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The University of Manchester

HQIP
Healthcare Quality Improvement Partnership

National Confidential Inquiry

into Suicide and Safety in Mental Health

Annual Report 2022:
UK patient and general population data 2009-2019, and real-time surveillance data

ACKNOWLEDGEMENTS

NCISH is commissioned by the Healthcare Quality Improvement Partnership (HQIP).

HQIP is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing, and National Voices. Its aim is to promote quality improvement in patient outcomes, and in particular, to increase the impact that clinical audit, outcome review programmes and registries have on healthcare quality in England and Wales. HQIP holds the contract to commission, manage, and develop the National Clinical Audit and Patient Outcomes Programme (NCAPOP), comprising around 40 projects covering care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England and NHS Improvement, the Welsh Government and, with some individual projects, other devolved administrations, and crown dependencies.

More detailed information can be found at:
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During a difficult year for many, we would like to thank mental health staff and experts by experience for their invaluable contributions to our suicide prevention work.

We are aware that the content of this report, which includes some detail of methods of death, may be distressing for some readers.

CONTENTS

EXECUTIVE SUMMARY

The 2022 annual report from the National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH) provides findings relating to people aged 10 and over who died by suicide between 2009 and 2019 across all UK countries. Additional findings are presented on the number of people under mental health care who have been convicted of homicide, and those in the general population.

The NCISH database includes a national case series of suicide by patients under the care of mental health services over more than 20 years. The current suicide database stands at over 152,000 deaths by suicide in the general population, including over 38,000 patients. This internationally leading database allows NCISH to make recommendations for clinical practice and policy that will improve safety locally, nationally and internationally.

Within this report, the main findings are presented for the UK as a whole for the baseline year of 2009 and the subsequent 10 years, including the most recent year (2019) for which comprehensive data are available.

We have not received complete 2019 patient data from Northern Ireland but findings will be presented in future reports. Therefore, we present data on patient suicide deaths in Northern Ireland for the period 2009-2018 in the country specific and UK-wide sections of the report.

Data for individual UK countries are provided in the supplementary online information files, and key messages are also provided as an easy read report, an infographic, and an animated video.

In this year's report, though we present data from deaths occurring between 2009 and 2019, most of the themed findings relate to groups that we now know are likely to have been particularly vulnerable during the COVID-19 pandemic: patients with economic difficulties, those who have experienced domestic violence, and those with comorbid physical illness.

We also present some data from our pilot real-time surveillance of suspected suicide by people under mental health care in England.

KEY FINDINGS

General population suicide numbers and rates

- There were 66,991 suicides in the general population in the UK between 2009 and 2019, an average of 6,090 deaths per year. The rate of suicide increased by 8% in the UK in 2018-19 compared to 2017, and the increase was seen in both males and females.

- The rise in suicide rates in 2018-19 occurred in England, Scotland and Wales but not in Northern Ireland where a change in the coding of drug-related deaths has led to recording of lower figures (see details on page 8).

- There has been a significant rise in deaths by hanging in 2018-19 and a small rise in deaths by self-poisoning, but no increase in deaths by jumping/multiple injuries. Among the less frequent methods of suicide, deaths by cutting/stabbing increased in 2018-19 while deaths from gas inhalation decreased.

Patient suicide numbers and rates

- Over 2009-2019, there were 18,268 suicide deaths in the UK by patients (i.e. people in contact with mental health services within 12 months of suicide), an average of 1,661 deaths per year, 27% of all general population suicides.

- In 2018-19, the number of patients who died by suicide rose significantly in England and there was a small increase in Scotland (see details on page 13). However, the increase in England was not reflected in the rate of suicide among patients under mental health care, i.e. taking into account the total number of people under mental health care, where there has been little change.

- The number of deaths by hanging/strangulation has risen steeply in 2018-19, especially in female patients and in patients aged under 25. The number of deaths by self-poisoning also increased in 2018-19, but deaths by jumping/multiple injuries decreased (see details on page 15).

Clinical characteristics

- The majority of patients who died had a history of self-harm (64%) and there were high proportions of those with alcohol (47%) and drug (37%) misuse, and comorbidity, i.e. more than one mental health diagnosis (53%) (see details on page 16).

- Nearly half (48%) lived alone. In 13%, the contact with mental health services was a one-off contact. 9% of patients were known to have died on or near an anniversary or significant date.

Clinical care

- Over 2009-2019, there were 5,218 (29%) patients who died by suicide in acute care settings, including in-patients (6%), post-discharge care (15%) and crisis resolution/home treatment (14%).

- Nearly half (46%) had been in contact with mental health services in the week before death. The majority (84%) of patients were viewed by clinicians as at low or no short-term risk.

- There were an estimated 67 suicides by mental health in-patients in the UK (excluding Northern Ireland) in 2019, around 4% of all patient suicides (see details on page 19). Half of the in-patients were on agreed leave, 35% died on the ward, and 15% died off the ward without staff agreement or with agreement but failed to return. In 30%, the patients had been detained for treatment.

- There were an estimated 180 deaths by suicide in the 3 months after discharge from mental health in-patient care in the UK (excluding Northern Ireland) in 2019, 11% of all patient suicides, a small decrease since the previous year, maintaining an overall downward trend (see details on page 22). The highest risk was in the first 1-2 weeks after discharge and the highest number of deaths occurred on day 3 post discharge.

Suicide by patients aged under 18

- There were 1,093 suicides in the general population by people aged under 18 in 2009-19, an average of 99 deaths per year. The number increased over the report period, mainly driven by an increase in girls aged 16 and boys aged 17, and by a rise in deaths by hanging/strangulation in the under 18s.

- There were 213 suicides by patients aged under 18, an average of 19 deaths per year. This represents 19% of general population suicides in this age group, a lower proportion than in older groups (27%). Recent numbers appear to be higher, reflecting the increase in general population suicides by people aged under 18 (see details on page 25).

- Patients under 18 were more likely to have died by hanging/strangulation and less likely to have died by self-poisoning. 13% were diagnosed with autism and 5% were diagnosed with eating disorders.

- Patients under 18 were more likely to have a history of self-harm. In 2011-19, 25% were known to have suicide-related online experience, more than other age groups.

Suicide by patients with recent economic adversity

- Complete data on economic adversity were available from 2013. In 2013-19, there were 281 deaths per year in patients who had experienced recent economic adversity, 18% of all patient suicides. These included serious financial problems, workplace problems, or homelessness. Recent figures were stable but there was an increase in 2018 (see details on page 27).

- Patients with recent economic adversity were more likely to be male (74%), middle-aged (45%), unemployed (55%), and divorced or separated (29%).

- They were more likely to have had a recent illness onset, most commonly affective disorder (depression or bipolar disorder), and also more likely to have alcohol and drug misuse. Despite recent acute illness, loss of contact with services (26%) and non-adherence with medication (15%) were more common.

Suicide by patients with comorbid physical illness

- There were 390 deaths per year in patients with a comorbid major physical illness, 25% of all patient suicides. The number has been increasing since 2014 (see details on page 30). Nearly half (47%) of patients aged 65 and over had a comorbid physical illness. The most common physical illnesses were cardiovascular diseases (24%) and musculoskeletal disorders (24%).

- Patients with physical comorbidity were older and more often men, but there was a higher proportion of women (37%) compared to in other patient groups (33%). They were less likely to have conventional risk factors, but living alone (52%) and having a long-term illness (especially depression) (58%) were more common and long-term risk was more often viewed as moderate or high (45%).

- In general, these patients more often died by self-poisoning (38%) and the drug type used was more often opioids (opiates or paracetamol/opiate compounds). In 76% the opioids had been prescribed for the patient.

Suicide by patients with a history of domestic violence

- Between 2015 and 2019, there were 532 patients who were known to have experienced domestic violence, 9% of all patients during this time period, 104 deaths per year. The average number in 2016-17 was 101 per year but in 2018-19 this had increased to 149 per year (see details on page 32). The majority (73%) were female, an average of 76 per year.

- Women with a history of domestic violence were more likely to be younger than other women, and be single or divorced, living alone and unemployed. The majority (81%) had a history of self-harm and previous alcohol (61%) and/or drug (47%) misuse was common. Nearly a third (29%) had been diagnosed with personality disorder.

- Male patients who had experienced domestic violence showed similar features, particularly high proportions with personality disorder diagnosis (20%), previous self-harm (73%) and alcohol (75%) and/or drug (65%) misuse. They were more likely to also have a history of perpetrating violence (57%).

Real-time suicide surveillance

- We did not find a rise in suicide in the general population in England in the first year of the pandemic (see details on page 35).

- Experiences of the pandemic, for example anxiety, isolation, disruption to care, may have contributed to some suicides by mental health patients.

CLINICAL MESSAGES

1. Clinical risk

Established risk factors for suicide – such as previous self-harm, alcohol or drug misuse, multiple mental health diagnoses, living alone – are common among patients who die by suicide, and should form the basis of risk management. Responding to loss of contact with services is an important prevention measure.

Assessment of risk should include significant dates and anniversaries which may then form part of safety planning.

2. Acute mental health care

People who die by suicide during in-patient care are not a uniform group. Prevention should address the ward environment (both physical and emotional), vigilance and the safety of leave arrangements before discharge. After hospital discharge, prevention should focus on the first two weeks, ensuring follow-up within 72 hours of discharge.

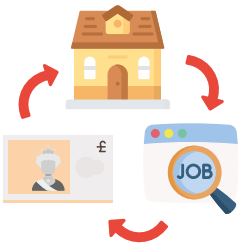
These recommendations are highlighted in our "10 ways to improve safety".

3. Suicide by patients aged under 18

The rise in suicide in young people is also seen in mental health patients. Prevention should focus on access to services, ensuring services have the skills to address multiple co-existing difficulties, preventing and responding to self-harm, and specific diagnoses such as autism and eating disorders.

Assessment of risk should include enquiry about online experience.

4. Suicide by patients with recent economic adversity



Clinicians should be aware of the features of those at suicide risk in the context of economic adversity: most often middle-aged men, unemployed, divorced or separated, with higher rates of alcohol or drug misuse. Onset of mental disorder, especially depression, may have been recent; some lose contact with services.

Working with organisations that support people facing debt or other financial problems is important to prevention.

5. Suicide by patients with physical illness

Physical illness is becoming a more frequent, or more frequently recognised, feature of suicide in mental health patients. The risk profile of these patients is not the same as for patients generally – they are older, common risk factors such as self-harm or alcohol/drug misuse, are less often present, a higher proportion are women.

Clinicians should be aware of the risk from opioids prescribed for pain. Safer prescribing in primary and secondary care is important to prevention.

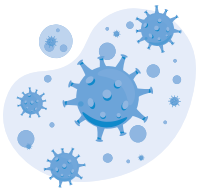
Assessment of risk should include access to opioids available at home, particularly among older patients.

6. Suicide by patients with a history of domestic violence

Clinicians should be aware of the risk associated with domestic violence, especially in female patients but also in men, often occurring with other risk factors such as self-harm or alcohol or drug misuse. Personality disorder diagnoses, more common in this group, may reflect previous trauma or abuse.

Assessment of suicide risk should include experience or threat of domestic violence.

7. Suicide prevention during COVID-19



Clinicians should be aware of the need to maintain support for patients under the care of mental health services, particularly for patients who are anxious, isolated, or have experienced disruption to care.

SCOPE OF THE REPORT

This report provides findings relating to people aged 10 and above who died by suicide in 2009-2019 across all UK countries. Additional figures are presented on people convicted of homicide, and on the real-time surveillance work we have undertaken in response to the COVID-19 global pandemic.

The NCISH database includes a national case series of suicides by people who have been in contact with mental health services in the previous 12 months. The overall database now stands at over 152,000 suicides in the general population, including over 38,000 patients by this 12 month definition.

Complete details of the NCISH methodology are provided in our previous reports and on our **website**.

In brief, we are notified by national mortality data providers of all deaths assigned a suicide or undetermined conclusion at coroner's inquest, or, for Scotland, deaths assigned an 'intentional self-harm' code on the basis of official sources. Currently the median time from the occurrence of a suicide to its registration is 169 days. We then determine which of these people had contact with mental health services in the year before they died, and request that the clinician responsible for their care complete our questionnaire.

In this report, findings are presented for the UK as a whole for suicide (based on date of death), homicide (based on year of conviction) and homicide-suicide (based on date of offence, in England and Wales only).

Our suicide figures differ from official statistics from the Office for National Statistics (ONS) who present figures by date of death registration.

For the period 2009-2018, overall data completeness for patient suicide in the UK is 94%. Data completeness is lower in the final year reported, in this case 2019, at 63% (excluding Northern Ireland). This is, in part, because of the time associated with legal processes but also due to NCISH suspending data collection during the early months of the COVID-19 pandemic to support reducing burden and releasing capacity in clinical services. 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.

Information on some patient sub-groups may take longer to reach us - for example in-patient deaths can take up to four years to be registered. In these circumstances, we projected the figures in 2017-2019 using a more individualised approach, i.e. taking into account the proportion of all deaths in recent years in particular sub-groups. In analysing trends, the final year is not included because of these estimations. Estimated numbers in the final year are presented as dotted lines in the figures. Changes in figures from previous annual reports occur as further information is received.

We have followed guidance from ONS on disclosure control to protect confidentiality within death statistics, and have omitted numbers less than three, including zero. The denominator in all estimates is the number of valid cases. All proportions are provided as valid percentages. We only report trends that are significant. Please note that in this report, "mental health diagnosis" relates to ICD 10 mental, behavioural, and neurodevelopment diagnoses.

Changes to suicide death coding in Northern Ireland

The Northern Ireland Statistics and Research Agency (NISRA) and the Coroners' Service are reviewing drug-related deaths registered between 2015 and 2020 which were originally recorded as 'undetermined intent' and reclassifying some of these to 'accidental' deaths, click **here** for details. These deaths would therefore no longer fall within our suicide definition.

NISRA recommends that until the review process is complete, to use figures from 2015 relating to registered deaths from self-inflicted injury only. This means the figures relating to date of death in Northern Ireland in 2015-2019, and to a lesser extent in 2013 and 2014, have fallen and cannot be compared with the number of suicides in earlier years. Our suicide figures also differ from NISRA who present figures by date of death registration.

UK-WIDE FINDINGS

SUICIDE IN THE UK

Between 2009 and 2019, NCISH was notified of 66,991 deaths in the general population that were registered as suicide or "undetermined", an average of 6,090 per year. These are referred to as suicides throughout the report. Rates in the UK increased in men and women in 2018 and 2019 (Figure 1). Rates also increased between 2009 and 2012 but subsequently fell.

Suicide rates for each UK country are shown in Figure 2, presented by date of death. England, Scotland and Wales experienced higher figures in 2018-19, though the rates in Scotland and Wales remain lower than earlier in the report period.

Lower recent rates in Northern Ireland reflect a change in how some drug-related deaths are classified. As a result, rates in Scotland are currently the highest among UK countries.

In all countries except Northern Ireland the rates were highest in middle-aged groups (Figure 3). The biggest differences between UK rates were in the younger age groups, with higher rates in Northern Ireland and Scotland. In those aged 80 and above, rates were higher in England and Wales.

