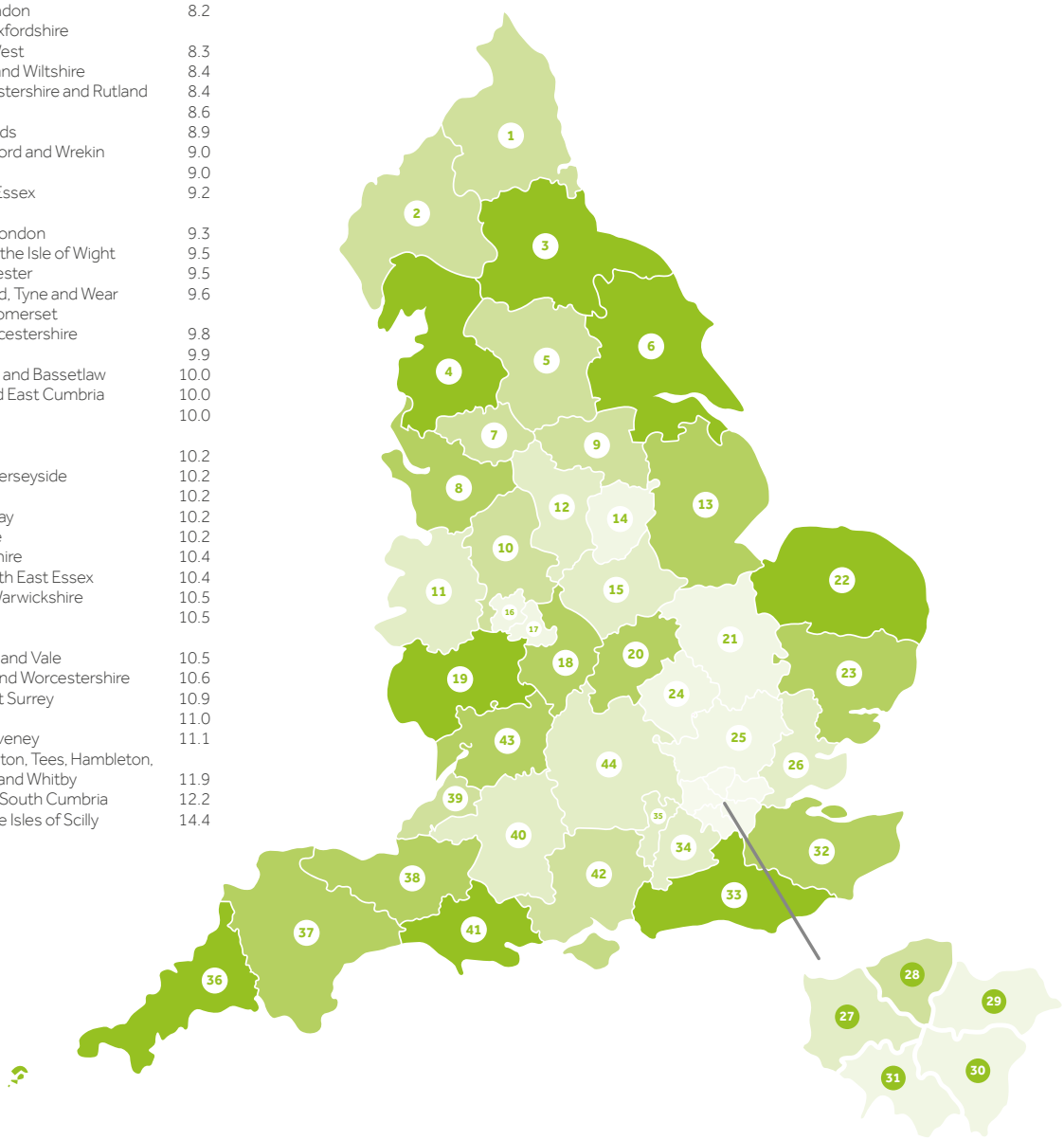


Figure 16: Rates of suicide per 100,000 population, by STP 'footprint' area of residence (average rate 2014-2016)

Method of suicide

113. The most common methods of suicide were hanging/strangulation (24,508, 49%), self-poisoning (overdose) (9,587, 19%), and jumping and multiple injuries (mainly jumping from a height or being struck by a train) (5,314, 11%). Less frequent methods were drowning (2,153, 4%), gas inhalation (1,862, 4%), cutting and stabbing (1,381, 3%), and firearms (939, 2%).

114. Deaths by hanging/strangulation and jumping and multiple injuries increased whilst deaths by self-poisoning decreased (Figure 17). Of the less common methods (Figure 18), there was a fall in deaths by drowning between 2006 and 2013 followed by an increase in 2014 and 2015. Deaths from gas inhalation fell between 2006 and 2010, reflecting a fall in car exhaust asphyxiation, but rose after this time with an increase in other gases. There was an increase in deaths by cutting/stabbing between 2007 and 2013, though the reported number has fluctuated since. There was no significant change in deaths by firearms over the report period.

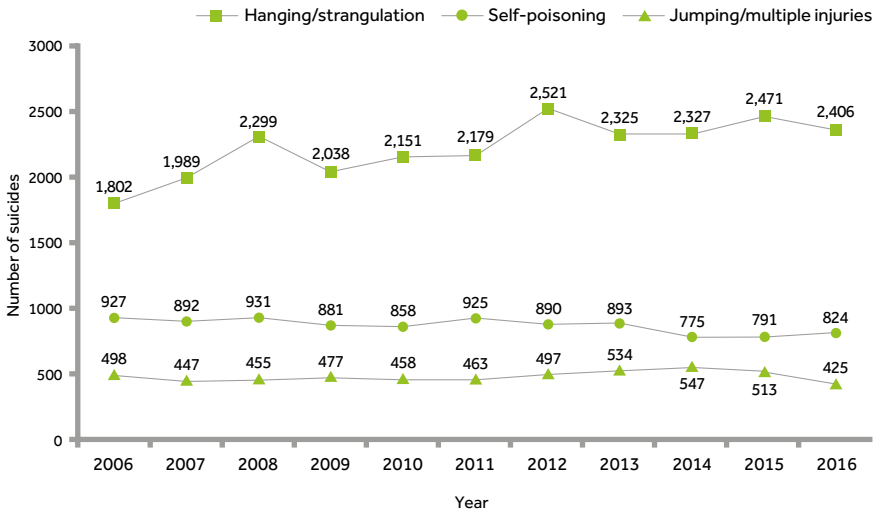


Figure 17: Suicide in the general population in England: main causes of death

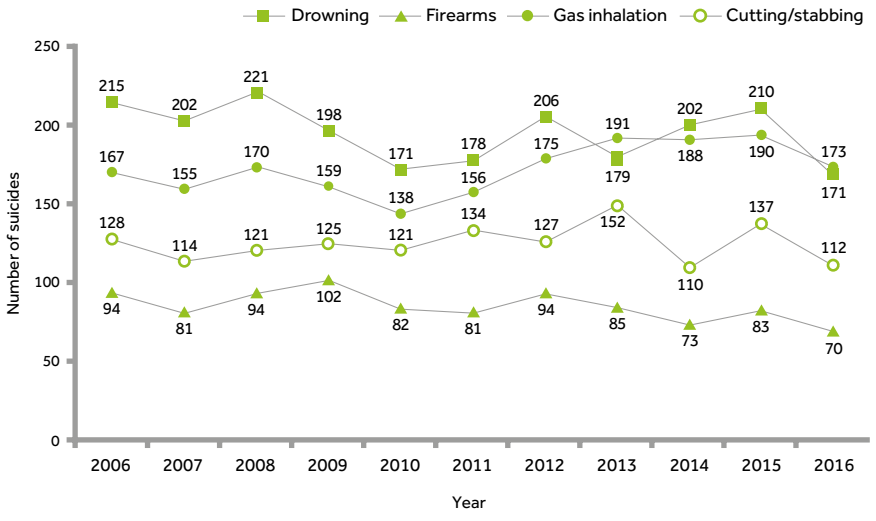


Figure 18: Suicide in the general population in England: other causes of death

PATIENT SUICIDE

Patient suicide: numbers and rates

115. During 2006-2016, 13,698 deaths (28% of general population suicides) were identified as patient suicides, i.e. the individual had been in contact with mental health services in the 12 months prior to death. This represents an average of 1,245 patient suicides per year. The number increased between 2006 and 2012 but has since fallen (Figures 19 and 20). The proportion of general population suicides that were in contact with services was highest in those aged 45-64 (30%).

116. Completeness of our data is lower in the more recent years reported, reflecting the time required to receive and process the data. Currently, figures in 2014-2016 are projected based on the expected final return of questionnaires for previous years (see paragraph 18). Other methods could also be used to estimate the final year figures based on the number of questionnaires sent out and returned, or adjusting for any over-estimates that have occurred in previous reports. Our current estimate for the number of suicides in 2016 is 1,267 but using other estimation methods, the range could be between 1,173 and 1,302 patient suicides.

117. Rates of patient suicide - taking into account the rising number of patients under mental health care [19] - show a different pattern (Figure 21). Although rates pre- and post-2011 are not comparable because of changes to methodology, [20] rates fell in both periods, suggesting a fall overall.

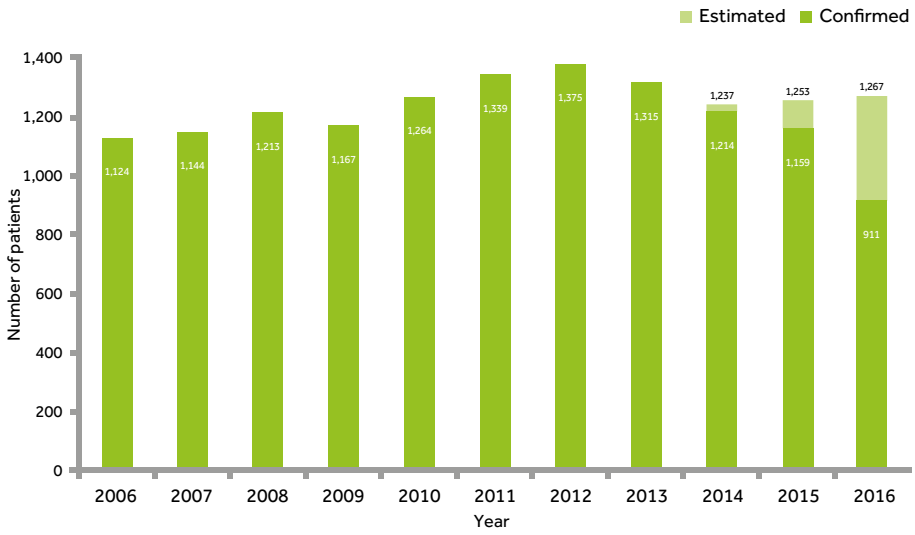


Figure 19: Number of patient suicides in England

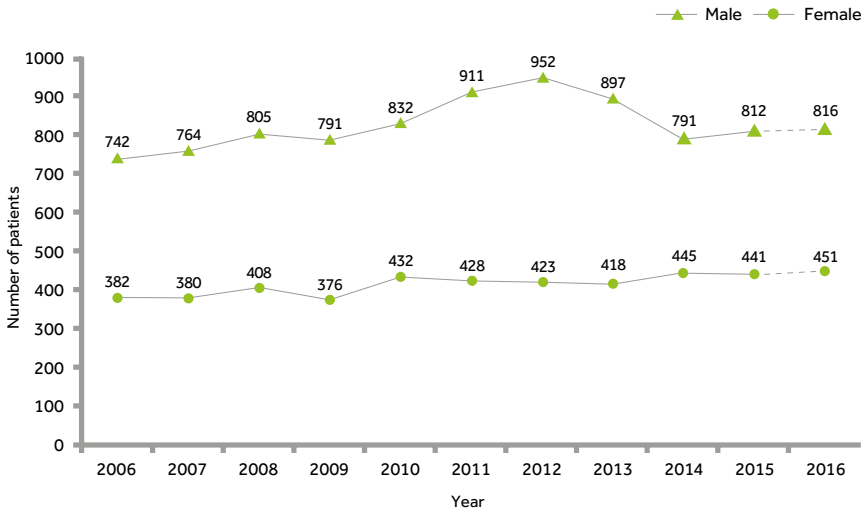


Figure 20: Number of patient suicides in England, by gender

Note: the total figure in 2014 does not tally with that in Figure 19 due to rounding

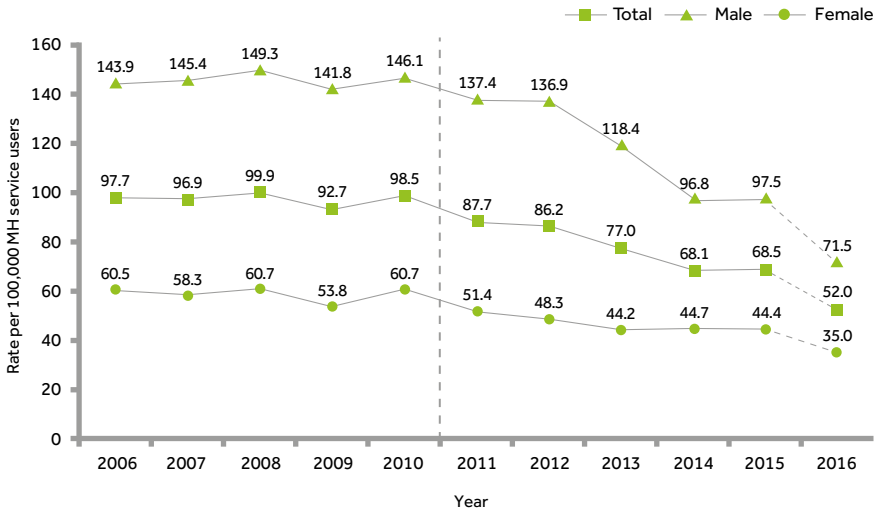


Figure 21: Rates of suicide per 100,000 mental health service users† in England

† The Mental Health Services Data Set (MHSDS)[19] was used to calculate rates. Changes in MHSDS methodology[20] means rates between 2006-2010 and 2011-2016 are not directly comparable. Rates in 2011-2016 are based on 1,517,613 service users in 2011, 1,578,409 in 2012, 1,703,247 in 2013, 1,813,672 in 2014, 1,828,428 in 2015, and 2,434,913 in 2016.

Method of suicide by patients

118. The most common methods of suicide by patients were hanging/strangulation, self-poisoning, and jumping/multiple injuries, together accounting for 83% of all suicides (Figure 22). These methods were the most prevalent for both males and females, though hanging/strangulation was more common among males (49% v. 36%) and self-poisoning was more common among females (33% v. 19%).

119. Hanging/strangulation increased by 21% during 2006-2015. The proportion of patients who died by hanging/strangulation increased from an average of 42% in 2006-2009 to 47% in 2013-2016. The number of self-poisoning deaths increased because of a rise in opiate deaths between 2006 and 2011 but has been falling since. There have been no significant changes in other suicide methods.

120. Opiates and opioids were the most common drugs used in self-poisoning and accounted for a third of these deaths (Table 10). Non-opiate analgesics were used in 7%, the majority (169, 6% of all self-poisonings) by paracetamol. Antipsychotic drugs were used in 11% and antidepressants (typically tricyclics or SSRI/SNRIs) in 21%.

Table 10: Main substances used in deaths by self-poisoning in England

Substance	Deaths by self-poisoning N=3,095	
	Number	%
Opiates/opioids	947	33%
- opiates only	746	26%
- paracetamol/opiate compound	201	7%
Non-opiate analgesics	205	7%
Antipsychotics	302	11%
Antidepressants	587	21%
- tricyclics	271	9%
- SSRI/SNRIs	260	9%
- other antidepressants	56	2%

121. We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (113, 40%), codeine (53, 19%) and tramadol (48, 17%). 31 (11%) used methadone.

122. Information on the source of the opiates/opioids was available in 47%. Among those who died by heroin/morphine overdose, in 61% (excluding unknowns) this had not been prescribed for the patient (Table 11). In the majority of patients who died using other opiates/opioids, these had been prescribed for them.

123. There was a peak in 2011 in the number of deaths by opiates after which the number has fallen. There was an increase in self-poisonings using paracetamol or other analgesics over the report period. The number of deaths by psychotropic drugs fell by 38% between 2006 and 2015.

Table 11: Type and source of opiates/opioids used in deaths by self-poisoning (2012-2016)

Type	Prescribed N=156		Not prescribed N=184		Total N=340
	Number	%	Number	%	Number
Heroin/morphine	26	39%	40	61%	66
Methadone	11	73%	4	27%	15
Codeine	15	71%	6	29%	21
Tramadol	14	88%	<3	12%	16
Paracetamol/opiate compounds	21	68%	10	32%	31

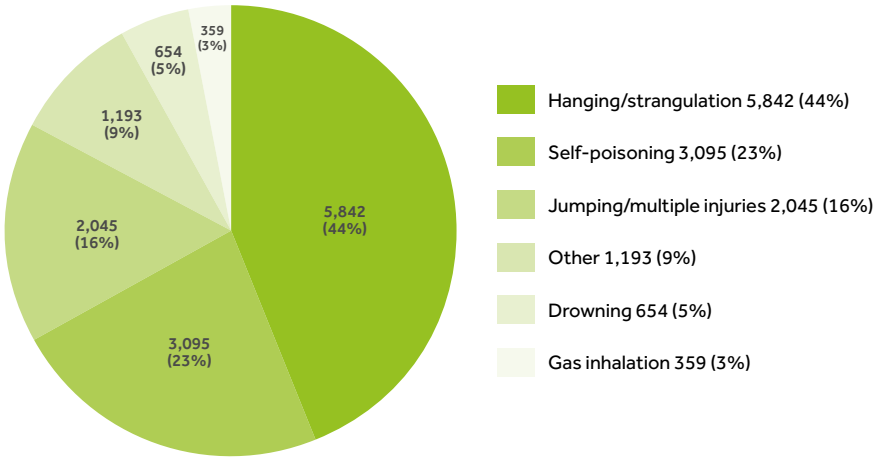


Figure 22: Patient suicide in England: main causes of death

Social and clinical characteristics

124. Table 12 shows the main social, clinical and behavioural features of patients dying by suicide whose deaths would have to be prevented to reduce suicide figures. These patients have high rates of social adversity and isolation, e.g. unemployment and living alone. Around half have a co-morbid condition, and rates of previous self-harm and alcohol misuse are high.

125. There were 52 suicides by women who were pregnant or who had died within a year of childbirth, 1% of all female suicides, an average of 5 per year.

Table 12: Characteristics of patients who died by suicide in England (2006-2016)

Patient characteristics	Total = 13,698 Number	%
Demographic features		
Age: median (range)	46 (10-100)	
Aged under 25†	1,030	8
Male†	9,113	67
Not currently married	9,046	71
Living alone	5,964	47
Unemployed	5,595	45
On long-term sick leave	1,616	13
Black and minority ethnic group	1,018	8
Homeless	322	3
Clinical features		
Any secondary diagnosis	6,632	51
Duration of illness (<12 months)	2,695	22
First contact with mental health services:		
<12 months	3,587	30
>5 years	5,017	42
Last admission was a re-admission	898	14
Behavioural features		
History of self-harm	8,546	67
History of violence	2,694	22
History of alcohol misuse†	5,938	45
History of drug misuse†	4,375	33

† includes estimated figures in 2014-2016

Diagnosis

126. The most common primary diagnoses were affective disorders (6,027, 45%, including 4,802 (36%) with depressive illness and 1,224 (9%) with bipolar disorder); schizophrenia (includes other delusional disorders) (2,245, 17%) and personality disorder (1,275, 9%) (Figure 23). Diagnoses within the 'other' category included dementia (1%), eating disorders (<1%), autism spectrum disorder (<1%), and somatoform disorders (<1%). Suicide in patients with affective disorders rose between 2006 and 2012 but has since fallen (Figure 24), with an average of 548 per year during the report period. In patients with schizophrenia, the number increased after 2008 to a peak in 2013 and since fell, with an average of 204 per year. In personality disorder, the number has generally risen since 2006, with an average of 116 per year.

127. We carried out a detailed mixed-methods investigation of suicide in patients with personality disorder, combining quantitative and qualitative data collection. The report was published in February 2018 (see page 127 for a summary of the report) and can be found on our website at: **www.manchester.ac.uk/ncish**

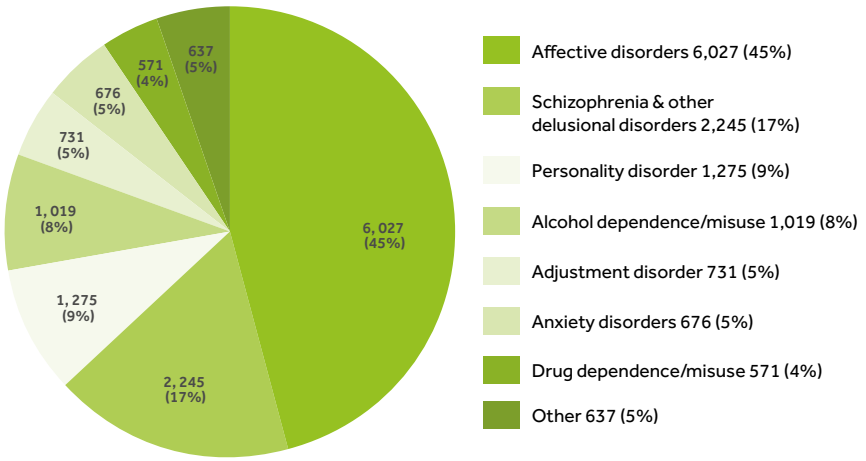


Figure 23: Patient suicide in England: primary psychiatric diagnoses

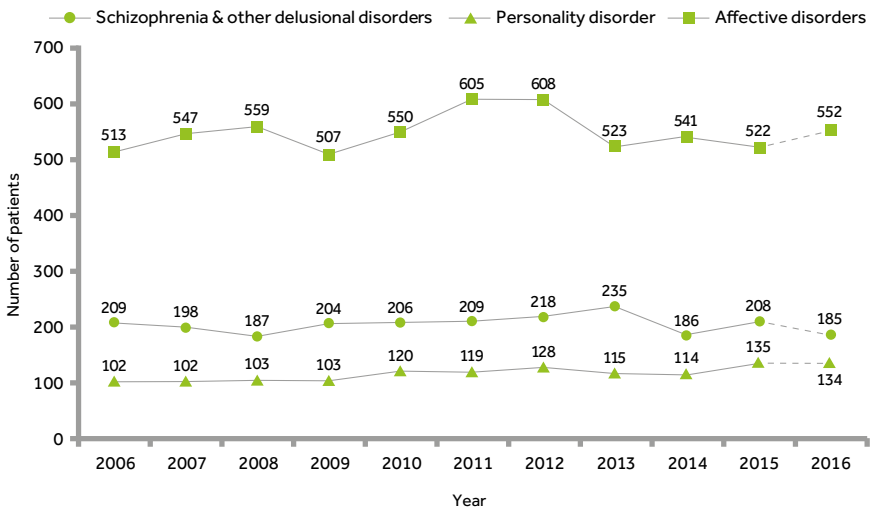


Figure 24: Patient suicide in England: main primary psychiatric diagnoses

Patients with alcohol and drug misuse

128. There were an estimated 5,938 suicides in patients with a history of alcohol misuse, 45% of the total sample, an average of 540 deaths per year. 4,375 had a history of drug misuse, 33% of the total sample, an average of 398 deaths per year. 7,193 had a history of either alcohol or drug misuse or both, 54% of patient suicides, an average of 654 deaths per year.

129. The number of suicides in patients with a history of alcohol or drug misuse has fallen since a peak in 2011 (Figure 25). Between 2011-2016, 410 (20%) patients who died were under drug services, 446 (17%) were under alcohol services, and 689 (21%) were under either drug or alcohol services.

130. The most common substances misused in the 3 months prior to suicide were alcohol (58%), cannabis (23%), stimulants such as amphetamines, LSD, and ecstasy (16%), and heroin (13%). The number of patients misusing alcohol, heroin, or benzodiazepines fell between 2011 and 2015.

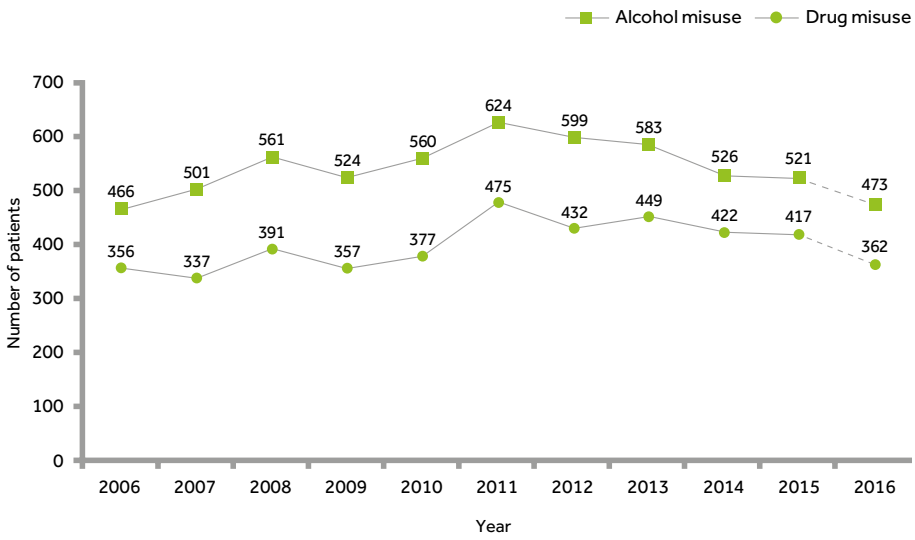


Figure 25: Patient suicide in England: number with a history of alcohol or drug misuse

Websites promoting suicide

131. In 2011-2016 there were 162 patients who died by suicide after visiting websites that may have encouraged suicide, e.g. those providing information on methods of suicide. This represents an average of 27 per year, 2% of all patient suicides during this period. This proportion increased to 5% (27 patients) in patients aged under 25 in the same time period. There was no trend during 2011-2015. As these figures are based on clinical reports, they may underestimate how often this occurs.

