Northern Ireland Registry of Self-Harm

Annual Report

2018/19

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Foreword

Suicide and self-harm are complex issues. The World Health Organisation report '*Preventing Suicide: a global imperative*' which was published in 2014, sets out a number of areas for action. One key area was the improvement of data in relation to suicide and self-harm.

The Self Harm Registry was established across the whole of Northern Ireland in 2012 by the Public Health Agency (PHA). Northern Ireland is one of the few countries to have such a self-harm monitoring system. In addition to collecting data about self-harm, the Registry also uniquely collects data in relation to hospital attendances with ideation (thoughts of self-harm and suicide). This report outlines the findings of the Self Harm Registry for the period 2018-19. The report presents data for seven full calendar years allowing us to begin analysis of trends and to highlight key issues.

This report is intended to enhance understanding of the issue and be of use to organisations involved in policy, planning and delivery of services for people who experience these difficult issues. In particular this report will inform work currently underway within the Health and Social Care (HSC) system such as the Review of Crisis Services, and the development of a 'Suicide Prevention Care Pathway'.

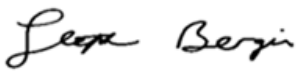
This report should be viewed in the context of the wider Protect Life 2 Strategy and the Mental Health Action Plan (May 2020) which encourage help seeking behaviour regarding self-harm and suicide and the further development of services in the statutory and non-statutory sectors to address these issues.

I would like to take this opportunity to acknowledge the partnership and support of the National Suicide Research Foundation in relation to data analysis, technical and scientific support; the five Health and Social Care Trusts; the work of the Trust Data Registration Officers in the data collection process; and the staff team within the PHA for the management and production of the report.

The Registry has enabled local research to be undertaken. A number of peer reviewed papers have been published and conference presentations undertaken based on data from the Registry. A list of publications can be found in Appendix 1. Work is in progress with Queen's University, Belfast to link Registry findings with other datasets to further our understanding of this issue and in particular explore the links with suicide to inform further suicide prevention efforts.

By highlighting the scale of the issue, it is hoped that this will enable resources to be appropriately aligned to provide timely access to assessment, care and support for people who self-harm. The findings of the report highlight the importance of addressing mental wellbeing across all sectors of our society. There will be a need for an enhanced focus on the area of mental wellbeing following the anticipated negative effects of COVID-19 restrictions on the mental wellbeing of the population. Future reports will explore hospital presentations during the COVID-19 period.

Dr Stephen Bergin



Director of Public Health and Medical Director (Interim)

1.0 Executive Summary

1.1 Introduction

This is the fifth regional report from the Northern Ireland Self-Harm Registry, covering the period from 1st April 2018 to 31st March 2019. The National Self-Harm Registry, Ireland has been operating in the Republic of Ireland since 2002, via the National Suicide Research Foundation. Under the Northern Ireland Suicide Strategy "Protect Life – A Shared Vision", the Registry was piloted in the Western Health & Social Care Trust area from 2007. Building upon the success of this pilot, the Registry was implemented across all five Health and Social Care Trusts (HSCTs), with effect from 1st April 2012.

This publication covers a 12 month period, building upon previous reports, allowing for comparisons to be drawn. The Public Health Agency (PHA) also submits quarterly returns to the Department of Health (DoH) regarding self-harm and ideation attendances to Emergency Departments (EDs) in each Trust.

The data in this report highlights the importance of ED staff being skilled in carrying out preliminary assessments and having good referrals pathways in place with mental health services to ensure that people with self-harming behaviour, or at risk of self-harm or suicide, are offered referrals for a psychosocial assessment by trained mental health professionals. This data also highlights the importance of having adequately resourced mental health services that are able to respond to the demand that presents to the EDs to provide both initial assessment and the appropriate services thereafter depending on needs identified.

While it is important to respond appropriately to people with self-harm who present to the ED, it is also important that people with self-harm who present to other services are managed appropriately and that pathways are in place to ensure the person receives the right level of support. It is also crucial that there is a focus on preventing self-harm occurring in the first place and ensuring that there are a range of preventative services accessible in schools and communities to promote positive mental health and wellbeing, early detection of problems and accessible support services.

1.2 Key findings

1.2.1 Self-harm and ideation presentations combined

During 2018/19, acts of self-harm and thoughts of self-harm or suicide accounted for 14,645 attendances to the ED which represents almost 2% of all Type 1 and Type 2 ED attendances during 2018/19. Almost two thirds of these presentations were due to acts of self-harm (63%, n= 9242). Considering self-harm and ideation presentations together, there has been a 28% rise in these presentations to ED since 2012/13. This rise is more marked among those aged under 18 years where there has been a 45% increase in the number of presentations, compared to a 26% increase in adult presentations since 2012/13. This is explored further in Section 6 in the report.

Data in relation to self-harm and ideation will be presented separately below. The data focuses on presentations made during 2018/19 and highlights longer term trends where possible.

1.2.2 Self harm

Self-harm presentations

- For the period from 1st April 2018 to 31st March 2019, the Registry recorded 9,242 self-harm presentations to EDs in Northern Ireland, made by 6,335 individuals. This reflects a 1% rise in the number of presentations since 2017/18 and a 12% increase since 2012/13.
- There were 4,763 (52%) female presentations and 4,479 (48%) male presentations. The gender balance of self-harm presentations has changed slightly over the seven year period compared to 50% male and 50% female in 2012/13.
- In 2018/19 Altnagelvin Hospital in the Western HSCT recorded the highest number of self-harm presentations over the 12 month period, accounting for 16% (n=1,461) of total presentations, followed by Antrim Area Hospital with a 14% share (n=1,331) and the Royal Victoria Hospital with 14% (n=1,270) of presentations.
- The largest number of self-harm presentations were recorded in the Belfast HSCT area (n=2,456; 27%), despite Belfast Trust residents making up only 19% of the population of Northern Ireland.
- During 2018/19, an average of 25 presentations involving self-harm were recorded per day.
- There was an increase in the frequency of self-harm attendances over the course of the day. The peak for males was 1am and for females was 9pm. Almost half (47%) of all self-harm presentations occurred between the hours of 10pm and 9am.
- The majority (68%) of presentations were brought to hospital by emergency services (e.g. ambulance and police).
- The majority of people presented to an ED within their Trust of residence but there were substantial numbers of out of Trust presentations highlighting the importance of ensuring good communication between professionals in the presenting Trust and the Trust of residence where follow-up care is required.

Specialist mental health assessment for people who present with self-harm

- This report identifies that a referral / the need for a referral for specialist assessment was documented by ED staff in 83% of self-harm attendances.

Methods of self-harm

- In 2018/19 the most common method of self-harm was drug overdose, which was involved in almost two-thirds (63%) of all self-harm presentations. Self-cutting was also a common method of self-harm, present in 27% of all presentations.
- Attempted drownings accounted for 6% of all self-harm presentations across the region. People presenting with attempted drowning were more likely to have had alcohol involved in their presentations than people presenting with other methods of self-harm. Alcohol was involved in in 63% of male attempted drowning presentations and 49% of female attempted drowning presentations. Attempted drowning cases varied by Trust area from 2% in each of the BHSCT, SEHSCT and SHSCT areas to 20% in WHSCT. Further exploration of the WHSCT

presentations revealed that in 93% of the cases that are currently classified as 'attempted drowning' the person had not entered the water but was brought by a third party to the ED for assessment and support before the act progressed any further. The Registry is reviewing how these cases should be categorised in future to more accurately reflect the nature of the presentation.

- There have been some changes in methods of self-harm during the period 2012/13 to 2018/19. The proportion of cases involving drug overdose has reduced from 75% to 63% during this period while the proportion of cases involving self-cutting has increased from 23% to 27%. The proportion involving attempted drowning has increased from 1% to 6%, although as noted above, the majority of these cases had not entered the water.
- The proportion of cases where alcohol was involved in the act of self-harm has fallen from 51% in 2012/13 to 44% in 2018/19.

Recommended next care following self-harm

- In 2018/19, 40% of self-harm presentations resulted in admission to a general ward in the presenting hospital. A further 6% resulted in admission to a psychiatric ward.
- Almost half (46%) of self-harm cases were discharged from the ED following treatment.
- In 3% of presentations the patient left the ED without being seen and a further 4% left the ED before a next care recommendation could be made. In less than 1% of presentations, the patient refused admission, as recommended by the presenting hospital.
- The proportion of patients leaving the ED after being seen by a clinician but before a recommendation could be made about their next care was highest in the Western Trust area accounting for 45% of such cases regionally.
- Admission to a general ward in the presenting hospital was most common following presentations involving intentional drug overdose (50%) and was least common for patients who presented with self-cutting and self-poisoning (24%).
- Patients were most likely to leave the ED without being seen or before a next care recommendation when the presentation involved self-cutting (8%).
- In 83% of self-harm presentations there was documented evidence regarding the need for referral for a specialist psychosocial assessment. In 34% of cases this specialist assessment took place while the patient was in the ED.
- There have been some changes in the patterns of care following ED attendance with self-harm over the period 2012/13 to 2018/19. There has been a reduction in the percentage of people leaving ED without being seen from 6% to 3% over the seven year period. However this remains highest in the Belfast Trust at almost 6%, accounting for half of all patients in NI who leave ED before being seen. The proportion of patients who left the ED without being seen varied from 1% in the South Eastern HSCT to 6% in the Belfast HSCT.
- Admission to a general hospital decreased from 58% to 40% over the seven year period while discharge following treatment in the ED increased from 27% to 46%. This may be associated with the changing patterns over time in the methods of self-harm presenting to the ED noted above.

Repetition of self-harm

- Of the 6,335 individuals, 1,311 (21%) made at least one repeat presentation to hospital with self-harm during the 12 months of 2018/19. Repetition rates have shown a slight reduction in 2018/19 but show a slight increase from the baseline of 19% documented in 2012/13.
- Highest rates of repetition were associated with self-cutting (29%) and self-poisoning (24%).

Self-harm among under 18s

- Self-harm presentations by those under 18 years of age contributed to 10% (n=968) of all self-harm presentations during 2018/19 and this has been fairly consistent across the seven year period since 2012/13. The majority of these presentations were female (71%).
- Alcohol was more likely to be involved in self-harm presentations made by young males (24%) compared to young females (11%).
- Drug overdose was the most common method of self-harm used by those aged under 18 (63%). Over the period 2012/13 to 2018/19 the proportion of self-harm attendances involving drug overdose has decreased by 8% while there has been an increase in the proportion of cases involving self-cutting (+2%), attempted drowning (+2%) and attempted hanging (+1%).
- In 2018/19 admission to a general ward following presentation with self-harm occurred in 40% of self-harm presentations made by young people under 18 years. A further 2% were admitted to a psychiatric ward. A small proportion (1%) left the ED without being seen and 1% left before a decision was made regarding their next care. Over the period 2012/13 to 2018/19 there was a reduction in the proportion of cases admitted to the general hospital (from 52% to 40%) while there was an increase in the proportion who were treated and discharged from the ED (41% to 56%).

Other key subgroups

- Older people aged over 65 years accounted for 2% (n=191) of self-harm presentations in 2018/19.
- Approximately 5% (n=454) of self-harm presentations involved persons who were homeless at the time of attendance. Over half of these were male (59%) and the majority (48%) presented to hospitals in the Belfast HSCT. The number of self-harm presentations to ED by homeless people has decreased from 587 in 2017/18, a reduction of 23%.
- Approximately 1% (n=71) of presentations recorded by the Registry were made by persons who were in prisons at the time of the self-harm act.
- A total of 92 presentations (1%) were made by 38 residents of residential children's homes. This reflects one in four care home residents and highlights the importance of self-harm and suicide prevention training for staff in these settings and access to appropriate interventions for young people.
- A minority of presentations (n=72; <1%) were made by persons residing in acute or psychiatric hospitals.