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

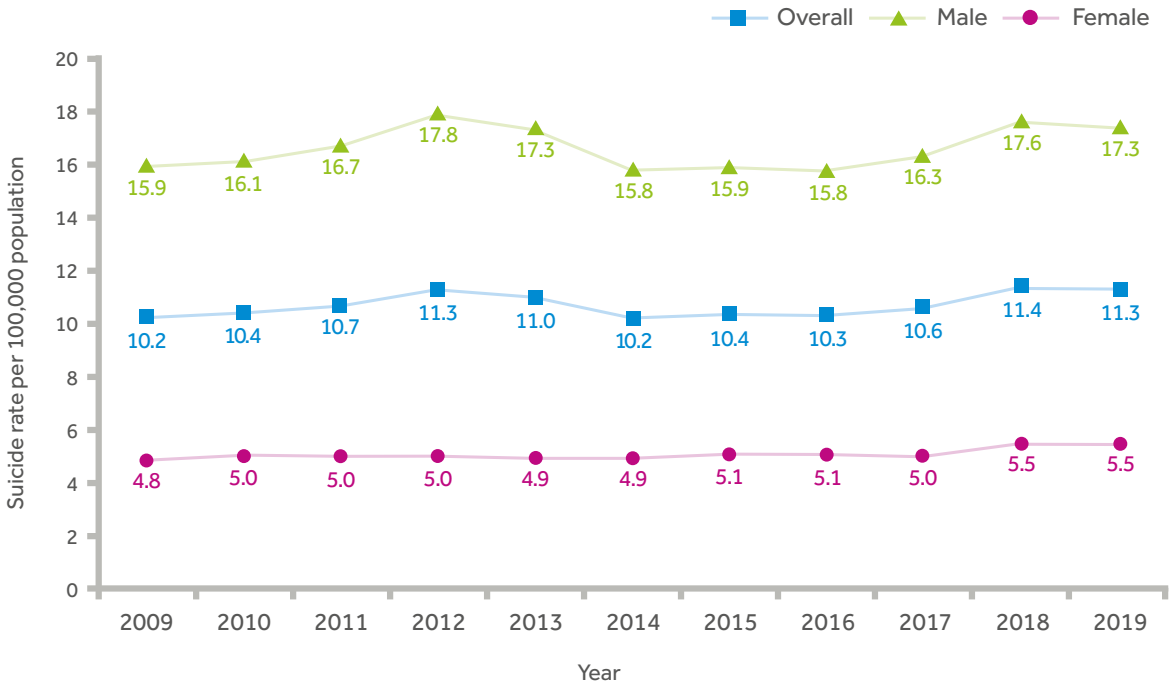
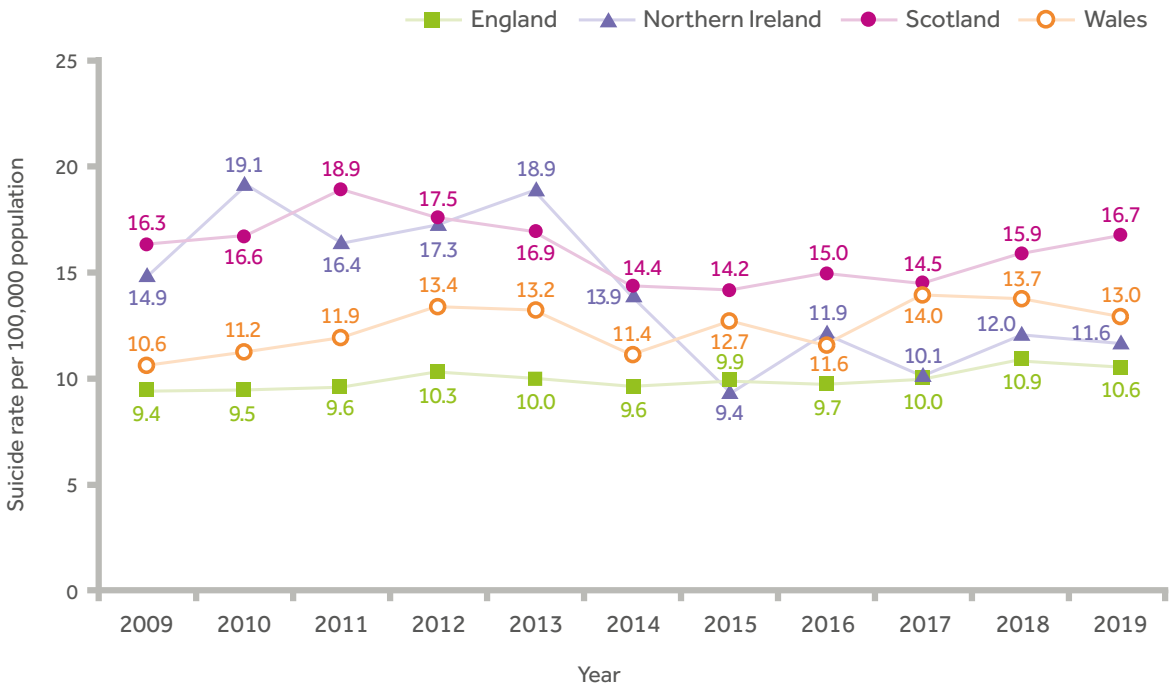
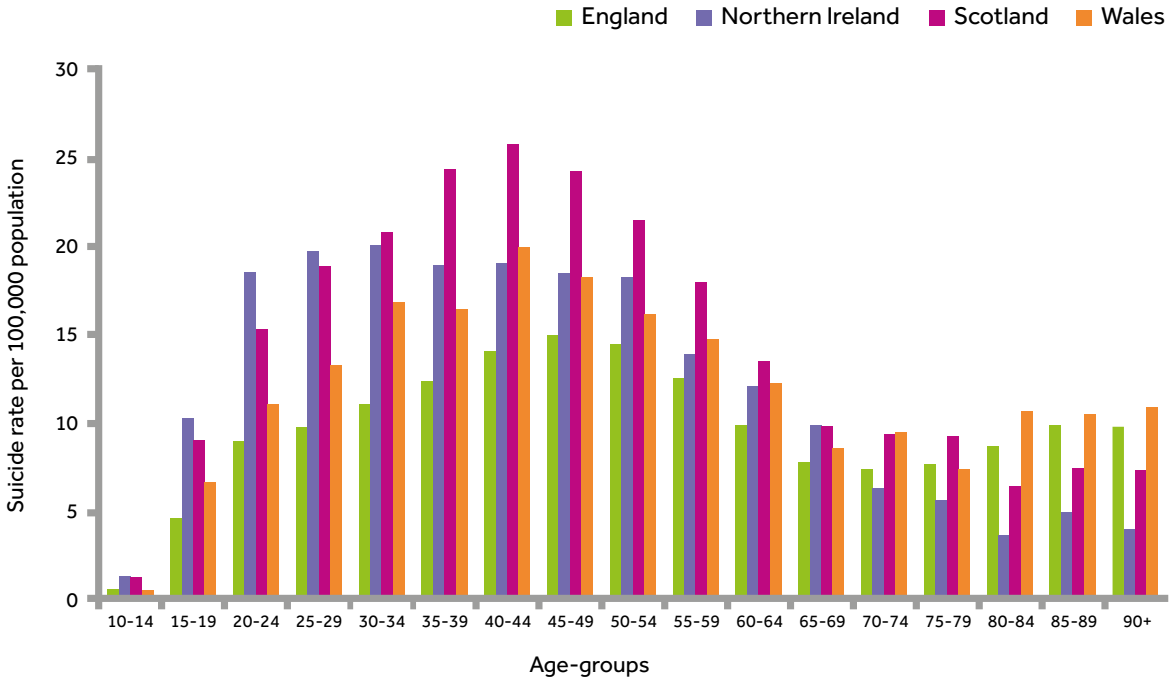


Figure 2: Suicide rates by year of death in the general population, by UK country



Note: The rates in 2015-2019 in Northern Ireland indicate the current guidance from NISRA to include only registered deaths resulting from self-inflicted injury (see details on page 8).

Figure 3: Suicide rates in the general population by age-group, by UK country (2009-2019)



Method of suicide in the general population

There was a rise in the number of deaths by hanging/strangulation and, to a smaller extent, self-poisoning in 2018-19 but a lower number of deaths by jumping/multiple injuries (Figure 4). Deaths by hanging/strangulation have increased almost every year since 2009, with a 15% increase in 2019 compared to 2017. This increase in hanging/strangulation was in men and women, and in all age-groups of under 25, 25-44, 45-64 and 65 and over.

Deaths from jumping/multiple injuries have continued to fall since 2014, while the recent increase in self-poisoning follows a decrease prior to 2015.

Of the less common methods, deaths from gas inhalation have fallen since 2013 following a previous increase, while deaths from cutting/stabbing have increased (Figure 5). Firearms remain a minor method, constituting less than 2% of all deaths, with a fall since 2009.

Figure 4: Suicide in the general population in the UK: main suicide methods

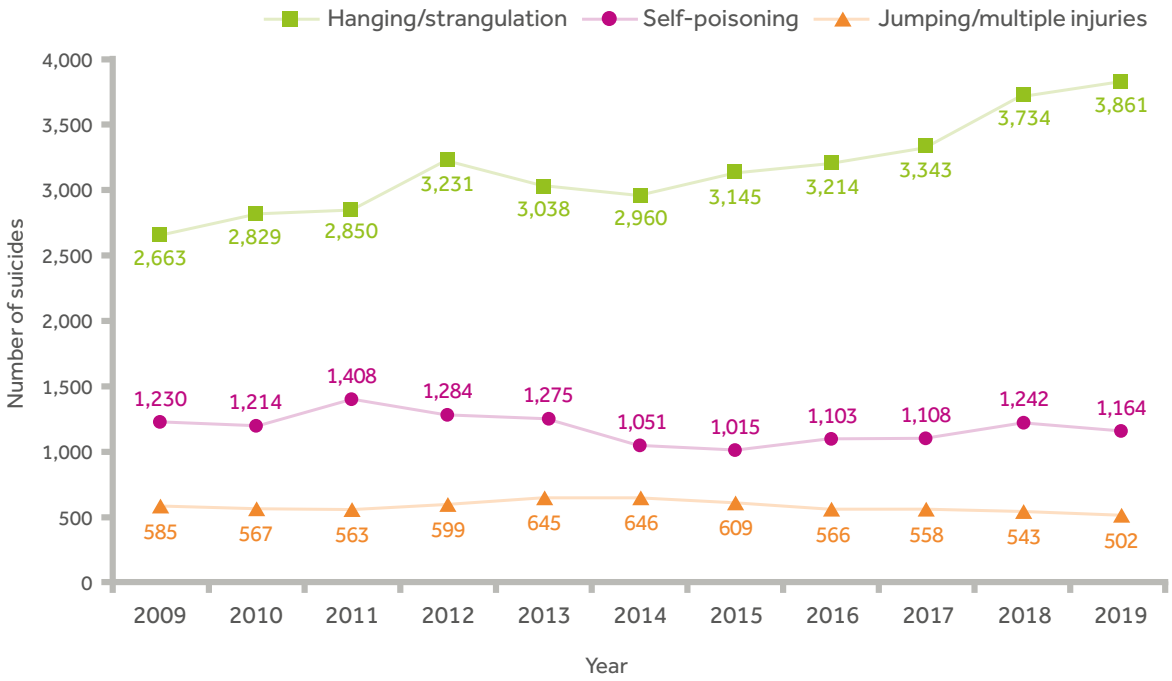
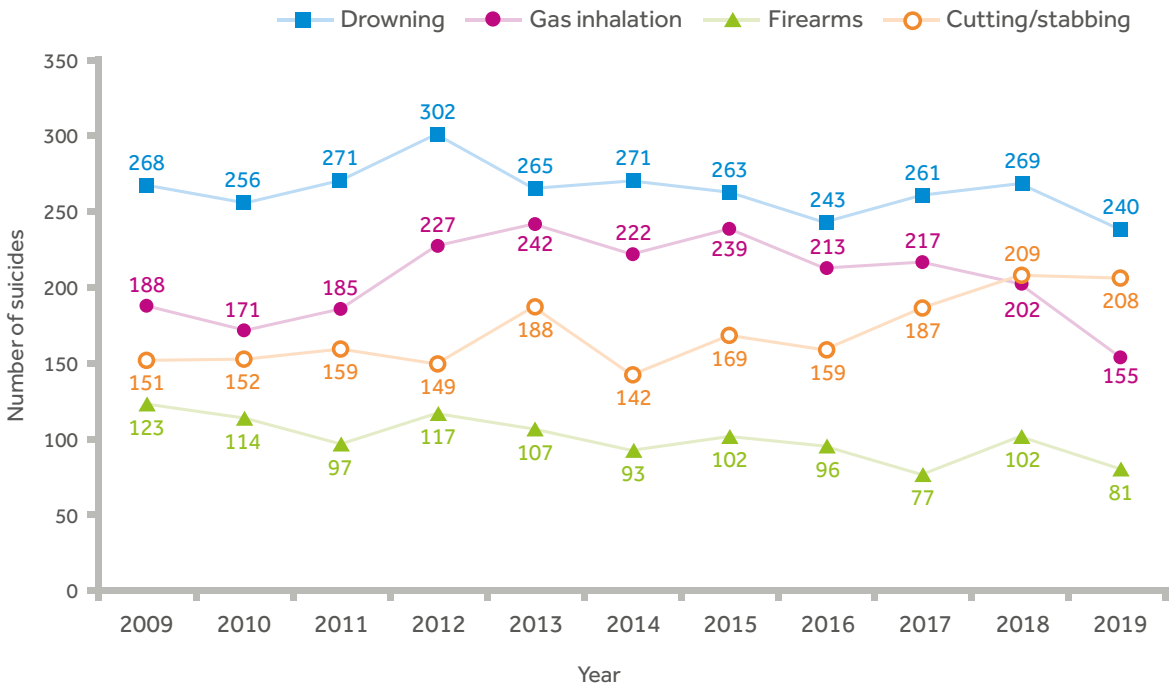


Figure 5: Suicide in the general population in the UK: other suicide methods



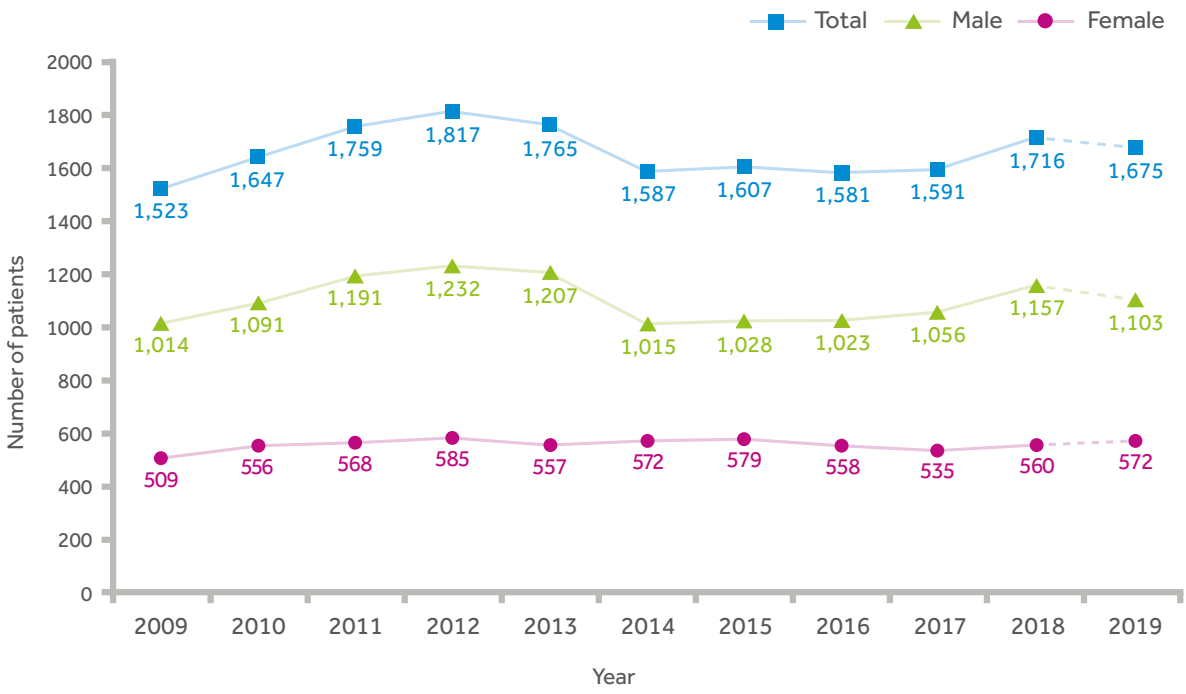
PATIENT SUICIDE IN THE UK

There were 18,268 suicide deaths by patients (i.e. people in contact with mental health services within 12 months of suicide) in the UK in 2009-2019 (excluding data in Northern Ireland in 2019), 27% of all general population suicides, an average of 1,661 deaths per year. This figure was slightly higher in Scotland (31%) and lower in Wales (22%) (see supplementary data). There was an increase in the number of patient suicides in 2018-19, mostly driven by an increase in the number of male patients (Figure 6).