132. In our study of suicide by children and young people[4] we recommend further efforts are needed to remove information on suicide methods from the internet, and to encourage on-line safety for young people.

MENTAL HEALTH CARE

133. Table 13 shows some of the key service-related characteristics, including priority patient groups, recent contact with services, and estimations of risk. Many are in acute care settings (in-patients, under crisis resolution/home treatment, recently discharged from in-patient care), and half have been in recent (<7 days) contact with mental health services.

Table 13: Service characteristics of patients who died by suicide in England (2006-2016)

	Total = 13,698	
Characteristic	**Number**	**%**
In-patients†	1,110	8
Recent (<3 months) discharge†	2,220	16
Under crisis resolution/home treatment services†	2,102	16
Missed last contact in previous month†	2,901	23
Non-adherence with medication in previous month†	1,584	13
Contact with services		
Last contact within 7 days of death	6,392	49
Short-term risk: low or none	9,998	84
Long-term risk: low or none	6,747	59

† includes estimated figures in 2014-2016

In-patient suicide

134. There were 1,110 in-patient deaths by suicide in 2006-2016, representing 8% of patient suicides.

135. From 2006 to 2016, there was a 37% fall (53 cases) in the number of in-patient suicides (Figure 26) and this follows a fall in previous years. However in-patient deaths are more often subject to late notification – up to 4 years. We have therefore estimated the overall figures in 2014-2016 using the average proportion of all patient suicides that were in-patients in recent years.

136. In-patient suicide numbers may be affected by changes in the number of admissions. Nonetheless, we found rates of in-patient suicide per 10,000 admissions still fell by 31% in 2006-2016 (Figure 27).

137. The fall in in-patient suicide seems to have slowed in recent years. The fall in numbers in the 5 years after 2006 was 29% but 12% in the 5 years after 2011. The equivalent figures for in-patient suicide rates are 21% and 13%. In the most recent 5 years the average number of in-patient suicides has been 90 per year.

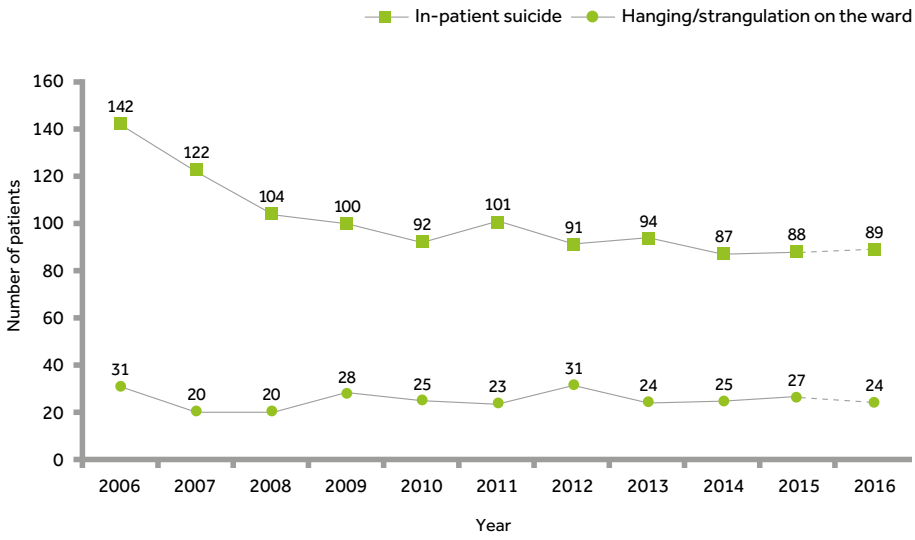


Figure 26: Patient suicide in England: number of mental health in-patients; number who died by hanging and strangulation on the ward

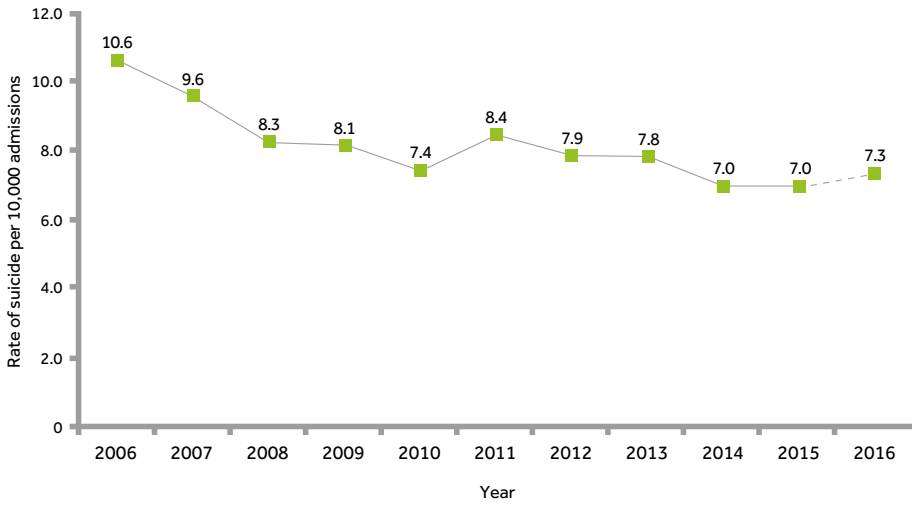


Figure 27: Patient suicide in England: rate of in-patient suicide per 10,000 admissions

138. The following sections are based on actual figures and do not include estimations for recent years. 311 (32%) patients died on the ward itself; 543 (55%) were on agreed leave or had left with staff agreement; and 129 (13%) died after leaving the ward without staff agreement. Of the 543 who had left the ward with staff agreement, 45 (8%) had failed to return to the unit.

139. In total, 174 in-patients died after leaving the ward without staff agreement or with staff agreement but failed to return, 21% of all in-patient suicides, an average of 16 deaths per year. These patients were more likely than other in-patients to be male, to have died in the first week of admission, and to have a history of drug misuse.

140. Deaths by hanging on the ward are usually from low-lying ligature points (i.e. strangulation). There were approximately 20-30 such deaths per year over the report period (see Figure 26), which includes some deaths by strangulation with no ligature point (i.e. self-strangulation). The majority died by hanging/strangulation in a single bedroom (72%) or a toilet/bathroom (21%). The most common ligature points were doors (46%) or windows (16%) and the most common ligatures were a belt (34%) or sheets/towels (28%).

141. 136 suicides (13%) took place in the first week after admission. The proportion who died in the first week of admission did not change over the report period. Within this first week, the highest number occurred on day 2 (24 cases) or day 5 (23 cases) and the lowest number occurred on the day of admission (13 cases). 30 (22%) patients who died in the first week had left the ward without staff agreement and died off the ward.

142. There were 290 suicides in detained in-patients, 29% of in-patient suicides, an average of 26 per year.

143. 187 in-patient suicides were under a medium or high level of observation, an average of 17 deaths per year. In a study of suicide by patients under observation, we recommended that observations should be seen as a skilled intervention carried out by experienced staff. [22]

Crisis Resolution/ Home Treatment

144. There were 2,102 suicides in patients under crisis resolution/home treatment (CRHT) teams, 16% of the total sample, an average of 191 deaths per year over the whole report period. The overall figures for 2014-2016 have been estimated to take into account late notifications.

145. Overall, the annual number of suicides under CRHT increased over the report period (Figure 28), initially reflecting its increasing use. Our recent estimates mean there are now over 2 times as many patient suicides under CRHT.

146. When we calculated rates of suicide under CRHT in 2012-2016 (the years when denominator data, i.e. the number of CRHT attendances, were available), the rates averaged at 12.2 per 100,000 attendances, and the pattern followed broadly the trend in the number of deaths in recent years.

147. In 606 (32%) the patient had been discharged from in-patient care in the preceding 3 months; 250 (28%) died within 2 weeks of discharge, 158 (18%) within a week.

148. We have collected data on length of time under CRHT since 2012. 276 (38%) patients who died had been under CRHT services for less than a week.

149. In 834 (43%) the patient lived alone. They were less likely to receive additional social support from outside the home (e.g. from a relative, friend or neighbour) as part of their care plan compared to those who did not live alone (138, 44% excluding unknowns vs. 270, 71%).

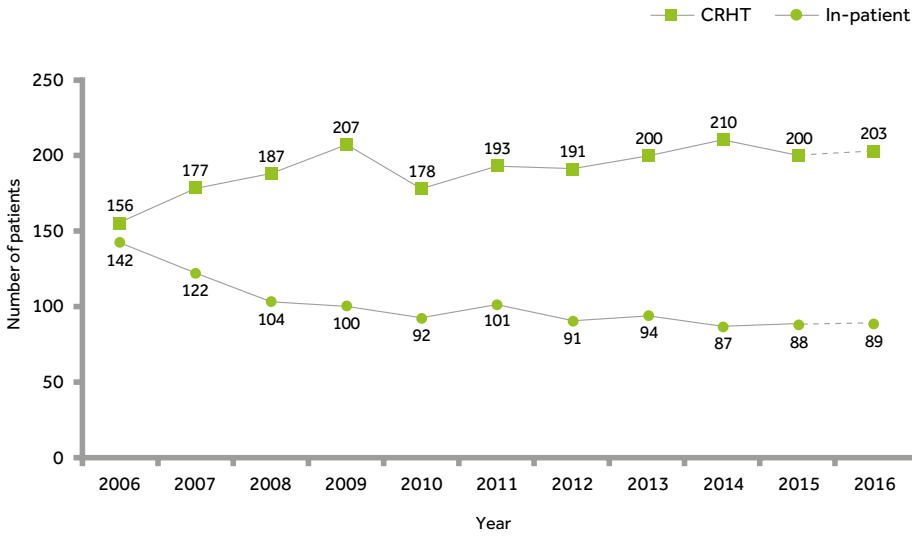


Figure 28: Patient suicide in England: number under crisis resolution/home treatment services and mental health in-patients

Patients recently discharged from hospital

150. There were 2,220 suicides within 3 months of discharge from in-patient care, 16% of all patient suicides, an average of 202 deaths per year. The overall figures for 2014-2016 (Figure 29) have been estimated to take into account late notifications. The remaining figures in this section will present the actual figures.

151. There were 955 suicides in the first month after discharge, 48% of all suicides within 3 months of discharge, an average of 87 deaths per year. Post-discharge suicides were most frequent in the first week after leaving hospital when 312 deaths occurred, an average of 28 per year, 16% of all suicides within 3 months of discharge (Figure 30).

152. The number of post-discharge suicides fell after a peak in 2011 to the lowest figures over the report period (Figure 29). The average rate of suicide was 16.6 per 10,000 discharges. The rate of post-discharge suicide also fell after a peak in 2011 (Figure 29).

153. The proportion who died in the first week after discharge did not change over the report period. Of all patients who died in the first week after discharge, the highest number occurred on the second (18%) and third (21%) day. We continue to recommend all patients are followed up within 3 days of discharge from in-patient care.

154. Of all post-discharge suicides, 220 (11%) died before the first follow-up appointment. This proportion increased to 20% of those who died in the first month after discharge and 45% in those who died within a week after discharge. The number and proportion of patients who died before the first follow-up appointment fell over the report period.

155. In 429 (21%) of post-discharge suicides the patient had been detained under the Mental Health Act (MHA) at the last admission. In 572 (28%) patients the last admission had lasted less than a week. In 393 (20%) the patients had initiated their own discharge from hospital, including self-discharge and breaching of ward rules. The number of patients initiating their own discharge fell over the report period.

156. Patients who died in the first week after leaving hospital were more likely than those who died later after discharge to have a diagnosis of personality disorder (15% v. 10%). Over half (52%) had experienced recent adverse life events, especially financial (25%) and family problems (23%).

157. 199 (10%) died after being discharged from a non-local in-patient unit. This proportion was similar to those who died within 2 weeks of discharge (65 cases, 12%). In 2016 there were 11 (11%) suicides after discharge from a non-local unit.

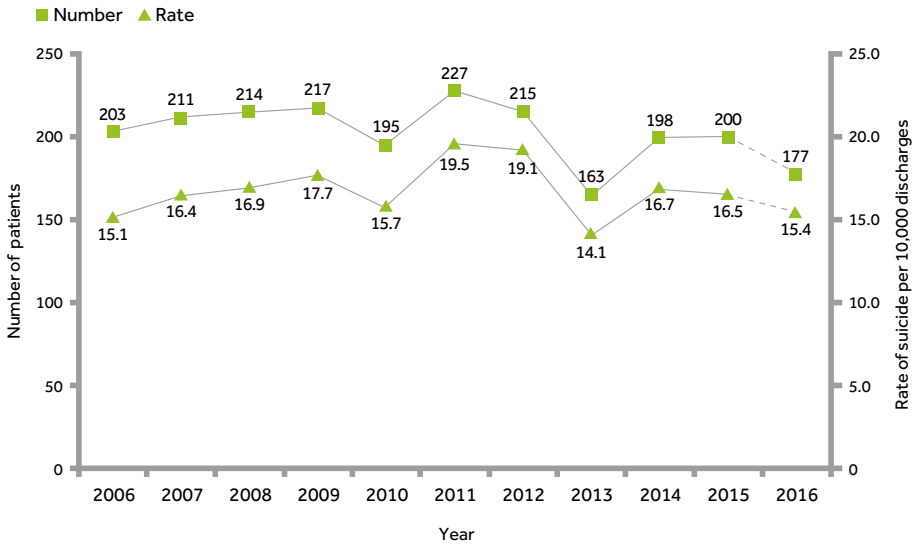


Figure 29: Patient suicide in England: number who died within 3 months of in-patient discharge and rate of suicide per 10,000 discharges

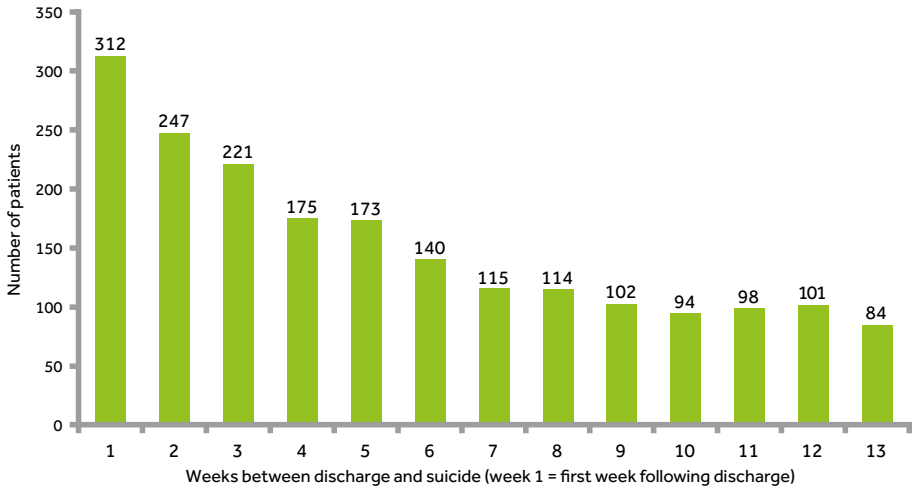


Figure 30: Patient suicide in England: number per week following discharge (2006-2016)

Non-adherence and missed contact

158. There were an estimated 1,584 (13%) patients who were non-adherent with drug treatment in the month before death, an average of 144 deaths per year, and 2,901 (23%) patients who missed their final service contact, an average of 264 deaths per year.

159. During 2006-2011 the number of patient suicides following missed contact increased but has since fallen (Figure 31). However, the proportion who had missed their final contact was similar in 2006-2010 compared to 2011-2015 (24% and 23% respectively). The number of deaths following non-adherence decreased between 2008 and 2015 (Figure 31).

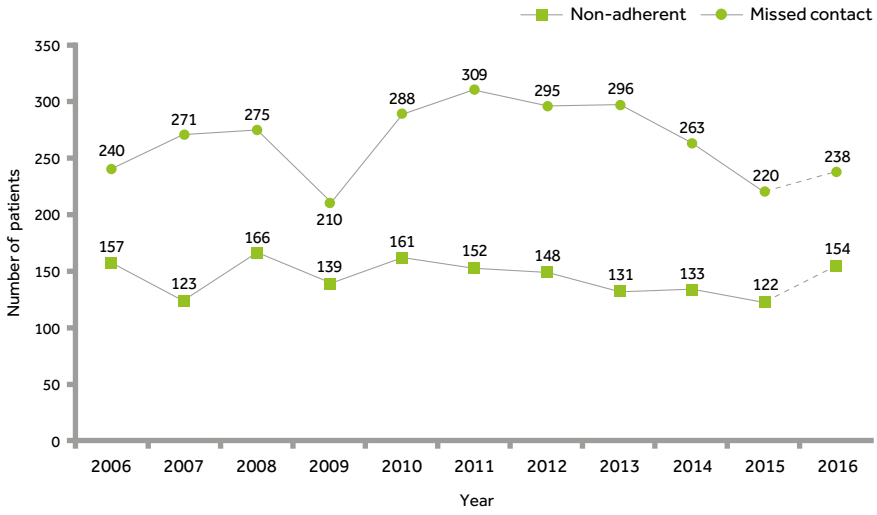


Figure 31: Patient suicide in England: number non-adherent with drug treatment or missed contact

Community Treatment Orders

160. There were 107 patients subject to a community treatment order (CTO) in 2009-2016, 1% of all patient suicides in this time period, an average of 13 per year. A third (35, 33%) of these patients had their CTO revoked at the time of suicide. The rate of suicide in patients ever subject to a CTO was 31.6 per 10,000 CTOs issued in 2009-2016. The number or rate did not change between 2009-2015.

161. 27 (38%) of the 72 deaths under CTO at the time of suicide occurred within 3 months of hospital discharge. 12 patients who died while subject to a CTO were non-adherent with drug treatment in the month before death and 18 missed their final service contact; 4 had both refused treatment and missed their final service contact. Therefore, 36% of those who died were not receiving care as intended despite CTO powers.

162. Compared to patients who were not under a CTO but were eligible to be (i.e. those admitted under Section 37 or Section 3 but not subject to a CTO at their last discharge), those under CTO were more likely to be unmarried (89% v. 78%), unemployed (70% v. 56%) and from a black and minority ethnic group (27% v. 14%). Substantially more patients under a CTO had a primary diagnosis of schizophrenia (79% v. 44%), more had died within 3 months of discharge (32% v. 21%) and more had missed their last service contact (25% v. 14%). A history of violence (50% v. 33%) and drug misuse (52% v. 38%) were particular features of patients under a CTO compared to CTO eligible patients.

Section 136

163. In 2012-2016, there were 201 patients who had been conveyed to a hospital (n=174) or custody (n=55) based place of safety under Section 136 of the MHA in the 3 months prior to suicide. This represents 5% of all suicides in this time period, an average of 40 per year.

164. Compared to other patients who died, those under Section 136 were more likely to have a primary diagnosis of personality disorder (20 v. 9%). They were also more likely to have any secondary diagnosis (61% v. 51%). The most common secondary diagnoses were alcohol dependence/misuse (20%), drug dependence/misuse (17%) and depressive illness (14%).

165. Short-term risk was viewed as low/none in 137 (79%), similar to other patients (82%). Long-term risk was viewed as low/none in 73 (45%), significantly lower than for other patients (57%).

Improving Access to Psychological Therapies (IAPT)

166. There were an estimated 238 suicides in patients under IAPT services in specialist mental health trusts in the years 2011-2016, 4% of all patient suicides in this time period, an average of 40 per year. The number increased over this time period and rates of suicide showed a similar pattern, i.e. taking into account the number of attendances under these services.

167. The majority had affective disorders (59%), anxiety disorders (16%) or adjustment disorders (11%). Nearly half (48%) had a secondary diagnosis.

168. Compared to other patients, those under IAPT services showed fewer social problems, e.g. they were less likely to live alone, be unmarried or unemployed. More had a recent onset of illness and long-term risk was more likely to be viewed as low/none.

Child and adolescent mental health services (CAMHS)

169. There were 372 suicides by patients aged under 25 who had been under the care of CAMHS in 2006-2016, 43% of all young patients under 25, an average of 34 per year. 216 (58%) were male and there was no change over the report period. Of these patients, almost a quarter had a primary diagnosis of personality disorder (86, 24%), a higher proportion compared to other young patients under 25 (11% v. 24%). 55 (15%) had schizophrenia, a lower proportion compared to other patients under 25 not under CAMHS (28% v. 15%).

What could have reduced risk?

170. We asked clinicians, in their opinion, what factors may have made the suicide less likely at the time. The most common factors were: closer supervision of the patient (25%), closer contact with the patient's family (17%), improved compliance with treatment (17%), a decrease in case-loads (17%) and access to psychological treatment (15%) (Figure 32).

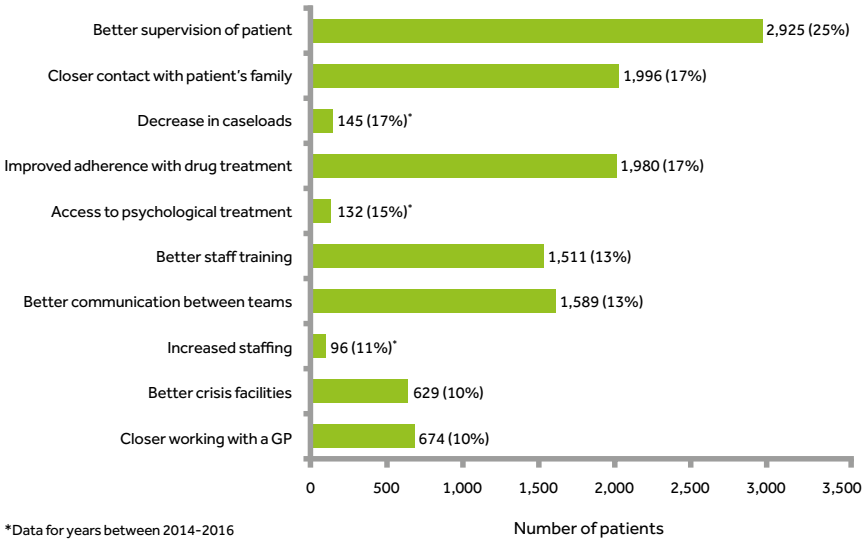


Figure 32:Patient suicide in England: factors that may have reduced risk

HOMICIDE

171. In 2006-2016, NCISH was notified of 5,699 homicide convictions, an average of 518 per year. There were 6,002 victims, an average of 546 per year.

HOMICIDE IN THE GENERAL POPULATION

172. The annual number of convictions in the general population is shown in Figure 33. More recent statistics have been published for England and Wales by the Office for National Statistics (ONS) based on the number of offences recorded annually.[23] There was a decrease in the number of people convicted of homicide over the report period and since a peak in 2008.

173. The most common method of homicide was the use of a sharp instrument (2,363, 43%) and hitting and kicking (1,023, 19%).

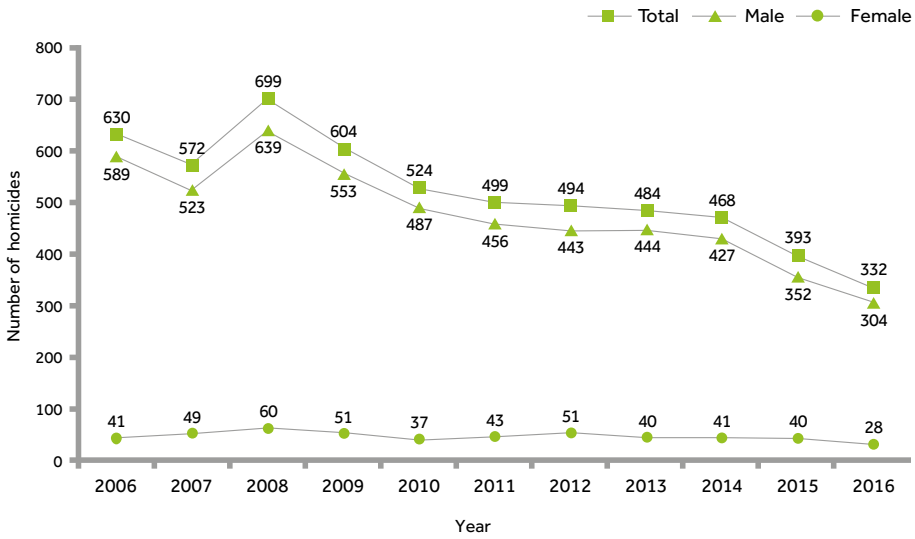


Figure 33: Number of homicide convictions in the general population in England, by gender of offender

Variation in homicide convictions by area of residence (NHS England Area Teams)

174. Homicide conviction rates varied by area of residence (by NHS England Area Team) (average rate 2014-2016). The highest rate was in North East London at 1.78 per 100,000 population, and the lowest in East Anglia at 0.35 per 100,000 (Figure 34).