Self-harm rates

- The overall age-standardised rate of self-harm in 2018/19 for Northern Ireland was 361 per 100,000 – 357 per 100,000 for males and 365 per 100,000 for females.
- The rate for Northern Ireland in 2018/19 was 8% higher than in 2012/13 (334 per 100,000). The male rate of self-harm increased by 6% during this period while the female rate increased by 9%.
- Between 2017/18 and 2018/19 the rate of self-harm increased by 4% (6% for males and 3% for females).
- The highest rate of self-harm was observed among 15-19 year-old females and 20-24 year-old males, with peak rates of 1,120 per 100,000 for females and 986 per 100,000 for males in these age groups.
- The highest male rate of self-harm was observed in the Belfast HSCT area (469 per 100,000) and the highest female rate was observed in the Western HSCT area (460 per 100,000): 31% and 26% higher than the male and female rates for Northern Ireland, respectively.
- The lowest rate of self-harm for male residents was recorded in the South Eastern HSCT area (282 per 100,000). This was 21% lower than the regional male rate.
- The lowest female rate was recorded in the Southern Trust area (302 per 100,000) which was 17% lower than the regional female rate.
- Derry City & Strabane Local Government District (LGD) recorded both the highest male and female rates of self-harm at 527 per 100,000 and 455 per 100,000 respectively.

1.2.3 Ideation

Acts of ideation include presentations to the Emergency Department by persons who have experienced thoughts of self-harm and/or suicide, where no physical act has taken place.

- There were 5,403 ideation presentations recorded during the 12 month period from 1st April 2018 to 31st March 2019. There has been a 69% increase in the number of ideation presentations between 2012/13 and 2018/19.
- In 2018/19, 63% of ideation presentations were made by males and 37% made by females.
- These 5,403 ideation presentations were made by 3,892 individuals.
- Young people under 18 years accounted for 7% of ideation presentations (n=373).
- Older people aged over 65 years accounted for 3% of ideation presentations (n=168).
- The Mater Hospital recorded the highest number of ideation presentations in 2018/19, accounting for 19% (n=1,008) of total presentations, followed by the Antrim and Craigavon Hospitals with a 14% and 13% share (n=778 and 707 respectively) of presentations.
- The largest number of ideation presentations was recorded in the Belfast HSCT area (n=1,650), accounting for 31% of all ideation presentations made during this period.
- An average of 15 presentations involving ideation was recorded per day. Similar to self-harm presentations, the number of ideation presentations was highest at weekends.
- Approximately one-quarter (26%) of ideation presentations resulted in admission to a general ward following presentation to an ED, with a further 8% admitted to a psychiatric ward. One in ten presentations due to ideation resulted in the patient leaving the ED without being seen (6%) or before a next care recommendation could be made (4%).

- A referral / need for a referral for specialist mental health assessment was documented by ED staff in 89% of ideation presentations. In 47% of cases this specialist assessment took place while the patient was in the ED.
- The age standardised rate of ideation in 2018/19 for Northern Ireland was 219 per 100,000. The rate in 2018/19 was 71% higher than in 2012/13 (128 per 100,000). There was an increase in male and female rates over this time period of 63% and 84% respectively.
- For males the highest rate of ideation was observed in the Belfast HSCT area (395 per 100,000) and the highest female rate was recorded in the Western Trust (208 per 100,000).
- The highest male rate of ideation was recorded in the Belfast Local Government District area (341 per 100,000) while Derry City & Strabane LGD recorded the highest female rate of ideation at 206 per 100,000.

2.0 Method of data collection

2.1 Definition of self-harm

The term 'self-harm' was derived from the term 'parasuicide'. The definition of 'parasuicide' was developed by the World Health Organisation (WHO)/ Euro Multicentre Study Working Group as:

'An act with non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour, that without intervention from others will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences.'

Internationally, the term 'self-harm' has superseded 'parasuicide'. In recognition of this, the term 'self-harm' has been used in this report.

2.2 Inclusion criteria

The following are considered to be self-harm cases:

- All methods of self-harm i.e. drug overdoses, alcohol overdoses, lacerations, attempted drownings, attempted hangings, gunshot wounds, etc. where it is clear that the self-harm was intentionally inflicted with the intention of harming oneself rather than accidental. Acts that have not been completed because they were interrupted by others are also captured as self-harm.

- All individuals who are alive on presentation to hospital following an act of self-harm.

The Registry in Northern Ireland also collects data on cases of ideation, this is not the case in the Republic of Ireland.

2.3 Exclusion criteria

The following are NOT considered to be self-harm cases:

- Accidental overdoses e.g. an individual who takes additional medication in the case of illness, without any intention to self-harm.

- Alcohol overdoses alone where the intention was not to self-harm.

- Accidental overdoses of street drugs i.e. drugs used for recreational purposes, without the intention to self-harm.

- Acts of self-harm by individuals with learning disability. One of the reasons for exclusion is that self-harm is a behavioural outcome of some learning disabilities. Also it can be very hard to ascertain the level of intent in these situations (e.g. if the person is fully understanding that the act is causing harm).

- Individuals who are dead on arrival at hospital as a result of suicide.

2.4 Ideation

Acts of ideation include presentations to the Emergency Department by persons who have experienced thoughts of self-harm and/or suicide, where no physical act has taken place. These include acts where no physical harm has taken place due to self-interruption and excludes cases where acts were interrupted by others. Acts interrupted by others are defined as self-harm.

2.5 Hospitals

This report is based on anonymised information collected from the 12 hospital EDs in Northern Ireland:

- Emergency Department, Royal Victoria Hospital
- Emergency Department, Mater Infirmorum Hospital
- Emergency Department, Royal Belfast Hospital for Sick Children
- Emergency Department, Ulster Hospital
- Emergency Department, Lagan Valley Hospital
- Emergency Department, Downe Hospital
- Emergency Department, Antrim Hospital
- Emergency Department, Causeway Hospital
- Emergency Department, Craigavon Hospital
- Emergency Department, Daisy Hill Hospital
- Emergency Department, Altnagelvin Hospital
- Emergency Department, South West Acute Hospital

Regarding ED type this report includes data obtained from Type 1 and Type 2 EDs. Type 3 EDs are not included in this report. The locations of these hospitals can be seen in Figure 1 below.

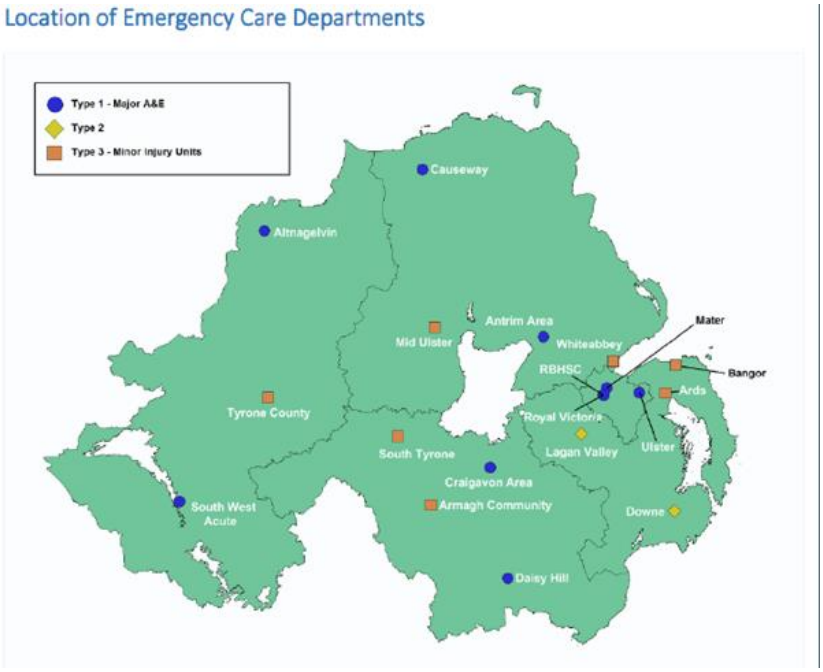


Figure 1: Location of Emergency Care Departments in Northern Ireland.

A pilot data collection exercise revealed that there were very small numbers of cases presenting to the Type 3 EDs and therefore it was decided not to proceed with data collection from these sites. Data from Type 3 EDs have never been included in regional registry reports. Earlier reports relating to the Western Trust area included data from Tyrone County Hospital.

Type 1 EDs are those which have major units with consultant-led services and accommodation for patients, in which emergency medicine and surgical services are provided on a 24-hour basis. Type 2 EDs are those which provide consultant-led service with accommodation for patients, where either emergency medicine or emergency surgical services may be provided. These services may have restricted opening hours. All hospitals in this report, excluding Lagan Valley and Downe hospitals are Type 1 EDs. Lagan Valley and Downe hospitals are Type 2 EDs and since January 2014 have reduced opening hours from 8am – 8pm Monday to Fridays, with no access at weekends, which may explain the low numbers of presentations at these hospitals.

2.6 Data recording and case finding

Data collectors check all entries of attendance at the hospital's ED department. All potential cases of self-harm and ideation presenting to the ED are identified by the data collector and considered against the inclusion criteria (see section 2.2-2.4). The reference numbers, date and time of attendance, along with other relevant details are recorded on the password protected data collection sheet. Anonymised information on the cases meeting the criteria is then entered onto a data entry system for analysis.

2.7 Data items

A minimum dataset has been developed to determine the extent of self-harm, the circumstances relating to the act and to examine trends by area. Reference numbers and area codes are encrypted prior to data entry to ensure that it is impossible to identify an individual on the basis of the data recorded. For the purpose of this report the following datasets are used.

- **Reference numbers**
  Two reference numbers are recorded. One number refers to the ED episode which is automatically assigned by the ED computer system. The second reference number refers to the patient's Health & Care number which is used to highlight repeat attendances. These numbers are encrypted prior to entry and can only be decrypted by the data recorder.

- **Gender**

- **Age**

- **Date and hour of attendance**

- **Brought by**
  The method of arrival is recorded to identify self-referrals and the use of the emergency services.

- **Method(s) of self-harm**
  The method(s) of self-harm are recorded according to the Tenth Revision of the WHO's International Classification of Diseases codes for intentional injury (ICD-10 X60-X84). The main methods included are overdose of drugs and medicaments (X60-X64), self-poisonings

by alcohol (X65), poisonings which involve the ingestion of chemicals, noxious substances, gases and vapours (X66-X69) and self-harm by hanging (X70), by drowning (X71) and by sharp object (X78). Some individuals may use a combination of methods e.g. overdose of medications and laceration of wrists.

The main categories of self-harm presented in the tables in this report are: drug overdose, self-cutting, self-poisoning, attempted drowning and attempted hanging. As stated above the Registry records incidents of self-harm if an act took place or there was an attempt to do so which was interrupted by another individual or individuals e.g. attempted drowning will be recorded where a person has entered the water or is removed from a bridge / river bank by others.

- **Drugs taken**
  Where applicable, the name and quantity of the drugs taken are recorded.

- **Place of Residence**
  The post / area code of residential addresses is recorded. Once entered, the postcode is replaced by a ward name so to remove the identity of the exact area. This is non-reversible.

  The Registry also collects information on the following key subgroups who present to ED with self-harm:

  - homeless persons who are: sleeping on the streets or staying in a temporary hostel / B&B
  - residents of children's residential homes
  - persons in prison at the time of the self-harm act
  - persons residing in psychiatric hospitals

- **Seen by**
  This identifies cases that were seen by a clinician and those who leave before receiving any treatment.

- **Recommended next care**
  The Registry collects data with regard to the outcome of the presentation to the ED and the next care that was recommended by the ED team. This information is derived from the ED notes and therefore is limited and requires care in interpretation.

  Categories of next care recorded by the Registry are:
  - admission to a general hospital ward
  - admission to a psychiatric hospital ward
  - patient left before a decision was made regarding next care
  - patient refused to be admitted
  - patient was discharged following treatment.

  Patients discharged from the ED following treatment will include a range of different types of cases:

  - those discharged into acute community based psychiatric care;

- those discharged with a follow up appointment under the Card Before You Leave Scheme;
- those who received assessment by a mental health practitioner in the ED and were discharged either to their GP or with a follow-up plan in place;
- those where ED staff determined that a referral to mental health services was not required or was declined when offered).

2.8 Reporting period

Information for this report reflects quarterly performance returns submitted to the Department of Health, as part of the PHA's commissioning objectives and relates to the 12 month period from 1st April 2018 to 31st March 2019.

2.9 Confidentiality

Confidentiality is strictly maintained. The data collectors have completed data protection training and are legally required to follow standards of the Data Protection Act and any additional data security policies set out by the Belfast Health & Social Care Trust, the Health & Social Care Board and the PHA. No identifiable client information is recorded or used in reports. The data collector is monitored by an appropriately qualified Regional Board Officer and has direct access to this Officer if queries arise in relation to patient level data or data security.

2.10 Quality assurance

Regular audits are carried out to check the accuracy of the data collection process. The outcome of the audits showed that the process used was both effective and efficient.