We are estimating an increase in England and Scotland in 2018-19, though overall the highest figures were in 2011-13, with an apparent fall since then (Figure 7).

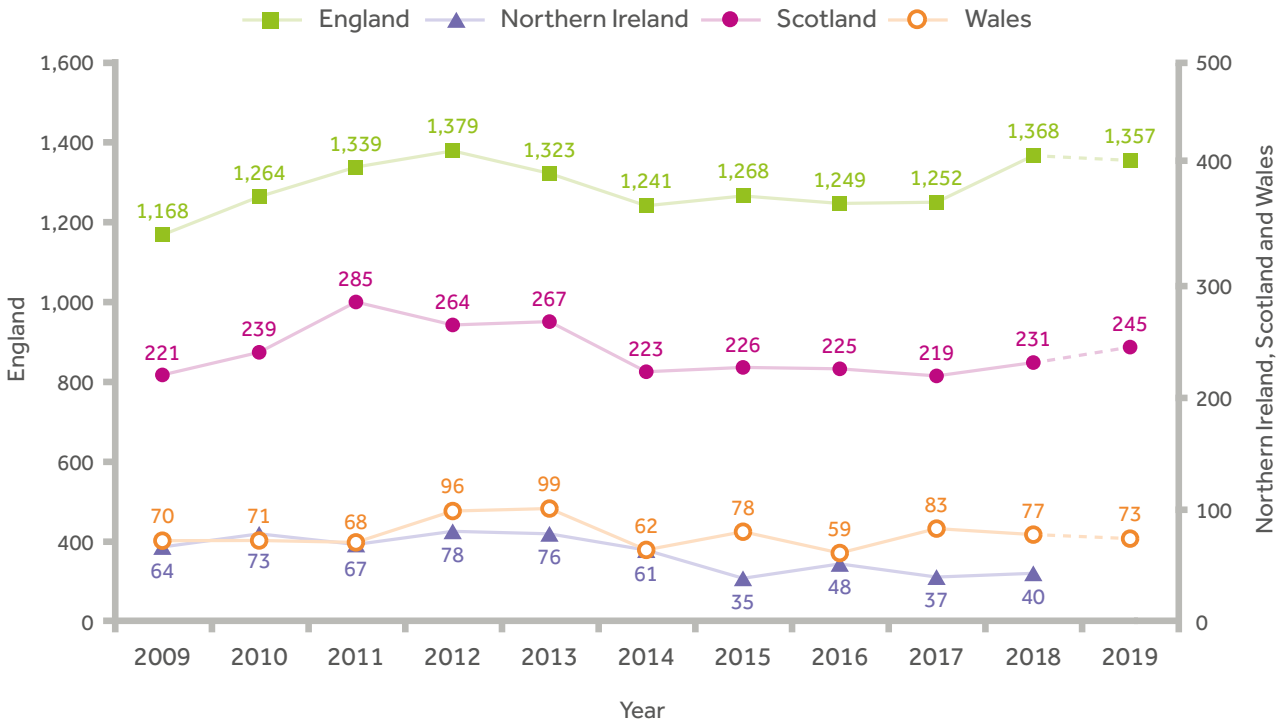
Rates of patient suicide (England only), taking into account the rising number of patients under mental health care, show a fall over the report period, from 92.8 per 100,000 mental health service users in 2009 to 47.8 per 100,000 in 2019, though the most recent figures show little change (Figure 8). The Mental Health Services Data Set (MHSDS) was used to calculate rates. Changes in MHSDS methodology means rates between 2009-2011 and 2011-2019 are not directly comparable.

Figure 6: Patient suicide: numbers by sex in the UK



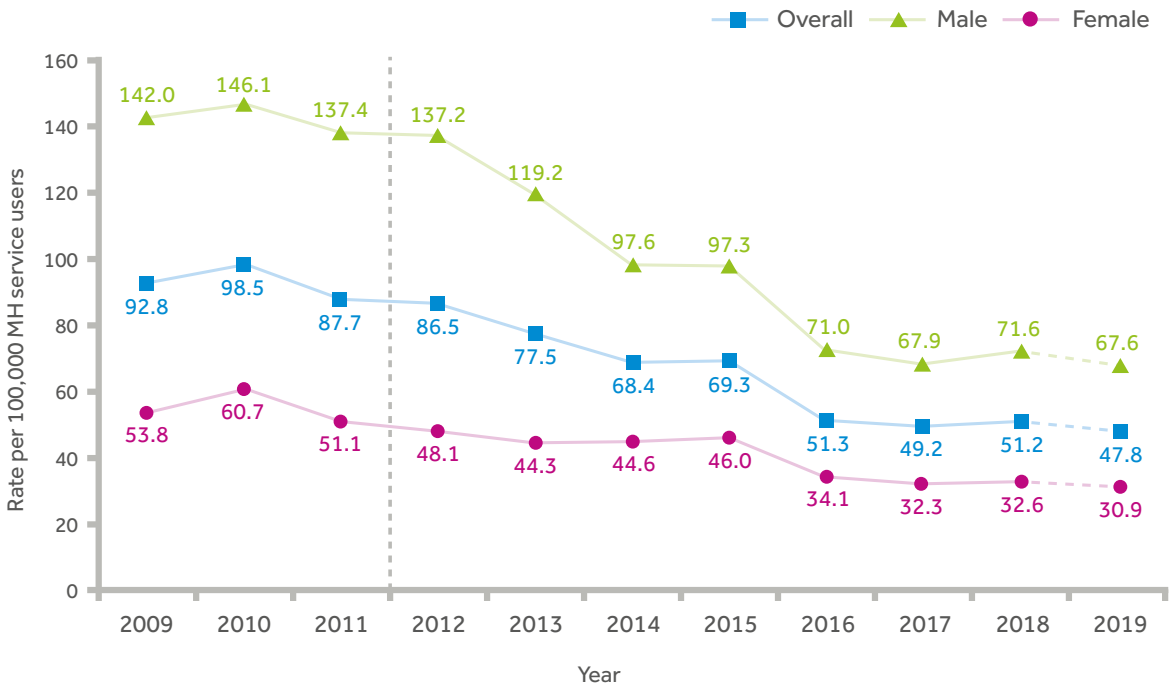
Notes: Male and female numbers in 2013 and 2018 do not total the overall figure due to rounding.
Patient data unavailable in Northern Ireland in 2019.

Figure 7: Patient suicide: numbers by year in each country of the UK



Note: Patient data unavailable in Northern Ireland in 2019

Figure 8: Rates of suicide per 100,000 mental health service users† in England



† The Mental Health Services Data Set (MHSDS) was used to calculate rates. Changes in MHSDS methodology means rates between 2009-2011 and 2011-2019 are not directly comparable.

Method of suicide by patients

The most common methods of suicide are shown in Figure 9. Hanging/strangulation increased by 45% during 2009-2019 (Figure 10). The increase was especially seen in women, from an average of 32% of all female deaths in 2009-2012 to 41% in 2016-2019, and in patients aged under 25, from an average of 53% in 2009-2012 to 60% in 2016-2019. The number of deaths by jumping/multiple injuries has fallen by 31% since 2013.

We are estimating an increase in the number of self-poisoning deaths in 2018-19. Overall the number of deaths by self-poisoning increased between 2009 and 2012 because of a rise in opiate deaths but has been falling since. Opiates (including opioid compounds) accounted for 36% of deaths by self-poisoning, though the number of deaths using opiates and opioids fell by 35% between 2009 and 2019.

There was no change in the number of self-poisonings using paracetamol over the report period. The number of deaths by psychotropic drugs fell by 48% between 2009 and 2019.

We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (227, 38%), codeine (105, 18%), tramadol (98, 17%) and methadone (79, 13%). Information on the source of the opiates/opioids was available in 47%. In 197 (51%, excluding unknowns) these had been prescribed for the patient, an average of 25 deaths per year.

UK country differences: Northern Ireland (58%) and Wales (54%) had a higher proportion of suicide by hanging/strangulation compared to the UK average (46%).

The proportion of deaths by self-poisoning was higher in Scotland (34% v. 23%), with more patients using opiates and opioids (48% v. 32%), particularly methadone (19% v. 11%).

See supplementary data for further details.

Figure 9: Patient suicide in the UK: suicide methods

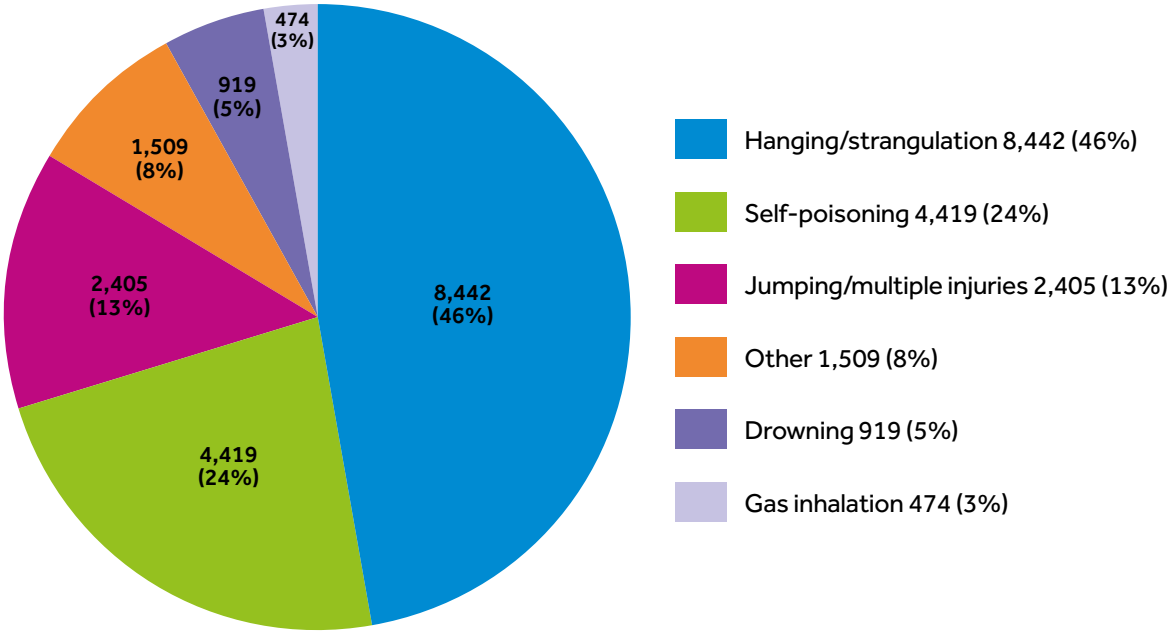
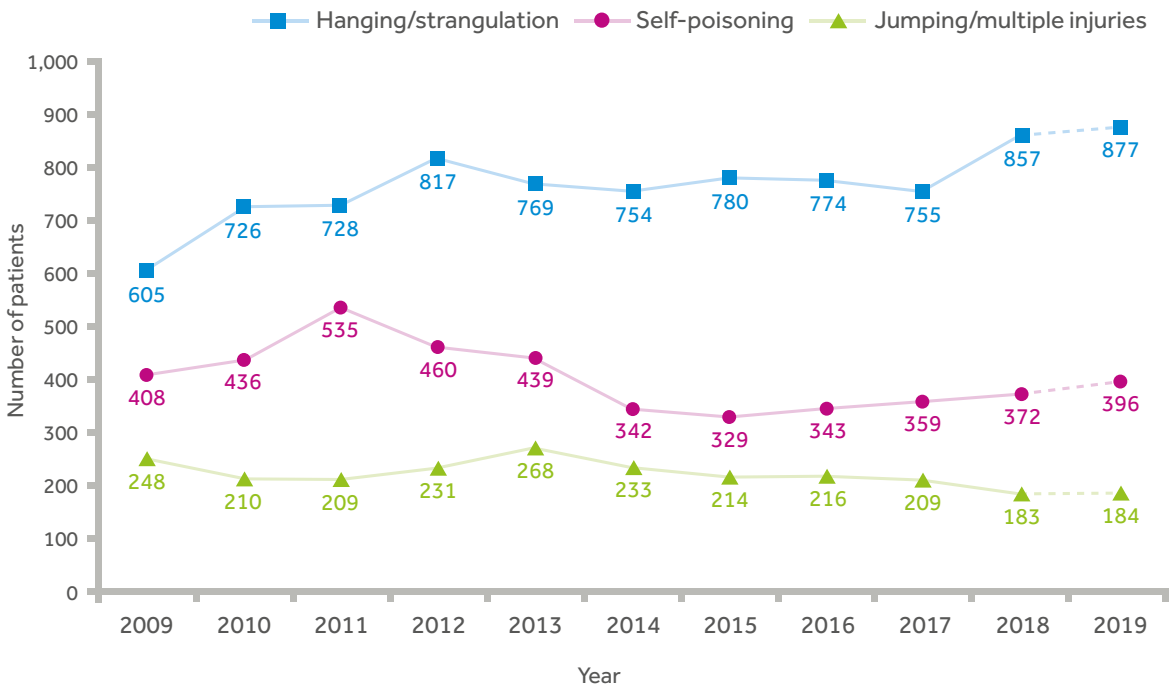


Figure 10: Patient suicide in the UK: main suicide methods



Note: Patient data unavailable in Northern Ireland in 2019

Social and clinical characteristics

Box 1 shows the main social features of patients dying by suicide in the UK. These patients had high rates of social adversity and isolation, indicated by unemployment and living alone. The majority (12,117, 66%) were male patients. Since 2015 we have asked whether the patient was within a transgender or gender non-conformity group and have identified 26 (<1%) patients under this question.

Around half had a comorbid (i.e. additional) mental health diagnosis, and rates of previous self-harm and alcohol misuse were high (Box 2). The proportion of patients with a history of self-harm decreased by 16% between 2009 and 2019. There was an 18% increase in the number of patients with a comorbid diagnosis, indicating increasing clinical complexity, during this period.

Since 2015, we have collected data on whether the contact with services was a one-off contact; 596 (13% excluding unknowns) patients in 2015-2019 had only one contact with services. We asked clinicians if the patient had died by suicide on or near an anniversary or other significant date. Between 2011 and 2019, this was the case for 984 (9%) patients, an average of 109 deaths per year.

Diagnosis

The main primary mental health diagnoses are shown in Figure 11. Suicide by patients with affective disorders (depression or bipolar disorder) rose in 2018-19 after falling since 2012, with an average of 659 deaths per year during the report period.

In patients with schizophrenia and other delusional disorders, the number in 2018-19 has continued to be lower than in earlier years of the report when there was a peak in 2013, with an average of 250 per year over the whole report period. In patients with a diagnosis of personality disorder, the number increased in 2018-19, continuing a rise since 2009, with an average of 163 per year.

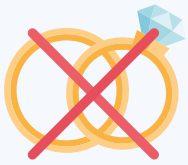
The number of patients with alcohol dependence/misuse fell after 2011, with an average of 134 per year during the report period. Similarly the number of patients with drug dependence/misuse has remained lower since 2013, with an average of 93 per year. The number of patients with anxiety disorders rose by 49% between 2009 and 2019, with an average of 88 per year.