Note: rates have been colour coded by approximate quartile

Area	Rate
East Anglia	0.35
Surrey & Sussex	0.42
Thames Valley	0.48
Wessex	0.50
Cheshire, Warrington & Wirral	0.52
Durham, Darlington & Tees	0.54
Bath, Gloucestershire, Swindon & Wiltshire	0.60
Devon, Cornwall & Isles of Scilly	0.61
Essex	0.62
Arden, Herefordshire & Worcestershire	0.63
Shropshire & Staffordshire	0.66
Leicestershire & Lincolnshire	0.71
Bristol, N Somerset & S Gloucestershire	0.72
Hertfordshire & the South Midlands	0.72
Derbyshire & Nottinghamshire	0.79
West Yorkshire	0.81
Lancashire	0.86
Kent & Medway	0.87
North Yorkshire & the Humber	0.87
Cumbria, Northumberland, Tyne & Wear	0.95
South London	0.99
Greater Manchester	1.02
South Yorkshire & Bassetlaw	1.12
Birmingham & the Black Country	1.15
Merseyside	1.19
North West London	1.29
North East London	1.78

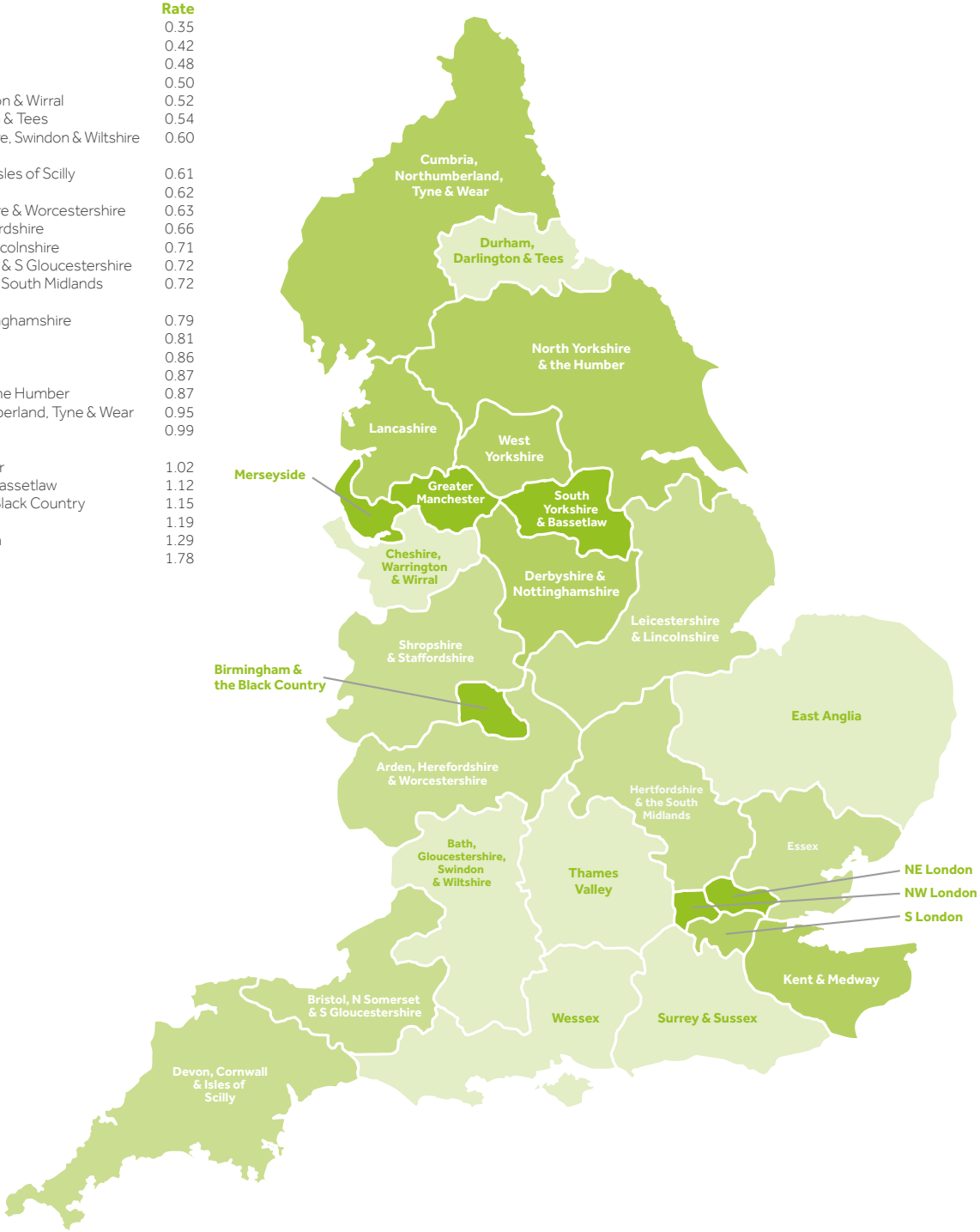


Figure 34: Rates of homicide convictions per 100,000 population by NHS area of residence (average rate 2014-2016)

HOMICIDE FOLLOWED BY SUICIDE

175. We were notified of 191 homicide-suicide offences between 2006 and 2016, an average of 17 per year. There were 246 victims in total and the median age of offenders was 45 (range 16-93). Most offenders were male (167, 87%).

176. The relationship of victim to offender was most commonly spouse/partner (current/ex) (130, 68%). 15 (8%) of the homicide-suicides were identified as patients.

PATIENT HOMICIDE

177. The total number of patient homicides is based on 600 confirmed convictions of patients for a homicide offence during 2006-2016, plus 8 additional cases for 2015-16, which we have estimated based on the proportion of expected final return of NCISH questionnaires, to give a total figure of 608 (Figure 35); which represents an average of 55 homicides per year. There were 641 victims, an average of 58 per year.

178. There was a fall in the number of patient homicides over the whole report period when examined by both year of conviction, and by year of offence (Figure 36). Recent figures show the lowest numbers since 2009.

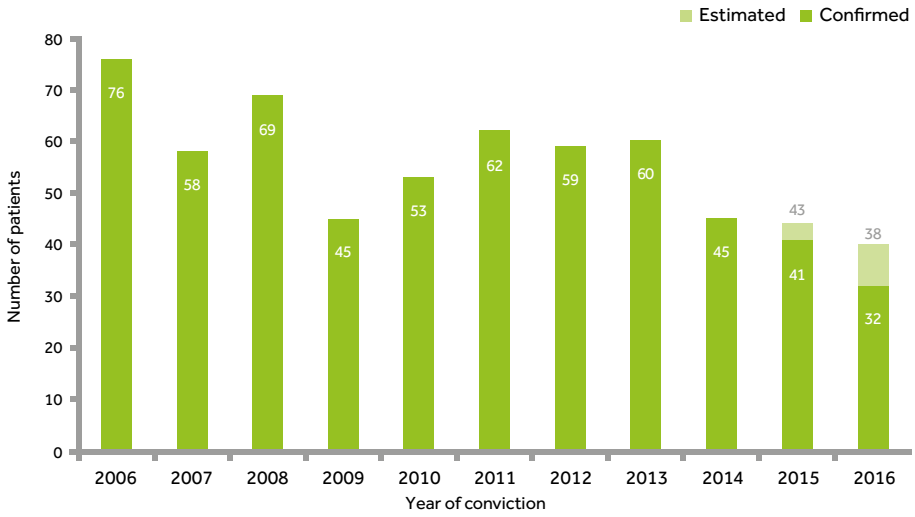


Figure 35: Number of patient homicides in England

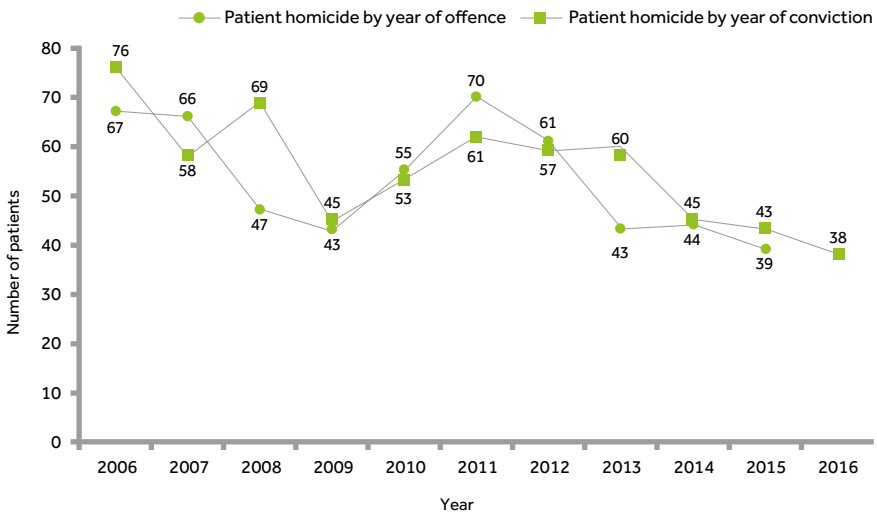


Figure 36: Number of patient homicides in England, by year of offence and year of conviction
Note: homicide numbers by year of offence for 2016 are not provided due to incomplete data

Social and clinical characteristics of homicide offenders

179. Table 14 shows the main social and clinical features of patient homicide offenders. Rates of unemployment as well as previous conviction history remain high. 8% were homeless. Over half of the patients had a history of violence or self-harm.

180. The most common primary diagnosis was schizophrenia and other delusional disorders, followed by drug dependence/misuse (Figure 37). Of the 'other' diagnoses, 19 (3%) had attention deficit hyperactivity disorder (ADHD)/conduct disorder, 13 (2%) had anxiety disorder and 11 (2%) had adjustment disorder.

Table 14: Characteristics of patient homicide offenders in England (2006-2016)

	Total N = 608	
	Number	%
Demographic features		
Age: median (range)	33 (13-83)	
Male	521	86
Not currently married	271/334	81
Living alone	91/299	30
Unemployed/on long-term sick	268/327	82
Black and minority ethnic group	121	20
Homeless	24/308	8
Behavioural features		
History of self-harm	292	51
History of violence	312	53
Any previous convictions	442	76
History of alcohol misuse	417	71
History of drug misuse	457	77
Abnormal mental state at the time of offence	202	33

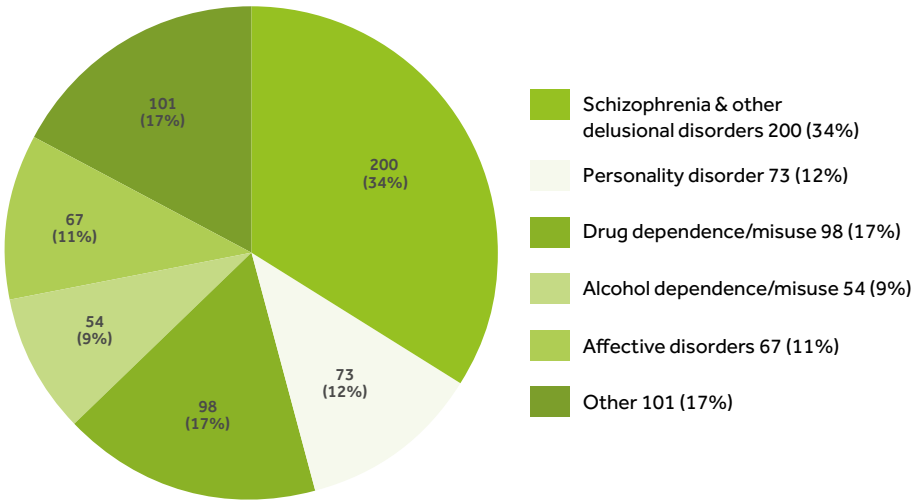


Figure 37: Patient homicide in England: primary psychiatric diagnosis

Offence characteristics

181. Table 15 shows the characteristics of the offences committed by patients. Half were convicted of murder and the majority received a custodial sentence. There was a fall in the number of homicide offenders receiving a prison sentence over the report period. 17% received a manslaughter by diminished responsibility verdict.

Table 15: Offence characteristics of patient homicide offenders in England (2006-2016)

	Total N = 608	
	Number	%
Offence variables		
Age of victim: median (range)	42 (0-89)	
Male victim	413	68
Victim was a stranger	86	16
Sharp instrument used	334	57
Final outcome		
Murder	315	52
Manslaughter (diminished responsibility)	104	17
Manslaughter (other including provocation, self-defence)	173	28
Infanticide	4	1
Unfit to plead/not guilty by reason of insanity	12	2
Sentencing outcome		
Prison	446	74
Hospital order (with or without restriction)	143	24
Other non-custodial sentence	16	3

Relationship of victim to offender

182. The relationship of victim to offender was acquaintance (256, 47%); family member (107, 20%); spouse/partner (including current/ex) (97, 18%); and stranger (86, 16%).

183. The number of stranger homicides fell over the report period and since a peak in 2006, having risen in the previous years. There were 74 homicides in which a male patient killed a female spouse/partner (including current/ex), 12% of all patient homicides.

Homicide and schizophrenia

184. There were 330 homicides by people with a history of schizophrenia (includes other delusional disorders) over 2006-2016, 6% of all those convicted of homicide, an average of 30 per year. The numbers have been stable over the report period, however there was a peak of 44 cases in 2013 (Figure 38). This peak in 2013 was likely to reflect the court process with more offenders tried in that year, as no similar rise was shown when examined by year of offence. After a rise in the number of homicides by people with a diagnosis of schizophrenia in 2015, we are estimating a fall in 2016. 247 (92%) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence.

185. 202 (61%) were patients, an average of 18 per year. After a rise in 2015 we report a fall in 2016. Although diagnosis information would be collected from our questionnaire data, some of the fall in 2016 may likely be affected by the discontinued collection of psychiatric report data (Figure 38).

186. Almost three-quarters of all known victims were either an acquaintance (65, 38% excluding unknowns) or a family member (61, 35%). 26 (15%) victims were a stranger and 21 (12%) were a spouse.

187. There were 115 (63%) patients who did not miss their their final service contact and 131 (70%) who were adherent with treatment.

188. 174 (87%) patients with a primary diagnosis of schizophrenia had a history of alcohol and/or drug misuse. Almost half of all patients with schizophrenia misused cannabis (90, 49% excluding unknowns), or misused alcohol (93, 48%), whilst 61 (33%) misused stimulants.

189. Over one-third of all patients with a primary diagnosis of schizophrenia were convicted of murder (67, 33%), and 85 (42%) received a custodial sentence.

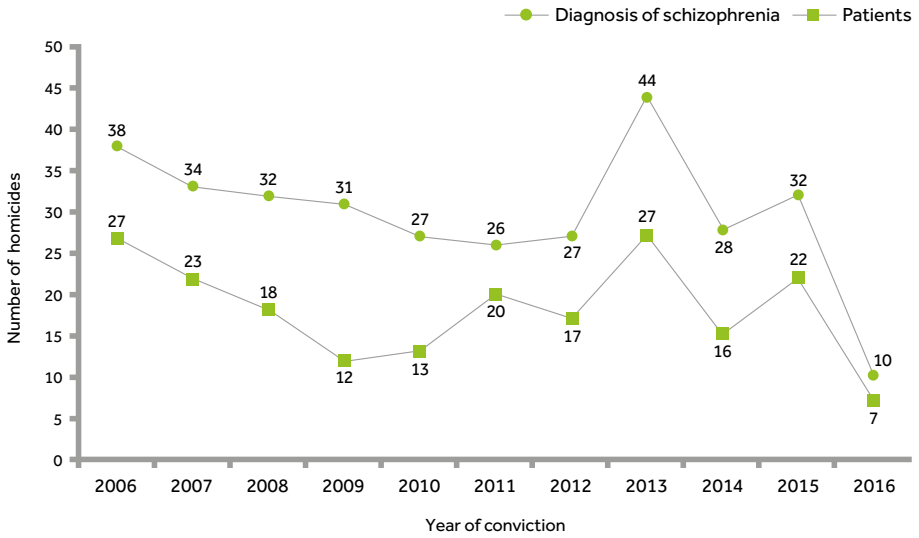


Figure 38: Offenders with a primary diagnosis of schizophrenia and other delusional disorders in England, by year of conviction

Patients with alcohol and drug misuse

190. 417 (71%) patients had a history of alcohol misuse, an average of 38 per year (Figure 39). 457 (77%) patients had a history of drug misuse, an average of 42 per year (Figure 39). 81 (14% excluding unknowns) had no history of alcohol and/or drug misuse (Table 16). There was a fall in the number of patients with alcohol and/or drug misuse over the report period. The most common substance misused was alcohol (276, 51%).

Table 16: Patient homicide in England: primary diagnosis and history of alcohol and/or drug misuse

Primary diagnosis	History of alcohol misuse	History of drug misuse	History of alcohol and/or drug misuse	No history of alcohol or drug misuse
Schizophrenia (& other delusional disorders)	141 (71%)	164 (83%)	174 (87%)	25 (13%)
Affective disorder	41 (61%)	32 (48%)	45 (67%)	22 (33%)
Personality disorder	61 (85%)	62 (87%)	67 (92%)	6 (8%)
All patients	**417 (71%)**	**457 (77%)**	**515 (86%)**	**81 (14%)**

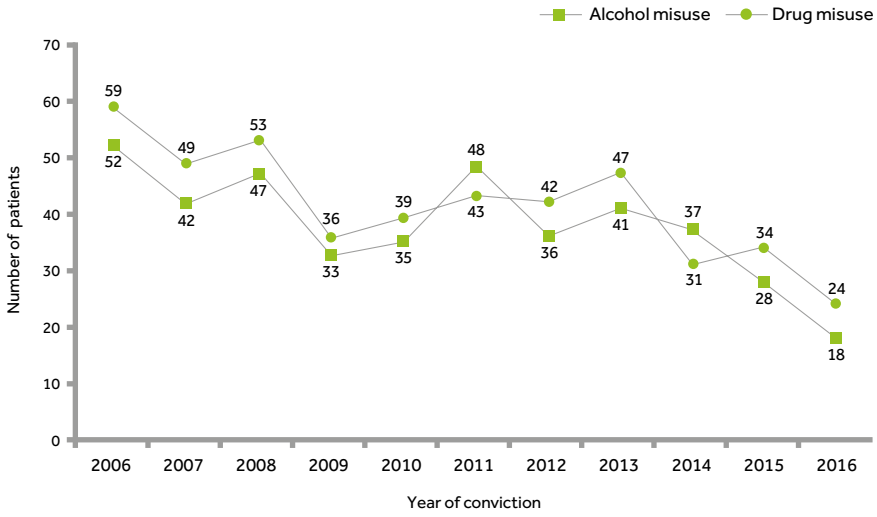


Figure 39: Patient homicide in England: number with a history of alcohol or drug misuse

MENTAL HEALTH CARE

Acute care

191. There were 19 (3%) homicides by in-patients. There were 45 homicides within 3 months of discharge from in-patient care, 8% of all patient homicides, an average of 4 homicides per year. The number of post-discharge homicides fell between 2006-2013 but there was a rise in the most recent years in 2014 (6 cases) and 2016 (7 cases). 12 (7%) patients committed homicide within 2 weeks of discharge from mental health services.

Crisis Resolution/ Home treatment

192. 32 (6% excluding unknowns) patients in 2006-2016 were under crisis resolution/home treatment (CRHT) teams at the time of the homicide. This is an average of 3 per year, with the highest number recorded in 2006 (6 cases). The majority of all known victims were either spouse (12, 39%) or other family members (11, 35%).

Recent contact with mental health services

193. 314 (52%) patients committed homicide 1-4 weeks after their final service contact. 114 (64% excluding unknowns) of those had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence. Of these, 11 (11%) were under the care of an early intervention team for psychosis.

Non-adherence and missed contact

194. In total, 258 (48%) patients were either non-adherent or had missed their final contact with services and were therefore not in receipt of planned treatment prior to the homicide. This number has fallen over the report period, with a 59% fall between 2006-2015.

Forensic history

195. 312 (53%) patients had been convicted of a previous violent offence, 275 (49%) had previously been in prison. 39 (7%) had a history of admission to a secure unit. A quarter of patients had previously been involuntarily detained under mental health legislation (149, 25%). Over 30% of all patients (187, 31%) had no forensic history (previous violent offence, admission to a secure unit or been in prison) and no previous detention prior to homicide.

NORTHERN IRELAND

NORTHERN IRELAND

SUICIDE

196. Between 2006-2016, NCISH was notified of 2,956 deaths in the general population that were registered as suicide or "undetermined", an average of 269 per year. These are referred to here as suicides.

SUICIDE IN THE GENERAL POPULATION

197. There was an increase in the overall number and rate of suicides in 2006-2015 but a fall in 2016 (Figures 40 and 41). Some deaths are not registered for several months or longer which means that our figures for the most recent years underestimate the final figures.

198. The number of both male and female suicides increased in 2006-2015, although the rates significantly increased in females only.

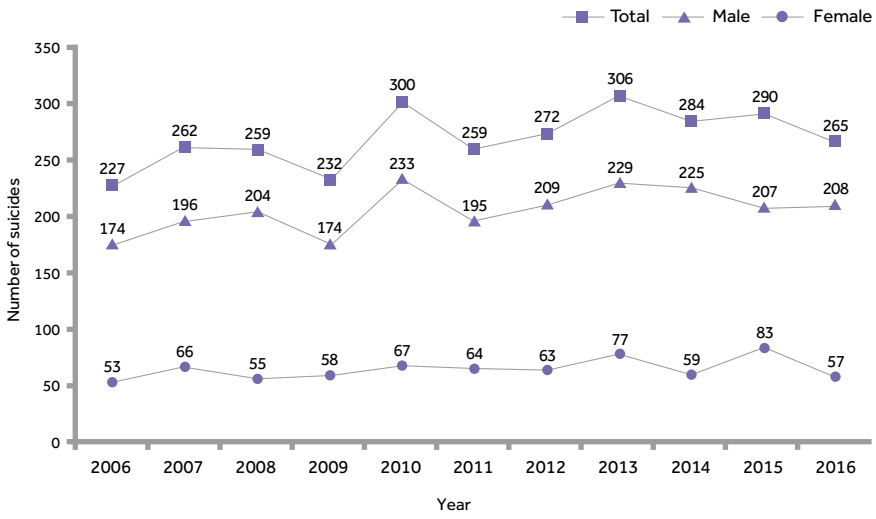


Figure 40: Number of suicides in the general population in Northern Ireland, by gender

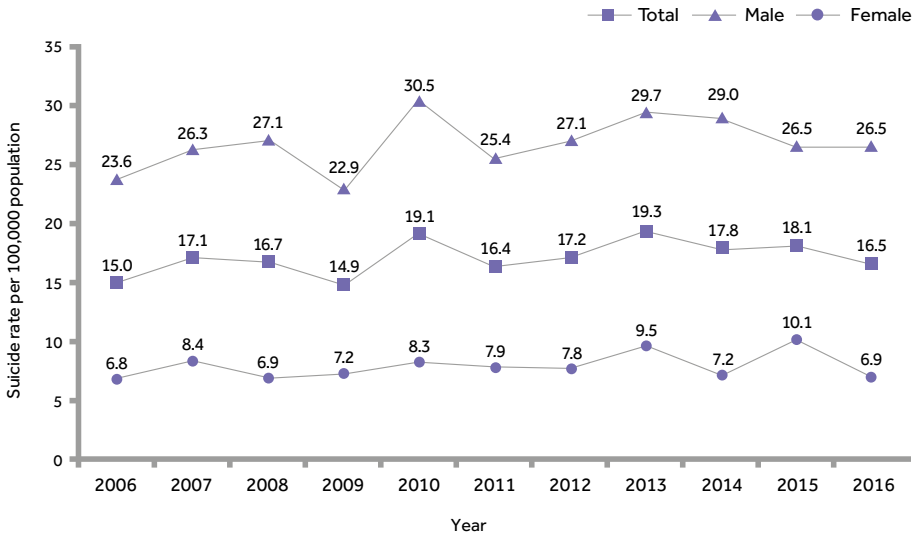


Figure 41: Rates of suicide in the general population in Northern Ireland, by gender

Variation in suicide rates by area of residence

199. There were variations by area of residence (by Health and Social Care Trust) at the time of death (average rate 2014-2016). The highest rate of suicide was in Belfast at 22.8 per 100,000 population, and the lowest in the Northern Area, at 14.4 per 100,000 population (Figure 42).

Health & Social Care Trust	Rate
Belfast	22.8
Western	17.3
South Eastern	16.2
Southern	15.2
Northern	14.4

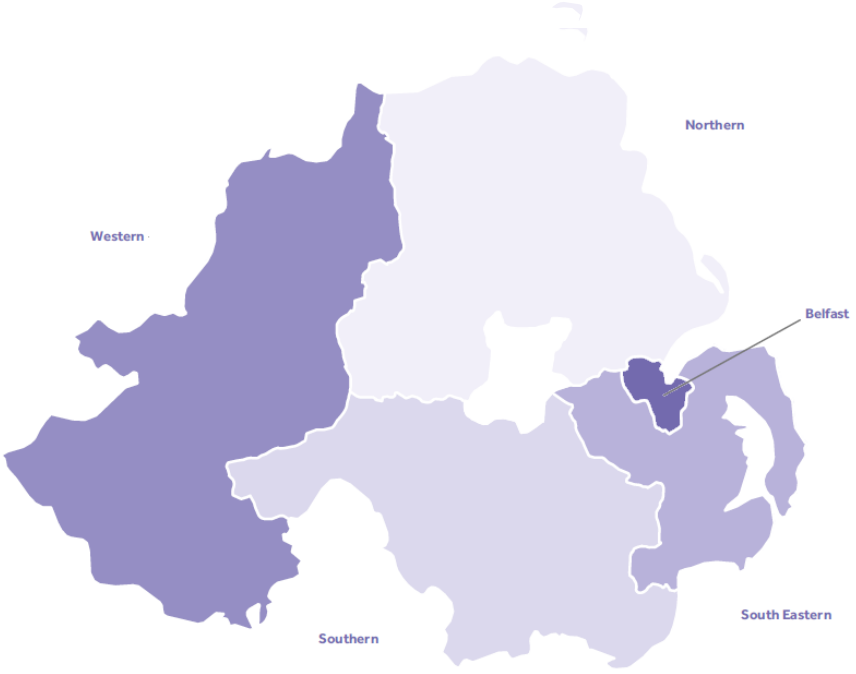


Figure 42: Rates of suicide per 100,000 population, by Health and Social Care Trust of residence

Method of suicide

200. The most common methods of suicide were hanging/strangulation (1,622, 55%), self-poisoning (overdose) (826, 28%), and drowning (222, 8%). Less frequent methods were firearms (91, 3%), gas inhalation (47, 2%), jumping and multiple injuries (mainly jumping from a height or being struck by a train) (46, 2%), and cutting and stabbing (38, 1%).