A quality assurance exercise involved the data collector applying the same case finding process to data from another hospital which is participating in the Registry. The cases identified were compared with those identified by another data collector. The outcome of this provided assurance that both data collectors were working to the same level and applying the criteria correctly.

2.11 Registry coverage

Self-harm information was collected from all the 12 Type 1 and Type 2 EDs in Northern Ireland as referred to in 2.5.

2.12 Cautions

The identification of cases and the detail regarding each episode recorded by the Registry is dependent on the quality of clinical records kept.

Where differences between geographical areas are highlighted it is important to note that these are not necessarily statistically significant. This particularly applies to analyses by gender and age, where the numbers of cases may be relatively small. Therefore, caution should be exercised in interpreting such findings.

2.13 Calculation of rates

Self-harm rates were calculated based on the number of persons' resident in the relevant HSCT area who presented to hospital as a result of self-harm.

European age-standardised rates (EASRs) are the incidence rates that would be observed if the population under study had the same age composition as a theoretical European population. Adjusting for the age composition of the population under study ensured that differences observed by gender or by area are due to differences in the incidence of self-harm rather than differences in the composition of the populations. EASRs were calculated as follows: For each five-year age group, the number of persons who engaged in self-harm was divided by the population at risk and then multiplied by the number in the European standard population. The EASR is the sum of these age-specific figures.

Section 3: Self-harm presentations

3.1 Number of self-harm presentations

For the period from 1st April 2018 to 31st March 2019, the Registry recorded 9,242 self-harm attendances to emergency departments (EDs) in Northern Ireland, summarised in Table 1. These are referred to as presentations and it should be noted that one individual may have had multiple attendances.

This reflects 1.2% of all ED attendances. During 2018-19 there were a total of 758,888 new and unplanned review attendances to Type 1 and Type 2 EDs for any reason.

Of the recorded attendances, there were 4,479 male and 4,763 female self-harm presentations over the 12 month period. There was a 1.3% increase in self-harm presentations compared to the previous year and an 11.6% increase since 2012/13.

Table 1 Number of self-harm presentations to EDs in Northern Ireland, 2012/13 to 2018/19.

Northern Ireland	Male		Female		All Presentations	
Year	**Number**	**% change from previous year**	**Number**	**% change from previous year**	**Number**	**% change from previous year**
2012/13	4,139	-	4,140	-	8,279	-
2013/14	4,202	+1.5%	4,254	+2.8%	8,456	+2.1%
2014/15	4,459	+6.1%	4,426	+4.0%	8,885	+5.1%
2015/16	4,424	-<1%	4,686	+5.9%	9,110	+2.5%
2016/17	4,316	+2.4%	4,429	-5.5%	8,745	-4.0%
2017/18	4,333	+<1%	4,794	+8.2%	9,127	+4.4%
2018/19	**4,479**	**+3.4%**	**4,763**	**-<1%**	**9,242**	**+1.3%**

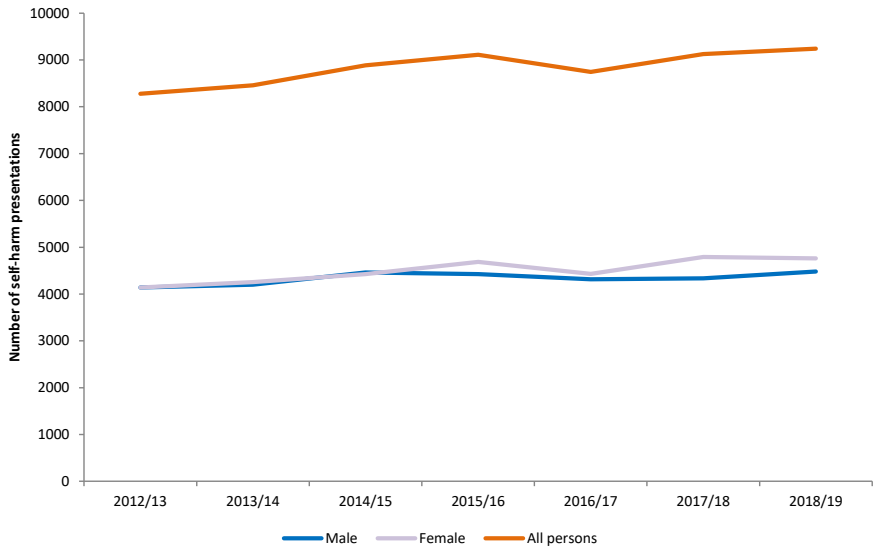


Figure 2: Number of self-harm presentations to EDs in Northern Ireland by gender, 2012/13 to 2018/19.

Given that one individual may have made multiple presentations, the recorded 9,242 episodes in 2018/19 were made by 6,335 individuals, summarised in Table 2.

Table 2 Individual persons presenting with self-harm to EDs in Northern Ireland, 2012/13 to 2018/19.

Northern Ireland	Male		Female		All Persons	
Year	**Number**	**% change from previous year**	**Number**	**% change from previous year**	**Number**	**% change from previous year**
2012/13	2,976	-	3,001	-	5,977	-
2013/14	2,987	+<1%	2,997	-<1%	5,984	+<1%
2014/15	3,021	+1.1%	3,005	+<1%	6,026	+<1%
2015/16	2,982	-10.3%	3,155	-4.5%	6,137	-7.4%
2016/17	2,914	-2.3%	3,025	-4.1%	5,939	-3.2%
2017/18	2,968	+1.8%	3,139	+3.7%	6,107	+2.8%
2018/19	**3,142**	**+5.9%**	**3,193**	**+1.7%**	**6,335**	**+3.7%**

Note: Total individual persons does not equal sum of individual years

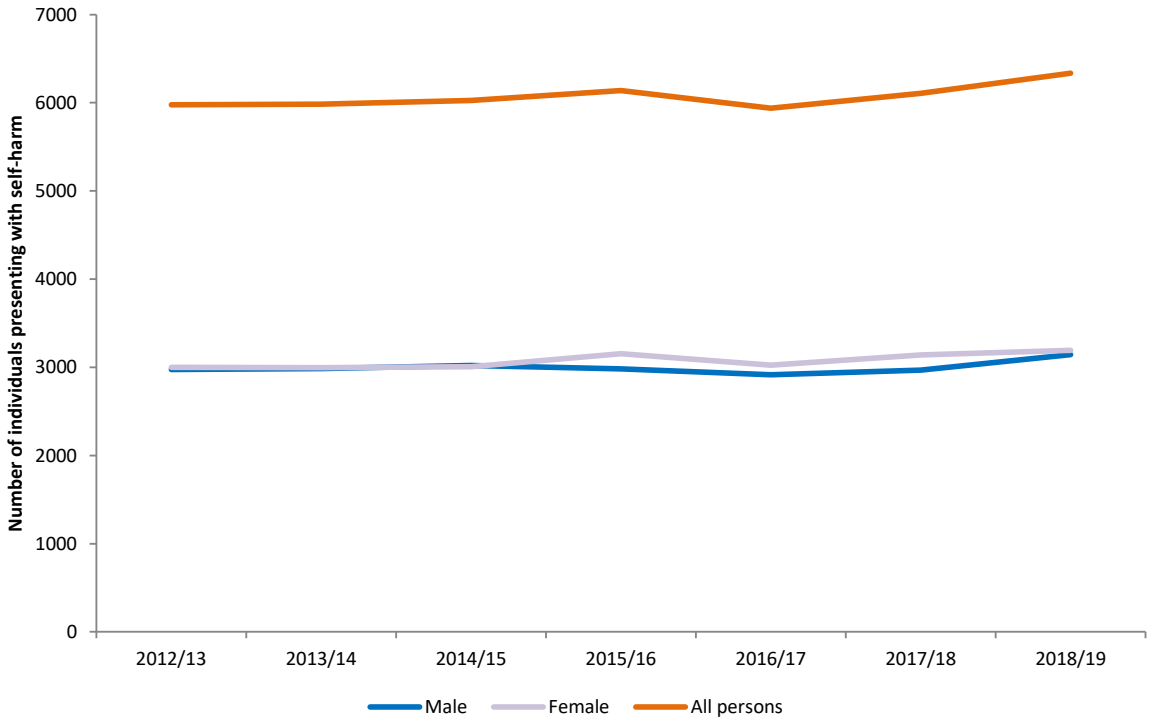
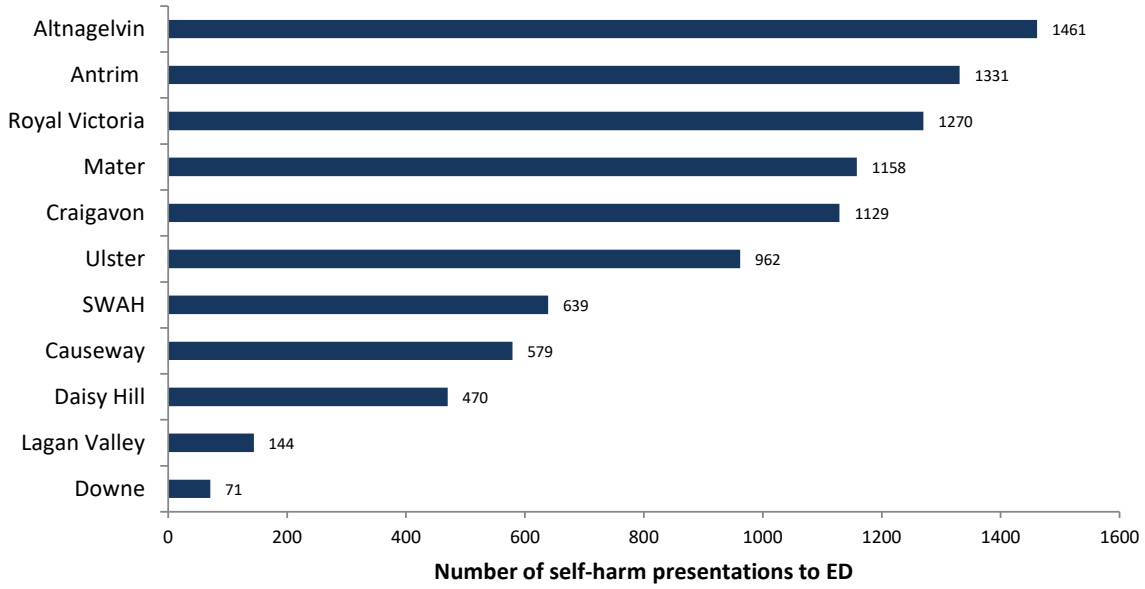


Figure 3: Number of individuals presenting with self-harm to EDs in Northern Ireland by gender, 2012/13 to 2018/19.

3.2 Self-harm presentations by hospital

The Registry records data across all twelve EDs in Northern Ireland. Altnagelvin Hospital in the Western Trust recorded the largest number of self-harm presentations in 2018/19, accounting for 16% (n=1,461) of total presentations, followed by Antrim Hospital with 14% of presentations (n=1,331) and the Royal Victoria Hospital with 14% (n=1,270) of presentations. Excluding the Royal Hospital for Sick Children, Downe Hospital had the least presentations (<1%; n=71).

The distribution of self-harm presentations between hospitals is summarised in Figure 4, below.



**This graph omits the Royal Hospital for Sick Children due to small numbers*

Figure 4: Number of self-harm presentations by hospital ED, 2018/19.

3.3 Summary of self-harm presentations by Health and Social Care Trust (HSCT) in Northern Ireland

The largest number of self-harm presentations was recorded to EDs in the Belfast HSCT area (n=2,456), accounting for 27% of all presentations in Northern Ireland in 2018/19, despite the Trust area having a 19% share of the total NI population. Conversely, the Northern Trust EDs have lower than expected presentations based on their proportion of the NI resident population (Table 3).

Table 3 Self-harm presentations share by HSCT area, 2018/19.

	BHSCT	SEHSCT	NHSCT	SHSCT	WHSCT	Northern Ireland
Number of self-harm presentations to EDs	2,456	1,177	1,910	1,599	2,100	9,242
% share of self-harm presentations	27%	13%	21%	17%	23%	100%
% of NI population resident in Trust*	19%	19%	25%	20%	16%	100%

**NISRA 2018 Mid-Year Estimate Resident Population*

While overall patients presented to a hospital within their Trust of residence, there were some observed variations. During 2018/19 over one-quarter (27%; n=336) of South Eastern trust residents presenting with self-harm did so to a hospital in the Belfast HSCT area (Table 4). In the Belfast area, 16% (n=362) presented to hospitals in SEHSCT. In the Northern HSCT area, 8% (n=158) of those who presented to hospital with self-harm did so to a BHSCT hospital.