Box 1: Socio-demographic characteristics of patients who died by suicide in the UK (2009-2019)

66% male

13% aged 65 and over

48% living alone



73% unmarried

47% unemployed

7% ethnic minority group

Box 2: Clinical and behavioural characteristics of patients who died by suicide in the UK (2009-2019)

53% comorbid diagnosis

21% ill <12 months

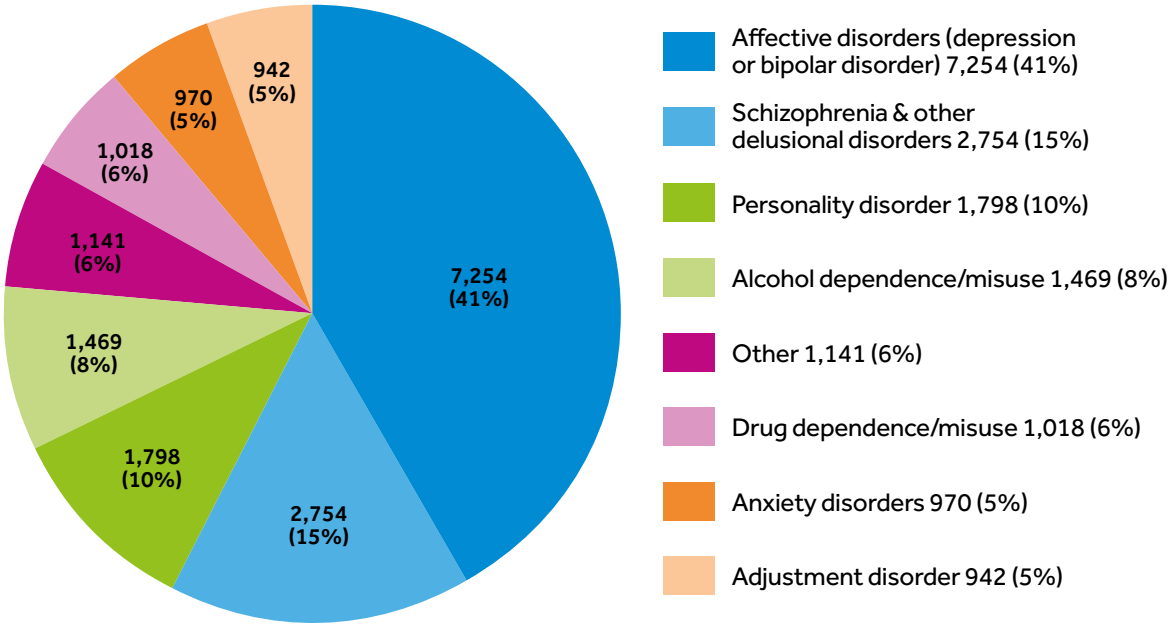
14% last admission was a readmission

64% self-harm

47% alcohol misuse

37% drug misuse

Figure 11: Patient suicide in the UK: primary diagnoses



*"other" diagnoses include: eating disorders, learning disability, conduct disorder, autism, somatisation disorder, ADHD, organic disorder, drug induced psychosis, dementia and other specified.

UK country differences: More patients in England (43%) and Wales (40%) had affective disorder (depression or bipolar disorder) compared to Northern Ireland (32%) and Scotland (30%).

Alcohol and drug dependence/misuse were more common in patients in Northern Ireland (20% and 9% respectively) and Scotland (14% and 13%) compared to England (7% and 4%) and Wales (9% and 7%).

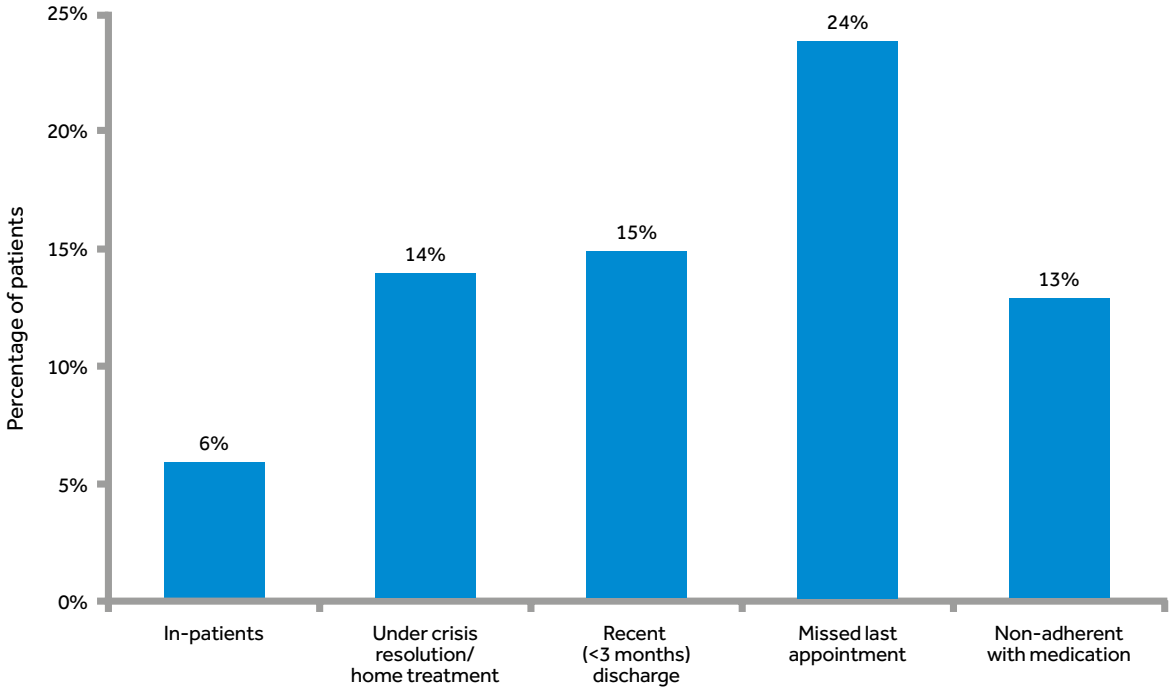
See supplementary data for further details.

MENTAL HEALTH CARE

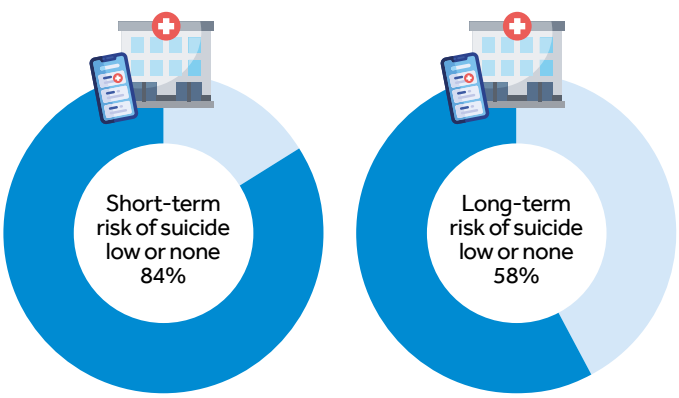
During 2009-19, 5,218 patients (29%) who died by suicide were in acute care settings (in-patients, under crisis resolution/home treatment (CRHT), recently discharged from in-patient care) (Figure 12)

A quarter (3,668, 24%) had missed their last appointment with services and 1,909 (13%) were non-adherent with medication.

Figure 12: Service characteristics of patients who died by suicide in the UK



Nearly half (7,744, 46%) had been in recent (<7 days) contact with mental health services. The immediate risk of suicide at the time of final service contact was judged by clinicians to be low or not present for the majority of patients who died by suicide. Our report "The assessment of clinical risk in mental health services" examined current practice and views of staff on risk assessment; our recommendation is that risk assessment tools should not be seen as a way of predicting suicidal behaviour.



UK country differences: There were fewer patients in Northern Ireland (8%) and Scotland (7%) receiving care under crisis resolution/ home treatment services compared to England (15%) and Wales (12%).

More patients in Northern Ireland (37%) and Scotland (28%) had missed their last contact with services compared to England (22%) and Wales (21%).

See supplementary data for further details.

In-patient suicide

There were 1,109 in-patient deaths by suicide in 2009-2019, representing 6% of patient suicides overall during this time period, but with a lower figure since 2016 (4% in 2019). Fifteen (1%) were aged under 18. From 2009 to 2019, there was a 46% fall in the number of in-patient suicides, though figures in 2017-19 have not fallen (Figure 13). Information on in-patient deaths often takes longer to reach us – up to 4 years. We have therefore estimated the overall figures in 2017-2019 using the average proportion of all patient suicides that were in-patients in recent years and adjusting for expected questionnaire returns.

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 42% in 2009-2019 (Figure 14).

Our figures since 2015 appear to be lower, although at this stage this includes a degree of estimation and so should be treated with caution.

Between 2009 and 2014 there were on average 32 deaths per year by hanging/strangulation on the ward but since 2015 the number has fallen to an average of 20 deaths per year (Figure 13). Many (230, 95%) are from low-lying ligature points (i.e. strangulation) but also include deaths by strangulation with no ligature point (i.e. self-strangulation).

The majority died by hanging/strangulation in a single bedroom (169, 62%) or a toilet/bathroom (79, 29%). The most common ligature points were doors (120, 49%) or windows (25, 10%) and the most common ligatures were a belt (89, 35%) or sheets/towels (62, 24%).

Figure 13: Patient suicide in the UK: number of mental health in-patients; number who died by hanging/strangulation on the ward

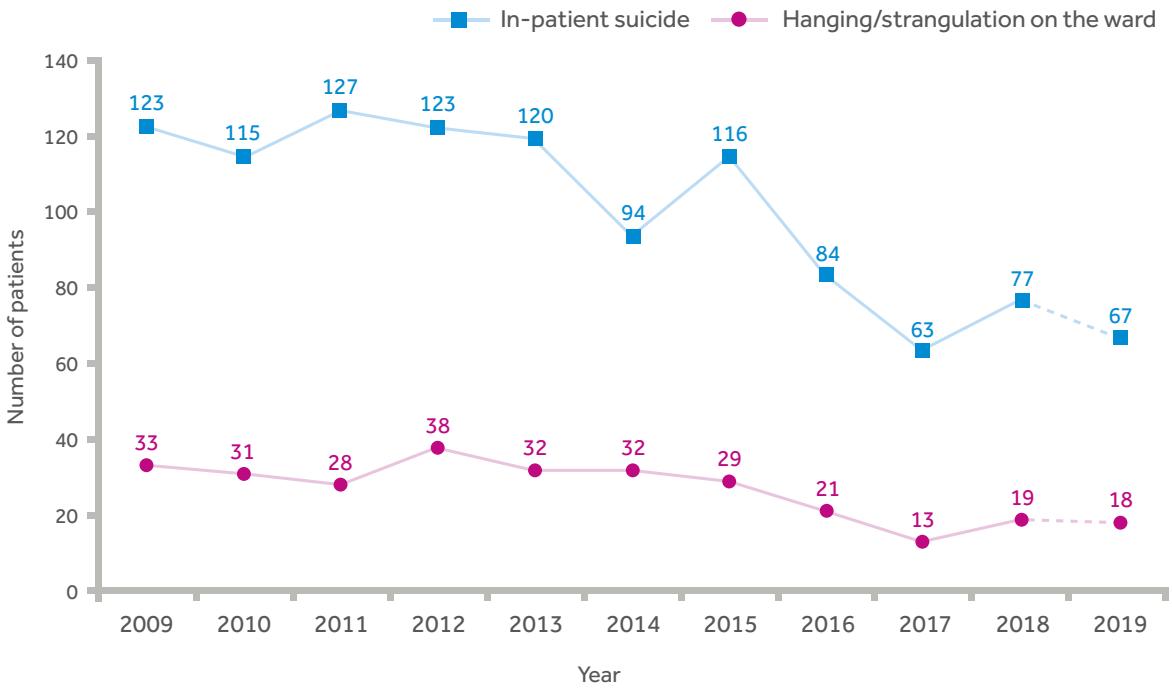
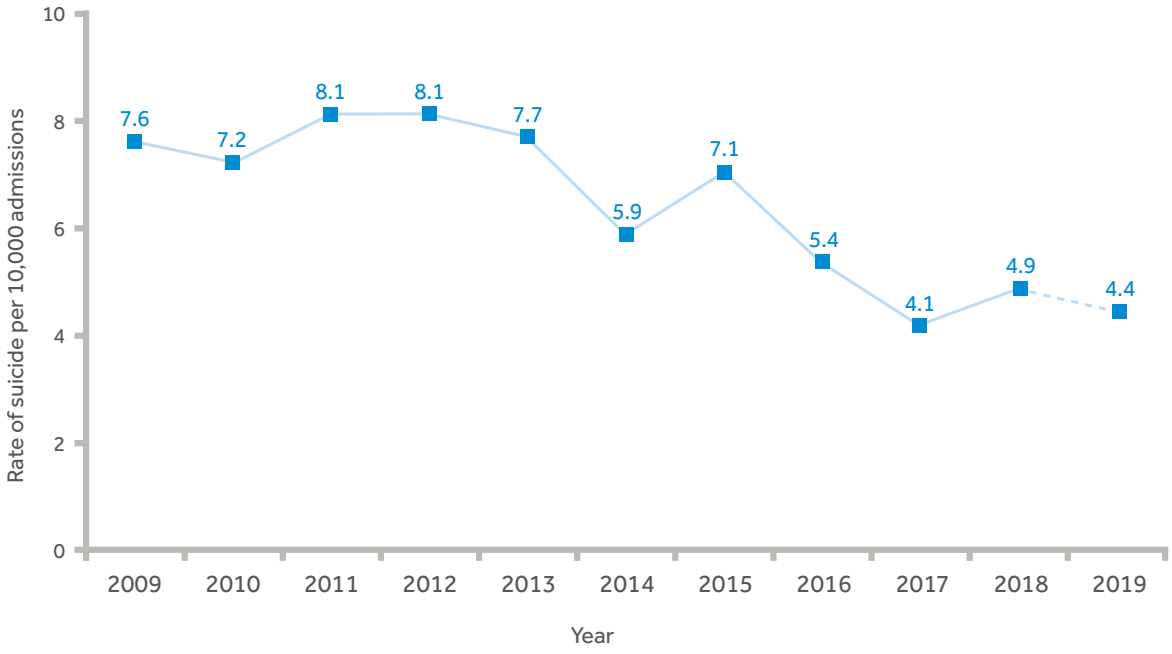


Figure 14: Patient suicide in the UK: rate of in-patient suicide per 10,000 admissions



The following sections are based on actual figures from data collected so far and do not include adjustments for late returns in recent years.

Service characteristics of in-patient suicides are shown in Box 3. 145 (14%) in-patient suicides took place in the first week after admission, most often on day 2 (32 patients) or day 7 (23 patients); the lowest number occurred on the day of admission (7 patients). Over a third (348, 35%) died on the ward; half (493, 50%) had left the ward with staff agreement; and 143 (15%) had left the ward without staff agreement (or with staff agreement but failed to return).

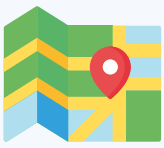
Certain characteristics of in-patient suicide have changed over the report period. For example, there have been falls in the number who died in the first week of admission, who left the ward without staff agreement, who were detained under the Mental Health Act 2007 (MHA), and who died under a medium or high level of observation.

Box 3: Service characteristics of in-patients who died by suicide in the UK (2009-2019)

14% in hospital less than a week

50% on leave from the ward

75% low or no suicide risk



30% non-local unit

28% medium or high observation levels

30% detained under the MHA

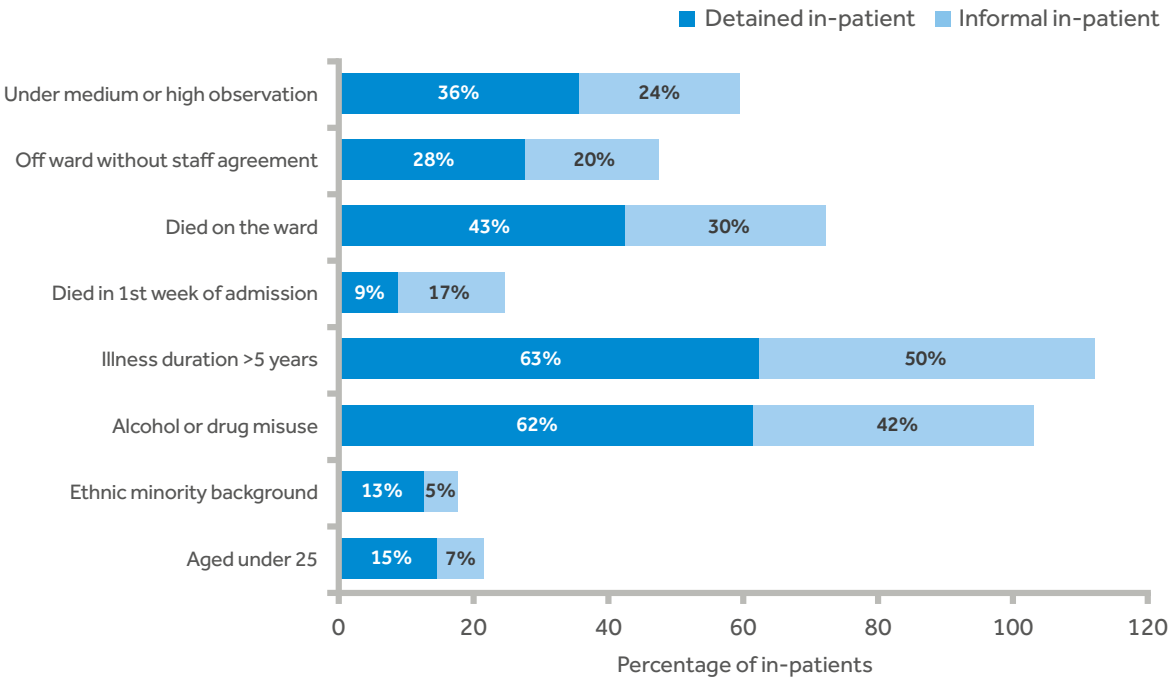
MHA=Mental Health Act 2007

Detained in-patients

There were 310 patients detained under the MHA at the time of suicide, 30% of in-patient suicides, an average of 28 deaths per year. Four (1%) were aged under 18. The number of detained in-patient suicides fell over the report period, in line with the fall in overall in-patient suicides. Figure 15 shows the key differences between detained in-patients and other in-patients.