201. Deaths by hanging/strangulation reached a peak in 2010 but have since fallen, especially since 2013 (Figure 43). Deaths by self-poisoning have increased sharply since 2012, and in 2015 rose to the highest number during the report period, nearly doubling in 3 years. Some of this increase is accounted for by an increase in opiate deaths. There was no change in the number of deaths by other methods over the report period.

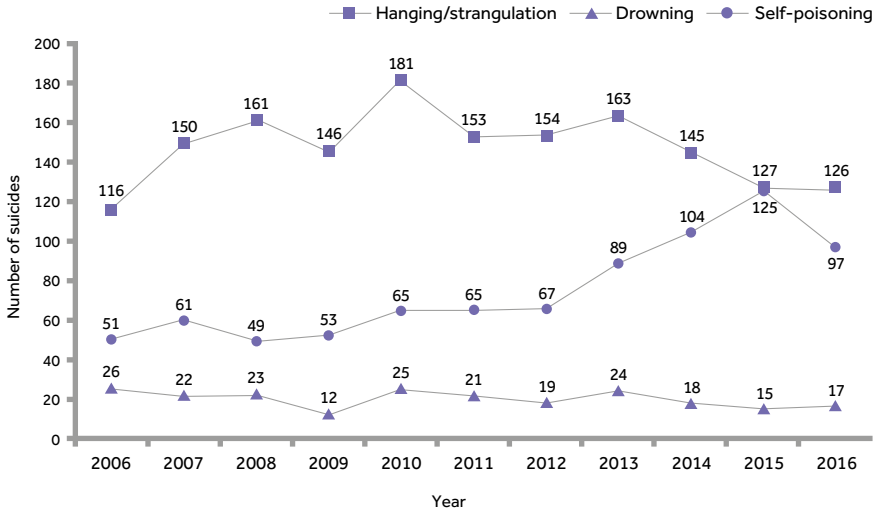


Figure 43: Suicide in the general population in Northern Ireland: main causes of death

PATIENT SUICIDE

Patient suicide: numbers and rates

202. During 2006-2016, 794 suicides (27% of general population suicides) were identified as patient suicides, i.e. the individual had been in contact with mental health services in the 12 months prior to death. This represents an average of 72 patient suicides per year.

203. There was no significant change in the number of suicides between 2006 and 2015, despite an increase in 2015 (Figure 44). There was an increase in the number of male suicides in 2015 while the number of female suicides has fallen since 2014 (Figure 45). There was no change in the rate of suicide using a general population denominator in 2006-2015 (Figure 46).

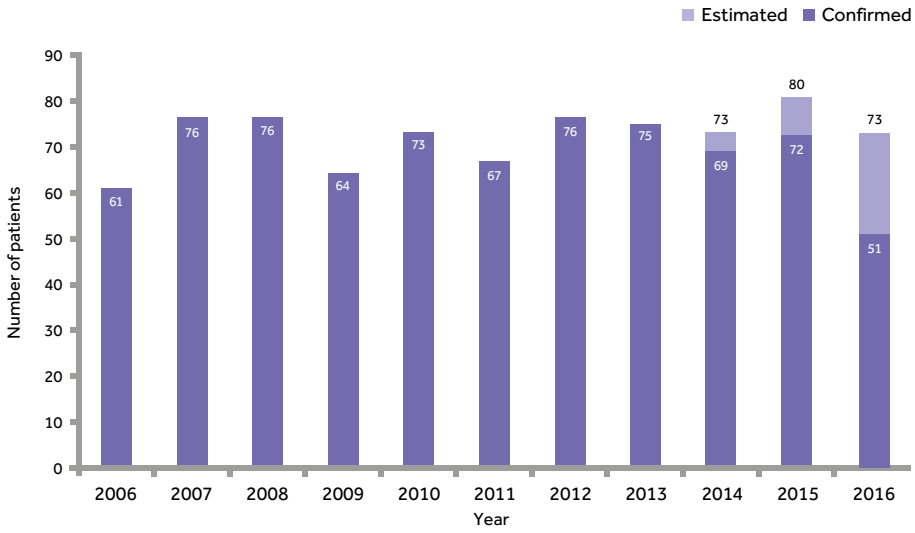


Figure 44: Number of patient suicides in Northern Ireland

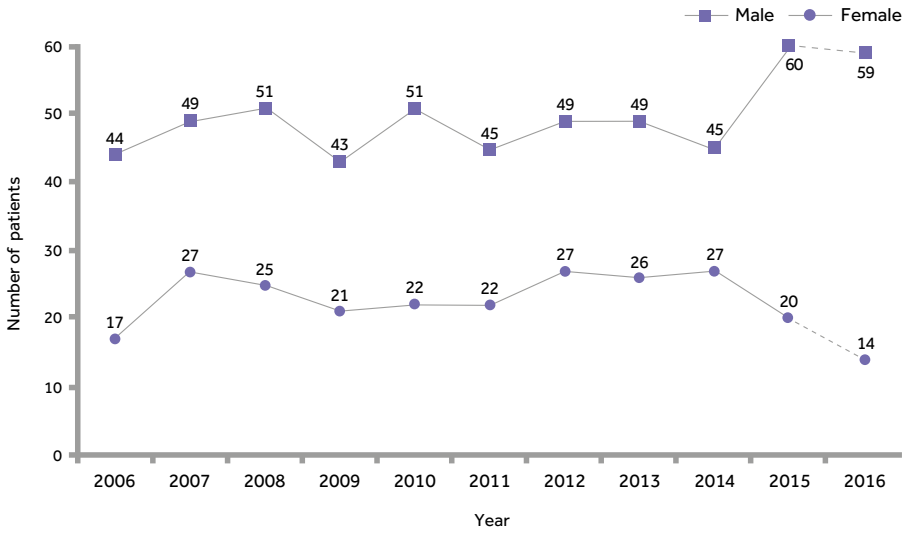


Figure 45: Number of patient suicides in Northern Ireland, by gender

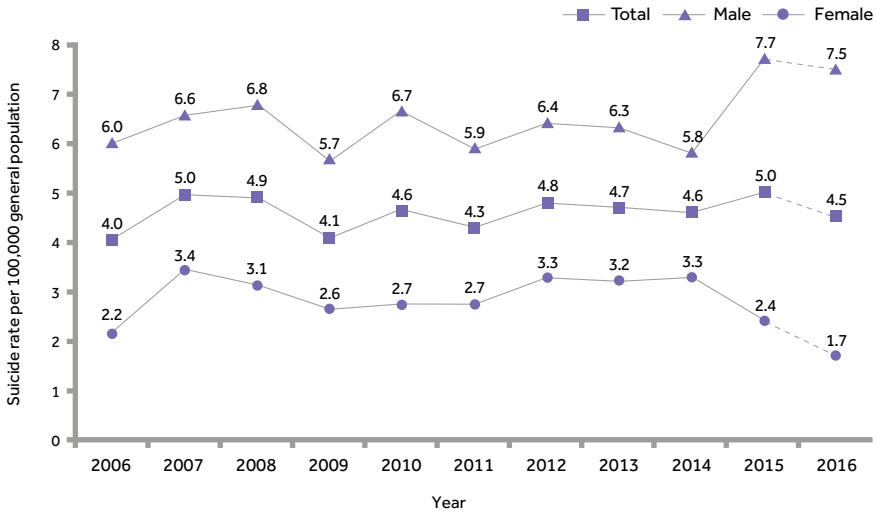


Figure 46: Rates of patient suicide in Northern Ireland, by gender

Method of suicide by patients

204. The most common methods of suicide by patients were hanging/strangulation (373, 49%), self-poisoning (252, 33%) and drowning (70, 9%). The proportion of deaths by hanging/strangulation, self-poisoning and drowning was higher in Northern Ireland compared to the rest of the UK (Figure 47) with fewer deaths by jumping/multiple injuries (2% v. 15%).

205. The number of suicides by self-poisoning doubled between 2006 and 2015. The most common substances used in self-poisoning were opiates/opioids, antipsychotic drugs and antidepressants (Table 17). There were more deaths using benzodiazepines/hypnotics compared to the rest of the UK (8% v. 4%).

206. The number of deaths by opiates increased fourfold between 2006 and 2015. Information on the source of the opiates/opioids was available in 46%. In 28 (67% excluding unknowns) the opiates had not been prescribed for the patient. We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (12, 26%), tramadol (11, 24%) and codeine (7, 15%).

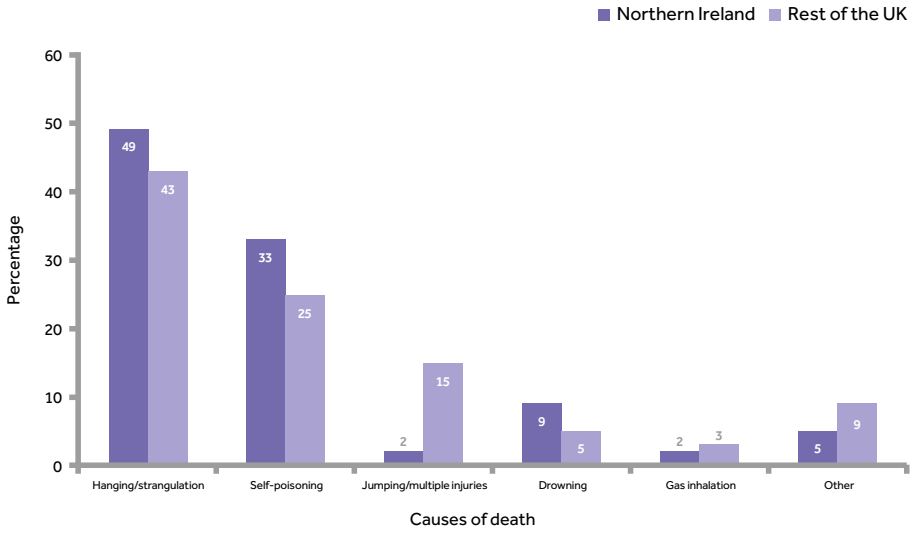


Figure 47: Patient suicide in Northern Ireland: main causes of death v. rest of the UK

Table 17: Main substances used in deaths by self-poisoning in Northern Ireland

Substance	Deaths by self-poisoning N= 252	
	Number	%
Opiates/opioids	91	40%
- opiates only	79	35%
- paracetamol/opiate compound	12	5%
Non-opiate analgesics	7	3%
Antipsychotics	38	17%
Antidepressants	23	10%
- tricyclics	12	5%
- SSRI/SNRIs	9	4%
- other antidepressants	<3	-

Social and clinical characteristics

207. Table 18 shows the main social, clinical and behavioural features of patients compared to the rest of the UK. Patients in Northern Ireland were more likely to be male, aged under 45, white, and be unemployed or on long-term sick leave compared to the rest of the UK.

208. Co-morbidity was more common in Northern Ireland compared to the rest of the UK and patients were more likely to have been ill for longer than 12 months before suicide. There were also higher rates of previous self-harm, violence, and alcohol or drug misuse.

Table 18: Characteristics of patients who died by suicide in Northern Ireland (2006-2016)

	Northern Ireland N=794		Rest of the UK N=17,137	
	Number	%	Number	%
Demographic features				
Age: median (range)	42 (16-92)		45 (10-100)	
Aged under 25†	84	11	1,302	8
Male†	545	69	11,370	66
Not currently married	545	75	11,496	72
Living alone	330	46	7,666	48
Unemployed	379	52	7,211	46
On long-term sick leave	131	18	2,165	14
Black and minority ethnic group	8	1	1,074	7
Homeless	13	2	405	3
Clinical features				
Any secondary diagnosis	431	57	8,385	51
Duration of illness (<12 months)	120	17	3,175	20
First contact with mental health services:				
<12 months	166	24	4,283	24
>5 years	326	47	6,758	45
Last admission was a re-admission	67	15	1,154	14
Behavioural features				
History of self-harm	542	73	10,804	67
History of violence	192	27	3,498	22
History of alcohol misuse†	494	63	7,797	47
History of drug misuse†	331	43	5,864	36

† includes estimated figures in 2014-2016

Diagnosis

209. The most common primary diagnoses were affective disorders (222, 30%, including 193 (26%) with depressive illness and 29 (4%) with bipolar disorder); alcohol dependence/misuse (158, 21%) and schizophrenia (includes other delusional disorders) (106, 14%) (Figure 48). 62 (8%) had an 'other' diagnosis, most commonly an anxiety disorder (35, 5%). A lower proportion of patients in Northern Ireland had a primary diagnosis of affective disorders compared to the rest of the UK but they more often had alcohol or drug dependence/misuse (Figure 48).

210. We carried out a detailed mixed-methods investigation of suicide in patients with personality disorder, combining quantitative and qualitative data collection. The report was published in February 2018 (see page 127 for a summary of the report) and can be found on our website at: **www.manchester.ac.uk/ncish**

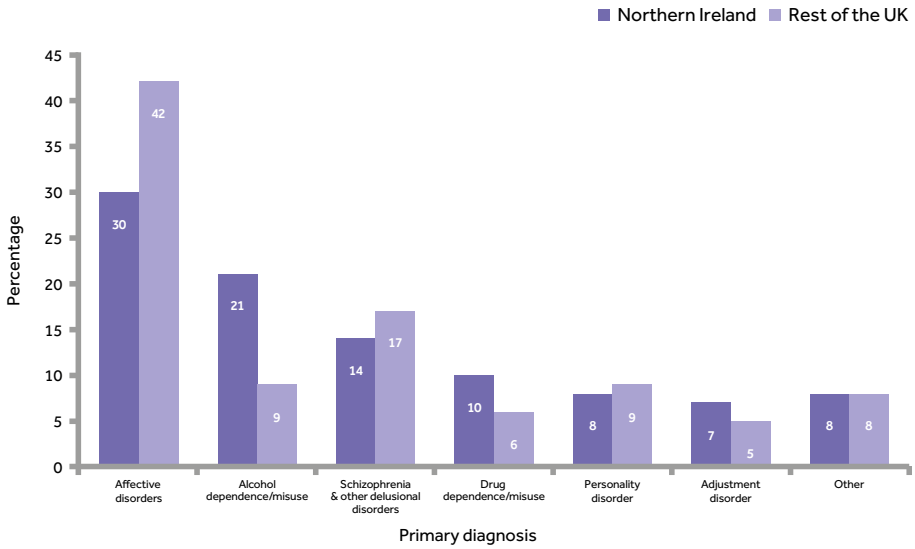


Figure 48: Patient suicide in Northern Ireland, v. rest of the UK: primary diagnosis

Patients with alcohol and drug misuse

211. There were an estimated 494 suicides in patients with a history of alcohol misuse, 63% of the total sample, an average of 45 deaths per year (Figure 49). 331 had a history of drug misuse, 43% of the total sample, an average of 30 deaths per year (Figure 49). 550 had a history of either alcohol or drug misuse or both, 70% of patient suicides, an average of 50 deaths per year.

212. Between 2006 and 2015, there was no significant trend in the annual number or proportion of patient suicides with a history of alcohol misuse, though numbers were lower in 2006-2007. There was an increase in patients with drug misuse over the report period. Between 2011-2016, 54 (20%) patients who died were under drug services, 71 (27%) were under alcohol services, and 93 (35%) were under either drug or alcohol services.

213. The most common substances misused in the 3 months prior to suicide were alcohol (66%), cannabis (20%) and benzodiazepines (19%).

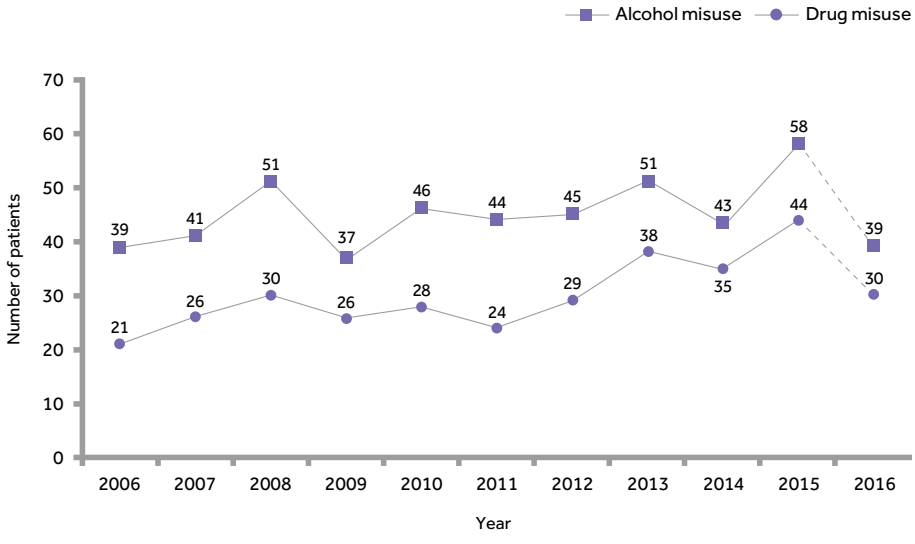


Figure 49: Patient suicide in Northern Ireland: number with a history of alcohol or drug misuse

MENTAL HEALTH CARE

214. Table 19 and Figure 50 show the key service-related characteristics of patients compared to the rest of the UK.

Table 19: Service characteristics of patients who died by suicide in Northern Ireland (2006-2016)

Characteristic	Northern Ireland N=794		Rest of the UK N=17,137	
	Number	%	Number	%
In-patients†	29	4	1,342	8
Recent (<3 months) discharge†	130	16	2,758	17
Under crisis resolution/home treatment services†	48	6	2,368	14
Missed last contact in previous month†	267	35	3,750	24
Non-adherence with medication in previous month†	77	11	1,934	13
Contact with services				
Last contact within 7 days of death	271	36	7,783	47
Short-term risk: low or none	621	89	12,768	85
Long-term risk: low or none	416	60	8,622	59

† includes estimated figures in 2014-2016

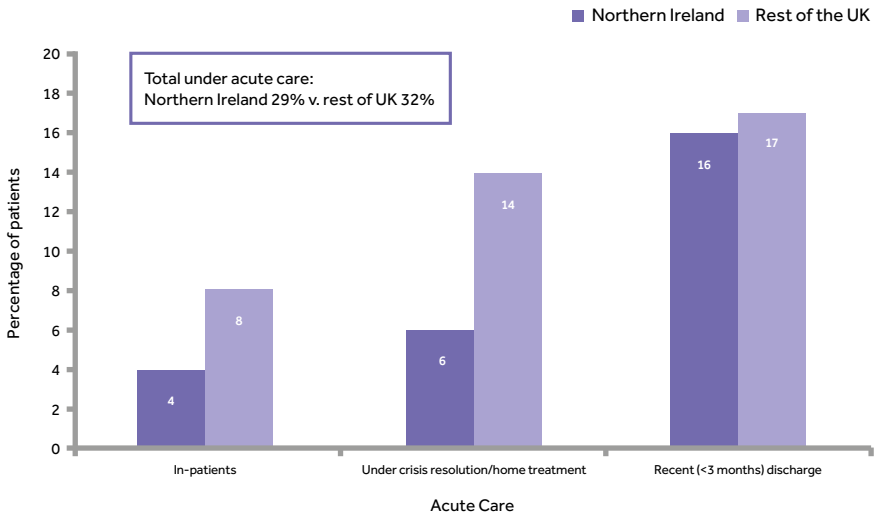


Figure 50: Patient suicide in Northern Ireland v. rest of the UK: percentage under acute care

In-patient suicide

215. There were 29 in-patient deaths by suicide between 2006-2016, 4% of patient suicides. This was significantly lower compared to the rest of the UK (Figure 50). The highest number of in-patient suicide deaths was 5 in 2009.

216. 8 patients died on the ward by hanging/strangulation over the report period. 7 in-patients died after leaving the ward without staff agreement, 25% of all in-patient suicides.

Crisis Resolution/ Home Treatment

217. There were 48 suicides in patients under crisis resolution/home treatment (CRHT) teams, 6% of all deaths, a lower proportion compared to the rest of the UK (Figure 50). There was no overall trend in the number of suicides under CRHT, but the highest figures were in 2007 (7 deaths) and 2012 (8 deaths). Since 2011 there have been 28 suicides in patients under CRHT compared to 15 in in-patient care.

Patients recently discharged from hospital

218. There were 130 suicides within 3 months of discharge from in-patient care, 16% of all patient suicides, an average of 12 deaths per year. The proportion was similar to the rest of the UK (Figure 50). The number of post-discharge suicides peaked in 2007 (15 deaths) but otherwise there was no trend over the report period.

219. Post-discharge suicides were most frequent in the first week after leaving hospital when 23 deaths occurred, 18% of all suicides within 3 months of hospital discharge. Of these, the highest number (6 deaths) occurred on the first and fourth days after discharge.

220. In 14 (11%) of post-discharge suicides the patient had been detained under the Mental Health Act (MHA) at the last admission. For 43 (36%) patients the last admission had lasted less than a week. 30 (25%) patients had initiated their own discharge from hospital, including self-discharge and after breaching ward rules.

Child and adolescent mental health services (CAMHS)

221. There were 20 suicides by patients aged under 25 who had been under the care of CAMHS in 2006-2016, 29% of all young patients under 25.

What could have reduced risk?

222. We asked clinicians, in their opinion, what factors may have made the suicide less likely at the time. The most common factors were: adherence with treatment (18%), closer supervision of the patient (11%), increased access to psychological therapies (11%), and decrease in caseloads (11%) (Figure 51).

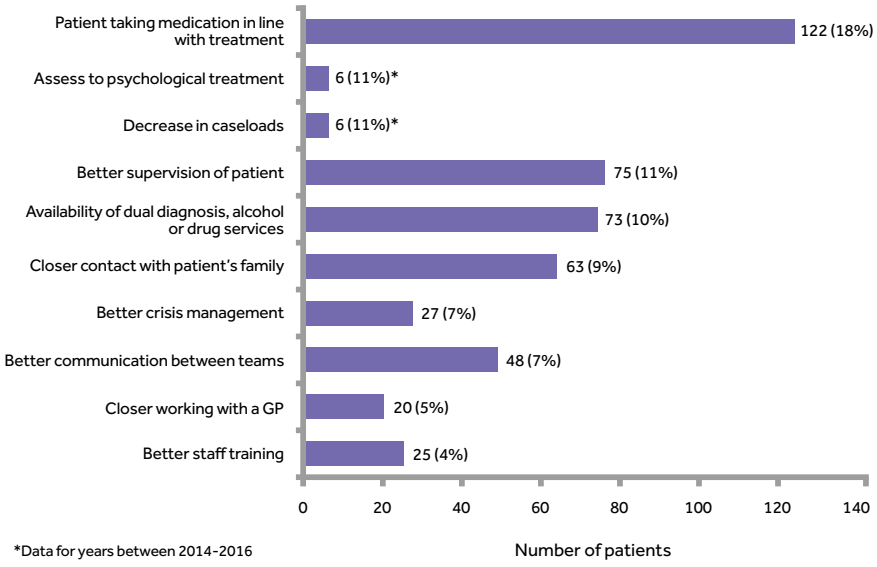


Figure 51: Patient suicide in Northern Ireland: factors that may have reduced risk

HOMICIDE

223. In 2006-2014, NCISH was notified of 188 homicide convictions, an average of 21 a year. There were 197 victims, an average of 22 per year.

HOMICIDE IN THE GENERAL POPULATION

224. The annual number of homicide convictions in the general population is shown in Figure 52. More recent homicide statistics are published by the Police Service of Northern Ireland.[24] The numbers have fluctuated over the report period with no overall trend.

225. The most common method of homicide was the use of a sharp instrument (62, 39%) followed by hitting and kicking (46, 29%).

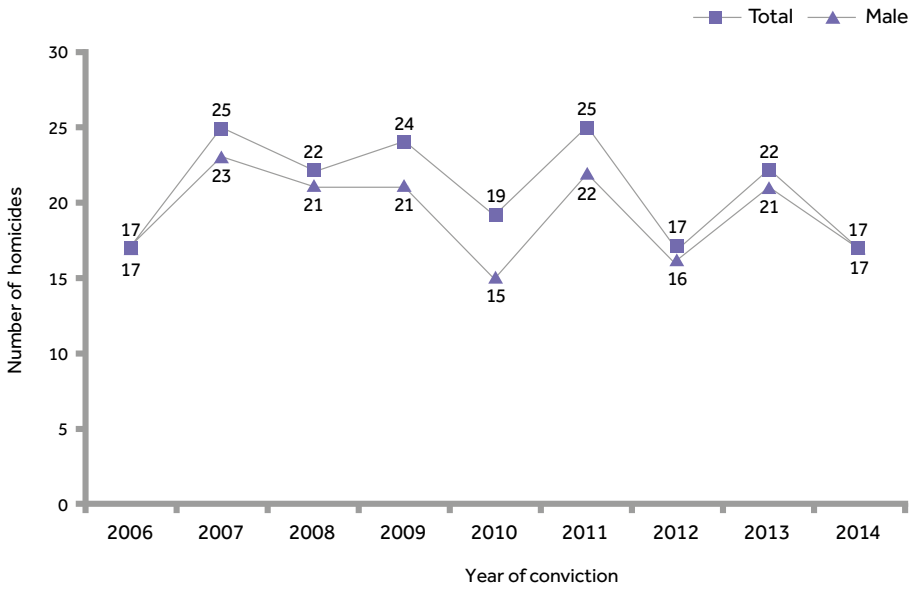


Figure 52: Number of homicide convictions in the general population in Northern Ireland, by gender of offender

Note: data not available for 2015 and 2016.