The majority of presentations to hospitals in both the Southern (96%) and Western (97%) HSCT areas were by residents from within their respective Trust.

Table 4 Self-harm presentations by Trust of residence and presenting hospital of Trust residents, 2018/19.

Self-harm presentations		Presenting hospital location					
		BHSCT Hospitals	SEHSCT Hospitals	NHSCT Hospitals	SHSCT Hospitals	WHSCT Hospitals	Total
Resident Trust Area	BHSCT	**83%**	16%	2%	<1%	<1%	100%
	SEHSCT	27%	**64%**	1%	8%	<1%	100%
	NHSCT	8%	<1%	**88%**	3%	<1%	100%
	SHSCT	2%	<1%	<1%	**96%**	2%	100%
	WHSCT	<1%	0%	2%	<1%	**97%**	100%

The gender balance of self-harm presentations to EDs in Northern Ireland during 2018/19 was 48% male and 52% female and this varied by HSCT area as detailed in figure 5. This has changed slightly over the seven year period from 50 % for both genders in 2012/13.

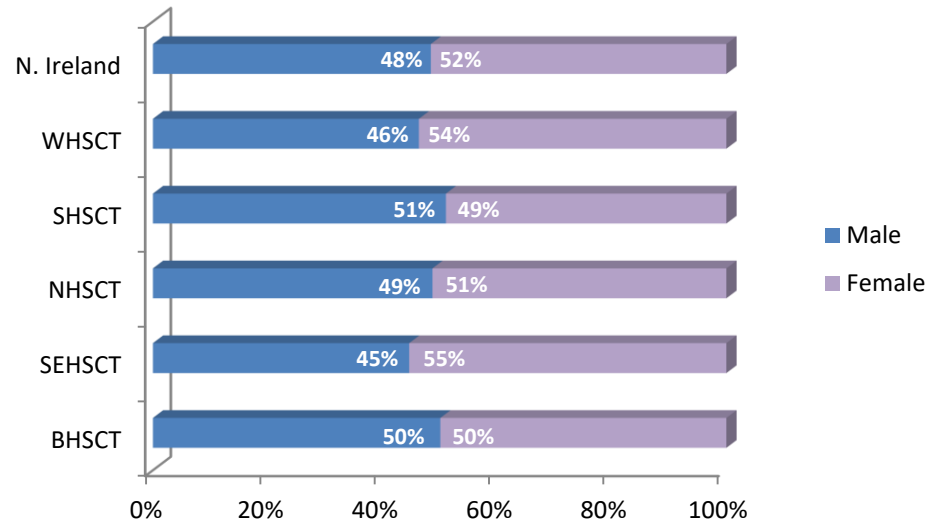


Figure 5: Percentage self-harm presentations by gender and HSCT area in Northern Ireland, 2018/19.

3.4 Self-harm presentations by time of occurrence

3.4.1 Variation by month

The monthly average number of self-harm presentations to hospitals in 2018/19 was 770. The month of February saw the fewest self-harm presentations to EDs at 619 (20% below average) while the peak month was July with 863 presentations (12% above average, Figure 6).

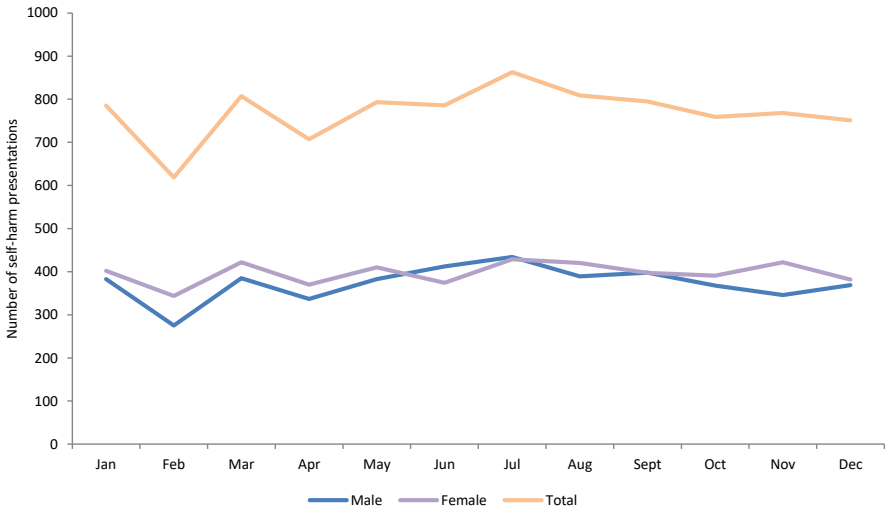


Figure 6: Self-harm presentations by month of attendance, 2018/19.

3.4.2 Variation by day and time of attendance

During 2018/19, an average of 25 presentations to ED involving self-harm were recorded per day. Table 5 examines the pattern of self-harm attendances by weekday and time of attendance. Considering presentations made on weekdays (Monday to Friday), only 28% were made between the hours of 9am to 5pm, with 27% made between 5pm and 10pm and 44% made between 10pm and 9am. For presentations at the weekend (Saturday and Sunday), 22% occurred between 5pm and 10pm and a further 53% occurred between the hours of 10pm and 9am.

Table 5 Self-harm episodes by day and time of presentation, 2018/19.

Northern Ireland	All persons		
	Mon-Fri	Sat-Sun	Total Mon-Sun
9am until 5pm	1,806 (28%)	704 (25%)	**2,510 (27%)**
5pm until 10pm	1,746 (27%)	636 (22%)	**2,382 (26%)**
10pm until 9am	2,831 (44%)	1,519 (53%)	**4,350 (47%)**
Total	6,383 (100%)	2,859 (100%)	**9,242 (100%)**

3.4.3 Variation by hour

There was an increase in the frequency of self-harm presentations over the course of the day with the highest numbers presenting around midnight (Figure 7). Numbers for both males and females gradually increased during the day. The peak for males was 1am and for females was 9pm.

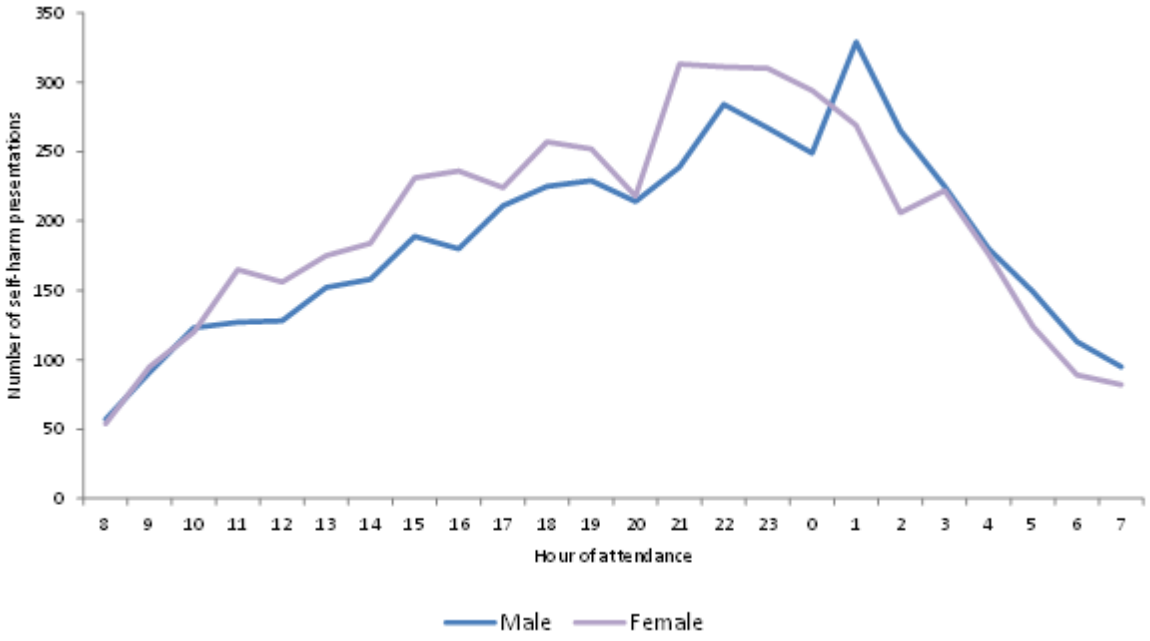


Figure 7: Number of self-harm presentations by time of occurrence, 2018/19.

3.5 Mode of arrival

In self-harm presentations, patients may be accompanied to the hospital by more than one service. The majority (68%) of presentations were brought to hospital by emergency (e.g. ambulance and/or police). In one-quarter of presentations (25%), the patient self-presented to the hospital ED.

3.6 Methods of self-harm

Table 6 overleaf details the methods involved in self-harm presentations in Northern Ireland. More than one method may be used and therefore the figures do not add up to 100%. The most common method of self-harm was drug overdose, which was involved in almost two-thirds (63%) of all self-harm presentations. Drug overdose was more common among females than males (68% vs. 58% respectively). Self-cutting was the only other common method of self-harm, present in 27% of all presentations (Table 6).

Table 6 Methods of self-harm by gender, 2018/19.

	Drug Overdose	Self-cutting	Self-poisoning	Attempted hanging	Attempted drowning
Male	2,597	1,291	56	382	314
%	(58%)	(29%)	(1%)	(9%)	(7%)
Female	3,232	1,234	37	158	256
%	(68%)	(26%)	(1%)	(3%)	(5%)
Total	**5,829**	**2,525**	**93**	**540**	**570**
%	**(63%)**	**(27%)**	**(1%)**	**(6%)**	**(6%)**

While rare as a sole method of self-harm, alcohol was involved in 44% of all self-harm presentations. The proportion was higher among males than females (49% v 38%).

The involvement of alcohol in 2018/19 varied across HSCT area, ranging from 37% in the South East to 47% in the Western HSCT.

Alcohol involvement was elevated in self-harm presentations among males where attempted drowning was involved (63%) and half of male drug overdose presentations (50%) involved alcohol, as shown in Figure 8.

Almost half (49%) of female attempted drowning episodes involved alcohol. Alcohol involvement was lowest among presentations due to self-poisoning for both genders (males 36%; females 11%).

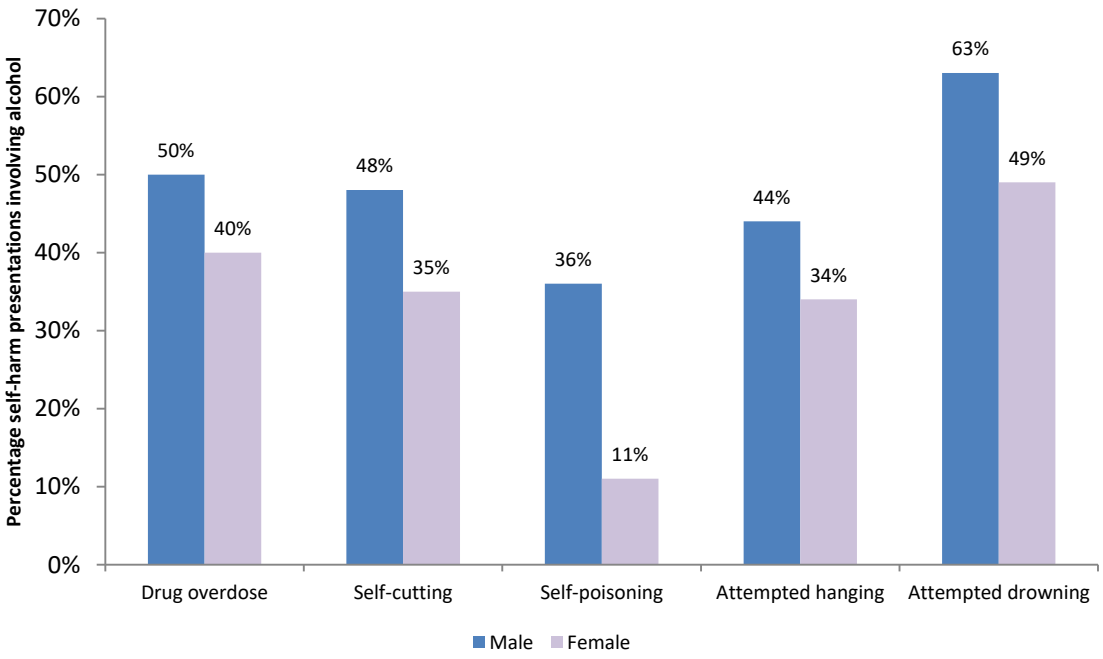


Figure 8: Alcohol involvement in self-harm presentations by method and gender, 2018/19.