Detained patients were more likely to be aged under 25, be from an ethnic minority group, have a history of alcohol or drug misuse, and have been ill for longer than five years. Fewer died in the first week of admission but more died on the ward or after leaving the ward without staff agreement (or with staff agreement but failed to return). Over a third were under a medium or high level of observation.

Figure 15: In-patient suicide in the UK: characteristics of detained and informal (voluntary) in-patients



UK country differences: Compared to the rest of the UK (6%), there were fewer in-patient suicides in Northern Ireland (4%).

In Scotland there were more in-patients who died in the first week of admission (21% v. 13%) or who died off the ward without staff agreement (36% v. 20%).

See supplementary data for further details.

Patients under a Community/ Compulsory Treatment Order (CTO)

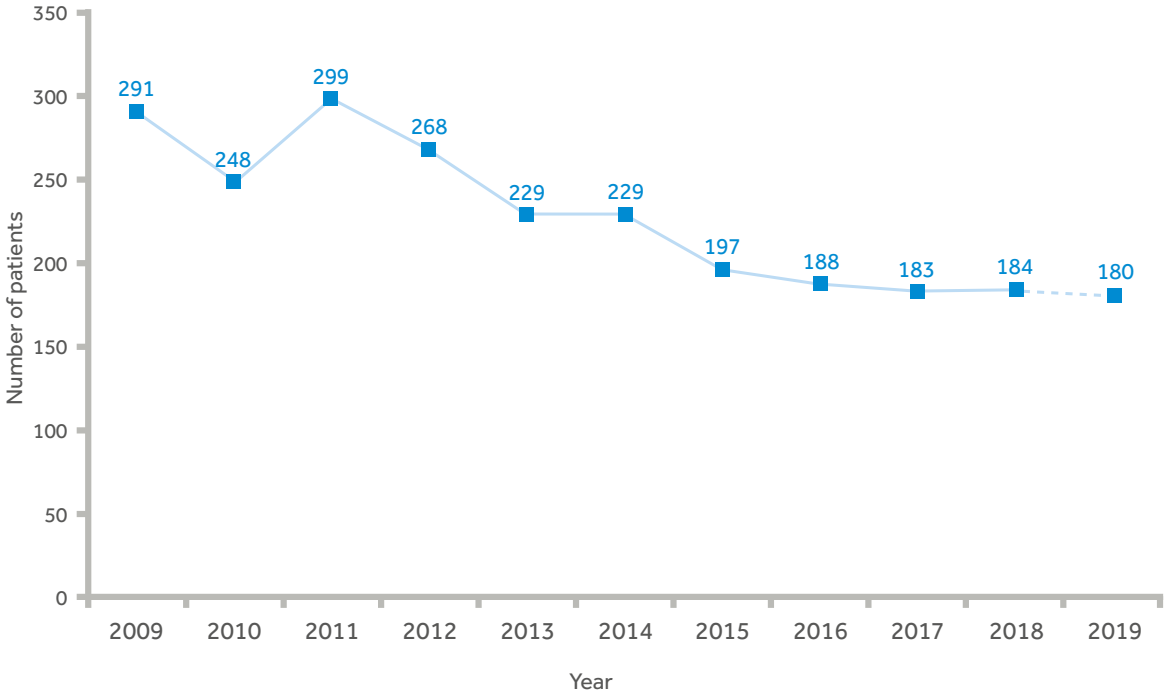
There were 210 patients who died by suicide having been subject to a CTO in 2009-19, 1% of all patient suicides, an average of 19 per year. Around a third (71, 35%) were no longer under the CTO at the time of suicide.

We have recently published a study of suicide by patients under CTO, which can be accessed at our website.

Patients recently discharged from hospital

There were 2,496 suicides within 3 months of discharge from in-patient care, 15% of all patient suicides, an average of 227 deaths per year. 16 (1%) were aged under 18. The number of suicides by patients within 3 months of discharge has not changed in recent years but has fallen over the report period - the average for 2009-13 being 267, and for 2015-19 being 186 (Figure 16). The average rate of suicide was 14.7 per 10,000 discharges (Figure 17).

Figure 16: Patient suicide in the UK: number who died within 3 months of in-patient discharge by year



Note: Patient data unavailable in Northern Ireland in 2019

The figures for 2017-2019 above contain a degree of estimation to take into account information on some patient groups that takes longer to reach us. The remaining figures in this section will present the actual figures.

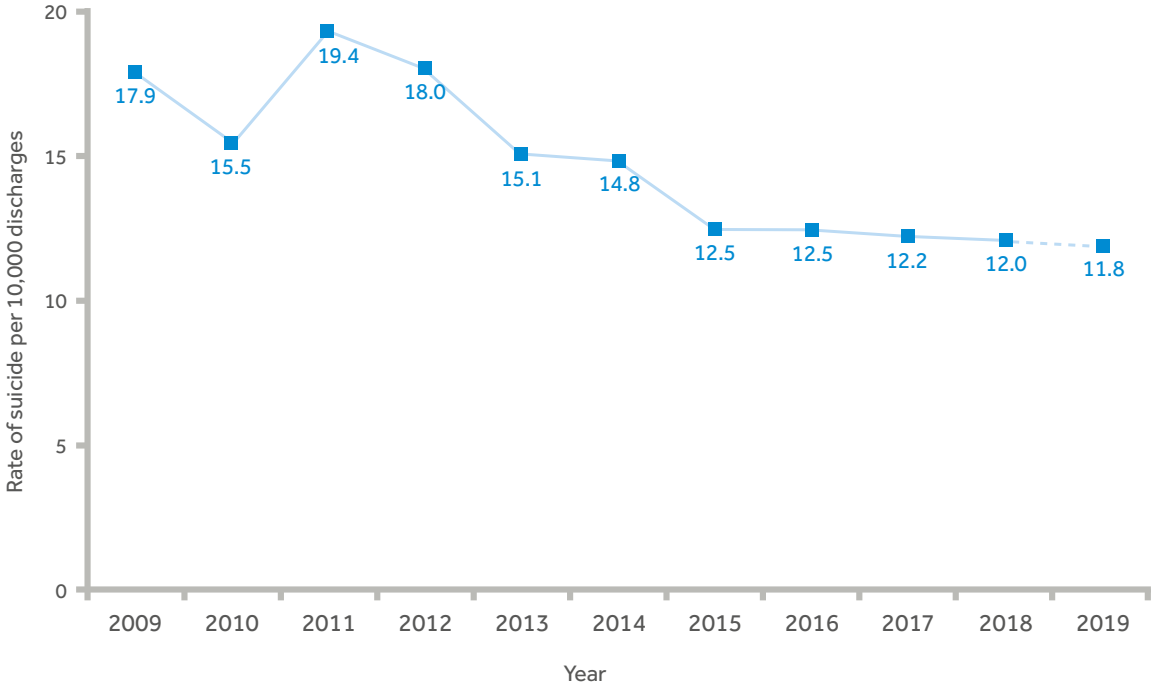
Post-discharge suicides were most frequent in the first 1-2 weeks after leaving hospital when 645 deaths (29% excluding unknowns) occurred (Figure 18). Of the 344 deaths in the first week after discharge, the highest number (71, 21%) occurred on day 3 after leaving hospital (day 1 = day of discharge). Nearly half (154, 47%) of the patients who died in the first week after discharge had experienced recent adverse life events, with family problems (37, 11%) significantly more common than other post-discharge patients (105, 6%).

We have recommended all patients are followed up within 72 hours of discharge from in-patient care, and NHS England and NHS Improvement has included 72 hour follow-up in the standard NHS contract.[1]

256 (12%) of deaths post-discharge occurred before the first follow-up appointment. This proportion was higher for those who died within 2 weeks of discharge (30%). The number and proportion of patients who died before the first follow-up fell over the report period.

225 (10%) died after being discharged from a non-local in-patient unit. In 2019 there were 13 (13%) suicides after discharge from a non-local unit.

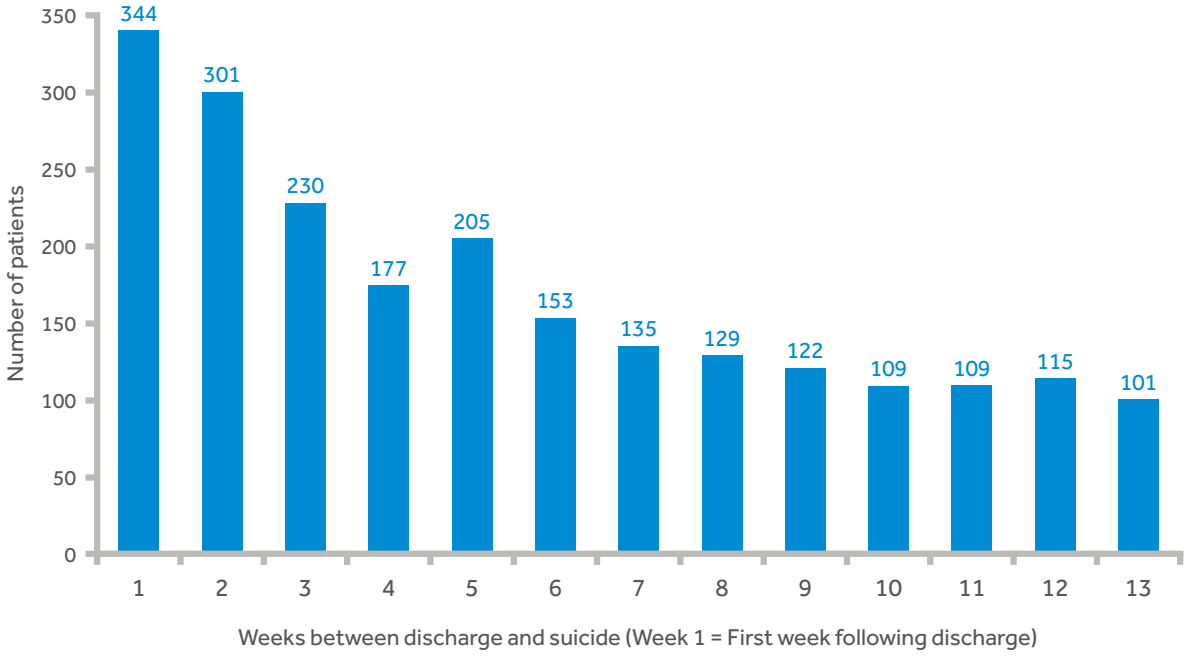
Figure 17: Patient suicide in the UK: rate of post-discharge suicide per 10,000 discharges



Note: Patient data unavailable in Northern Ireland in 2019

[1]Commissioning for Quality and Innovation (CQUIN) Guidance for 2019-2020. NHS England and NHS Improvement, March 2019.

Figure 18: Patient suicide in the UK: number per week following discharge (2009-2019)



UK country differences: In Northern Ireland more post-discharge suicides died in the first week after discharge compared to the rest of the UK (23% v. 15%).

More post-discharge suicides in Northern Ireland (21%) and Scotland (18%) died before the first follow-up appointment compared to in England (10%) and Wales (10%).

See supplementary data for further details.

THEMED TOPICS

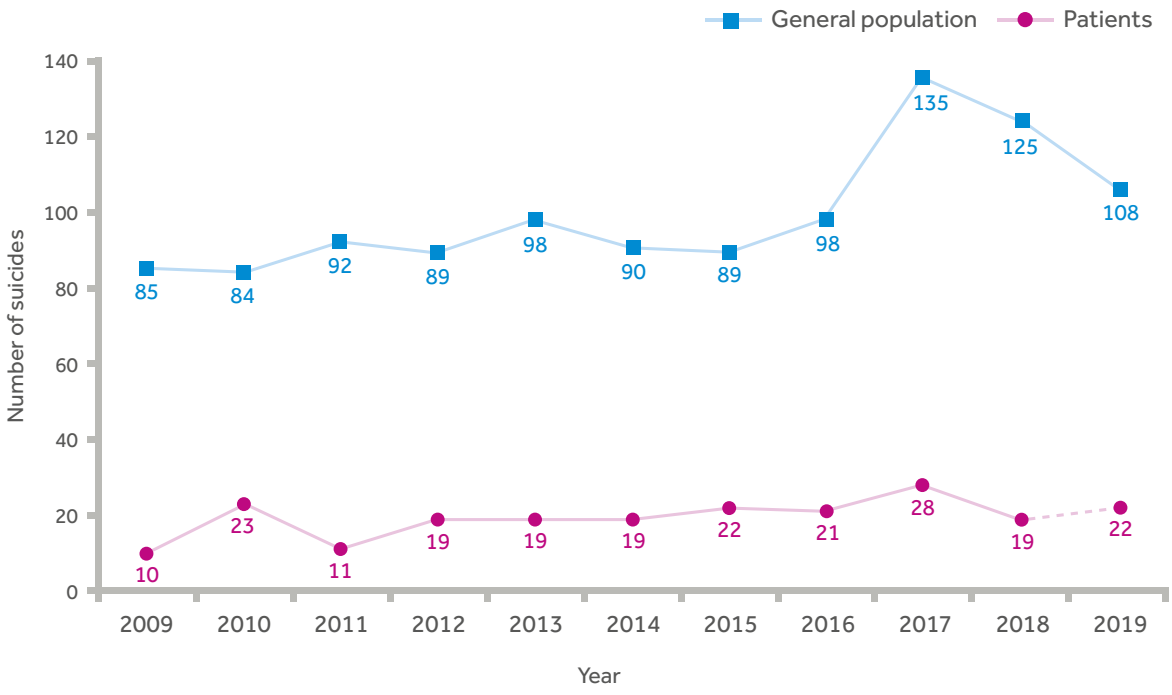
In this section we provide more detailed data on particular themed topics. Some of the groups below reflect those who have been vulnerable and a source of concern during the COVID-19 pandemic. We are presenting pre-pandemic data from the full report period 2009-2019 that can contribute to suicide prevention.

SUICIDE BY PEOPLE AGED UNDER 18 IN THE UK

In the UK in 2009-2019, there were 1,093 suicides in the general population by people aged under 18, an average of 99 deaths per year. The number of deaths by people aged under 18 increased in 2017 (Figure 19). The rise in 2017 was mainly the result of higher numbers of female suicides but is otherwise unexplained and is being examined further. There was an increase in deaths by hanging/strangulation in the under 18s, from an average of 62 deaths per year in 2014-2016 to 90 deaths per year in 2017-2019, a 45% increase.