PATIENT HOMICIDE

226. During 2006-2014, 17 people convicted of homicide (9% of the total sample), were confirmed as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence, an average of 2 per year. There were 17 victims. The numbers fluctuated over the report period but were too small to examine trends over time.

Social and clinical characteristics of homicide offenders

227. Table 20 shows the main social and clinical features of patient homicide offenders. These patients had high rates of unemployment and most of the offenders and victims were male. The majority had a history of violence, self-harm, and alcohol or drug misuse, a higher proportion compared to rest of the UK. Although the numbers were small, a higher proportion had a diagnosis of alcohol dependence/misuse compared to the rest of the UK.

Table 20: Characteristics of patient homicide offenders in Northern Ireland v. rest of the UK

	Northern Ireland N=17		Rest of the UK N=768	
	Number	%	Number	%
Demographic features				
Age: median (range)	29 (18-48)		32 (13-83)	
Male	16	94	657	86
Not currently married	12	80	359	80
Unemployed/on long-term sick leave	11/13	85	366	83
Black and minority ethnic group	<3	-	125	19
Living alone	<3	-	116	29
Homeless	3	25	29	7
Behavioural features				
History of self-harm	12	75	382	53
History of violence	12	86	365	53
Any previous convictions	15	94	530	77
History of alcohol misuse	17	100	542	74
History of drug misuse	15	88	589	80
Abnormal mental state at the time of offence	5	33	230	33
Primary diagnosis (lifetime)				
Schizophrenia and other delusional disorders	3	18	236	31
Affective disorders (bipolar and depression)	<3	-	82	11
Personality disorder	3	18	89	12
Alcohol dependence/misuse	5	29	78	11
Drug dependence/misuse	3	18	134	18

† includes estimated figures in 2014-2016

228. Table 21 shows the offence characteristics of patient homicide offenders. Most of the patients received a custodial sentence (94%). 29% were convicted of murder, lower than the rest of the UK, whilst almost two-thirds were convicted of manslaughter (other including provocation, self-defence), higher compared to the rest of the UK.

Table 21: Offence characteristics of patient homicide offenders in Northern Ireland v. rest of the UK

	Northern Ireland N=17		Rest of the UK N=768	
	Number	%	Number	%
Offence variables				
Age of victim: median (range)	50 (19-76)		42 (0-89)	
Male victim	15	88	525	69
Victim was a stranger	<3	-	109	16
Sharp instrument used	7/15	47	430	58
Final outcome				
Murder	5	29	428	56
Manslaughter (diminished responsibility)	<3	-	112	17
Manslaughter (other including provocation, self-defence)	11	65	181	28
Infanticide	<3	-	4	1
Unfit to plead/not guilty by reason of insanity	<3	-	12	2
Sentencing outcome				
Prison	16	94	582	76
Hospital order (with or without restriction)	<3	-	165	22
Other non-custodial sentence	<3	-	16	2

Relationship of victim to offender

229. The most common relationship of victim to offender was acquaintance (10, 63%) followed by a family member or spouse/partner (5, 31%).

Homicide and schizophrenia

230. 6 people had a history of schizophrenia (includes other delusional disorders), 3% of those convicted of homicide. Of these, 3 (50%) were patients. All patients with a primary diagnosis of schizophrenia had a history of alcohol and drug misuse (3, 100%).

MENTAL HEALTH CARE

Contact with mental health services	**231.** There were no homicides committed by in-patients or patients under crisis resolution/home treatment teams. Less than 3 patients committed homicide within 3 months of discharge from mental health services.
Non-adherence and missed contact	**232.** 8 (62%) patients were either non-adherent or missed their final service contact and were therefore not in receipt of planned treatment just prior to the homicide.
Forensic and clinical history	**233.** 12 (86%) had been convicted of a previous violent offence. 9 (60%) had previously been in prison.

SCOTLAND

SCOTLAND

SUICIDE

234. Between 2006-2016, NCISH was notified of 8,601 deaths in the general population that were registered as suicide or "undetermined", an average of 782 per year. These are referred to here as suicides.

SUICIDE IN THE GENERAL POPULATION

235. Figures 53 and 54 show trends in suicide in the general population. An apparent increase in 2011 occurred due to the introduction of new death coding rules for drug misuse deaths in the International Statistical Classification of Diseases and Related Health Problems (ICD-10) (see paragraph 12). This meant deaths that would previously have been coded as due to 'mental and behavioural disorders due to psychoactive substance use' are in some cases now coded as suicide or undetermined deaths. For example, the figure in 2016 would be 708 deaths using the old coding compared to 721 deaths using the new coding rules. Throughout this report we show figures based on the new coding.

236. There has generally been a sustained fall (allowing for the coding change in 2011) in the number and rate of suicide since a peak in 2007-2008 (Figures 53 and 54) but an increase in 2016.

Figure 53: Number of suicides in the general population in Scotland, by gender

Note: the dotted line indicates when the change in death coding rules occurred. Figures presented are those using the new coding rules.

Figure 54: Rates of suicide in the general population in Scotland, by gender
Note: the dotted line indicates when the change in death coding rules occurred.

Variation in suicide rates by area of residence

237. Suicide rates varied by area of residence (by NHS Health Board) at the time of death (average rate 2014-2016). The highest rate of suicide was in Forth Valley, at 18.4 per 100,000 population, and the lowest rate was in Dumfries and Galloway, at 12.6 per 100,000 population (Figure 55).

Area	Rate
Dumfries & Galloway	12.6
Borders	12.7
Ayrshire & Arran	13.2
Lanarkshire	13.3
Greater Glasgow & Clyde	13.8
Fife	13.9
Shetlands, Orkney & Western Isles	14.0
Lothian	14.2
Tayside	15.0
Grampian	15.1
Highland	16.1
Forth Valley	18.4

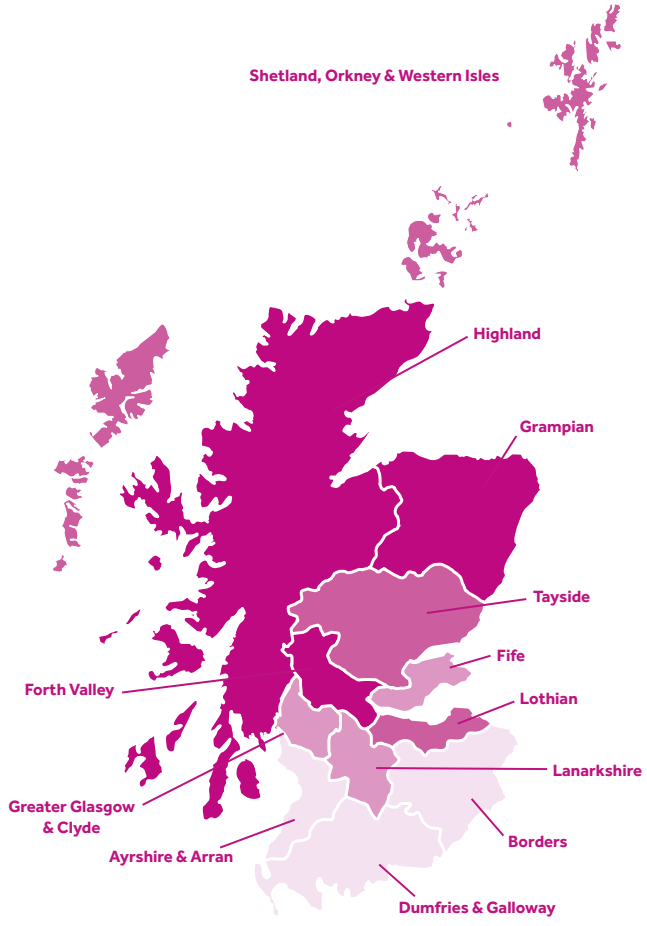


Figure 55: Rates of suicide per 100,000 population, by NHS Health Board of residence (average rate 2014-2016)
Note: rates have been colour coded by approximate quartile

Method of suicide

238. The most common methods of suicide were hanging/strangulation (3,554, 41%), self-poisoning (overdose) (2,661, 31%), jumping and multiple injuries (mainly jumping from a height or being struck by a train) (863, 10%) and drowning (569, 7%). Less frequent methods were gas inhalation (238, 3%), cutting and stabbing (193, 2%), and firearms (102, 1%).

239. Deaths by hanging/strangulation increased in 2008 but the number has not significantly changed since (Figure 56). The apparent increase in suicides by self-poisoning in 2011-2012 is the result of the death coding rule change described above, but the number has since fallen. Deaths by drowning decreased by 51% between 2006 and 2016 (Figure 56) whilst there was no overall change in the number of deaths by less common methods despite fluctuations year on year (Figure 57).

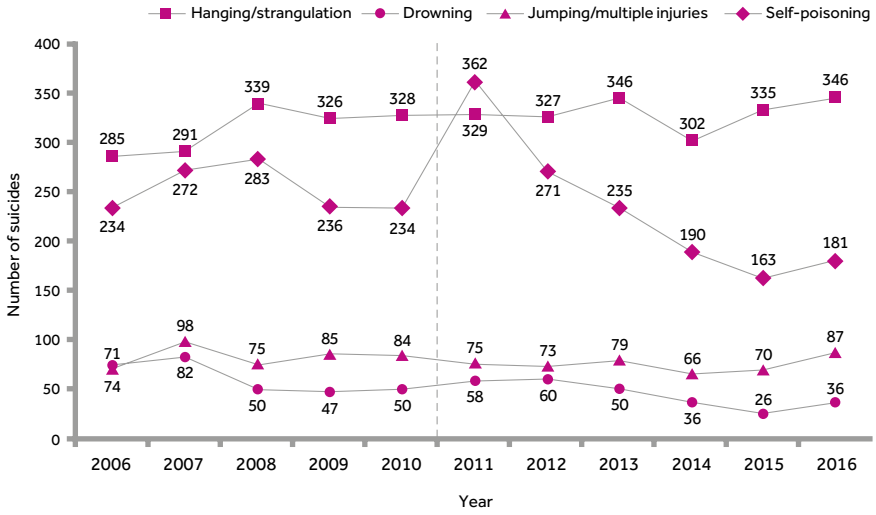


Figure 56: Suicide in the general population in Scotland: main causes of death
Note: the dotted line indicates when the change in death coding rules occurred.

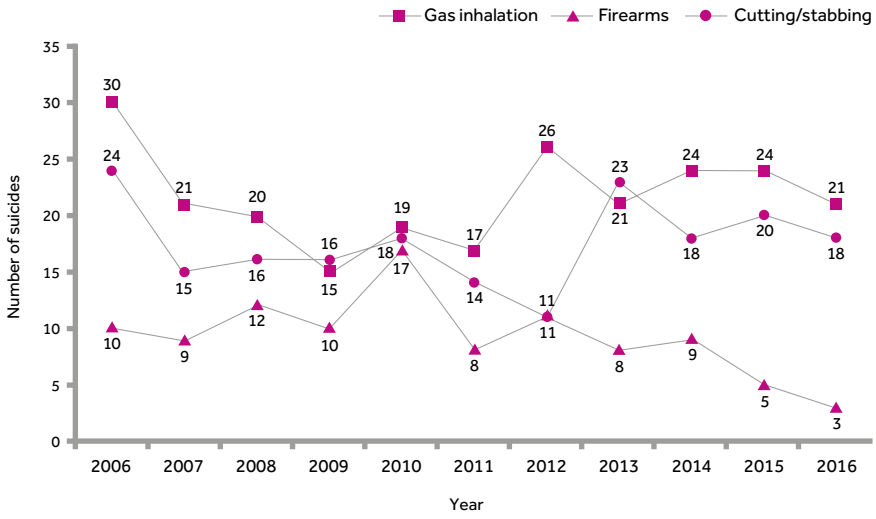


Figure 57: Suicide in the general population in Scotland: other causes of death

PATIENT SUICIDE

Patient suicide: numbers and rates

240. During 2006-2016, 2,658 suicides (31% of general population suicides) were identified as patient suicides, i.e. the individual had been in contact with mental health services in the 12 months prior to death. This represents an average of 242 patient suicides per year.

241. The increase in suicide figures in 2011-2013 for the general population resulting from a death coding change is also reflected in the figures for patient suicides in these years (Figures 58-60). There has been a fall in patient suicides since 2011 with lower figures in 2014-2016 (Figure 58), and this is seen mainly in males (Figures 59-60).

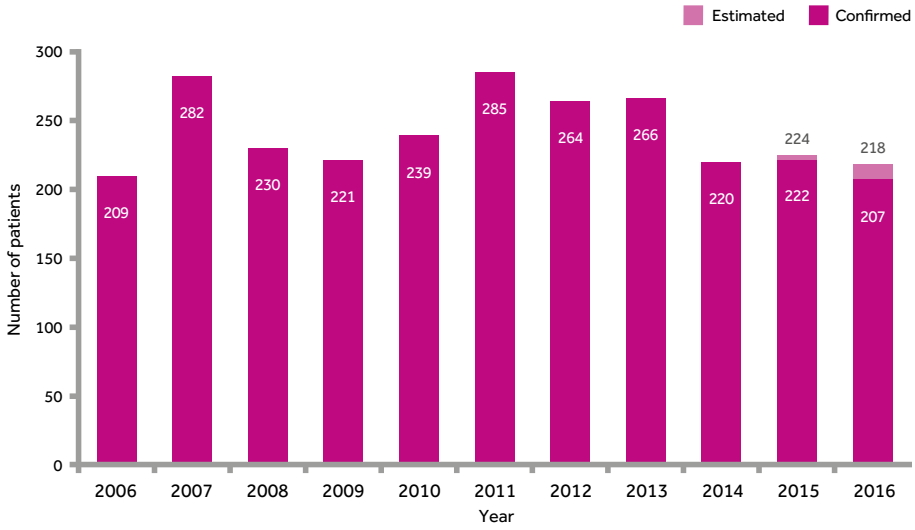


Figure 58: Number of patient suicides in Scotland

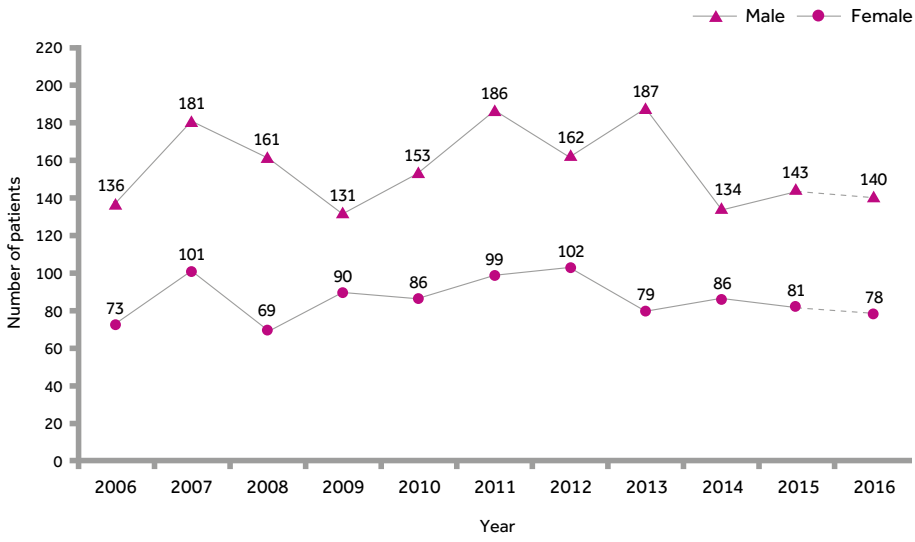


Figure 59: Number of patient suicides in Scotland, by gender

Figure 60: Rates of patient suicide in Scotland, by gender

Note: the dotted line indicates when the change in death coding rules occurred.

Method of suicide by patients

242. The most common methods of suicide by patients were hanging/strangulation (986, 37%) and self-poisoning (937, 36%) – since 2013, hanging/strangulation has been the most common method. The percentage of deaths by hanging/strangulation in Scotland was lower compared to the rest of the UK whilst self-poisoning was higher (Figure 61). Hanging/strangulation was most common among males (41% v. 31%) and self-poisoning more common among females (42% v. 32%).

243. The number of deaths by hanging/strangulation has fluctuated over the report period though there has been an increase since 2011. Since a peak in 2011 in suicides by self-poisoning – reflecting the change in coding rules, the numbers have fallen substantially in recent years. There have been no significant changes in other suicide methods.

244. Opiates and opioids accounted for almost half of all drugs used in self-poisoning (417, 48%) (Table 22), significantly higher than the rest of the UK (34%). Non-opiate analgesics were used in 7%, with the majority (48, 6% of all self-poisonings) by paracetamol. Antipsychotic drugs were used in 11% and antidepressants (typically tricyclics or SSRI/SNRIs) in 14%.

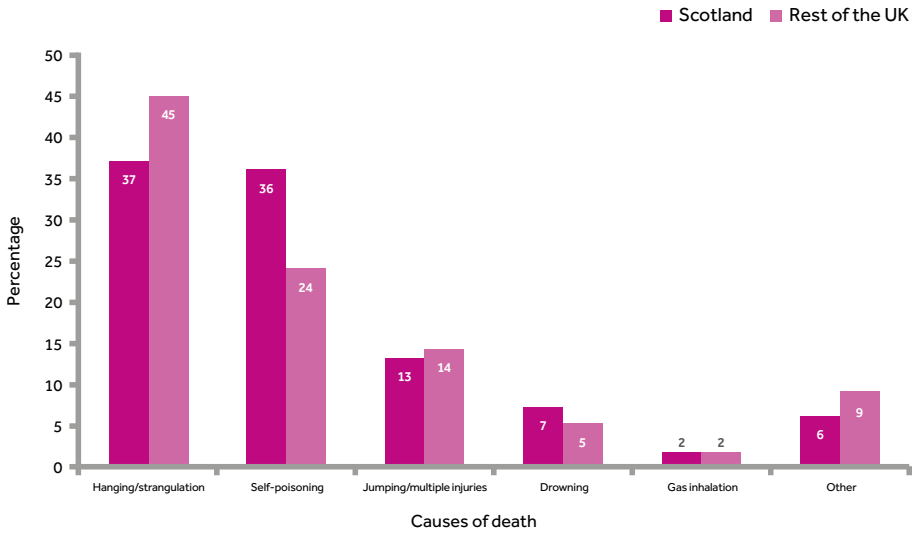


Figure 61: Patient suicide in Scotland v. rest of the UK: main causes of death

Table 22: Main substances used in deaths by self-poisoning in Scotland

Substance	Deaths by self-poisoning N= 937	
	Number	%
Opiates/opioids	417	48%
- opiates only	349	40%
- paracetamol/opiate compound	68	8%
Non-opiate analgesics	59	7%
Antipsychotics	98	11%
Antidepressants	125	14%
- tricyclics	71	8%
- SSRI/SNRIs	45	5%
- other antidepressants	9	1%

245. We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (41, 36%) followed by methadone (25, 22%) and tramadol (18, 16%).

246. Information on the source of the opiates/opioids was available in 47%. In total, of those who died by opiates/opioids overdose, almost half had not been prescribed for the patient (23, 47%). Among those who died by heroin/morphine overdose, in 68% this had not been prescribed for the patient.

247. There has been a decrease in suicide by antipsychotics and antidepressants over the report period. Self-poisonings using paracetamol or other analgesics have remained stable averaging 5 per year over the report period although there was a peak of 12 in 2013. The number of deaths by psychotropic drugs fell by 44% between 2006-2015.

Social and clinical characteristics

248. Social, clinical and behavioural characteristics of patients dying by suicide are presented in Table 23. A high proportion showed signs of social adversity and isolation, e.g. unemployment and living alone, compared to the rest of the UK. Over half had a co-morbid condition, and rates of previous alcohol and drug misuse were higher compared to the rest of the UK. 13% had been ill for less than a year, lower than the rest of the UK (22%).

249. There were 14 suicides by women who were pregnant or who had died within a year of childbirth, 2% of all female suicides.

Table 23: Characteristics of patients who died by suicide in Scotland v. rest of the UK (2006-2016)

	Scotland N=2,658		Rest of the UK N=15,273	
	Number	%	Number	%
Demographic features				
Age: median (range)	43 (11-94)		46 (10-100)	
Aged under 25†	215	8	1,171	8
Male†	1,714	64	10,201	67
Not currently married	1,938	77	10,103	71
Living alone	1,383	55	6,613	47
Unemployed	1,297	52	6,293	45
On long-term sick leave	407	16	1,889	13
Black and minority ethnic group	45	2	1,037	7
Homeless	70	3	348	2
Clinical features				
Any secondary diagnosis	1,360	52	7,456	52
Duration of illness (<12 months)	325	13	2,970	22
First contact with mental health services:				
<12 months	489	20	3,960	30
>5 years	1,410	58	5,674	43
Last admission was a re-admission	204	14	1,017	14
Behavioural features				
History of self-harm	1,745	68	9,601	67
History of violence	626	25	3,064	22
History of alcohol misuse†	1,489	57	6,802	46
History of drug misuse†	1,197	46	4,998	34

† includes estimated figures in 2014-2016

Diagnosis

250. The most common primary diagnoses were affective disorders (794, 30%; 158 (6%) with bipolar disorder and 636 (24%) with depressive illness); schizophrenia (includes other delusional disorders) (423, 16%) and alcohol dependence/misuse (425, 16%). 259 (10%) had personality disorder. Of the 'other' diagnoses, 131 (5%) had anxiety disorder, 96 (4%) had adjustment disorder and 24 (1%) had dementia. A higher proportion of patients in Scotland had alcohol and drug dependence/misuse and a lower proportion had affective disorders compared with the rest of the UK (Figure 62).

251. There was no overall trend in the number of suicides in relation to diagnosis. In 2011, there was an increase in the number of patients with schizophrenia as a result of changes in the death coding rules, though the numbers have fallen since 2014.

252. We carried out a detailed mixed-methods investigation of suicide in patients with personality disorder, combining quantitative and qualitative data collection. The report was published in February 2018 (see page 127 for a summary of the report) and can be found on our website at: **www.manchester.ac.uk/ncish**

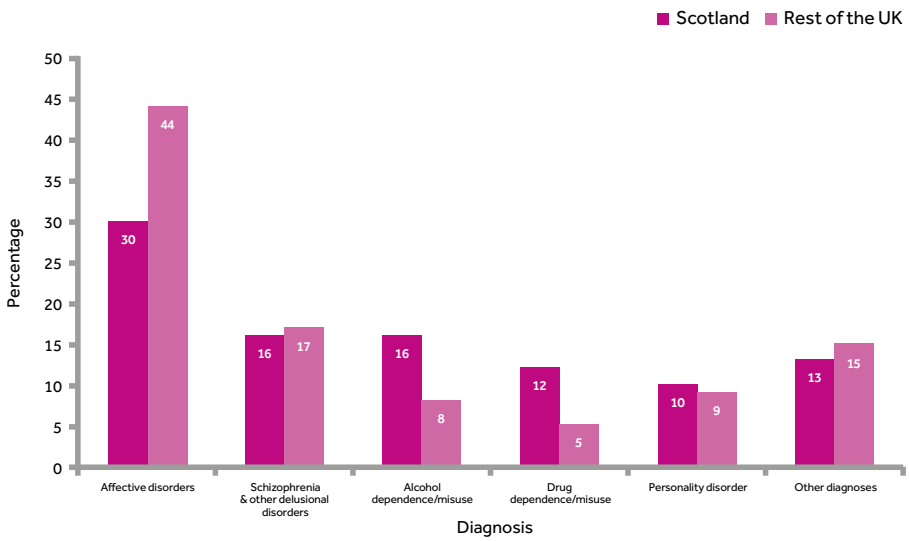


Figure 62: Patient suicide in Scotland v. rest of the UK: primary diagnosis

Patients with alcohol and drug misuse

253. There were an estimated 1,489 patients with a history of alcohol misuse, 57% of the total sample, an average of 135 deaths per year. 1,197 had a history of drug misuse, 46% of the total sample, an average of 109 deaths per year. 1,807 had a history of either alcohol or drug misuse or both, 69% of patient suicides, an average of 164 deaths per year.

254. The apparent rise in 2011 in the number with a history of alcohol or drug misuse is the result of the change in coding rules, though numbers have fallen since (Figure 63).

255. Between 2012-2016, 156 (22%) patients who died were under drug services, 131 (19%) were under alcohol services, and 251 (35%) were under either drug or alcohol services.

256. The most common substances misused in the 3 months prior to suicide were alcohol (55%), cannabis (24%) and benzodiazepines (22%).