Figure 9 illustrates the frequency with which the most common types of drugs were used in overdose. It should be noted that the data re drugs used in overdose are collected via a combination of self-report from the patient, and toxicology results if available. Furthermore, the Registry does

not currently record information on the sources of these medications, although this is being considered.

Minor tranquilisers (e.g. benzodiazepines) were involved in 27% of all overdoses and were more often taken by males than females (32% vs. 23%, respectively). In total, 56% of all female overdose acts and 43% of male acts involved an analgesic drug. Paracetamol was the most common analgesic drug taken, present in some form in 25% of overdoses. Paracetamol-containing medication was used significantly more often by females than males (30% vs. 19%).

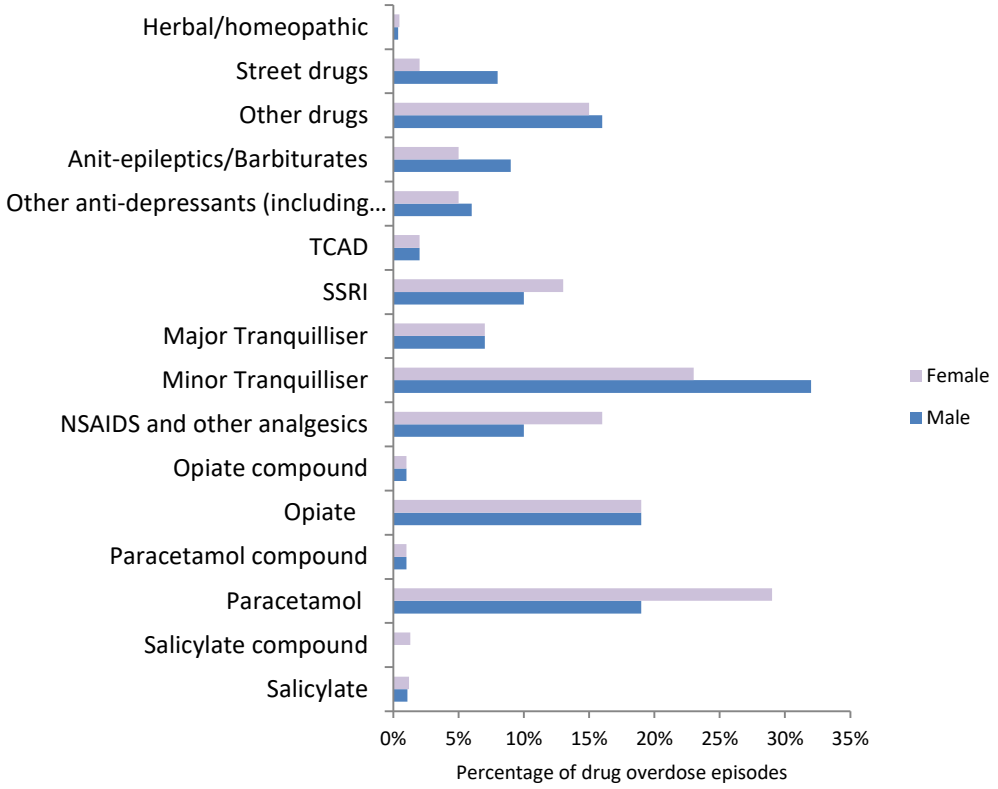


Figure 9: Variation in the types of drugs used in intentional overdose cases by gender, 2018/19.

As detailed in Figure 10, drugs used in overdose varied according to age. For those aged 65 years and over, minor tranquillisers were present in 40% of female and 29% of male overdoses.

Paracetamol-containing medication was most often involved in overdoses by young females, present in 40% of female presentations by those aged under 25 years. The age group that used anti-depressants in overdose most often was the 45-64 year old group, females (22%) and males (20%).

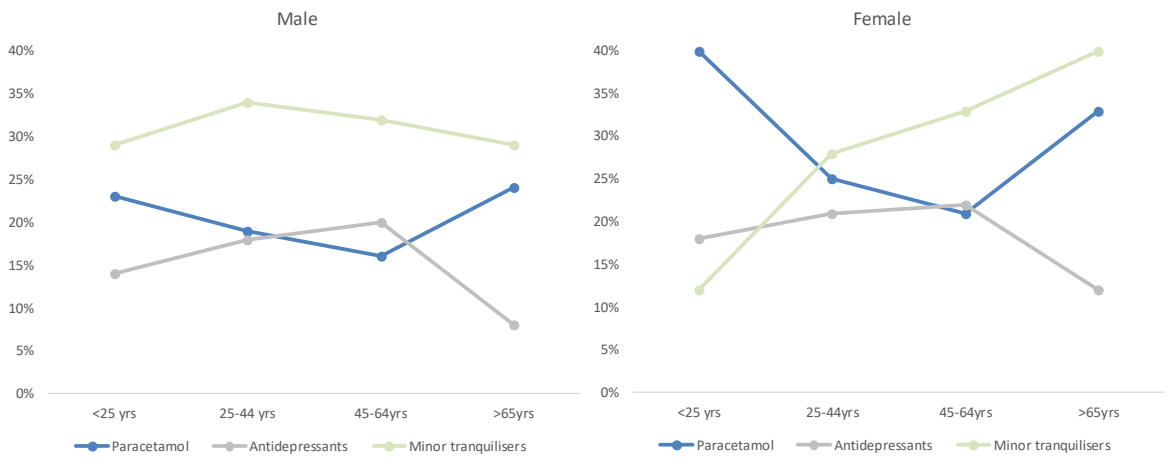


Figure 10: Drugs used in intentional overdose by age for males (left) and females (right), 2017/18.

3.6.1 Methods of self-harm by HSCT area, 2018/19

Methods of self-harm varied across HSCT areas. Presentations involving drug overdose varied from 58% in the WHSCT to 66% in the NHSCT (Table 7). Most notably, the proportion of self-harm presentations due to attempted drowning varied from 2% in each of the Belfast, South East and Southern areas to 20% in the Western HSCT area.

Due to the high proportion presenting with attempting drowning in the Western area further analysis of this group was undertaken. Of the 423 attempted drowning presentations in the Western area, 96% presented to Altnagelvin Hospital and 4% to South West Acute Hospital. The vast majority (93%) of the cases that are currently classified as 'attempted drowning' had in fact not entered the water and were brought to the ED by a third party for assessment and support prior to the act progressing further. The Registry intends to review how these cases are categorised in future to more accurately reflect the nature of the presentation.

Table 7 Percentage method involved in self-harm presentations by HSCT area, 2018/19.

Year	Drug overdose	Self-cutting	Self-poisoning	Attempted hanging	Attempted drowning
BHSCT	63%	31%	1%	6%	2%
SEHSCT	64%	30%	2%	5%	2%
NHSCT	66%	26%	1%	6%	3%
SHSCT	65%	28%	1%	7%	2%
WHSCT	58%	23%	1%	5%	20%
N. Ireland	**63%**	**27%**	**1%**	**6%**	**6%**

Self-cutting was involved in 31% of self-harm presentations to hospitals in the Belfast Trust compared to 27% regionally. The Western area recorded a lower percentage (23%). Self-cutting

was involved in 30% of presentations in the South Eastern Trust, 28% in the Southern Trust and 26% in the Northern Trust.

Attempted hanging was involved in 7% of self-harm presentations to hospitals in the Southern HSCT. The regional average in 2018/19 was 6%. Belfast and Northern Trust areas both recorded 6% while South East and Western HSCT areas recorded 5%. The Registry is considering new data collection categories in relation to attempted hanging to better understand the nature of these presentations.

Presentations made to hospitals in the Southern HSCT area were more likely to involve alcohol (48% vs. 44% regionally). Alcohol was involved in 47% of self-harm presentations to the Western Trust and 42% in both Belfast and Northern HSCT areas. The lowest involvement of alcohol was recorded in the South Eastern Trust area at 37%.

3.6.2 Trends in methods of self-harm over the period 2012/13 to 2018/19

Over the seven-year period the proportion of self-harm attendances to ED involving drug overdose decreased by 12% while increases were observed in the proportion of cases involving attempted drowning (+5%), self-cutting (+4%), and attempted hanging (+2%) (Table 8).

Table 8 Percentage method involved in self-harm presentations by year, 2012/13 to 2018/19.

Year	Drug overdose	Self-cutting	Self-poisoning	Attempted hanging	Attempted drowning
2012/13	74.9%	23.1%	1.1%	3.8%	1.0%
2013/14	73.7%	23.8%	1.1%	3.6%	1.3%
2014/15	71.9%	26.4%	1.7%	3.9%	1.4%
2015/16	70.5%	25.8%	1.2%	4.9%	3.0%
2016/17	68.2%	26.6%	1.5%	5.2%	3.2%
2017/18	64.3%	29.6%	1.4%	4.8%	4.2%
2018/19	**63.1%**	**27.3%**	**1.0%**	**5.8%**	**6.2%**

The involvement of alcohol in self-harm attendances to ED has decreased over the seven-year period from 51% of cases in 2012/13 to 44% in 2018/19 as illustrated in Figure 11.

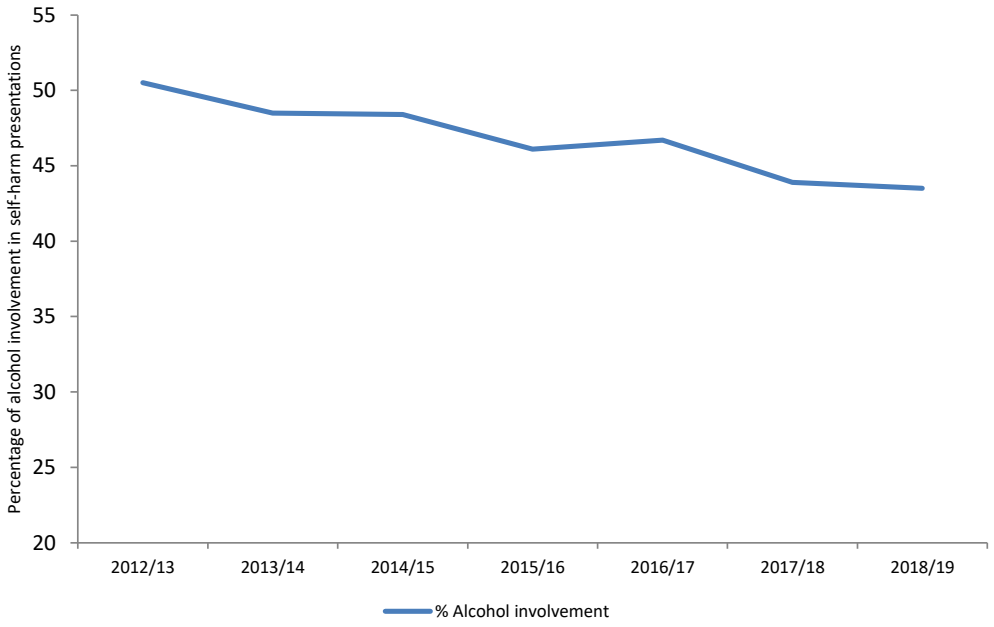


Figure 11: Alcohol involvement in self-harm episodes, 2012/13 to 2018/19.

3.7 Recommended next care following self-harm

Table 9 illustrates the recommended next care for self-harm presentations made to hospital ED'S. For an explanation of these terms refer to section 2.7. In 2018/19, admission to either a general or psychiatric ward occurred in 46% of presentations, with 40% admitted to a general ward a further 6% resulting in psychiatric admission. The proportion admitted to the general hospital has steadily declined over the period 2012/13 to 2018/19. In contrast the proportion admitted to a psychiatric hospital has increased during the same period.

Almost half (46%) of self-harm cases were discharged from the ED following treatment. Over the time period the proportion of self-harm presentations that are managed without requiring admission to hospital has increased.

In 3% of presentations, the patient left the ED without being seen and a further 4% left the ED before a decision regarding next care was made.