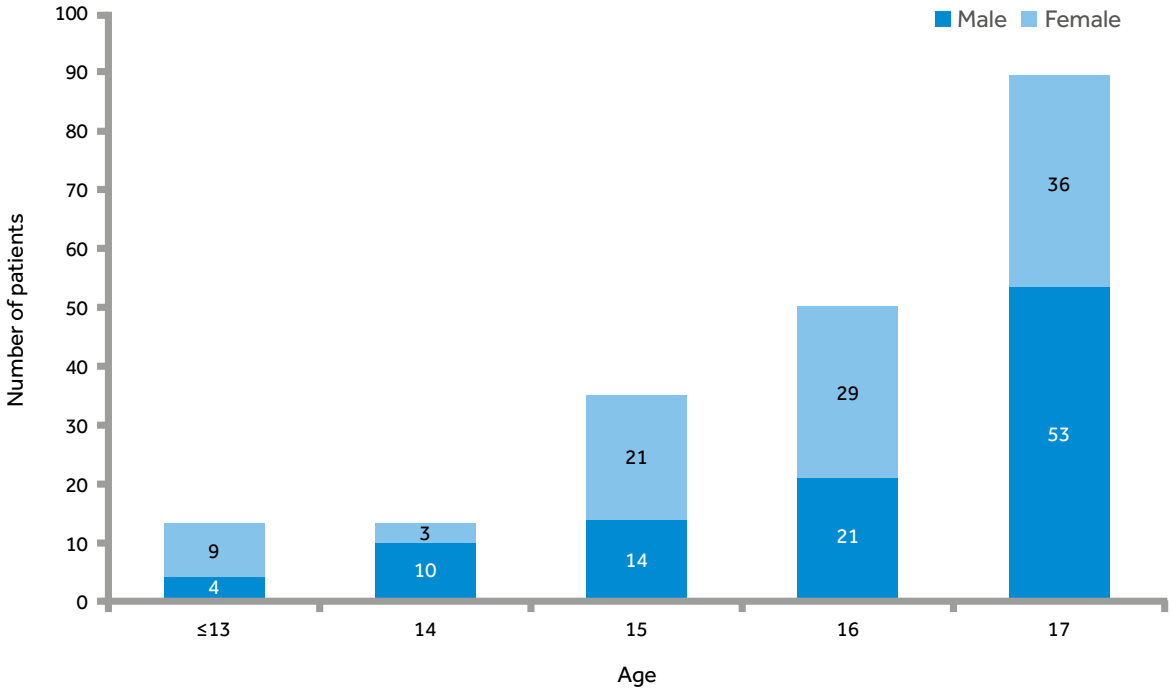
213 (19%) were suicides by patients, i.e. people who had been in contact with mental health services in the previous 12 months, of whom 26 were under 15, an overall average of 19 per year. This proportion in contact with services is lower than in other age groups (27%). The number of patients who died increased in 2017 in line with (though less than) the general population rise that year, but has since fallen back to the average for the report period (Figure 19). The number of suicides increased into the later teens (Figure 20).

Figure 19: Suicide by people aged under 18 in the UK



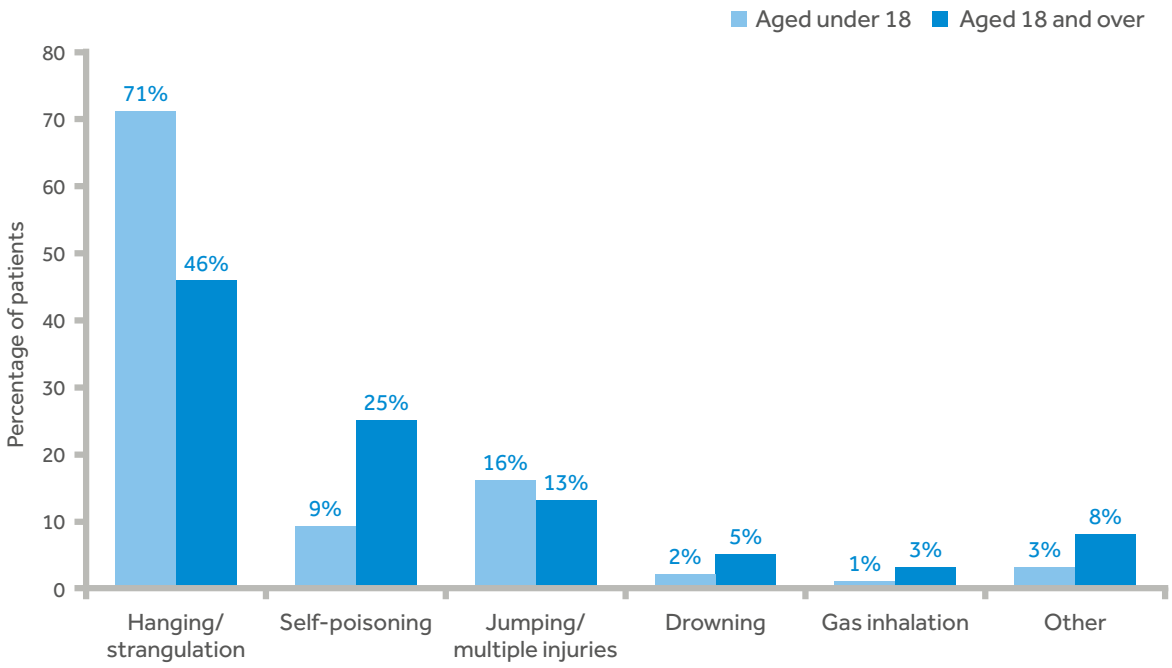
Note: Patient data unavailable in Northern Ireland in 2019

Figure 20: Patient suicide: number by age and sex in the UK (2009-2019)



Suicide by hanging/strangulation was proportionally more common in patients aged under 18 compared to other age groups, while self-poisoning and drowning were less common (Figure 21).

Figure 21: Method of suicide in patients aged under 18 in the UK (2009-2019)



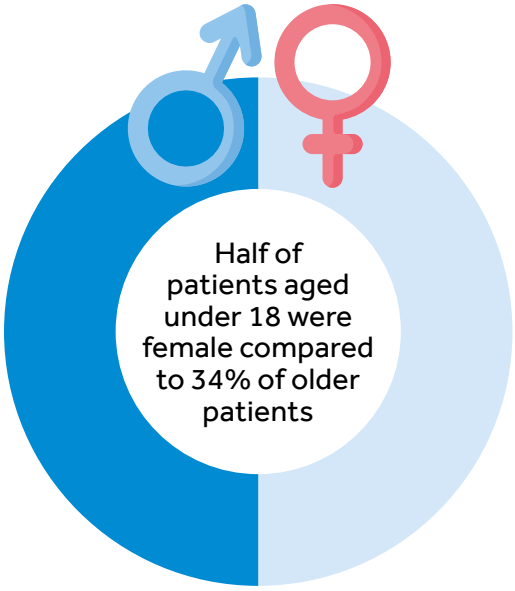
Half (98, 49%) of the patients aged under 18 were female, more than the proportion in other age groups (34%). The majority (140, 74%) were full-time students and 20 (11%) were from an ethnic minority group.

25 (13%) had a diagnosis of autism and 10 (5%) had eating disorders. The majority (141, 74%) had a history of self-harm, a higher proportion than other age groups (10,319, 64%), and more had been seen in the emergency department for self-harm in the previous 3 months (48, 29% v. 2,708, 19%). 33 (18%) had a combination of previous self-harm, a comorbid diagnosis (mostly depressive illness) and a history of alcohol or drug misuse, indicating clinical complexity.

In 2011-2019, 23 (25%) were known to have had suicide-related internet experience, such as obtaining information on suicide methods, visiting websites that may have encouraged suicide, or communicating suicidal intent online, significantly more than other age groups (582, 7%).

Our report Suicide by Children and Young People identified common themes in the lives of young people who die by suicide. Information on suicides by children is also presented by the National Child Mortality Database (NCMD) Programme in their annual reports, alongside recommendations for prevention.

The NCMD reported child suicide rates during the early period of the COVID-19 pandemic.

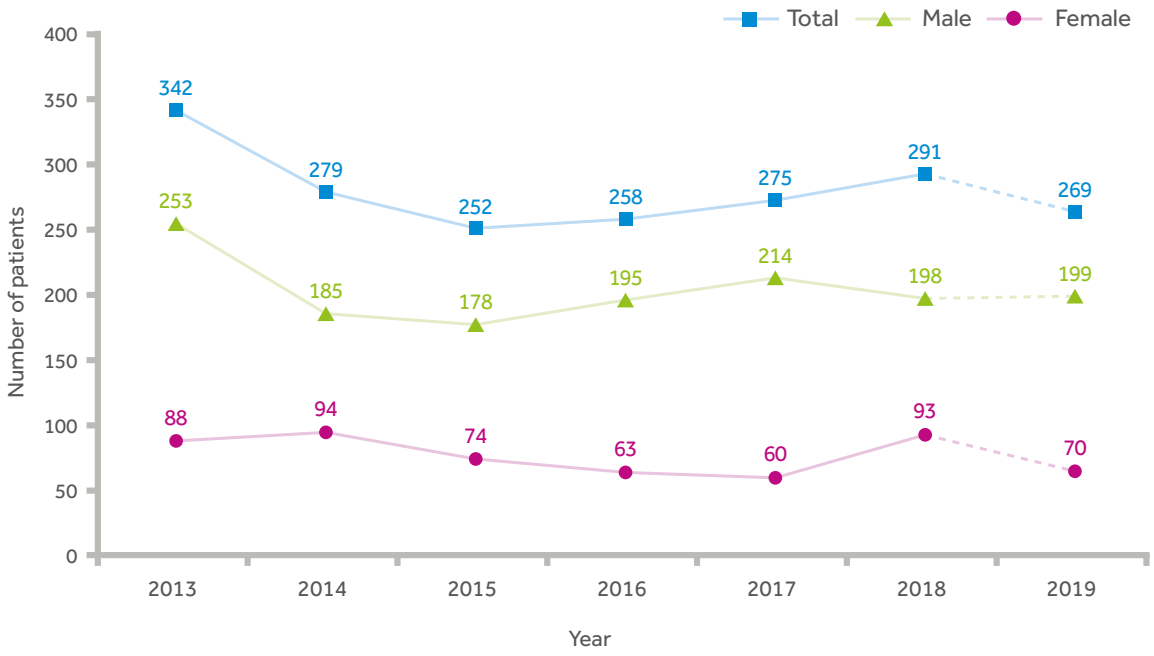


SUICIDE BY PATIENTS WITH RECENT ECONOMIC ADVERSITY IN THE UK

In the UK, there were 3,345 suicides in 2009-2019 by patients who experienced recent (within previous 3 months) economic adversity, 19% of all patient suicides. This was defined as patients who experienced: i) serious financial difficulties, ii) loss of job, benefits or housing, iii) workplace problems or iv) homelessness. However, information was collected on each component of this definition over different time periods. Complete data on serious financial difficulties, workplace problems, or homelessness were available from 2013, therefore trends were examined between 2013-2019.

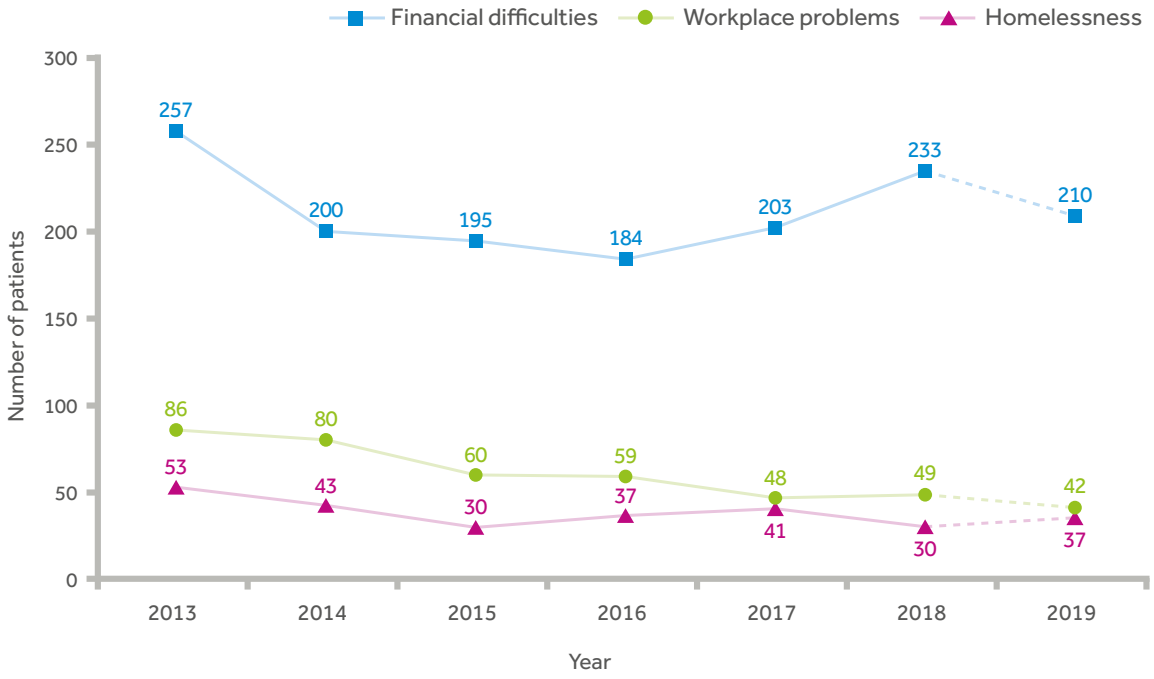
The average number was 281 per year over this time period, 18% of all patient suicides. We began collecting data on recent loss of job, benefits or housing in 2016 and these are not included in the trend analysis or in this average. The number of patients with economic adversity overall has increased in 2018 after no change since 2014 (Figure 22). This increase in 2018 was driven by those with serious financial difficulties, rather than in those with recent workplace problems or homelessness, where there was a fall in 2013-2019 (Figure 23).

Figure 22: Suicide by patients who experienced recent adverse economic factors (serious financial difficulties, workplace problems, or homelessness) in the UK



Notes: Recent loss of job, benefits or housing is not included as data unavailable in 2013-2015.
Male and female numbers in 2013 and 2017 do not total the overall figure due to rounding.
Patient data unavailable in Northern Ireland in 2019.

Figure 23: Number of patients who died by suicide and had experienced recent financial difficulties, workplace problems, or homelessness in the UK

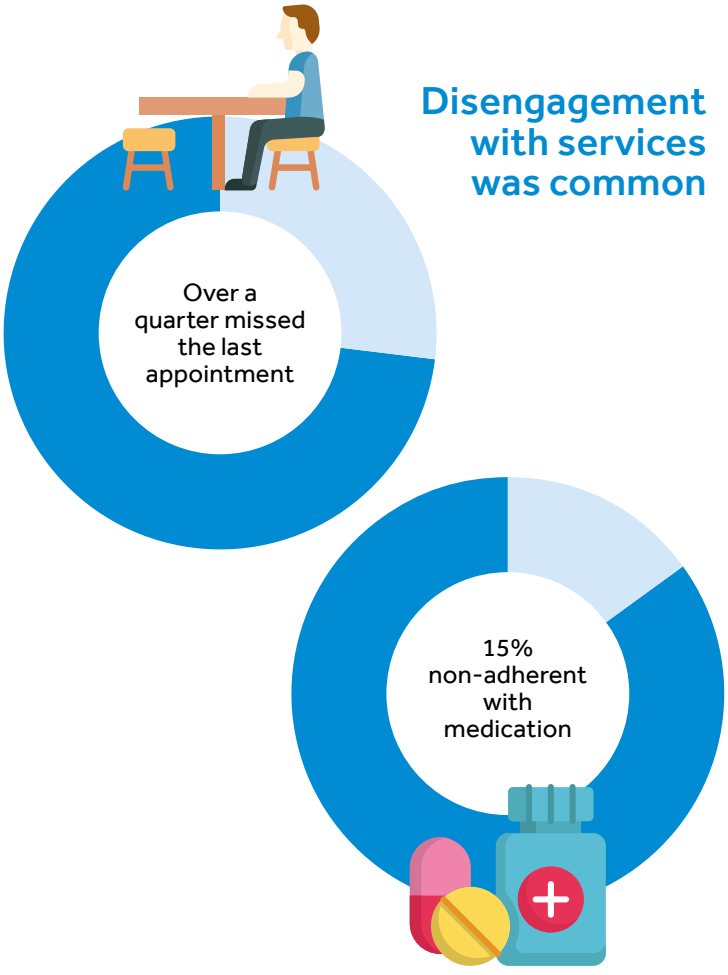


Note: Patient data unavailable in Northern Ireland in 2019.