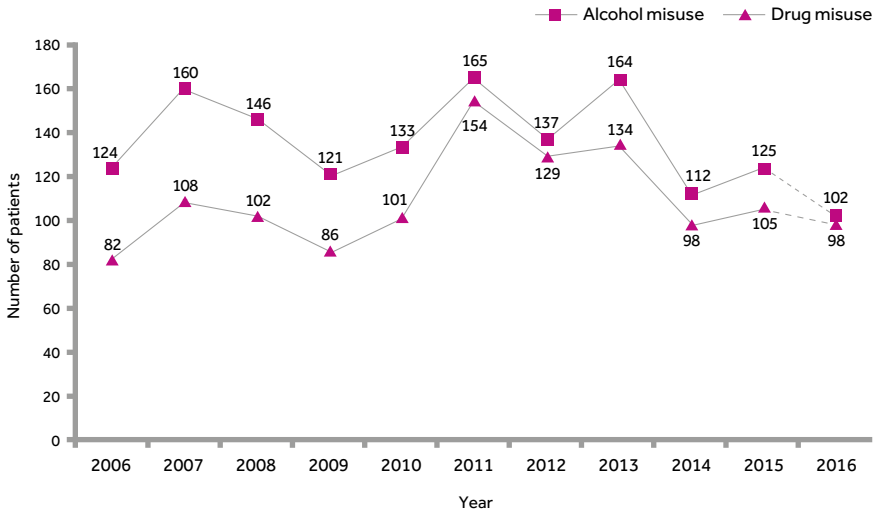


Figure 63: Patient suicide in Scotland: number with a history of alcohol or drug misuse

Websites promoting suicide

257. In 2012-2016 there were 19 (3%) patients who died by suicide after visiting websites that may have encouraged suicide, i.e. those providing information on methods of suicide. As these figures are based on clinical reports, they may underestimate how often this occurs.

MENTAL HEALTH CARE

258. Table 24 and Figure 64 show the service related characteristics of the patients compared to the rest of the UK.

Table 24: Service characteristics of patients who died by suicide in Scotland (2006-2016)

Characteristic	Scotland N=2,658		Rest of the UK N=15,273	
	Number	%	Number	%
In-patients†	176	7	1,195	8
Recent (<3 months) discharge†	404	16	2,485	16
Under crisis resolution/home treatment services†	188	8	2,226	15
Missed last contact in previous month†	678	28	3,339	24
Non-adherence with medication in previous month†	263	11	1,748	13
Contact with services				
Last contact within 7 days of death	999	38	7,055	48
Short-term risk: low or none	2,144	88	11,245	85
Long-term risk: low or none	1,430	60	7,608	59

† includes estimated figures in 2014-2016

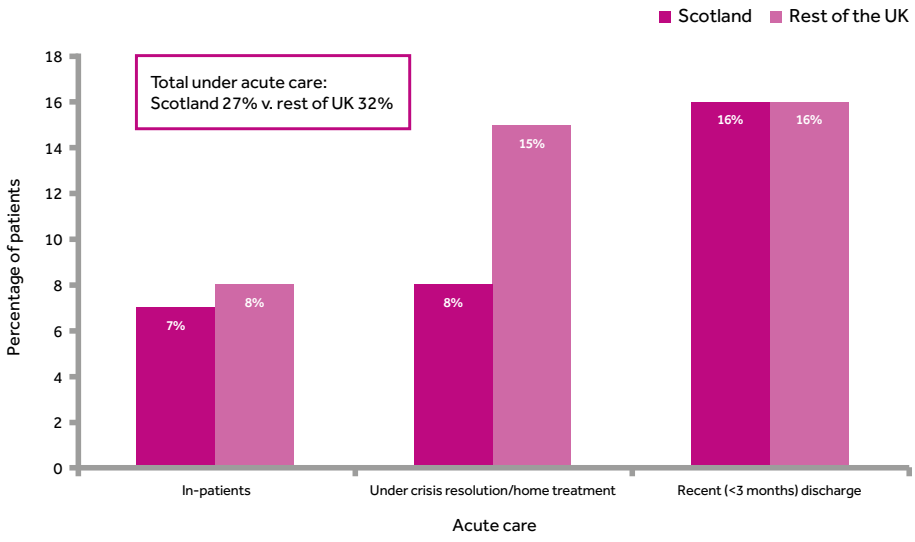


Figure 64: Patient suicide in Scotland v. rest of the UK: percentage under acute care

In-patient suicide

259. There were 176 in-patient suicide deaths between 2006-2016, 7% of patient suicides, an average of 16 deaths per year. This proportion was similar to the rest of the UK (Figure 64). The rate of in-patient suicide averaged at 7.2 per 10,000 admissions. The number and rate has fallen after peaks in 2007 and 2011 (Figure 65).

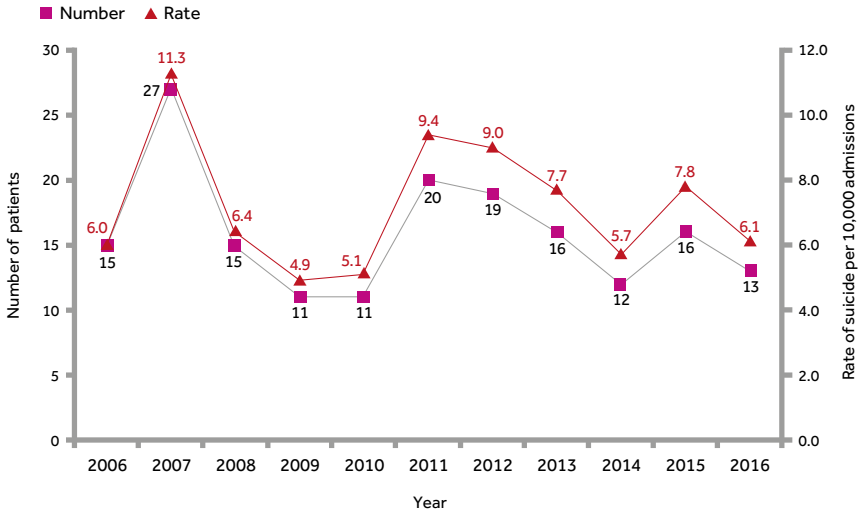


Figure 65: Patient suicide in Scotland: number of mental health in-patients and rate of suicide per 10,000 admissions

260. 51 (29%) patients died on the ward itself; 89 (51%) were on agreed leave or had left with staff agreement; and 34 (20%) died after leaving the ward without staff agreement. Of the 89 who had left the ward with staff agreement, 12 (13%) had failed to return to the unit.

261. In total, 46 in-patients died after leaving the ward without staff agreement or with agreement but failed to return, 26% of all in-patient suicides, an average of 4 deaths per year, representing no change over the report period.

262. Deaths by hanging on the ward are usually from low-lying ligature points (i.e. strangulation). There were 38 patients who died by this method; this number fluctuated from 1 to 7 per year and included deaths by strangulation with no ligature point. The majority died by hanging/strangulation in a single bedroom (17, 45%) or a toilet/bathroom (17, 45%). The most common ligature points were doors (14, 39%) or windows (5, 14%) and the most common ligatures were belts (20, 56%) or shoelaces/items of clothing (7, 19%).

263. 36 suicides (20%) took place in the first week after admission. The proportion who died in the first week of admission increased over the report period, from an average of 11% between 2006-2010 to 27% between 2011-2015. Within this first week, the highest number occurred on the first day (8 cases). 10 (50%) patients who died off the ward in the first week had left the ward without staff agreement.

264. There were 49 suicides in detained in-patients, 28% of all in-patient suicides, an average of 4 per year. The number of these deaths did not change over the report period.

265. 13 (11%) in-patient suicides were under a medium or high level of observation.

Crisis Resolution/ Home Treatment

266. There were 188 suicides in patients under crisis resolution/home treatment (CRHT) teams, 8% of the total sample, an average of 17 deaths per year. This proportion was lower than the rest of the UK (Figure 64). The number has fluctuated with no overall change since 2006 (Figure 66).

267. In the last 5 years there have been the same number of suicides in patients under CRHT (76 patients) as those in in-patient care (77 patients).

268. Around one-third of patients had been discharged from in-patient care in the preceding 3 months (59, 32%); 23 (13%) died within 2 weeks of discharge, 14 (8%) within a week.

269. We have collected data on length of time under CRHT since 2012. 22 (42%) patients who died had been under CRHT services for less than a week.

270. In 101 (54%) the patient lived alone. In 24 (48% excluding unknowns) the care plan included additional social support from outside the home, e.g. from a relative, friend or neighbour.

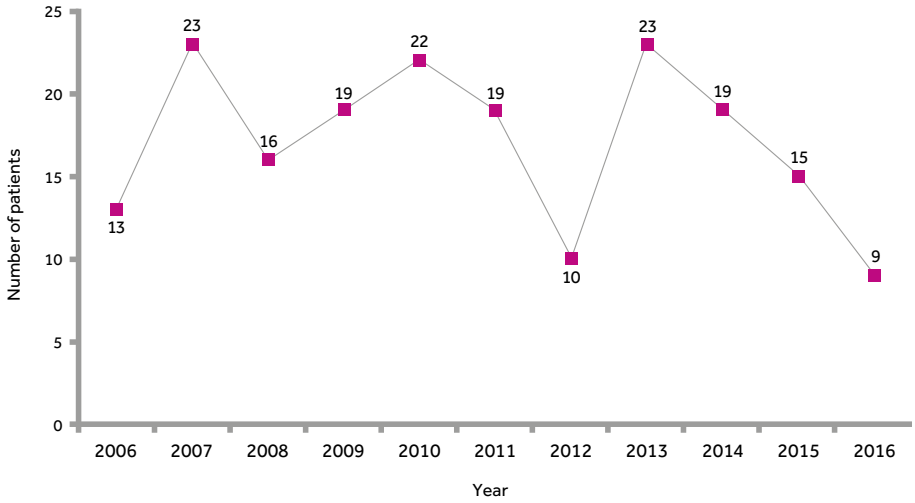


Figure 66: Patient suicide in Scotland: number under crisis resolution/home treatment services

Patients recently discharged from hospital

271. There were 404 suicides within 3 months of discharge from in-patient care, 16% of all patient suicides, an average of 37 deaths per year. This proportion was the same as the rest of the UK (Figure 64).

272. There were 181 suicides in the first month after discharge, 46% of all suicides within 3 months of discharge, an average of 16 deaths per year. Post-discharge suicide were most frequent in the first week after leaving hospital when 66 deaths occurred, an average of 6 per year, 17% of all suicides within 3 months of discharge (Figure 67).

273. Despite fluctuations, there has been a downward trend (since a peak in 2007) in the number of patients who died within 3 months of in-patient discharge, with the lowest figures in the last 5 years (Figure 68). The rate of suicide showed a similar pattern, and averaged at 16.5 per 10,000 discharges.

274. The number who died in the first week after discharge decreased over the report period. Of those who died in the first week after discharge, the highest number occurred on the third day after discharge (17, 26%). We continue to recommend all patients are followed up within 3 days of discharge from in-patient care.

275. Of all post-discharge suicides, 73 (20%) died before the first follow-up appointment. This proportion increased to 35% of those who died in the first month after discharge and 65% in those who died within a week after discharge. The number of patients who died before the first follow-up appointment fell over the report period.

276. In 56 (14%) of post-discharge suicides the patient had been detained under the Mental Health Act (MHA) at the last admission. In 138 (35%) patients the last admission had lasted less than a week. In 111 (28%) the patients had initiated their own discharge from hospital, including self-discharge and breaching of ward rules. The number of patients initiating their own discharge did not change over the report period.

277. Of the patients who died in the first week after discharge, 41% had experienced recent adverse life events, with relationship break-ups significantly more common than other post-discharge patients (17% v. 8%).

278. 30 (8%) died after being discharged from a non-local in-patient unit. For patients who died within 2 weeks of discharge, the proportion discharged from a non-local in-patient unit increased to 12% (13 patients). The proportion of suicides after discharge from a non-local unit did not change from 8% in 2006-2010 and 2011-2015, but the number decreased from 17 to 12.

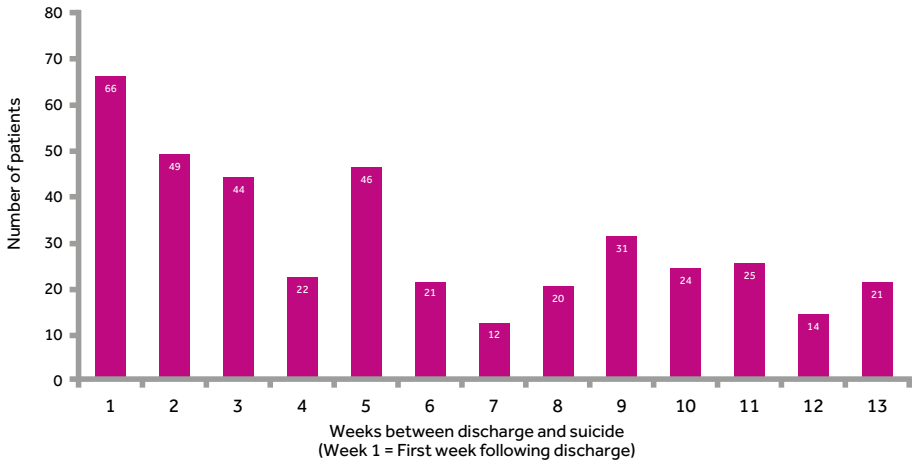


Figure 67: Patient suicide in Scotland: number of suicides per week following discharge (2006-2016)

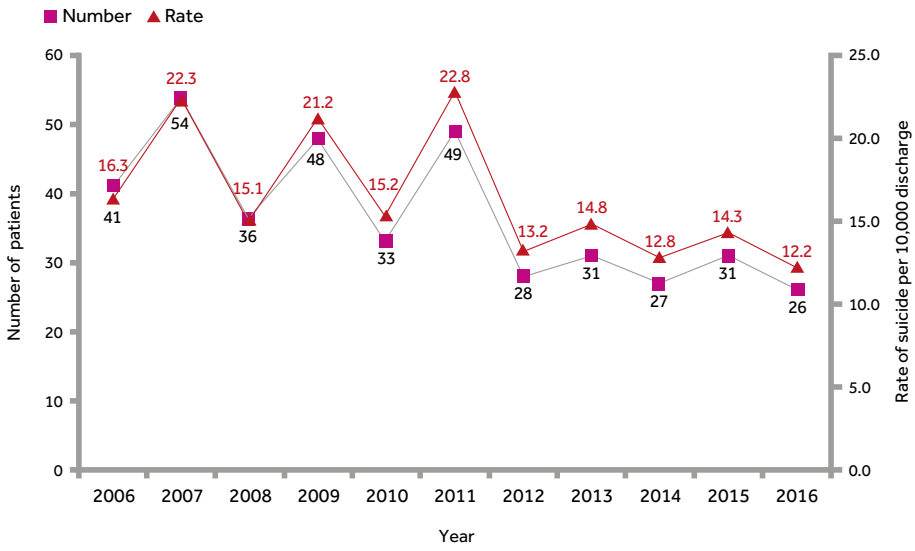


Figure 68: Patient suicide in Scotland: number who died within 3 months of in-patient discharge and rate of suicide per 10,000 discharges

Compulsory Treatment Orders in the community

279. There were 52 suicides in patients subject to a compulsory treatment order (CTO) in the community between 2007-2016, 2% of all patient suicides, an average of 5 deaths per year. A third (17, 33%) of these patients had their CTO revoked at the time of suicide. The highest number of patients subject to a CTO was in 2008 (8 patients).

280. 10 patients subject to a CTO were non-adherent with drug treatment in the month before death and 11 missed their final service contact. Therefore 38% who died were not receiving care as intended despite compulsory treatment order powers. 13 deaths under a compulsory treatment order occurred within 3 months of hospital discharge.

Child and adolescent mental health services (CAMHS)

281. There were 81 suicides by patients aged under 25 who had been under the care of CAMHS in 2006-2016, 41% of all suicides by patients aged under 25. There was no change over the report period. Most of these patients had a primary diagnosis of personality disorder (20%) and affective disorders (18%). Patients under the care of CAMHS were less likely to have a diagnosis of schizophrenia compared to other patients aged under 25 (4% v. 17%).

What could have reduced risk?

282. We asked clinicians, in their opinion, what factors may have made the suicide less likely at the time. The most common factors were adherence with treatment (15%), closer supervision of the patient (14%), and closer contact with the patient's family (9%) (Figure 69).

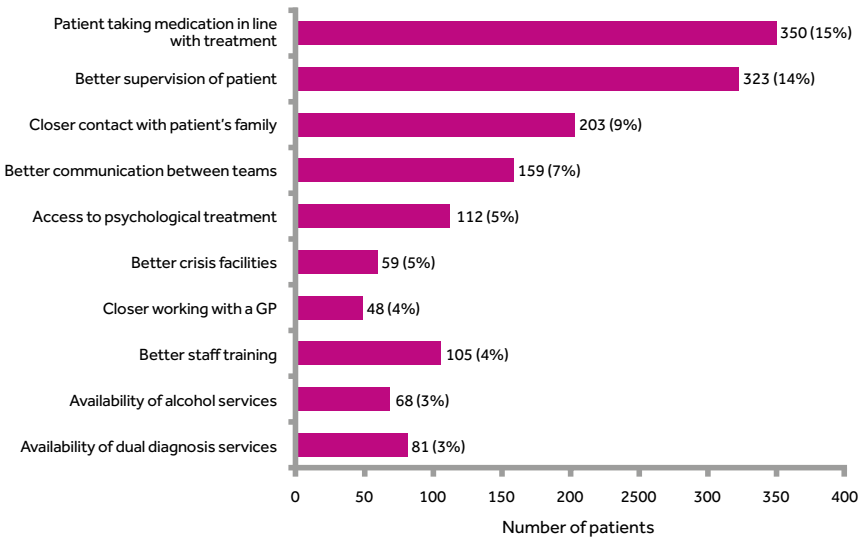


Figure 69: Patient suicide in Scotland: factors that may have reduced risk

HOMICIDE

283. In 2006-2016, NCISH was notified of 841 homicide convictions, an average of 76 per year. There were 855 victims, an average of 78 per year.

HOMICIDE IN THE GENERAL POPULATION

284. There was a fall in the number of homicide convictions in the general population over the report period (Figure 70). These figures are provided as context for our data on homicides by people with mental illness. More recent homicide statistics are published by the Scottish Government based on the number of offences recorded annually.[25]

285. The most common method of homicide was the use of a sharp instrument (435, 54% of all homicides) followed by hitting and kicking (141, 18%); the number of homicides in both methods fell over the report period.

Figure 70: Number of homicide convictions in the general population in Scotland, by gender of offender

PATIENT HOMICIDE

286. The following analysis is based on 122 confirmed patient cases for 2006-2016 plus an additional case which we estimated based on the proportion of expected returns for 2016, a total figure of 123 (15% of all homicide convictions). This represents an average of 11 patient homicides per year. There were 126 victims, an average of 11 per year.

287. Although the number of patient homicides fluctuated over the report period, there has been a decrease in the number after peaks in 2009 and 2012 (Figure 71). On average there were 9 homicides committed by male patients and 2 by female patients per year.

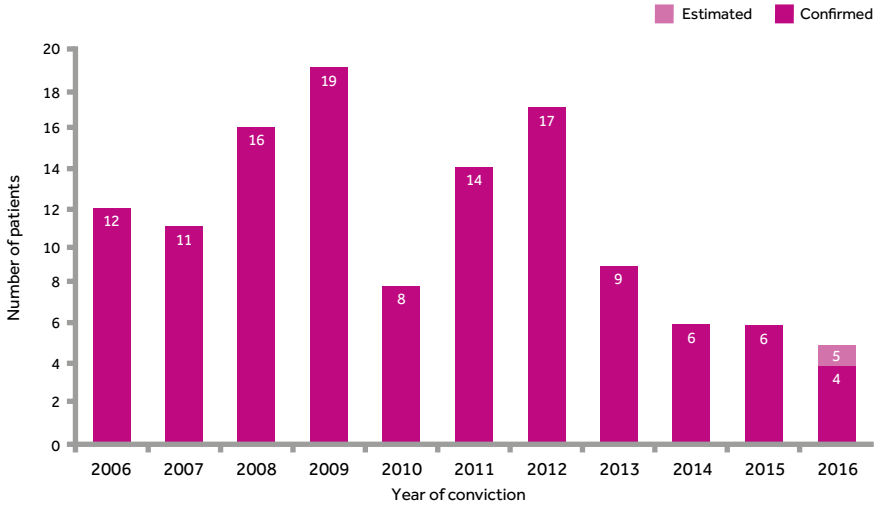


Figure 71: Number of patient homicides in Scotland

Social and clinical characteristics of homicide offenders

288. Patient characteristics are presented in Table 25. These patients had high levels of unemployment. Almost two-thirds had a previous history of self-harm, a higher proportion compared to the rest of the UK. The majority had a history of alcohol and/or drug misuse, significantly higher than the rest of the UK.

289. The most common primary diagnosis was drug dependence (34, 28%) (Figure 72). Of the 'other' diagnoses, 5% had anxiety disorder, and 4% had ADHD/conduct disorder. A significantly higher proportion of patients had alcohol and drug dependence/misuse and a lower proportion had schizophrenia compared to the rest of the UK (Figure 72).

Table 25: Characteristics of patient homicide offenders in Scotland v. rest of the UK

	Scotland N=123		Rest of the UK N=662	
	Number	%	Number	%
Demographic features				
Age: median (range)	31 (16-74)		33 (13-83)	
Male	104	85	569	86
Not currently married	72/93	77	299	81
Living alone	23/88	26	93	28
Unemployed/long term sick	82/97	85	295	82
Black and minority ethnic group	<3		124	20
Homeless	<3		30	9
Behavioural features				
History of self-harm	70/112	63	324	52
History of violence	35/59	59	342	53
Any previous convictions	61/71	86	484	76
History of alcohol misuse	100/108	93	459	71
History of drug misuse	105/114	92	499	78
Abnormal mental state at the time of offence	16/77	21	218	35

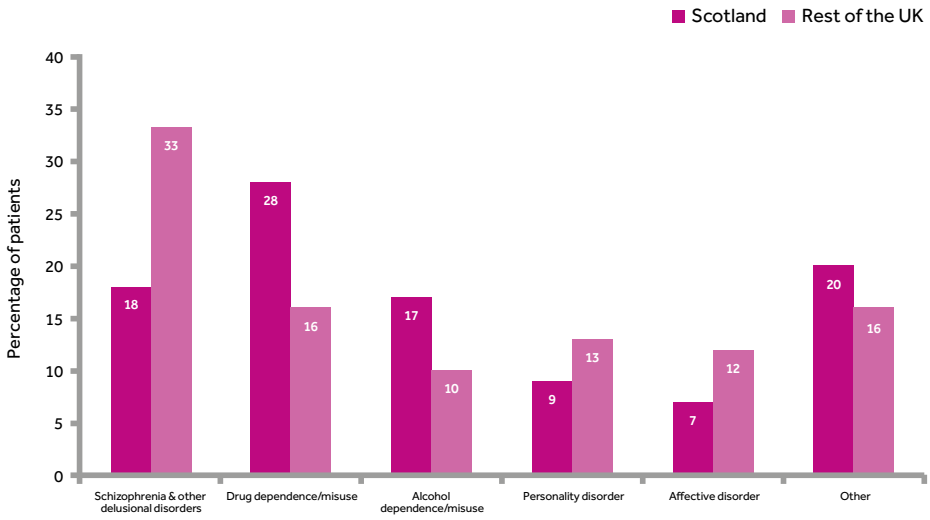


Figure 72: Patient homicide in Scotland v. rest of the UK: primary psychiatric diagnosis

Offence characteristics

290. Offence characteristics are presented in Table 26. Three-quarters of patients were convicted of murder and most received a custodial sentence (107, 87%) in Scotland, significantly higher than the rest of the UK.

Table 26: Offence characteristics of patient homicide offenders in Scotland v. rest of the UK

	Scotland N=123		Rest of the UK N=662	
	Number	%	Number	%
Offence variables				
Age of victim: median (range)	41 (1-88)		42 (0-89)	
Male victim	90	76	450	68
Victim was a stranger	17	14	93	16
Sharp instrument used	74	64	363	57
Final outcome				
Murder	92	75	341	52
Culpable homicide	29	24	-	-
Unfit to plead / insanity	<3	-	12	2
Sentencing outcome				
Prison	107	87	491	75
Hospital order (with or without restriction)	14	11	152	23

Relationship of victim to offender

291. The most common relationship of victim to offender was acquaintance (60, 51%); spouse/partner (including current/ex) (23, 19%); other family member (18, 15%); and stranger (17, 14%). The average number of stranger homicides was 2 per year over the report period, 4 cases occurred in 2013. There were 13 homicides in which a male patient killed a female spouse/partner (including current/ex), 11% of all patient homicides.

Homicide and schizophrenia

292. There were 31 homicides by people with a history of schizophrenia (includes other delusional disorders), 4% of the total sample, an average of 3 per year. Of these, 19 (90% excluding unknowns) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence. 22 (71%) were patients, an average of 2 per year. 3 (14%) patients with schizophrenia were non-adherent with drug treatment in the month before the homicide and 6 (32%) missed their final service contact before the homicide.

293. All patients (20, 100% excluding unknowns) with a primary diagnosis of schizophrenia had a history of alcohol and/or drug misuse (Table 27), i.e. there were no patients with a diagnosis of schizophrenia convicted of homicide unless they had also a substance misuse problem. 11 (55%) patients with schizophrenia had misused alcohol, 6 had misused benzodiazepines, 6 had misused cannabis, and 5 heroin/opiates.