Fewer than 1% of presentations resulted in the patient refusing admission, as recommended by the presenting hospital. Between 2012/13 and 2018/19, the proportion of presentations leaving the ED before decision, without being seen or refusing admission decreased from 11% to 7%.

Table 9 Recommended next care following self-harm attendance to hospital emergency departments in Northern Ireland, 2012/13 to 2018/19.

Next care	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
General admission	4,817 (58.2%)	4,442 (52.5%)	4,588 (51.6%)	4,312 (47.3%)	3,506 (40.1%)	3,619 (39.7%)	3,718 (40.2%)
Psychiatric admission	313 (3.8%)	311 (3.7%)	346 (3.9%)	451 (5.0%)	449 (5.1%)	521 (5.7%)	591 (6.4%)
Refused admission	163 (2.0%)	147 (1.7%)	90 (1.0%)	78 (<1%)	94 (1.1%)	82 (<1%)	72 (<1%)
Left ED before decision made regarding next care	207 (2.5%)	275 (3.3%)	264 (3.0%)	250 (2.7%)	334 (3.8%)	346 (3.8%)	332 (3.6%)
Left ED without being seen	533 (6.4%)	747 (8.8%)	499 (5.6%)	408 (4.5%)	279 (3.2%)	279 (3.1%)	270 (2.9%)
Discharged from ED following treatment	2,246 (27.1%)	2,534 (30.0%)	3,098 (34.9%)	3,611 (39.6%)	4,083 (46.7%)	4,280 (46.9%)	4,259 (46.1%)

Recommended next care varied depending on the presenting method of self-harm used (Table 10). General admission was most common following presentations involving drug overdose (50%) and was least common for patients who presented with self-cutting and self-poisoning (24%). Patients presenting with self-cutting were the group most often discharged from the ED following treatment (60%). Psychiatric admission was most common for presentations involving highly lethal methods of self-harm in particular following attempted hanging (16%).

The trend towards a lower proportion of cases of self-harm being admitted to the general hospital may be related to a change in the methods of self-harm used over time, as detailed in section 3.6.

Table 10 Recommended next care by method of self-harm, 2018/19.

Next care	Drug overdose (n=5,829)	Self-cutting (n=2,525)	Self-poisoning (n=93)	Attempted hanging (n=540)	Attempted drowning (n=570)
General admission	50.1%	23.7%	23.7%	28.5%	32.1%
Psychiatric admission	4.7%	7.1%	12.9%	15.7%	10.9%
Refused admission	<1%	<1%	0%	<1%	1.4%
Left ED before decision made regarding next care	3.2%	3.7%	5.4%	4.8%	5.6%
Left ED without being seen	2.2%	4.7%	1.1%	1.9%	1.9%
Discharged from ED following treatment	38.9%	60.1%	57.0%	48.7%	48.1%

Recommended next care varied significantly by HSCT area (Table 11). The proportion of patients who left the ED without being seen varied from 1% in the South Eastern HSCT to 6% in the Belfast HSCT. Half of all those who left ED before being seen by a clinician had presented to Belfast HSCT. The Western HSCT had the highest proportion of patients (7%) who left the ED before a decision could be made about the next steps in their care. Western Trust patients accounted for 45 % of all patients regionally who left before their care was completed.

Table 11 Recommended next care following self-harm attendance to hospital by HSCT area, 2018/19.

Next care	BHSCT n=(2,456)	SEHSCT n=(1,177)	NHSCT n=(1,910)	SHSCT n=(1,599)	WHSCT n=(2,100)	Northern Ireland n=(9,242)
General admission	888 (36.2%)	396 (33.6%)	909 (47.6%)	757 (47.3%)	768 (36.6%)	**3,718 (40.2%)**
Psychiatric admission	76 (3.1%)	75 (6.4%)	84 (4.4%)	126 (7.9%)	230 (11.0%)	**591 (6.4%)**
Refused admission	<10 (<1%)	<10 (<1%)	14 (<1%)	19 (1.2%)	32 (1.5%)	**72 (<1%)**
Left ED before decision made regarding next care	77 (3.1%)	24 (2.0%)	44 (2.3%)	39 (2.4%)	148 (7.0%)	**332 (3.6%)**
Left ED without being seen	136 (5.5%)	12 (1.0%)	34 (1.8%)	43 (2.7%)	45 (2.1%)	**270 (2.9%)**
Discharged from ED following treatment	1,273 (51.8%)	669 (56.8%)	825 (43.2%)	615 (38.5%)	877 (41.8%)	**4,259 (46.1%)**

Across HSCT area, general admission was recommended for 48% of self-harm patients in the Northern, 47% in the Southern, 37% in the Western, 36% in the Belfast and 34% in the South Eastern HSCT. Admission to a psychiatric ward varied from 3% in BHSCT to 11% in WHSCT. This may reflect variation between Trusts in the balance between community based and in-patient based psychiatric services.

The proportion of patients who left the ED without being seen varied from 1% in the South Eastern HSCT to 6% in the Belfast HSCT (Table 10).

3.8 Repetition of self-harm

There were 6,335 individuals treated for 9,242 self-harm episodes over the 12-month period from April 2018 to March 2019. This implies that almost one-third (31%) of the presentations were due to repeat acts.

Of the 6,335 individuals, 1,311 (21%) made at least one repeat presentation to hospital with self-harm in 2018/19. This indicates that one in five self-harm patients re-presented to the ED with self-harm within the 12 months studied.

Repetition rates in 2018/19 are the same for males and females. Repetition rates have shown a slight reduction in 2018/19 but show a slight increase from the baseline in 2012/13 (Table 12).

Table 12 Repetition rate within the 12 months studied, 2012/13 to 2018/19.

Northern Ireland	Male		Female		All Presentations	
Year	Repetition Rate	% change from previous year	Repetition Rate	% change from previous year	Repetition Rate	% change from previous year
2012/13	19.8%	-	18.0%	-	18.9%	-
2013/14	20.5%	+0.7%	19.1%	+1.1%	19.8%	+0.9%
2014/15	21.9%	+1.4%	19.7%	+0.6%	20.8%	+1.0%
2015/16	21.4%	-0.5%	21.2%	+1.5%	21.3%	+0.5%
2016/17	21.8%	+0.4%	21.3%	+0.1%	21.5%	+0.2%
2017/18	21.9%	+0.1%	20.9%	-0.4%	21.4%	-0.1%
2018/19	**20.7%**	**-1.2%**	**20.7%**	**-0.2%**	**20.7%**	**-0.7%**

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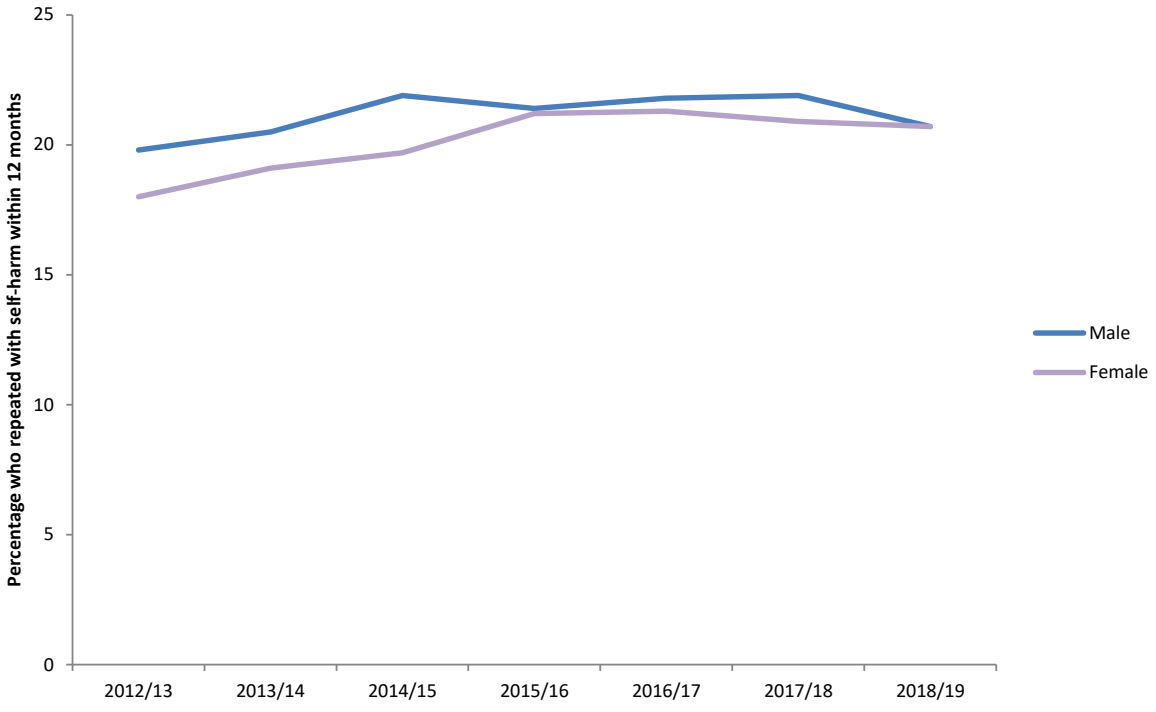


Figure 12: Repetition rate of self-harm within the 12 months studied by gender, 2012/13 to 2018/19

A relatively small proportion of presenting individuals (3%) had five or more presentations during 2018/19, accounting for 16% of all self-harm presentations (Table 13).

Table 13 Repetition distribution of self-harm presentations in Northern Ireland, 2018/19.

Number of presentations	Individual Persons	% of persons	Episodes	% of episodes
1	5,022	79%	5,022	54%
2	809	13%	1,618	18%
3	240	4%	720	8%
4	99	2%	396	4%
5 to 9	127	2%	767	8%
10 or more	38	1%	719	8%
Total	**6,335**		**9,242**	

In the above analysis, repetition within the year studied has been presented. This method facilitates year to year comparison however it means individuals have varying degrees of follow-up. Individuals who present towards the end of the year have little follow-up time in which repetition may occur.

As outlined in Table 14, the rate of repetition was similar across HSCT areas in 2018/19, and slightly elevated in the Western Trust (23%).

Table 14 Repetition of self-harm by HSCT Area, 2018/19.

	BHSCT	SEHSCT	NHSCT	SHSCT	WHSCT
Number of individuals treated	1,803	927	1,419	1,151	1,297
Number who repeated	364	189	285	233	297
Percentage who repeated	**20.2%**	**20.4%**	**20.1%**	**20.2%**	**22.9%**

When repetition is examined by method of self-harm, it can be seen that the highest rates of repetition are observed when self-cutting and self-poisoning were involved in the presentation. (Table 15).

Table 15: Repetition rates by method of self-harm, 2018/19.

	Drug overdose	Self-cutting	Poisoning	Attempted Hanging	Attempted drowning
Percentage person based repetition	19%	29%	24%	17%	19%

3.9 Self-harm behaviour in young people (under 18 years)

Self-harm presentations by those under 18 years of age contributed to 10% (n=968) of all self-harm presentations during 2018/19. This is a slight reduction from 12% of all presentations in 2017/18. The majority of these self-harm presentations were female (71%) (Table 16 and Figure 13).

In terms of trends over time, the number of male presentations has stabilised since 2015/16 following an earlier upward trend. The number of female presentations continues to show variability.

Table 16 Number of self-harm presentations by young people under 18 years, 2012/13 to 2018/19.