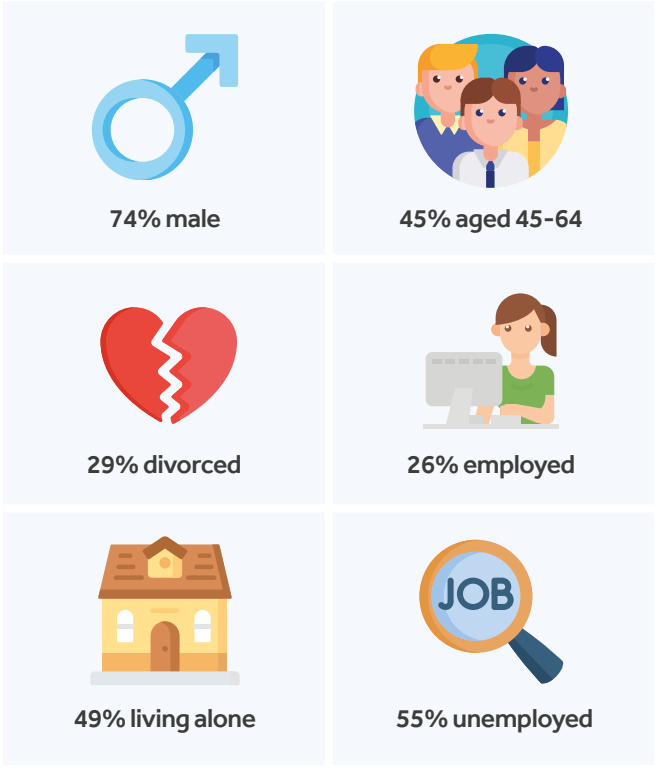
Patients with recent economic adversity were more often male, middle-aged, divorced/separated, in-paid employment or unemployed compared to other patients (Box 4). Examining individual economic factors showed patients with recent financial difficulties were more likely to be aged 45-64 (787, 48% v. 5,889, 40%), divorced/separated (506, 32% v. 3,433, 24%) or unemployed (849, 54% v. 6,583, 46%), compared to those without economic adversity. In contrast, patients with recent workplace problems were more likely to be married (292, 41% v. 3,618, 27%) and less likely to be living alone (237, 34% v. 6,463, 48%).

The most common diagnosis in patients with recent economic adversity was affective disorder (depression or bipolar disorder) (1,288, 43%). Comorbidity (i.e. more than one mental health diagnosis) was more common (1,713, 58% v 6,856, 52%) than in other patients, there were higher rates of alcohol (1,522, 53% v. 5,932, 46%) and drug misuse (1,206, 41% v. 4,554, 35%) and recent (<12 months) onset of mental disorder (755, 28% v. 2,502, 20%).

There were slightly higher rates of disengagement with services, i.e. missed last contact (718, 26% v. 2,845, 23%) and non-adherence with treatment (410, 15% v. 1,493, 12%).



Box 4: Socio-demographic characteristics of patients with recent economic adversity who died by suicide in the UK (2009-2019)



UK country differences: There were fewer suicides in Scotland by patients with recent economic adversity compared to the rest of UK (13% v. 19%).

Affective disorder (depression or bipolar disorder) was less common in Scotland compared to the rest of the UK (35% v. 44%) but these patients were more likely to have a diagnosis of alcohol (13% v. 7%) or drug dependence/misuse (15% v. 6%).

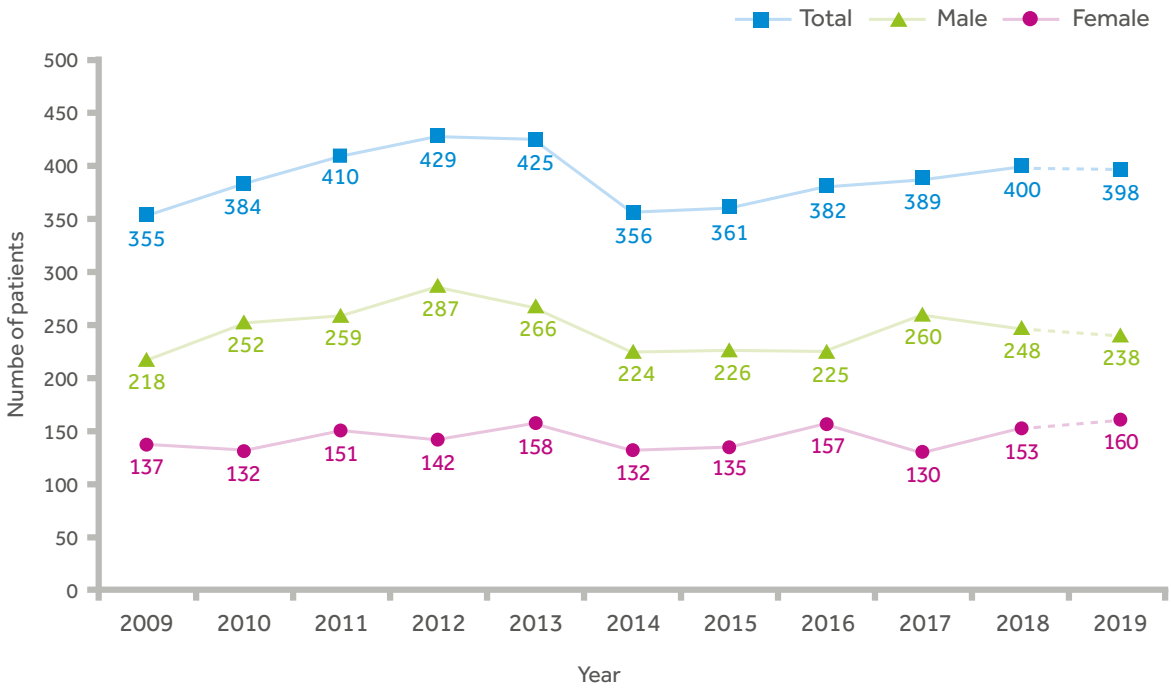
There were fewer patients in Scotland with a short-term illness (17% v. 29%) and fewer were under the care of CRHT (10% v. 20%).

SUICIDE BY PATIENTS WITH COMORBID PHYSICAL ILLNESS IN THE UK

Physical illness can increase the risk of suicide among mental health patients. In the UK in 2009-2019, there were 4,289 suicides by patients under mental health care who also had a major physical illness. This represents 25% of all patient suicides, an average of 390 deaths per year. The number has increased in recent years, particularly in women, since a fall in 2014 (Figure 24).

Nearly half (1,015, 47%) of those aged 65 and over had a major physical illness. The most common categories of physical illness were cardiovascular disease and musculoskeletal disorders (Figure 25). We are supporting NCEPOD studies on the interaction between physical and mental health (see www.ncepod.org.uk).

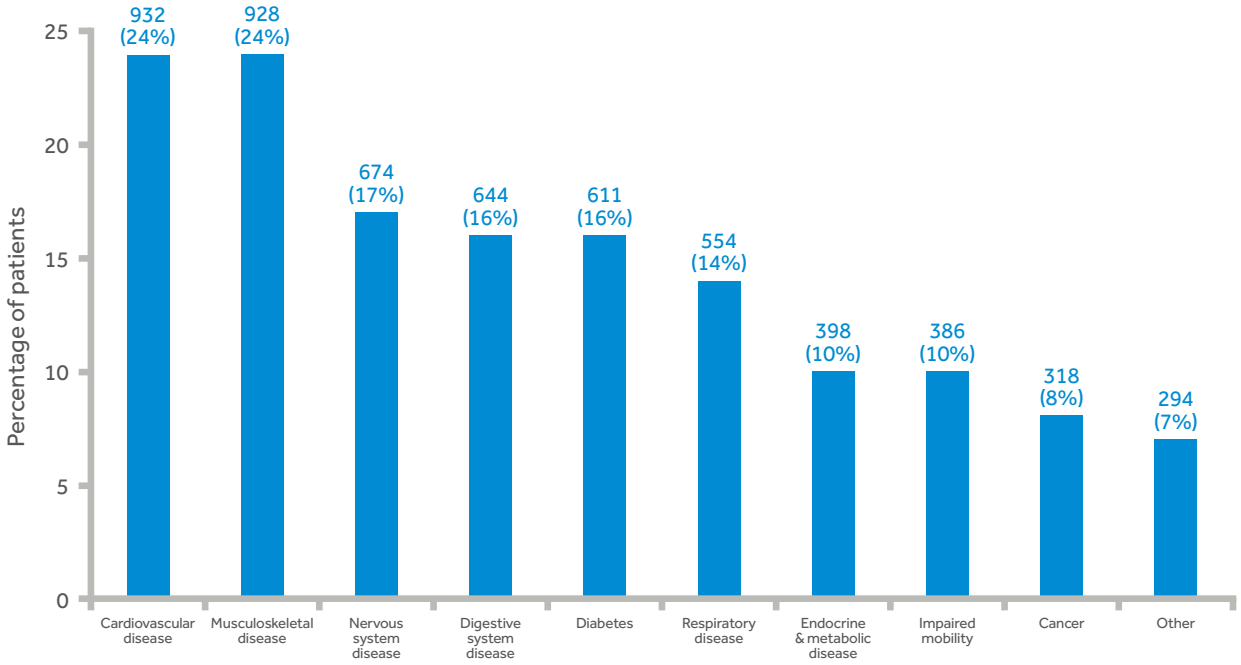
Figure 24: Suicide by patients with comorbid physical illness in the UK, by sex



Note: Male and female numbers in 2018-2019 do not total the overall figure due to rounding.
Patient data unavailable in Northern Ireland in 2019.

UK country differences: There were significantly more patients with physical illness who had affective disorder (depression or bipolar disorder) in England (48%) than in Northern Ireland (36%) or Scotland (35%).

Figure 25: Types of comorbid physical illnesses among patients who died by suicide in the UK (2009-2019)



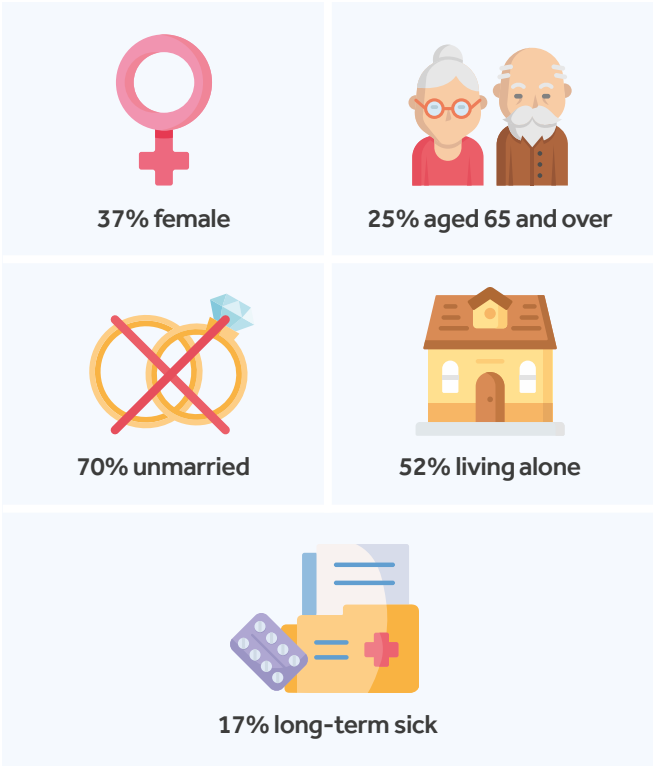
Patients with physical illness were more likely to die by self-poisoning compared to other patients. (1,500, 38% v. 2,367, 20%). The most common drug types used in self-poisoning were opiates/opioids (including paracetamol/opioid compounds) – these drugs were proportionately more likely to be used in overdose compared to other patients (531, 41% v. 651, 32%). Information on the source of the opiates/opioids was available in 50%. For the majority (203, 76%), the opioids had been prescribed for the patient.

While most patients with physical illness were male, there was a higher proportion of women compared to patients overall (1,587, 37% v. 4,117, 33%). They were also more likely to be older, living alone, or on long-term sick leave (Box 5; see supplementary data).

A diagnosis of affective disorder (depression or bipolar disorder) was more common (1,797, 45% v. 4,670, 40%) and in the majority (2,143, 58%) this condition had been present for more than 5 years.

A similar proportion had a history of self-harm (2,495, 65% v. 7,425, 64%) but other factors commonly associated with suicide such as alcohol misuse (1,660, 43% v. 5,489, 48%) and drug misuse (1,149, 30% v. 4,421, 38%) were less common. Long-term risk was more likely to be viewed by clinicians as moderate or high compared to other patients (1,522, 45% v. 4,335, 42%).

Box 5: Socio-demographic characteristics of patients with comorbid physical illness who died by suicide in the UK (2009-2019)



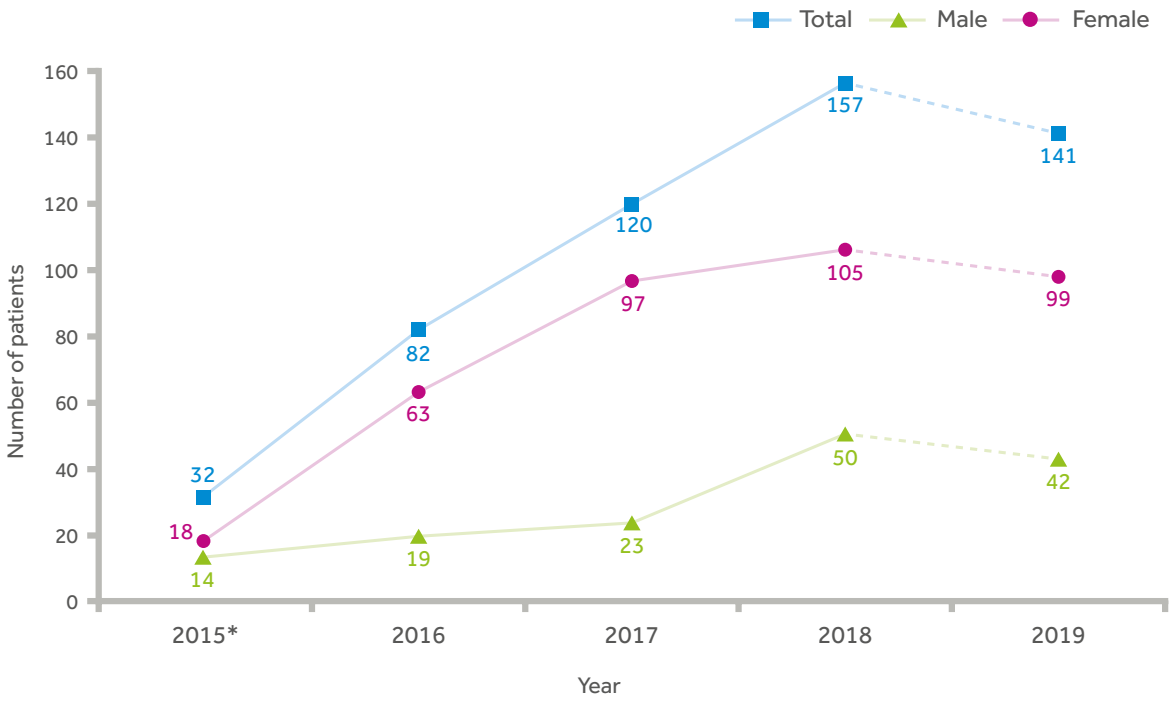
SUICIDE BY PATIENTS WITH A HISTORY OF DOMESTIC VIOLENCE IN THE UK

Since 2015 we have collected data on whether patients had experienced domestic or intimate partner violence (referred to as domestic violence in this report). In the UK in 2015-2019, there were an estimated 532 patients who died by suicide and who were reported to have experienced domestic violence.

In 2017-19 the average annual figure was 139 patients, 10% of all patients during this period (Figure 26).

In 90% the domestic abuse was physical, in 28% it was sexual, and in 19% it was both sexual and physical. Most people who experienced domestic violence were female (382, 72%), described in more detail below.

Figure 26: Suicide by patients who had experienced domestic violence in the UK, by sex



Notes: *2015 was the start of data collection and is therefore incomplete.
Male and female numbers in 2018 do not total the overall figure due to rounding.
Patient data unavailable in Northern Ireland in 2019.