Patients with alcohol and drug misuse

294. 100 (93%) patients had a history of alcohol misuse, an average of 9 per year (Figure 73). 105 (92%) patients had a history of drug misuse, an average of 10 per year (Figure 73). 115 (97%, excluding unknowns) had a history of either alcohol or drug misuse or both, an average of 10 homicides per year. Therefore only 3% of all patients had no history of alcohol and/or drug misuse (Table 27). The most common substances misused in the last 12 months were alcohol (70, 64%), benzodiazepines (47, 48%), and cannabis (42, 43%).

Table 27: Patient homicide in Scotland: Primary diagnosis and alcohol and/or drug misuse

Primary diagnosis	History of alcohol misuse		History of drug misuse		History of alcohol and/or drug misuse		No history of alcohol or drug misuse	
Schizophrenia (& other delusional disorders)	17	(94%)	19	(95%)	20	(100%)	0	(0%)
Affective disorder	7	(78%)	6	(75%)	8	(89%)	<3	(11%)
Personality disorder	10	(100%)	10	(100%)	10	(100%)	0	(0%)
All patients	**100**	**(93%)**	**105**	**(92%)**	**115**	**(97%)**	**4**	**(3%)**

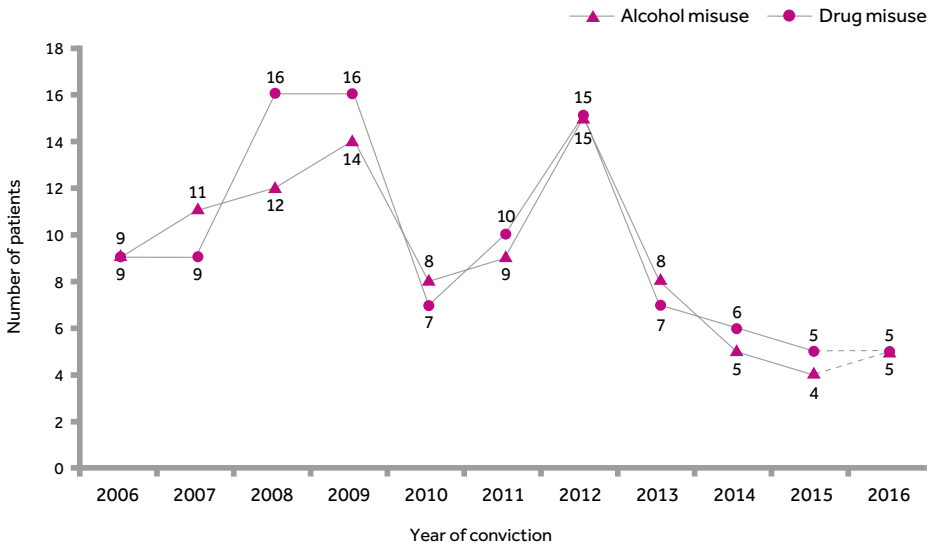


Figure 73: Patient homicide: number with a history of alcohol or drug misuse

MENTAL HEALTH CARE

Acute care

295. 5 (5%) patients had been under crisis resolution/home treatment teams (CRHT) at the time of the homicide.

296. There were 13 homicides within 3 months of discharge from in-patient care, 11% of all patient homicides, an average of 1 homicide per year.

Recent contact with mental health services

297. 49 (40%) patients committed homicide 1-4 weeks after their last contact with services. Of those, 12 (24%) patients had a primary diagnosis of drug dependence/misuse, one-third (16, 33%) had schizophrenia, and 7 (15%) had recently been discharged from in-patient care.

Non-adherence and missed contact

298. 49 (43%) were either non-adherent or missed their final contact with services and were therefore not in receipt of planned treatment just prior to the homicide.

Forensic history

299. Between 2006-2011, 35 (59%) had been convicted of a previous violent offence. We have been unable to obtain data on previous convictions for 2012-2015. 3 had a history of admission to a secure unit.10 (8%) patients had previously been involuntarily detained under mental health legislation. 37 (31%) patients had no forensic history (previous violent offence, admission to a secure unit or been in prison) and no previous detention prior to homicide.

WALES

WALES

SUICIDE

300. Between 2006-2016, NCISH was notified of 3,496 deaths in the general population that received a suicide or undetermined conclusion, an average of 318 per year. These are referred to here as suicides.

SUICIDE IN THE GENERAL POPULATION

301. The number and rate of suicide in the general population rose between 2009 and 2012-2013 with lower figures subsequently (Figures 74 and 75). Some deaths are not registered for several months or longer which means that our figures for the most recent years underestimate the final figures.

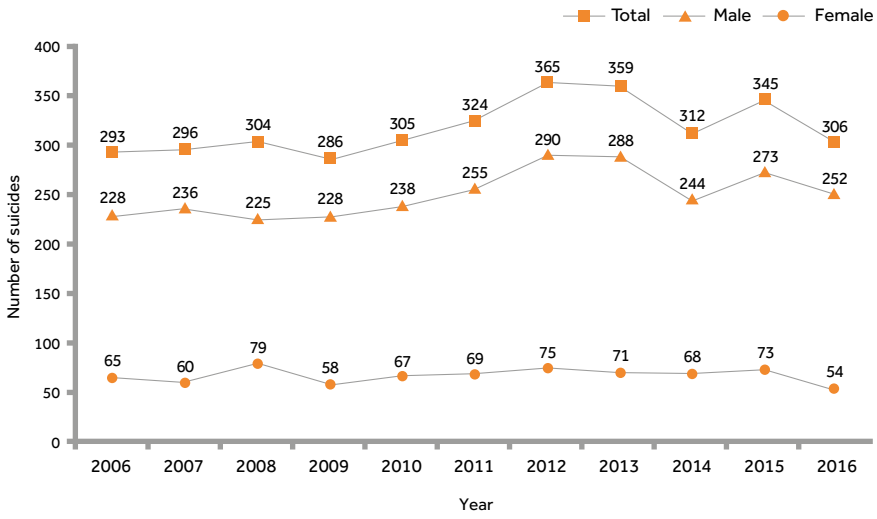


Figure 74: Number of suicides in the general population in Wales, by gender

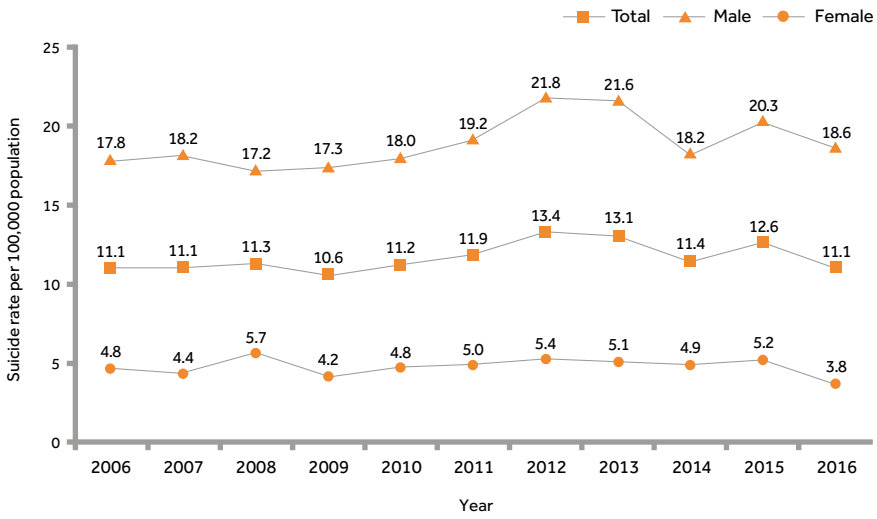


Figure 75: Rates of suicide in the general population in Wales, by gender

Variation in suicide rates by area of residence

302. There was variation in suicide rates by area of residence (by Health Board) at the time of death (average rate 2014-2016). The highest rate of suicide was in Powys Teaching at 14.5 per 100,000 population, and the lowest in Aneurin Bevan, at 9.6 per 100,000 population (Figure 76).

Area	Rate
Aneurin Bevan	9.6
Betsi Cadwaladr University	10.9
Cwm Taf	11.0
Hywel Dda	11.4
Abertawe Bro Morgannwg University	11.5
Cardiff and Vale University	12.6
Powys Teaching	14.5

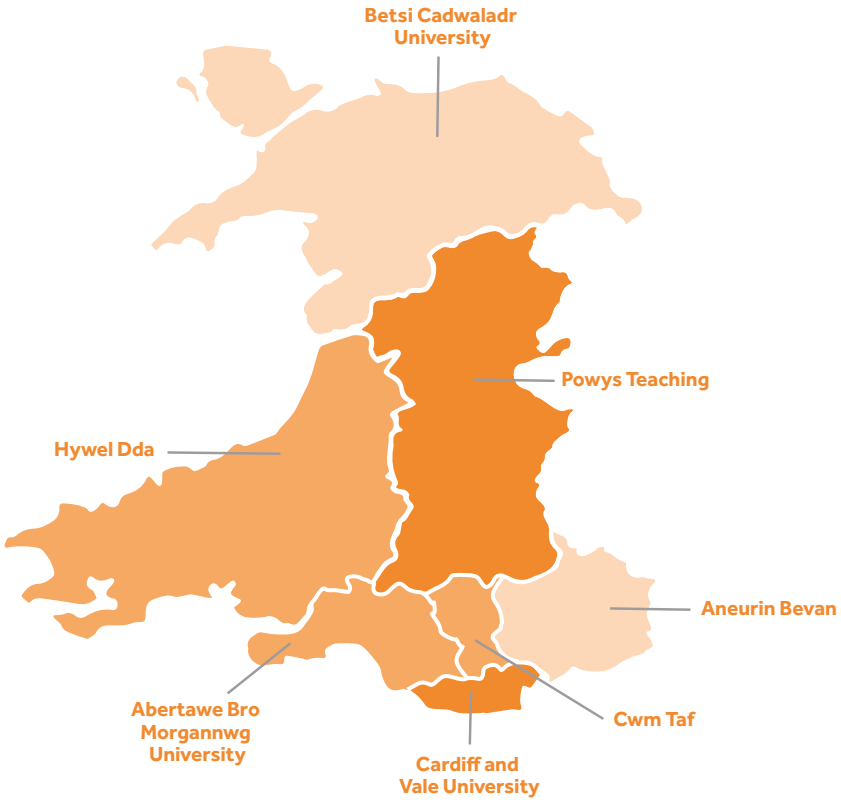


Figure 76: Rates of suicide per 100,000 population, by Health Board of residence (average rate 2014-2016)

Method of suicide

303. The most common methods of suicide were hanging/strangulation (1,977, 57%) and self-poisoning (overdose) (602, 17%). Less frequent methods were jumping and multiple injuries (mainly jumping from a height or being struck by a train) (248, 7%), drowning (158, 5%), gas inhalation (133, 4%), cutting and stabbing (102, 3%), and firearms (67, 2%).

304. Deaths by hanging/strangulation increased over the report period (Figure 77). The number of deaths by self-poisoning has fallen since a peak in 2013. Of the less common methods, deaths by gas inhalation increased.

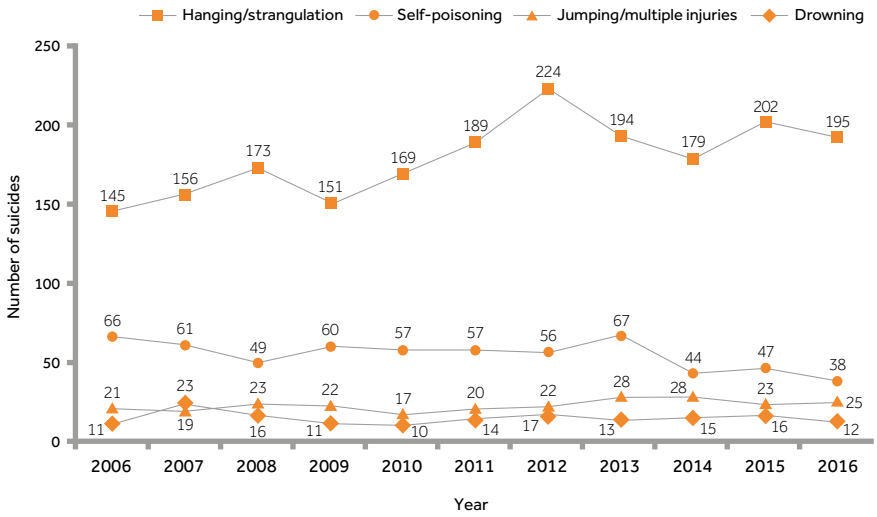


Figure 77: Suicide in the general population in Wales: main causes of death

PATIENT SUICIDE

Patient suicide: numbers and rates

305. During 2006-2016, 781 deaths (22% of general population suicides) were identified as patient suicides, i.e. the individual had been in contact with mental health services in the 12 months prior to death. This represents an average of 71 patient suicides per year.

306. There was an increase in the number of patient suicides between 2006 and 2015 with a peak in 2012 and 2013, broadly in line with general population figures (Figures 78 and 79). The rate of suicide using a general population denominator increased between 2006 and 2013 but fell in 2014 (Figure 80) and we are estimating a fall in 2016, mainly in females, but these estimates should be interpreted cautiously.

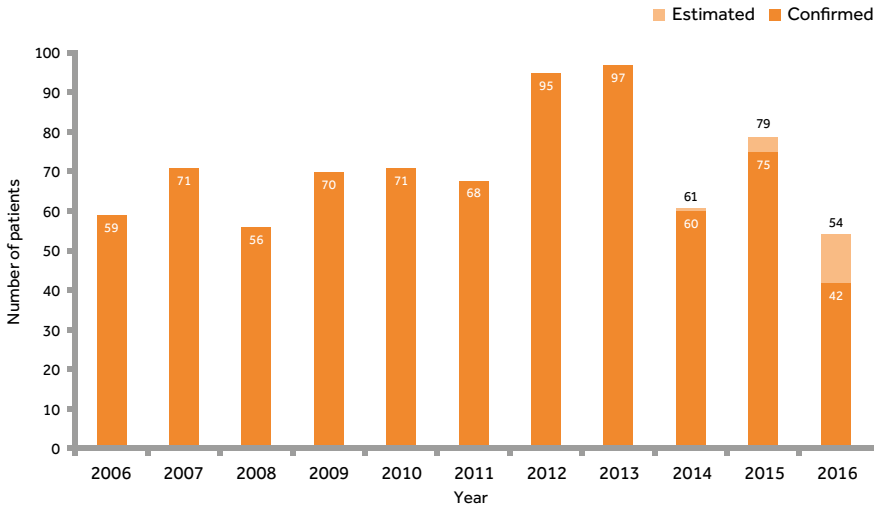


Figure 78: Number of patient suicides in Wales

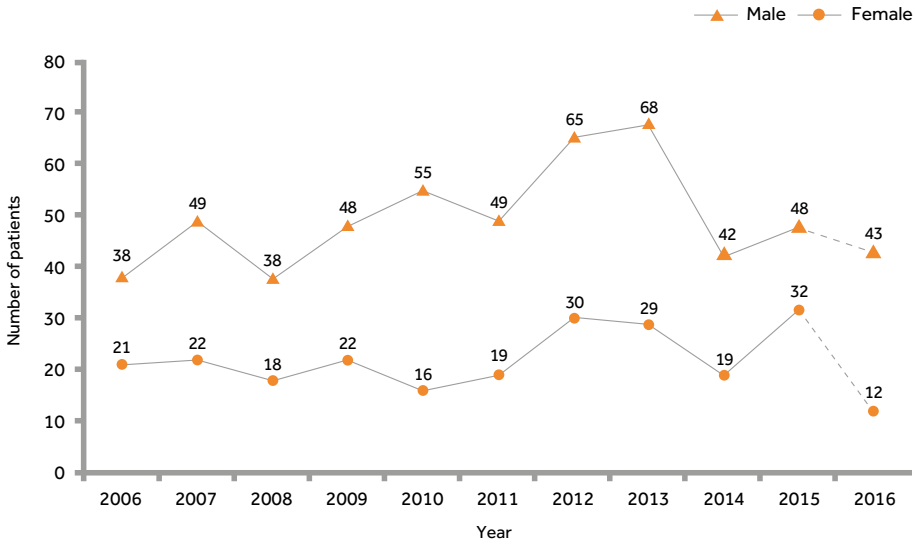


Figure 79: Number of patient suicides in Wales, by gender

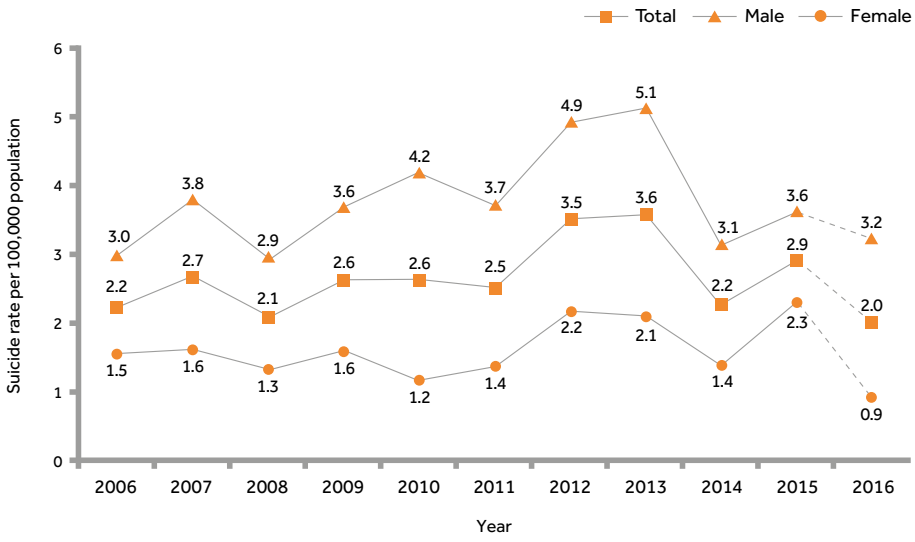


Figure 80: Rates of patient suicide in Wales, by gender

Method of suicide by patients

307. The most common methods of suicide by patients were hanging/strangulation (386, 51%), self-poisoning (167, 22%) and jumping/multiple injuries (74, 10%). The percentage of deaths by hanging/strangulation was higher compared to the rest of the UK. Deaths by self-poisoning and jumping/multiple injuries were lower compared to the rest of the UK (Figure 81).

308. Hanging/strangulation increased from 2006 to a peak in 2012 but recent figures have fallen. The number of deaths by other methods has changed little but there was a peak in 2013 in self-poisoning and jumping/multiple injuries with lower figures subsequently. The most common substances used in deaths by self-poisoning were opiates (40, 25%), SSRI/SNRI antidepressants (24, 15%), and antipsychotics (21, 13%).

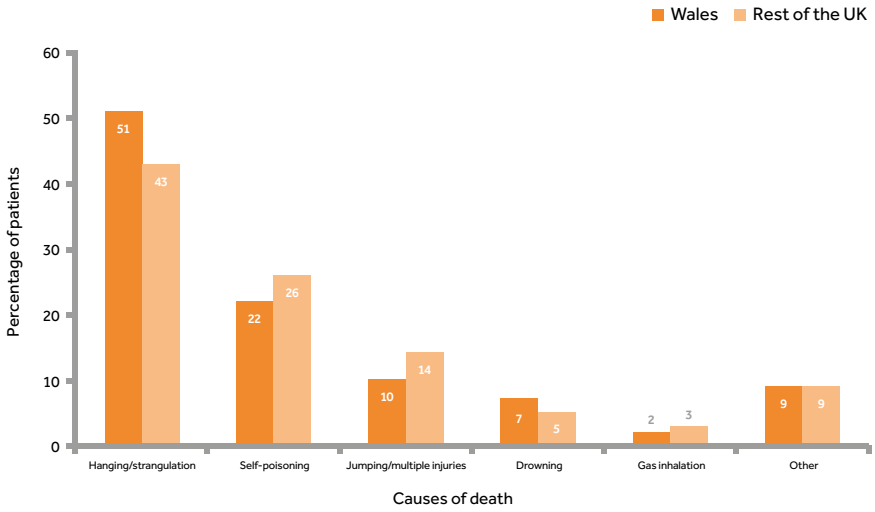


Figure 81: Patient suicide in Wales v. rest of the UK: main causes of death

Social and clinical characteristics

309. Table 28 shows the main social, clinical and behavioural features of patients who died by suicide. Compared to the other countries in the UK, the proportion living alone was lower in Wales, whilst those on sick leave was higher. There was a high proportion (29%) whose first contact with mental health care had been in the 12 months before suicide, though this figure was similar to the rest of the UK. Over half had a co-morbid condition and rates of previous self-harm, alcohol and drug misuse were high.

Table 28: Characteristics of patients who died by suicide in Wales compared to the UK (2006-2016)

	Wales N=781		Rest of the UK N=17,150	
	Number	%	Number	%
Demographic features				
Age: median (range)	45 (13-96)		45 (10-100)	
Aged under 25†	57	7	1,329	8
Male†	543	70	11,372	66
Not currently married	512	69	11,529	72
Living alone	319	44	7,677	48
Unemployed	319	43	7,271	46
On long-term sick leave	142	19	2,154	14
Black and minority ethnic group	11	1	1,071	7
Homeless	13	2	405	3
Clinical features				
Any secondary diagnosis	393	52	8,423	52
Duration of illness (<12 months)	155	22	3,140	20
First contact with mental health services:				
<12 months	207	29	4,242	28
>5 years	331	46	6,753	45
Last admission was a re-admission	52	12	1,169	14
Behavioural features				
History of self-harm	513	69	10,833	67
History of violence	178	24	3,512	22
History of alcohol misuse†	370	49	7,921	48
History of drug misuse†	292	38	5,903	36

† includes estimated figures in 2014-2016

Diagnosis

310. The most common primary diagnoses were affective disorders (308, 41%, including 248 (33%) with depressive illness and 60 (8%) with bipolar disorder), schizophrenia (includes other delusional disorders) (115, 15%), alcohol dependence/misuse (70, 9%) and personality disorder (65, 9%) (Figure 82). Of the 'other' diagnoses, 39 (5%) had adjustment disorder. The diagnostic profile was similar to the rest of the UK.

311. There was no overall trend in the number of suicides in relation to diagnosis. The number of patient suicides with affective disorders increased between 2008 and 2013 but subsequently fell.

312. We carried out a detailed mixed-methods investigation of suicide in patients with personality disorder, combining quantitative and qualitative data collection. The report was published in February 2018 (please see page 127 for a summary of the report) and can be found on our website at: **www.manchester.ac.uk/ncish**

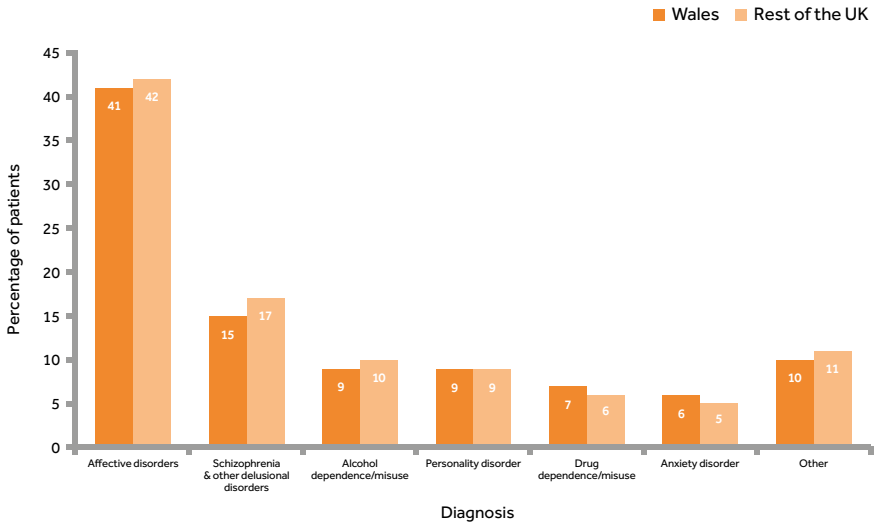


Figure 82: Patient suicide in Wales v. rest of the UK: primary psychiatric diagnosis

Patients with alcohol and drug misuse

313. There were an estimated 370 patients with a history of alcohol misuse, 49% of the total sample, an average of 34 deaths per year (Figure 83). 292 had a history of drug misuse, 38% of the total sample, an average of 27 deaths per year (Figure 83). 449 patients had a history of either alcohol or drug misuse or both, 59% of patient suicides, an average of 41 deaths per year.

314. In both alcohol and drug misuse, numbers rose after a low point in 2008 but have fallen since a peak in 2012.

315. Between 2011-2016, 36 (15%) patients who died were under drug services, 36 (16%) were under alcohol services, and 53 (23%) were under either drug or alcohol services.

316. The most common substances misused in the 3 months prior to suicide were alcohol (55%), cannabis (27%) and stimulants such as amphetamines, LSD, and ecstasy (18%).