Northern Ireland	Male <18 yrs		Female < 18 yrs		All Presentations <18 yrs	
Year	Number	% difference from previous year	Number	% difference from previous year	Number	% difference from previous year
2012/13	216	-	566	-	782	-
2013/14	269	+25%	597	+5%	866	+11%
2014/15	296	+10%	698	+17%	994	+15%
2015/16	262	-11%	788	+13%	1050	+6%
2016/17	268	+2%	687	-13%	955	-9%
2017/18	257	-4%	839	+22%	1096	+15%
2018/19	**276**	**+7%**	**692**	**-18%**	**968**	**-12%**

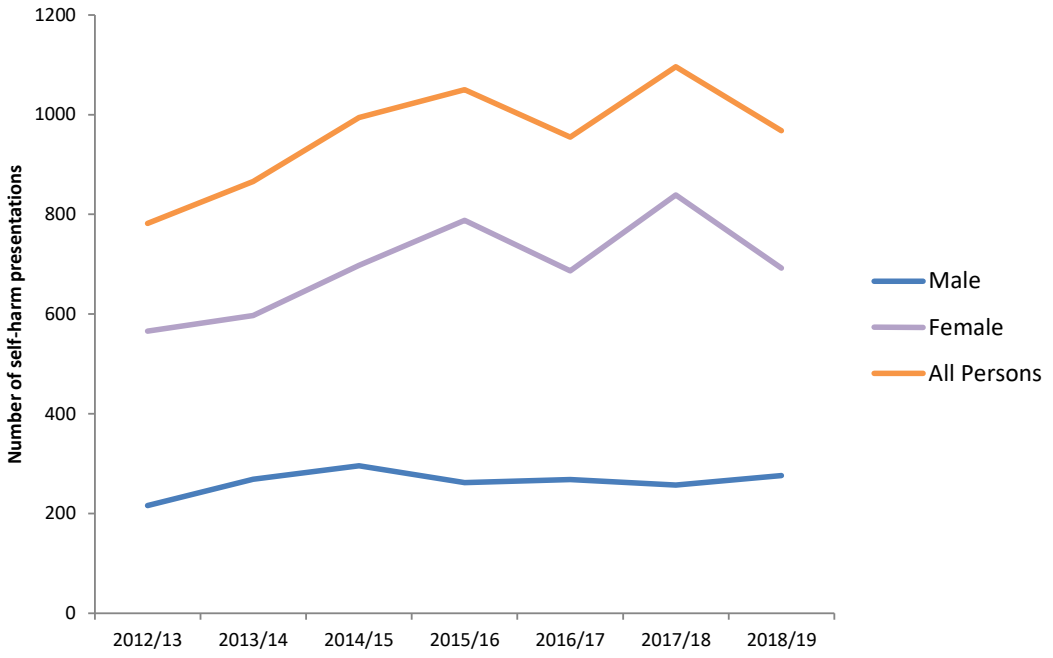


Figure 13: Number of self-harm presentations under 18 years to EDs in Northern Ireland by gender.

3.9.1 Methods of self-harm, under 18 years

Drug overdose was the most common method of self-harm used by those aged under 18 years, and more so for females than males (66% vs. 57%) (Table 17). Self-cutting was a common method of self-harm used by young people, accounting for almost one-third of self-harm presentations (30% for both males and females). Presentations involving attempted hanging or attempted drowning were more common among males than females.

Table 17 Methods of self-harm used by young people under 18 years by gender, 2018/19.

	Drug overdose	Self- cutting	Self- poisoning	Attempted hanging	Attempted drowning
Male	158	84	<10	26	<10
%	(57%)	(30%)	(<2%)	(9%)	(<4%)
Female	453	207	17	22	<10
%	(66%)	(30%)	(3%)	(3%)	(<2%)
Total	**611**	**291**	**20**	**48**	**18**
%	**(63%)**	**(30%)**	**(2%)**	**(5%)**	**(2%)**

3.9.2 Alcohol involvement, under 18 years

Alcohol was involved in 24% of young male and 11% of young female self-harm presentations to EDs in Northern Ireland in 2018/19.

3.9.3 Trends in methods of self-harm under 18 years, 2012/13 to 2018/19.

Over the seven year period the proportion of self-harm attendances to ED by young people involving drug overdose has decreased by 8% while there has been an increase in the proportion of cases involving self-cutting (+2%), attempted drowning (+1%) and attempted hanging (+1%) (Table 18).

Table 18 Percentage method involved in self-harm presentations under 18 years, 2012/13 to 2018/19.

Year	Drug Overdose	Self-cutting	Self-poisoning	Attempted hanging	Attempted drowning
2012/13	70.8%	27.5%	2.0%	4.1%	<1%
2013/14	68.5%	31.8%	1.8%	2.9%	<1%
2014/15	72.5%	29.2%	1.8%	4.2%	<1%
2015/16	66.1%	32.8%	2.2%	4.8%	2.8%
2016/17	65.2%	30.3%	3.8%	6.7%	2.4%
2017/18	59.8%	33.3%	2.3%	5.7%	2.7%
2018/19	**63.1%**	**30.1%**	**2.1%**	**5.0%**	**1.9%**

3.9.4 Recommended next care, under 18 years

In 2018/19, 40% of all those aged under 18 years were admitted to a general ward following presentation with self-harm while over half (56%) were discharged from the ED following treatment. A small proportion (1%) left the ED without being seen and 1% left the ED before a decision was made regarding their next care. There were 17 admissions (2%) to a psychiatric ward (Table 19).

Between 2012/13 and 2018/19, the proportion of young people being admitted to a general hospital decreased from 52% to 40%. The proportion that left the ED without being seen, before decision or refused admission decreased from 6% to 3%.

Table 19 Recommended next care, under 18 years, 2012/13 to 2018/19.

Next care	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
General admission	406 (51.9%)	422 (48.7%)	473 (47.6%)	477 (45.4%)	370 (38.7%)	445 (40.6%)	**385 (39.8%)**
Psychiatric admission	13 (1.7%)	13 (1.5%)	14 (1.4%)	17 (1.6%)	19 (2.0%)	24 (2.2%)	**17 (1.8%)**
Refused admission	10 (1.3%)	<10 (<1%)	<10 (<1%)	<10 (<1%)	<10 (<1%)	<10 (<1%)	**<10 (<1%)**
Left ED before decision made regarding next care	<10 (1.2%)	12 (1.4%)	15 (1.5%)	<10 (<1%)	13 (1.4%)	10 (<1%)	**12 (1%)**
Left ED without being seen	27 (3.5%)	49 (5.7%)	29 (2.9%)	19 (1.8%)	15 (1.6%)	16 (1.5%)	**14 (1.4%)**
Discharged from ED following treatment	317 (40.5%)	367 (42.4%)	460 (46.3%)	526 (50.1%)	534 (55.9%)	597 (54.5%)	**537 (55.5%)**

General admission rates varied by HSCT area for those aged less than 18 years. In the Southern HSCT area 55% of young people were admitted to a general ward compared to 51% in the Western HSCT area, 33% in both Belfast and Northern HSCT areas and 32% in the South Eastern HSCT area. The proportion of presentations leaving the ED without being seen was highest in the Belfast HSCT area (3% vs. 1% regionally).

3.10 Key subgroup analysis, self-harm.

3.10.1 Older people. During 2018/19 people aged over 65 years accounted for 2 % (n= 191) of all self-harm presentations to ED.

3.10.2 Homeless people. Of all self-harm presentations in 2018/19, 94% (n=8,645) involved persons recorded as living in private residence, with 5% (n=454) involving persons who were recorded as homeless at the time of attendance. Over half (59%) of these were male (n=266) and the majority presented to hospitals in Belfast HSCT (48%; n=219). The majority (91%) of those who were homeless were under the age of 45 years, with 48% aged between 25-44 years. The number of

self-harm presentations to ED by homeless people has decreased from 587 in 2017/18, a reduction of 23%.

3.10.3 Prisons[1] Approximately 1% (n=71) of all self-harm presentations recorded by the Registry were made by persons who were in prisons at the time of the self-harm act. The majority (82%, n=58) were male. The majority of these (69%, n=49) were presentations brought from Maghaberry Prison, with approximately one-quarter (n=17; 24%) from Hydebank Wood Prison and 7% (n=<10) from Magilligan Prison. Most of those presenting from a prison were aged between 25-44 years (62%). It should be noted that in the first instance episodes of self-harm are dealt with by the Northern Ireland Prison Service and the associated healthcare teams in prison and will only present to Emergency Departments at acute hospitals if intensive intervention is required.

3.10.4 Residential children's homes A total of 92 presentations (1%) were made by 38 individual residents of residential children's homes. In March 2019 there were 155 young people living in residential care homes. This implies that one in four young people in this setting presented to the ED with self-harm. The majority were females (n=66; 72%) and highest numbers were observed in the 15-19 year age group for both genders (n=74; 80%). Most presentations by residents of residential children's homes were made to hospitals in the South Eastern HSCT (41%). It should be noted that the main specialist residential homes for children with complex needs are based in the Belfast and South Eastern HSCT areas.

3.10.5 Acute or psychiatric hospital A minority of presentations (n=72; <1%) were made by persons residing in acute or psychiatric hospitals. The majority of those presenting from psychiatric hospitals were female (86%; n=62).

[1] Maghaberry and Magilligan Prisons both house adult male prisoners. Hydebank Wood College accommodates young people aged between 18 and 21 years, as well as female prisoners in Ash House.

Section 4: Incidence rates of self-harm

4.1 Incidence rates of self-harm in Northern Ireland

As in previous annual reports, European age-standardised rates (EASR) of self-harm were calculated to establish the incidence of self-harm in Northern Ireland. Based on the reported data, the age standardised rate of self-harm in 2018/19 for Northern Ireland was 361per 100,000 – 357 per 100,000 for males and 365 per 100,000 for females (Table 20).

The rate in 2018/19 was 8% higher than in 2012/13 (334 per 100,000). The male rate of self-harm increased by 6% during this period, while the female rate of self-harm increased by 9%.

Table 20 European age-standardised rate (EASR) of persons presenting to hospital in Northern Ireland following self-harm, 2012/13 to 2018/19.

Northern Ireland	Male		Female		All	
Year	Rate	% change from previous year	Rate	% change from previous year	Rate	% change from previous year
2012/13	336	-	334	-	334	-
2013/14	339	+1%	335	+<1%	336	+1%
2014/15	343	+1%	337	+1%	340	+1%
2015/16	338	-1%	356	-6%	346	+2%
2016/17	330	-2%	341	-4%	335	-3%
2017/18	337	+2%	356	+4%	346	+3%
2018/19	**357**	**+6%**	**365**	**+3%**	**361**	**+4%**

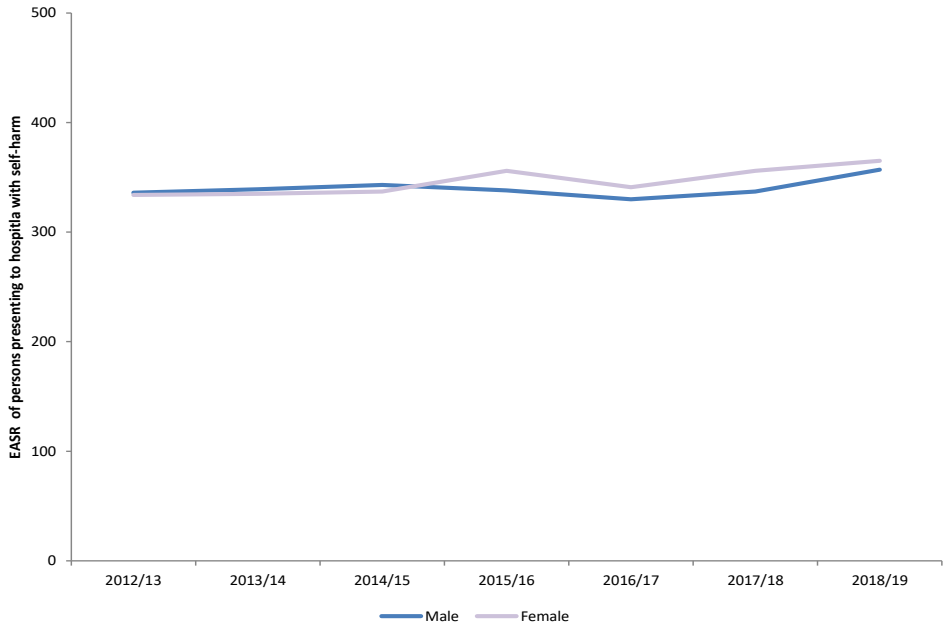


Figure 14: European age-standardised rate (EASR) of persons presenting to hospital in Northern Ireland following self-harm by gender, 2012/13 to 2018/19.

In 2018/19 the highest rate of self-harm in Northern Ireland was observed among 15-19 year-old females and 20-24 year old males, with peak rates of 1,120 per 100,000 for females and 986 per 100,000 for males in these age groups (see Figure 15).

The female rate of self-harm among 15-19 year-olds was 79% higher than the male rate for this age group. The female rate was also higher in the 45-49 year (+23%) and 50-54 year (+21%) age groups. However the male rate of self-harm was 57% higher among those aged 25-29 years (847 vs. 540 per 100,000).