Female patients who had experienced domestic violence

Women with a history of domestic violence were younger than other women (median 43 v. 48 years) and were more likely to be unmarried (247, 84% v. 792, 68%), the majority being single (134, 46%) or divorced/separated (107, 36%). More were living alone (163, 54% v. 503, 42%), unemployed (189, 65% v. 466, 40%), and homeless (9, 3% v. 8, <1%).

The diagnostic profile for women with a history of domestic violence suggests multiple areas of mental health adversity (Box 6). For example, there were higher rates of personality disorder compared to other women (89, 29% v. 196, 16%), a diagnosis often used in people with previous traumatic experience such as abuse.

They were also more likely to have a diagnosis of alcohol (23, 7% v. 40, 3%) or drug (19, 6% v. 17, 1%) dependence/ misuse. The majority (219, 71%) had a comorbid (i.e. additional) mental health diagnosis.

Since 2016 we have asked clinicians if the patient had been discharged to any unresolved problems in the community. Nearly a third (37, 31% v. 56, 11%) had been discharged to alcohol or drug misuse problems and 21% had been discharged to poor social support, significantly more than other discharged patients (26, 21% v. 51, 10%).

A history of self-harm, violence (as a perpetrator), and alcohol or drug misuse were all more common compared to other female patients (Figure 27).

Overall, nearly half (46%) had a combination of previous self-harm, a comorbid diagnosis, and a history of alcohol or drug misuse, indicating clinical complexity.

More women with a history of domestic violence had experienced adverse life events in the previous 3 months (115, 50% v. 351, 32%), the most common relating to family issues (21% v. 6%), serious financial problems (22% v. 11%) and loss of job, benefits or housing (19% v. 12%).

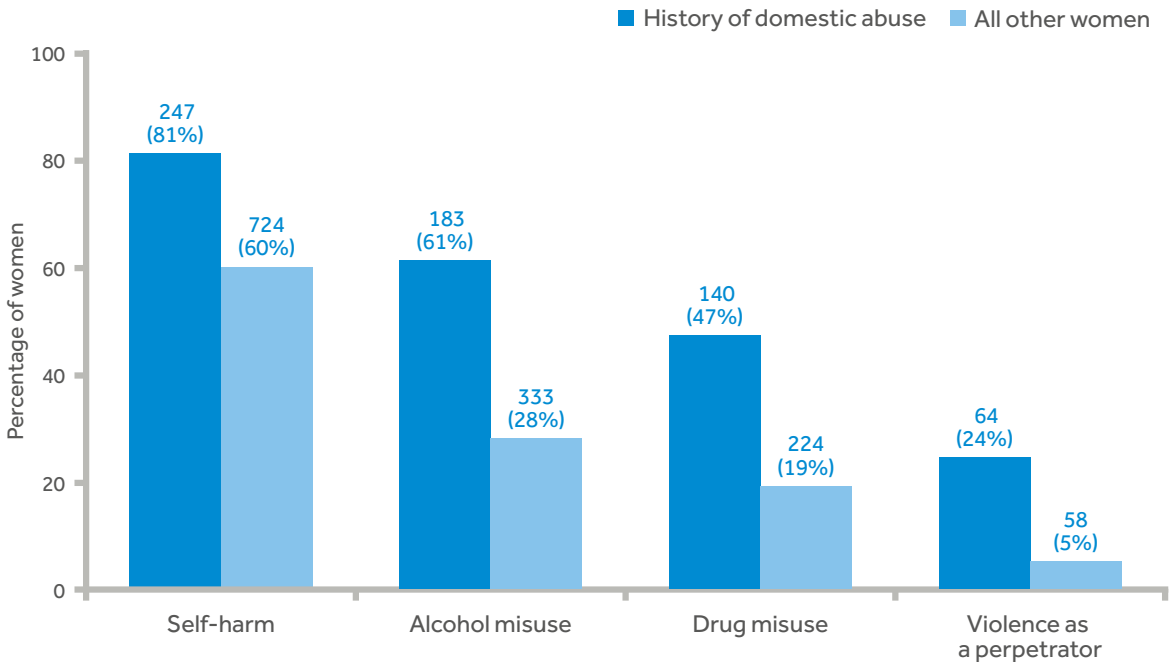
Box 6: Mental health diagnoses which were more common among women with a history of domestic violence compared to other women (UK, 2015-2019)

29% personality disorder

7% alcohol dependence

6% drug dependence

Figure 27: Behavioural features of female patients who had experienced domestic violence in the UK (2015-2019)



Male patients who had experienced domestic violence

In 2015-2019, there were an estimated 148 men who died by suicide and who were reported to have experienced domestic violence. In 2017-19 the average annual figure was 38 patients, 4% of all male patients during this period (Figure 26).

Proportionally more men who had experienced domestic violence had a diagnosis of personality disorder compared to other men (23, 20% v. 196, 7%). More had a history of self-harm (80, 73% v. 1,298, 48%), violence as a perpetrator (60, 57% v. 472, 19%), alcohol misuse (83, 75% v. 1,208, 45%) and drug misuse (73, 65% v. 1,066, 39%).

Adverse life events in the previous 3 months were reported in 52% compared to 36% of other men – these most often related to loss of job, benefits or housing (45% v. 22%) and serious financial problems (33% v. 17%). More were viewed by clinicians as at moderate or high long-term risk (59, 62% v. 1,066, 43%).

UK differences: There were significantly more patients who had experienced domestic violence in Wales (13%) and Scotland (13%) compared to England (9%) and Northern Ireland (9%).

REAL-TIME SUICIDE SURVEILLANCE IN ENGLAND

Real-time suicide surveillance in the general population

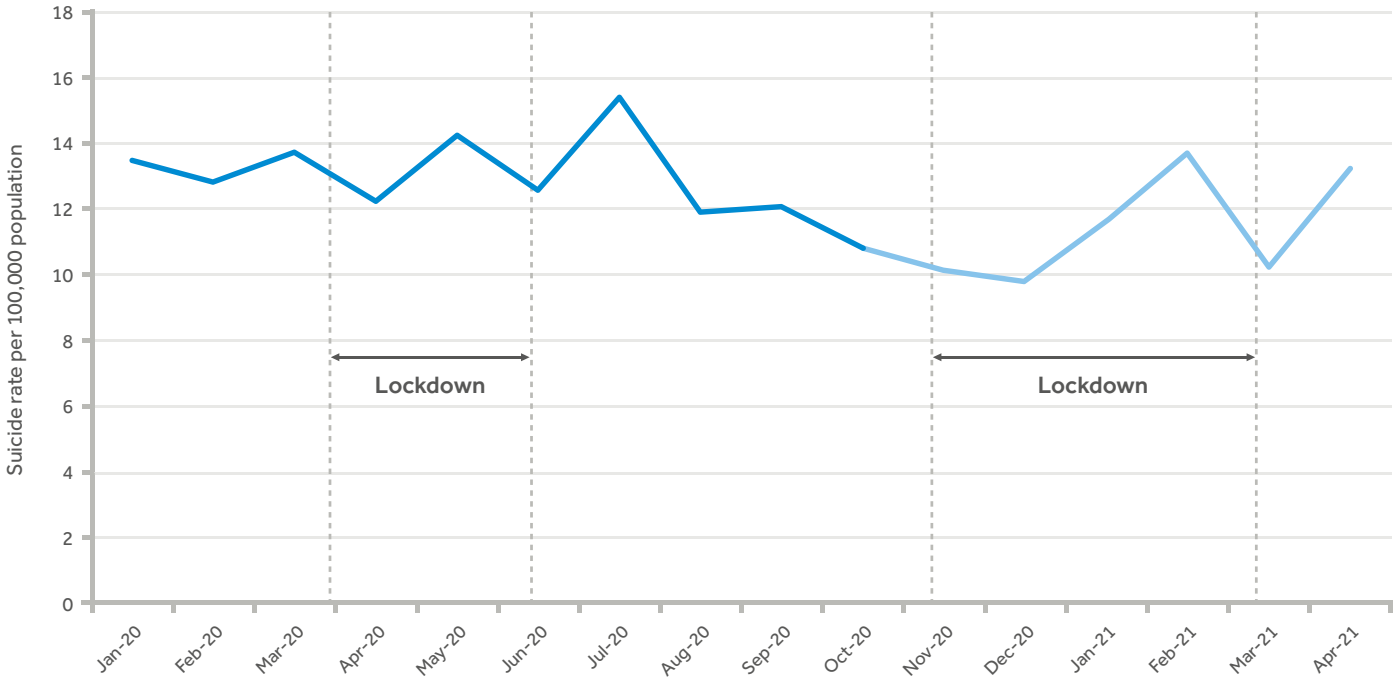
We continue to work with several local areas in England to collate numbers of deaths from real-time surveillance (RTS) of suspected suicides. RTS provides numbers of suspected deaths as they occur, unconfirmed by inquest. Similar real-time surveillance systems have been established in Northern Ireland, Scotland, and Wales.

We previously presented findings for suicide that occurred before and after the onset of the COVID-19 pandemic (available here). We found no rise in the number of suspected suicides in the general population in these areas in the months after March 2020. This finding was reflected in official (post-inquest) statistics from ONS released in September 2021.

Caution is needed in interpretation, as we cannot rule out higher figures in some local areas or in demographic subgroups, and it is too early to examine the long-term impact of the pandemic on mental health and suicide.

We are continuing to work with local areas to collate their real-time data (Figure 28 shows figures extended to April 2021), and will publish updated findings later this year.

Figure 28: Suicide rates from real-time surveillance data in 10 participating STPs in 2020-21



Note: STPs=Sustainability and transformation plans

Real-time suicide surveillance in people under mental health care

In 2020, we established a real-time data collection of suspected suicide deaths under mental health care in England as a response to concerns about the effects of the pandemic on people with pre-existing mental illness.

Here we present brief findings from deaths reported to us between 23rd March 2020 and 1st March 2022. These figures represent less than a fifth of the patient suicides recorded each year, and findings cannot be considered representative. In 2022 we will be launching new real-time data collection for patients whose deaths occurred in closest proximity to services; in-patients and those recently discharged from in-patient care. RTS can provide early evidence for safety measures in these settings and is an opportunity for services to tell us about particular problems in care.

Numbers of suspected suicide deaths reported to NCISH

We were notified of 422 suspected suicide deaths by people under mental health care in England in the 23-month time period. Most (269, 64%) patients were male and 200 (47%) of the deaths we were told about were in people aged under 45. The most common method of death was hanging/strangulation (173, 41%), followed by self-poisoning (66, 16%).

Clinical characteristics

The most common diagnoses were affective disorders (bipolar disorder and depression; 123, 29%) and personality disorders (52, 12%). The majority of these suspected suicide deaths occurred under community clinical settings (229, 54%), rather than acute or crisis care settings.

Experiences and disruptions to care as a result of COVID-19 or social distancing measures

Information was provided by clinicians on the pandemic experiences of 242 (57%) patients who died. Many had experienced anxiety (30%), isolation or loneliness (30%), loss of job or other financial stressors (16%).

4% had experienced loss of coping mechanisms and in 5% there was evidence of increased alcohol or drug misuse. Almost a third (31%) of patients who experienced anxiety and almost a quarter (23%) of patients reported as having experienced isolation or loneliness were over 65 years of age.

Almost half (197, 47%) of the patients whose deaths were notified to us had experienced disruption to mental health care as a result of the pandemic, most often disruption to regular support (i.e. support that the patient was receiving prior to the pandemic) (25%), loss of facilities (7%), and loss of face-to-face contact (7%). Clinicians also reported delayed help seeking (4%).

HOMICIDE IN THE UK

In 2009-2019, NCISH was notified of 6,260 homicide convictions, an average of 569 per year. There were 6,514 victims, an average of 592 per year.

There were 682 patients under the care of mental health services convicted of a homicide offence, an average of 62 per year. There has been no change in the number of convictions in recent years, the number has fallen steadily over the report period and has reached a plateau since 2014 (Figure 29). There were 710 victims, an average of 64 per year.

Across the UK, 11% of people convicted of homicide were patients under mental health care (Table 1). This figure was higher in Scotland and Wales and where the general population homicide rates are also higher.

More information taken from independent investigations following homicides committed while perpetrators were under the care of mental health services can be found in An Independent Review of the Independent Investigations for Mental Health Homicides in England.

Figure 29: Patient homicide in the UK: numbers by year

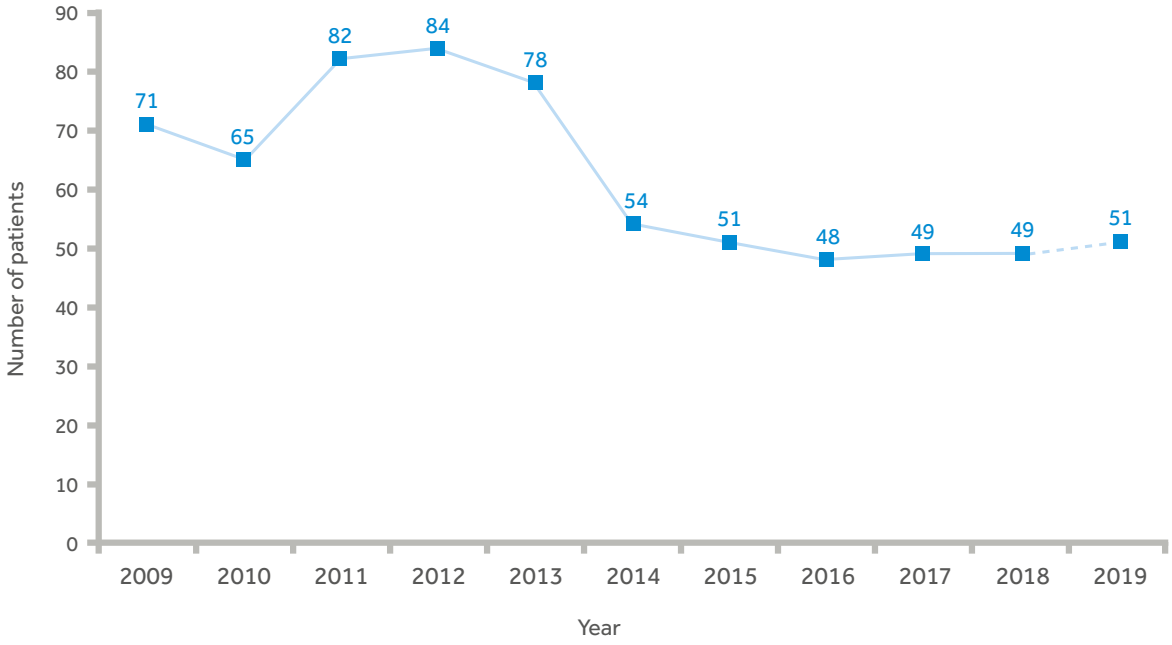


Table 1: Number of homicide offenders by UK country (2009-2019)

	England N (%)	Northern Ireland* N (%)	Scotland N (%)	Wales N (%)	UK N (%)
General population	5,203	124	673	260	6,260
Patients under mental health care	532 (10%)	11 (9%)	104 (15%)	35 (13%)	682 (11%)

*Northern Ireland data between 2009 and 2014

HOMICIDE FOLLOWED BY SUICIDE IN ENGLAND AND WALES

Homicide followed by suicide is defined here as when the offender dies by suicide within 3 days of committing homicide. As there is no conviction for homicide, these cases are not included in the homicide analysis.

We were notified of 171 homicide-suicide incidents between 2009 and 2019, an average of 16 per year. Most offenders were male (147, 88%) and their median age was 45 (range 16-93). There were 239 victims in total, of which almost three-quarters (73%) were female.

The relationship of victim to offender was most commonly a spouse/partner (current/ex) (118, 70%), followed by a son/daughter (27, 16%), then an acquaintance (9, 5%). Most of the victims who were a spouse/partner were female (98%). 11 (6%) of those who carried out homicide-suicides were identified as patients.

LINKS TO SUPPLEMENTARY DATA

1. UK Supplementary Data

2. England Supplementary Data

3. Northern Ireland Supplementary Data

4. Scotland Supplementary Data

5. Wales Supplementary Data

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