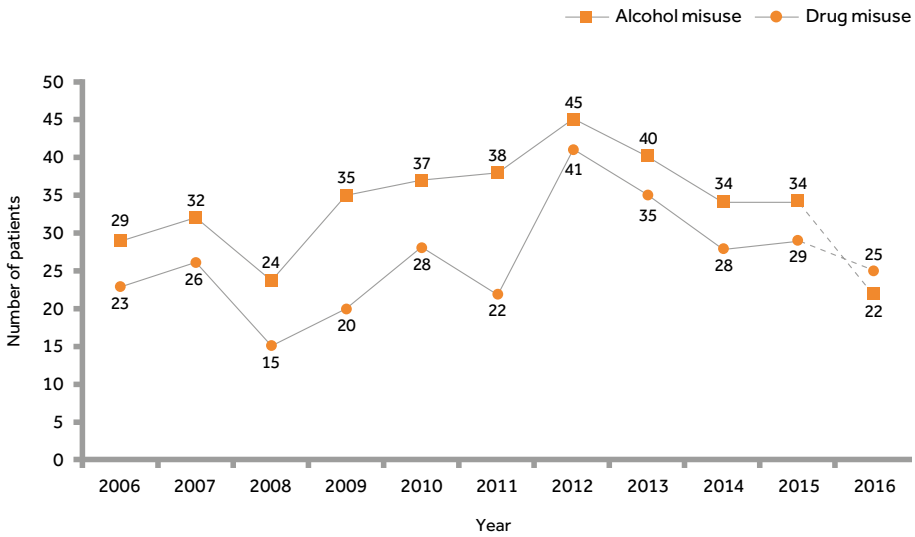


Figure 83: Patient suicide in Wales: number with a history of alcohol or drug misuse

Websites promoting suicide

317. Between 2011-2016 there were 7 (3% excluding unknowns) patients who died by suicide after visiting websites that may have encouraged suicide, i.e. those providing information on methods of suicide. As these figures are based on clinical reports, they may underestimate how often this occurs.

318. Table 29 and Figure 84 show the key service-related characteristics of the patients compared to the rest of the UK.

Table 29: Service characteristics of patients who died by suicide in Wales v. rest of the UK (2006-2016)

Characteristic	Wales N=781		Rest of the UK N=17,150	
	Number	%	Number	%
In-patients†	56	7	1,315	8
Recent (<3 months) discharge†	134	18	2,754	16
Under crisis resolution/home treatment services†	77	10	2,339	14
Missed last contact in previous month†	171	24	3,846	25
Non-adherence with medication in previous month†	87	12	1,924	13
Contact with services				
Last contact within 7 days of death	352	46	7,702	47
Short-term risk: low or none	626	88	12,763	85
Long-term risk: low or none	445	64	8,593	59

† includes estimated figures in 2014-2016

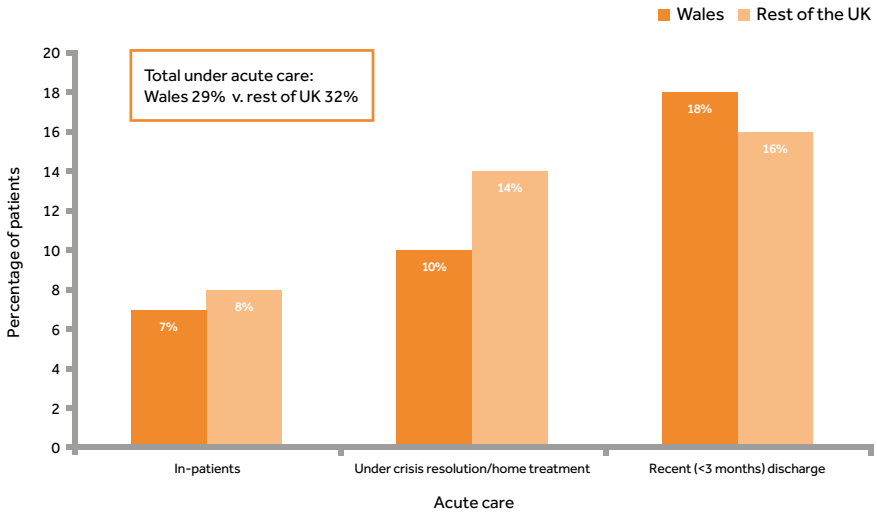


Figure 84: Patient suicide in Wales v. rest of the UK: percentage under acute care

In-patient suicide

319. There were 56 in-patient deaths by suicide in 2006-2016, representing 7% of patient suicides, similar to the rest of the UK (Figure 84). The number fluctuated from 3 to 10 per year.

320. The following sections are based on actual figures and do not include estimations for recent years. Over a quarter of patients died on the ward (14, 26%); 34 (64%) were on agreed leave or had left with staff agreement; and 5 (9%) died after leaving the ward without staff agreement. In total, 11% of in-patients died after leaving the ward without staff agreement or with staff agreement but failed to return.

321. There were 11 patients who died on the ward by hanging/strangulation. The majority died by hanging/strangulation in a single bedroom (64%) or a toilet/bathroom (29%). The most common ligature point was doors (55%) and the most common ligatures were a belt (45%) or shoelaces (27%).

322. 7 suicides (13%) took place in the first week after admission. There were 10 (19%) suicides in detained in-patients.

323. 7 (13%) in-patient suicides were under a medium or high level of observation. In a study of suicide by patients under observation, we recommended that observations should be seen as a skilled intervention carried out by experienced staff. [22]

Crisis Resolution/ Home Treatment

324. There were 77 suicides in patients under crisis resolution/home treatment (CRHT) teams, an average of 7 deaths per year. This represented 10% of the total sample, a lower proportion compared to the rest of the UK (14%) (Figure 84).

325. The number fluctuated from 2 to 12 per year with no clear pattern. Since 2007 there have been more patient suicides under CRHT (71 patients) than in in-patient care (48 patients), reflecting a change in the nature of acute care.

326. The following sections are based on actual figures and do not include estimations for recent years. One-third of patients (24, 33%) under CRHT had been discharged from in-patient care in the preceding 3 months; 17 (47% excluding unknowns) died within 2 weeks of discharge, 10 (28% excluding unknowns) within a week.

327. We have collected data on length of time under CRHT since 2012. 16 (53% excluding unknowns) patients who died had been under CRHT services for less than a week.

328. In 31 (40%) the patient lived alone. In 11 (39% excluding unknowns) the care plan included additional social support from outside the home, e.g. from a relative, friend or neighbour.

Patients recently discharged from hospital

329. There were 134 suicides within 3 months of discharge from in-patient care, 18% of all patient suicides, an average of 12 deaths per year. The proportion was similar to the rest of the UK (Figure 84). The number of post-discharge suicides reached a peak in 2013 with lower figures subsequently (Figure 85). The overall figures for 2014-2016 (Figure 85) have been estimated to take into account late notifications. The remaining figures in this section will present the actual figures.

330. There were 54 (47% of all suicides within 3 months of discharge) suicides in the first month after discharge, an average of 5 deaths per year. Post-discharge suicides were most frequent in the 2 weeks after leaving hospital when 42 deaths occurred, 37% of all suicides within 3 months of hospital discharge, an average of 4 deaths per year. 19 (17%) patients died in the first week after discharge – the highest number was on the third day (5 patients).

331. 19 (17%) died before the first follow-up appointment. This proportion increased to 26% of those who died in the first month after discharge.

332. In 16 (13%) of post-discharge suicides the patient had been detained under the MHA at the last admission. For 45 (38%) patients the last admission had lasted less than a week. 24 (20%) patients had initiated their own discharge from hospital, including self-discharge and after breaching ward rules.

Figure 85: Patient suicide in Wales: number who died within 3 months of in-patient discharge

Community Treatment Orders

333. There were 9 suicides in patients subject to a community treatment order (CTO) in 2009-2016, 2% of all patient suicides in this time period.

Section 136

334. In 2012-2016, there were 17 patients who had been conveyed to a hospital or custody based place of safety under Section 136 of the MHA in the 3 months prior to suicide. This represents 7% of all suicides in this time period.

Child and adolescent mental health services (CAMHS)

335. There were 17 suicides by patients aged under 25 who had been under the care of CAMHS in 2006-2016, 35% of all suicides by patients aged under 25.

What could have reduced risk?

336. We asked clinicians, in their opinion, what factors may have made the suicide less likely at the time. The most common factors were: closer supervision of the patient (21%), adherence to treatment (14%), access to psychological treatment (14%), and closer contact with the patient's family (12%) (Figure 86).

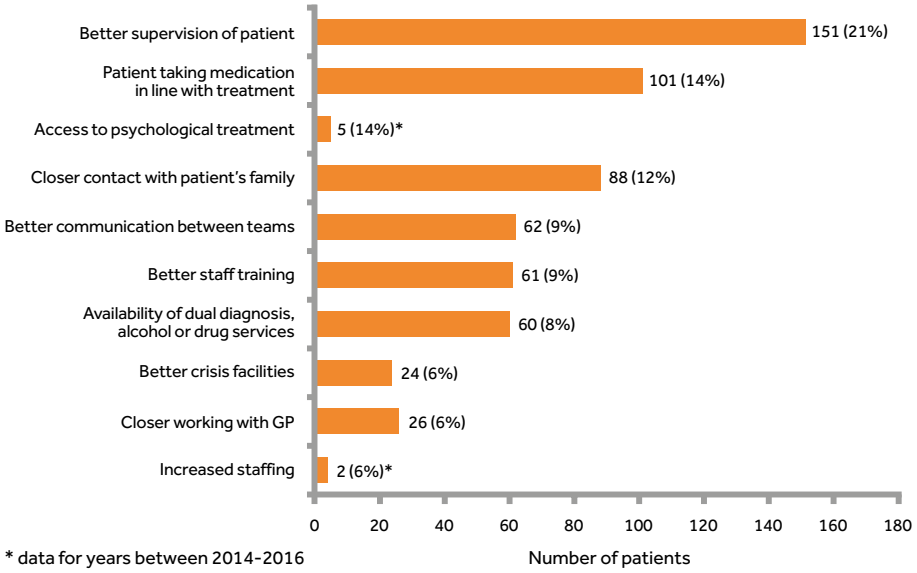


Figure 86: Patient suicide in Wales factors that may have reduced risk

HOMICIDE

337. In 2006-2016, NCISH was notified of 277 homicide convictions, an average of 25 per year. There were 289 victims, an average of 26 per year.

HOMICIDE IN THE GENERAL POPULATION

338. The annual number of homicide convictions in the general population is shown in Figure 87. More recent data are published for England and Wales by the ONS.[23] The number of homicide convictions has fallen between 2008-2015. However, we report a rise in 2016. The most common method of homicide was the use of a sharp instrument (92, 34% of all homicides), followed by hitting and kicking (59, 22%).

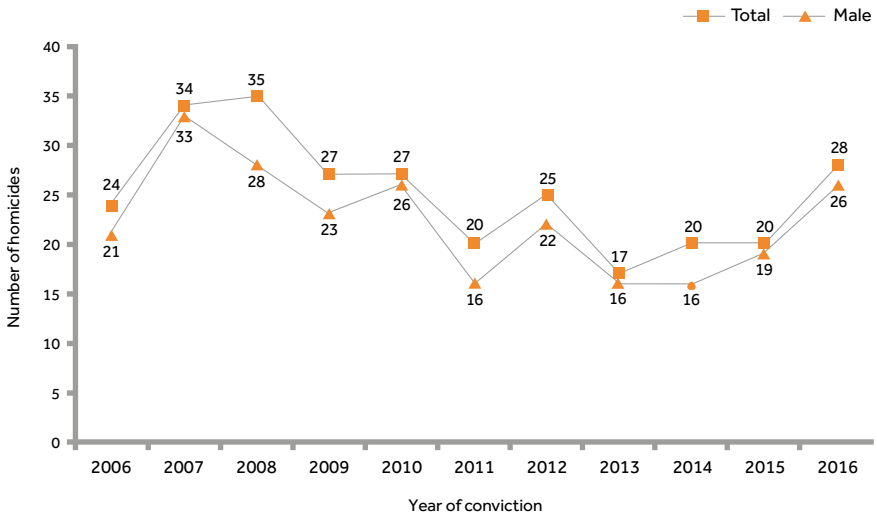


Figure 87: Number of homicide convictions in the general population in Wales, by gender of offender

HOMICIDE FOLLOWED BY SUICIDE

339. We were notified of 9 offences between 2006 and 2016 of homicides followed by suicide (offender dies by suicide within 3 days of the offence). There were 10 victims in total. Most of the offenders were male (7, 78%), with a median age of 44 (range 36-81).

340. The relationship of victim to offender (principal victim if there was more than one victim) was most commonly spouse/partner (including current/ex) (7, 78%).

PATIENT HOMICIDE

341. During 2006-2016, 37 people convicted of homicide (13% of the total sample) were confirmed as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence, an average of 3 per year. There were 43 victims, an average of 4 per year.

Social and clinical characteristics of homicide offenders

342. On average per year there were 3 homicides committed by male patients and 1 by female patients. Patient characteristic are presented in Table 30. These patients had high rates of unemployment and most of the offenders were male. The majority had a history of self-harm, previous convictions, and alcohol or drug misuse. The diagnostic profile was similar to the rest of the UK.

343. Around 1 in 3 (35%) homicides were by people who had a diagnosis of schizophrenia and 6 (18%) had a diagnosis of affective disorders. 5 (15%) patients had a diagnosis of personality disorder, and 4 (11%) had a diagnosis of alcohol dependence/misuse.

344. The majority of patients (31, 86%) had a history of alcohol and/or drug misuse. Of the patients with a history of drug misuse, cannabis (9, 45% excluding unknowns) was the most commonly misused drug in the last 12 months. 7 (39% excluding unknowns) patients had misused stimulants, 5 (29%) had misused benzodiazepines and 5 (26%) had misused heroin/opiates.

Table 30: Characteristics of patient homicide offenders in Wales v. rest of the UK

	Wales N=37		Rest of the UK N=748	
	Number	%	Number	%
Demographic features				
Age: median (range)	35 (15-61)		32(13-89)	-
Male	32	86	641	86
Not currently married	16/20	80	355	80
Living alone	<3	-	114	29
Unemployed/on long-term sick leave	16/19	84	361	83
Black and minority ethnic group	3/36	8	122	20
Homeless	3/20	15	29	7
Behavioural features				
History of self-harm	20/33	61	374	53
History of violence	18/37	49	359	54
Any previous convictions	27/37	73	518	77
History of alcohol misuse	25/36	69	534	75
History of drug misuse	27/36	75	577	80
Primary diagnosis (lifetime)				
Schizophrenia and other delusional disorders	12/34	35	227	31
Affective disorders (bipolar and depression)	6/34	18	78	11
Personality disorder	5/34	15	87	12
Alcohol dependence/misuse	4/37	11	80	11
Drug dependence/misuse	<3	-	135	19
Abnormal mental state at time of offence	12	75	223	32

Offence characteristics of homicide offenders

345. The characteristics of the offence are presented in Table 31. 21 (57%) patients were convicted of murder, similar to the rest of the UK, and all of them received a custodial sentence.

Table 31: Offence characteristics of patient homicide offenders in Wales v. rest of the UK

	Wales N=37		Rest of the UK N=748	
	Number	%	Number	%
Offence variables				
Age of victim: median (range)	37 (4-84)	-		
Male victim	22	59	518	70
Victim was a stranger	6/34	18	104	15
Sharp instrument used	22	59	415	61
Final outcome				
Murder	21	57	412	55
Manslaughter (diminished responsibility)	8	22	105	17
Manslaughter (other including provocation, self-defence)	8	22	184	29
Sentencing outcome				
Prison	29	78	569	76
Hospital order (with or without restriction)	8	22	158	21

Relationship of victim to offender

346. The relationship of victim to offender was mainly acquaintance (15, 44%); spouse/partner (including current/ex) (6, 18%); other family member (7, 21%) and stranger (6, 18%). There were 6 homicides in which a male patient killed a female spouse (including current/ex).

Homicide and schizophrenia

347. Of the total number of general population homicides, 23 were by people with schizophrenia (includes other delusional disorders), 8% of the total sample, an average of 2 homicides annually. Of these, 12 (52%) were patients.

348. 9 (75%) patients with a primary diagnosis of schizophrenia had a history of alcohol misuse. All patients with schizophrenia had a history of drug misuse (12, 100%).

MENTAL HEALTH CARE

Acute care	**349.** There were 3 homicides within 3 months of discharge from in-patient care, 8% of all patient homicides.
Recent contact with mental health services	**350.** 21 (57%) patients committed homicide 1-4 weeks after their last contact with services. 7 (19%) who were seen within the last 4 weeks had schizophrenia.
Non-adherence and missed contact	**351.** 10 (31%) patients were either non-adherent or missed their final service contact and were therefore not in receipt of planned treatment just prior to the homicide.
Forensic history	**352.** 18 (49%) had been convicted of a previous violent offence. 15 (44%) had previously been in prison. 8 (22%) patients had previously been involuntarily detained under mental health legislation. 11 patients (38%) had no known forensic history (previous violent offence, admission to a secure unit or been in prison) and no previous detention prior to homicide.

CURRENT NCISH PROJECTS

353. We are commissioned to undertake standalone projects, looking at particular groups of interest. This allows us to respond to concerns raised by clinicians, service users, and other stakeholders, and to make recommendations for prevention. Our current projects are detailed here.

Suicide by middle-aged men

354. Middle aged men have the highest suicide rate in the UK but are often not in contact with services. This study will combine multiple sources of information to examine factors related to suicide in this hard-to-reach group, including barriers to accessing services.

355. More specifically, the objectives of the study are:
- to examine the characteristics of middle-aged men who die by suicide;
- to determine how frequently suicide is preceded by factors that are more often associated with suicide by men than by women (e.g. masculinities, socio-economic position, social disconnectedness, reluctance to seek help for both mental and physical health);
- to examine the role of support services; and
- to make recommendations to strengthen suicide prevention for middle-aged men.

356. The study is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and a report will be published in 2020.

Substance misuse services in the UK: a feasibility study

357. This one-year pilot study commenced in April 2018 and will be investigating the feasibility of establishing an investigation into the frequency and nature of contact with substance misuse services prior to suicide.

358. More specifically, the objectives of this pilot study are to find out:
- who provides alcohol and drug treatment services in the UK;
- whether we can map these service providers across the UK;
- whether we can identify the rate of contact with substance misuse services prior to suicide; and
- whether we can we use the NCISH's existing methodology in identifying patient suicides to identify contact with substance misuse services prior to suicide.

359. The study is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and will report in March 2019.

Reducing suicides: Quality Improvement and Patient Safety

360. We are working with experts at the National Collaborating Centre for Mental Health (NCCMH) to support 8 Sustainability and Transformation Plan (STP) "footprint" areas to develop local suicide prevention quality improvement plans. This is part of a nationally recognised suicide reduction priority across Department of Health, NHS England, and an overall Mental Health Five Year Forward View recommendation to reduce the suicide rate by 10% by 2020/21.

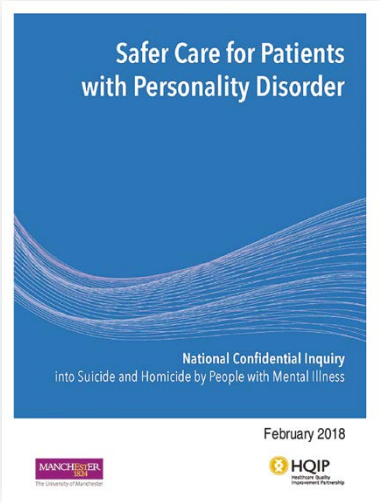
361. More specifically, the objectives of this study are to:
- Work together with NCCMH to support STPs to review services against established guidelines and recommendations, and supporting services to improve the quality of care they offer;
- Focus on mental health secondary care, services for self-harm, and middle-aged men;
- Identify and help STPs adopt and embed national evidence including NCISH "10 ways to improve safety" (see below)
- Provide STPs with bespoke data and advising on suicide prevention plans.

362. The study is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and is currently running in 2018/19.

RECENT REPORTS AND PUBLICATIONS FROM NCISH

363. NCISH has published a number of major UK and national reports, and numerous publications using a wide range of methodologies (e.g. case-control, case series, psychological autopsy, and qualitative studies) and data sources (e.g. coroner data, primary care records). Below is a list of all NCISH reports and publications from 2017-2018. A full list of reports and publications can be found on the NCISH website: **www.manchester.ac.uk/ncish**

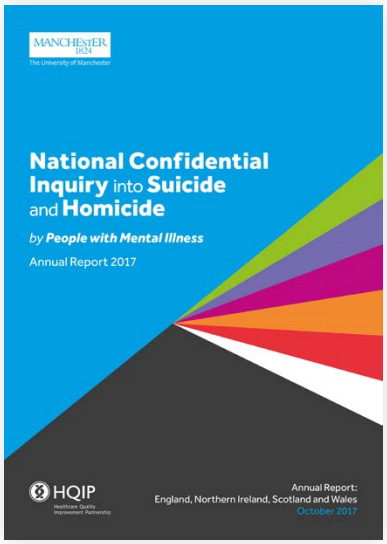
REPORTS



Safer Care for Patients with Personality Disorder. National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH). Manchester: University of Manchester, 2018.

Download report here

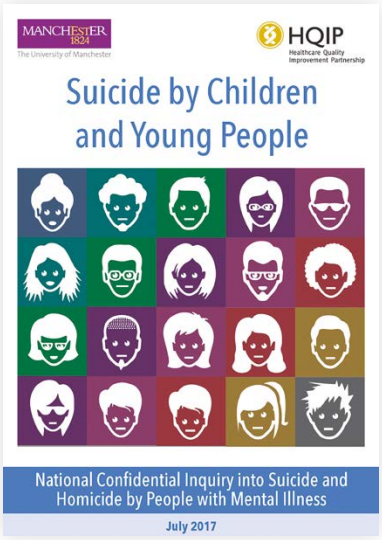
We carried out a detailed mixed-methods investigation into the care of patients with personality disorder who died by suicide or were convicted of homicide. We identified 154 patients with personality disorder who died by suicide (in 2013) and 41 who were convicted of a homicide (between 2010 and 2013) using data from our large, national database. We collected information from medical records and Serious Incident reports on 87% of the patients identified, and also asked staff and patients to share their experiences of services via an online survey and focus groups. Our findings highlight that patients with personality disorder who died by suicide or committed homicide were not receiving care consistent with NICE guidance, and there is a need for a more comprehensive examination of services for personality disorder, taking into account the safety concerns highlighted in this report.



National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Annual Report: England, Northern Ireland, Scotland and Wales. October 2017. University of Manchester.

Download report here

Our Annual Report presents findings from 2005 to 2015 and provides figures for suicide, homicide and sudden unexplained deaths, highlighting the priorities for safer services.



Suicide by children and young people. National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH). Manchester: University of Manchester, 2017.

Download report here

We conducted the first national investigation into suicide by children and young people both in the general population and among patients of mental health services, in order to identify possible sources of stress and to examine the role of support services. Two reports have been published from this study. The first, published in May 2016, examined suicides by people aged under 20 in England. The second, published in July 2017, extended data collection to people aged up to 24, in England and Wales. Our most recent report, examining the antecedents of suicide in 391 young people, confirmed the main findings of the first – there are themes that were common to many suicides that should be a target for prevention (e.g. support and management of family factors, childhood abuse, bullying, physical health, mental ill-health, and alcohol or drug misuse). In addition, we found specific actions are needed for certain groups: (1) support for young people who are bereaved, especially by suicide; (2) greater priority for mental health in colleges and universities; (3) housing and mental health care for looked after children; (4) mental health support for LGBT young people. Data collection is continuing for this study, including in Scotland and Northern Ireland.

PAPERS

Baird A, Shaw J, Hunt IM, Kapur N, Appleby L, Webb RT (2018) National study comparing the characteristics of patients diagnosed with schizophrenia who committed homicide vs. those who died by suicide. *Journal of Forensic Psychiatry & Psychology*. https://doi.org/10.1080/14789949.2018.1434226

This study compared the socio-demographical and clinical characteristics of male patients with schizophrenia who committed homicide during 1997-2012 with those who died by suicide. Homicide perpetrators had frequently disengaged with mental health services (e.g. missed appointments) while those who died by suicide were more often in recent contact with services, including being an in-patient at the time of death. Awareness of these issues is important in clinical risk assessment of individual patients.

Appleby L, Hunt IM, Kapur N (2017) New policy and evidence on suicide prevention. *Lancet Psychiatry*, https://doi: 10.1016/S2215-0366(17)30238-9

This commentary summarises recent reports and policy changes in suicide prevention. It highlights key findings from the NCISH 2016 report which demonstrate the changing pattern of patient suicide over twenty years of research.

Pitman AL, Hunt IM, McDonnel SJ, Appleby L, Kapur N (2017) Support for relatives bereaved by psychiatric patient suicide: National Confidential Inquiry into Suicide and Homicide findings. *Psychiatric Services*, DOI: 10.1176/appi.ps.201600004.

This paper aimed to measure the proportion of cases in which mental health services contacted next of kin after a patient's suicide and to examine whether patient characteristics influenced whether the family were contacted. Relatives were not contacted after the patient's suicide in 33% of cases. A violent method of suicide was associated with greater likelihood of contact with relatives. Four potentially stigmatising patient-related factors (forensic history, unemployment, and primary diagnosis of alcohol or drug dependence or misuse) reduced the likelihood of contacting next of kin, suggesting inequitable access to support after a potentially traumatic bereavement.

Flynn S, Nyathi T, Tham S-G, Williams A, Windfuhr K, Kapur N, Appleby L, Shaw J (2017) Suicide by mental health in-patients under observation. *Psychological Medicine*, Apr 11:1-8. doi: 10.1017/S0033291717000630.

We aimed to explore characteristics of in-patients who were under observation prior to suicide. There were 113 suicides by in-patients under observation in England and Wales between 2006 and 2012, an average of 16 per year. Most were under intermittent observation (i.e. checked every 5–25 minutes). Five deaths occurred while patients were under constant observation. We identified key elements of observation that could improve safety, including only using experienced and skilled staff for the intervention, adhering to procedures and using observation levels determined by clinical need not resources.

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