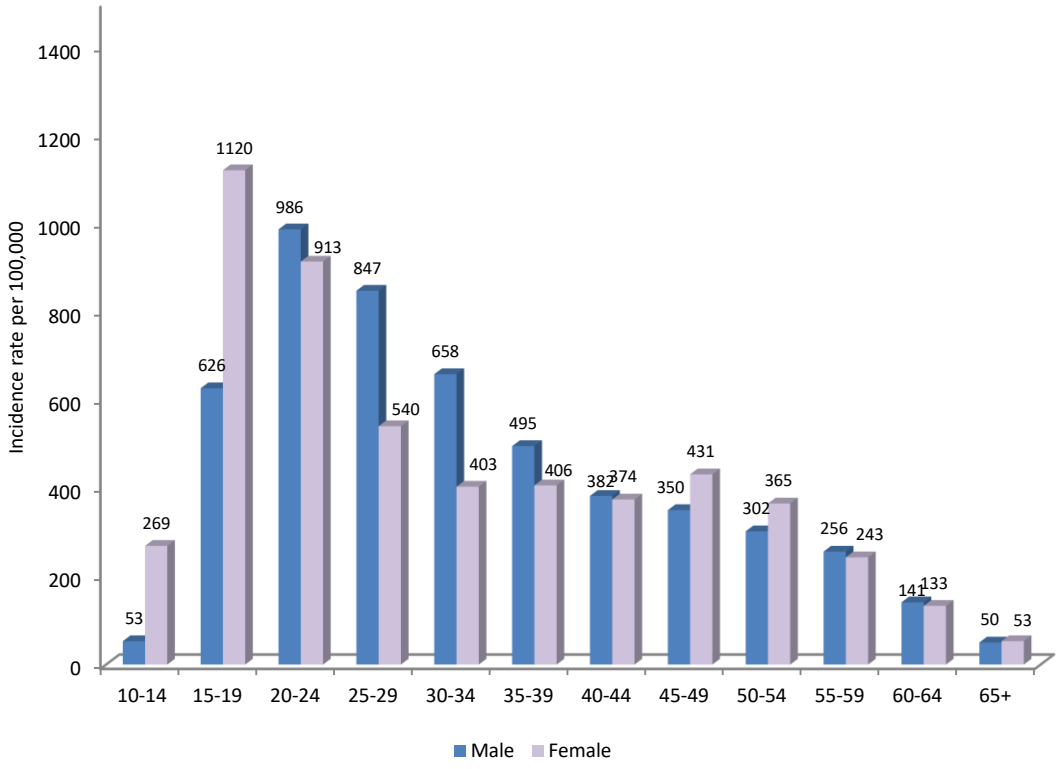


Figure 15: Incidence rate of self-harm per 100,000 in Northern Ireland by age and gender, 2018/19.

4.2 Incidence rates of self-harm by HSCT area

The highest EASR male rate of self-harm was observed in the Belfast HSCT area (469 per 100,000) and the highest EASR female rate was observed in the Western HSCT area (460 per 100,000): 31% and 26% higher than the male and female rates for Northern Ireland, respectively.

The lowest EASR rate of self-harm for male residents was recorded in the South Eastern HSCT area (282 per 100,000). This was 21% lower than the regional male rate. The lowest EASR female rate was recorded in the Southern HSCT (302 per 100,000) which was 17% lower than the regional female rate (Figure 16).

The EASR for males exceeded the EASR for females in BHSCT and WHSCT, while higher female rates were recorded for SEHSCT, NHSCT and SHSCT.

The peak self-harm rate among female residents was for 15-19 year olds in BHSCT, SEHSCT and NHSCT areas while SHSCT and WHSCT areas recorded the highest female rate among those aged 20-24 years. Across all HSCT areas the peak self-harm rate among male residents was for 20-24 year olds.

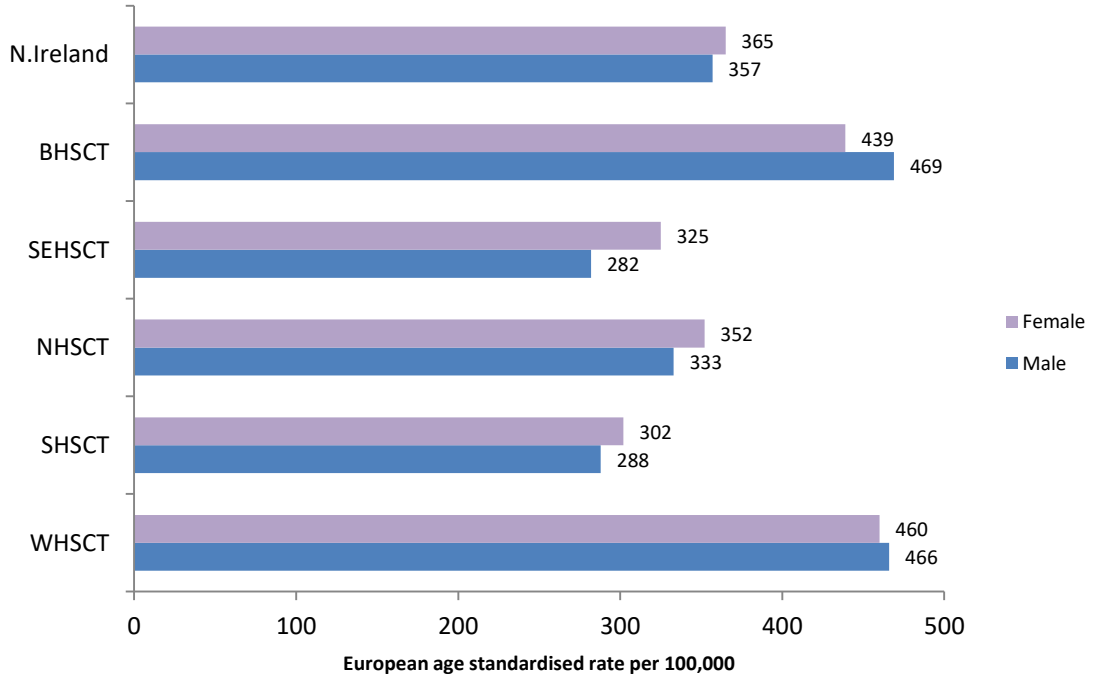


Figure 16: European age standardised rate of self-harm, all ages per 100,000 by gender and HSCT area in Northern Ireland, 2018/19.

4.3 Incidence rates of self-harm by Local Government District (LGD) area

The highest EASR male rate of self-harm was observed in the Derry City & Strabane LGD area (527 per 100,000) followed by Belfast (457 per 100,000) and Causeway Coast & Glens (330 per 100,000). The highest male rate in Derry City & Strabane was 48% higher than the male rate for Northern Ireland (Figure 17).

The lowest EASR rate of self-harm for male residents was recorded in the Mid Ulster LGD area (174 per 100,000). This was 51% lower than the regional male rate.

The highest EASR female rate of self-harm was also recorded in the Derry City & Strabane LGD area (455 per 100,000) followed by Belfast (393 per 100,000) and Fermanagh & Omagh (360 per 100,000) LGD areas. The highest female rate in Derry City & Strabane was 25% higher than the regional female rate.

The lowest EASR rate of self-harm for female residents was recorded in Lisburn & Castlereagh LGD area at 233 per 100,000. This was 36% lower than the Northern Ireland female rate.

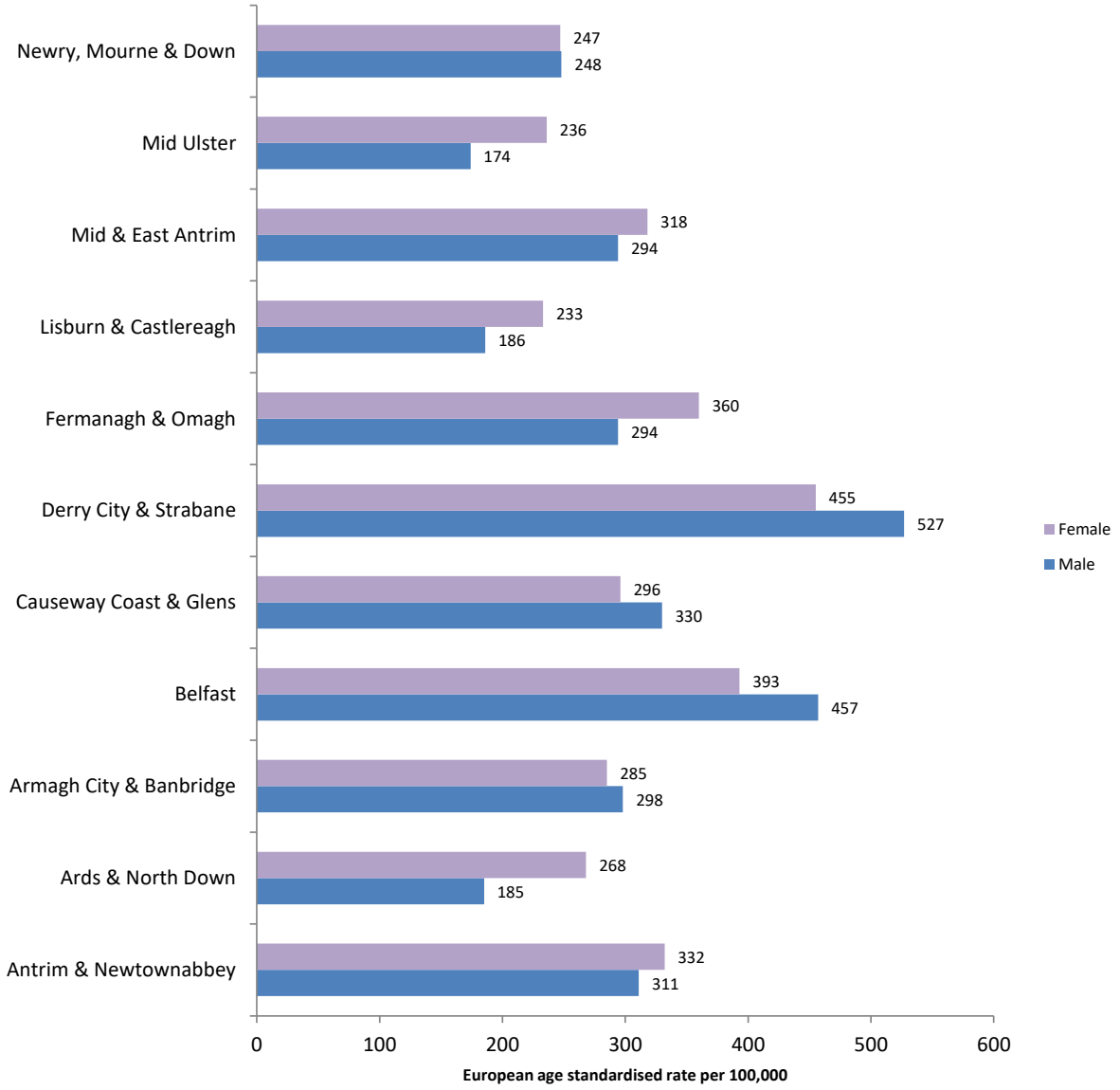


Figure 17: European age standardised rate of self-harm, all ages per 100,000 by gender and Local Government District (LGD) area in Northern Ireland, 2018/19.

Section 5: Ideation presentations

5.1 Number of ideation presentations to EDs in Northern Ireland

Data were also obtained on presentations to EDs that reported ideation. Ideation was recorded where the individual presented due to thoughts of self-harm and/ or suicide, but where no act had taken place.

There were 5,403 ideation presentations recorded during 2018/19 (Table 21). A larger proportion of ideation presentations were attributable to males (63%), in contrast to the more even gender balance among self-harm presentations. The number of ideation presentations has increased by 69% between 2012/13 and 2018/19 (60% for males and 86% for females).

Table 21 Number of ideation presentations to EDs in Northern Ireland, 2012/13 to 2018/19.

Northern Ireland	Male		Female		All	
Year	Number	% change from previous year	Number	% change from previous year	Number	% change from previous year
2012/13	2,131	-	1,068	-	3,199	-
2013/14	2,371	+11%	1,253	+17%	3,624	+13%
2014/15	2,449	+3%	1,291	+3%	3,740	+3%
2015/16	2,575	+5%	1,345	+4%	3,920	+5%
2016/17	2,699	+5%	1,556	+16%	4,255	+9%
2017/18	3,102	+15%	1,682	+8%	4,784	+12%
2018/19	**3,418**	**+10%**	**1,985**	**+18%**	**5,403**	**+13%**

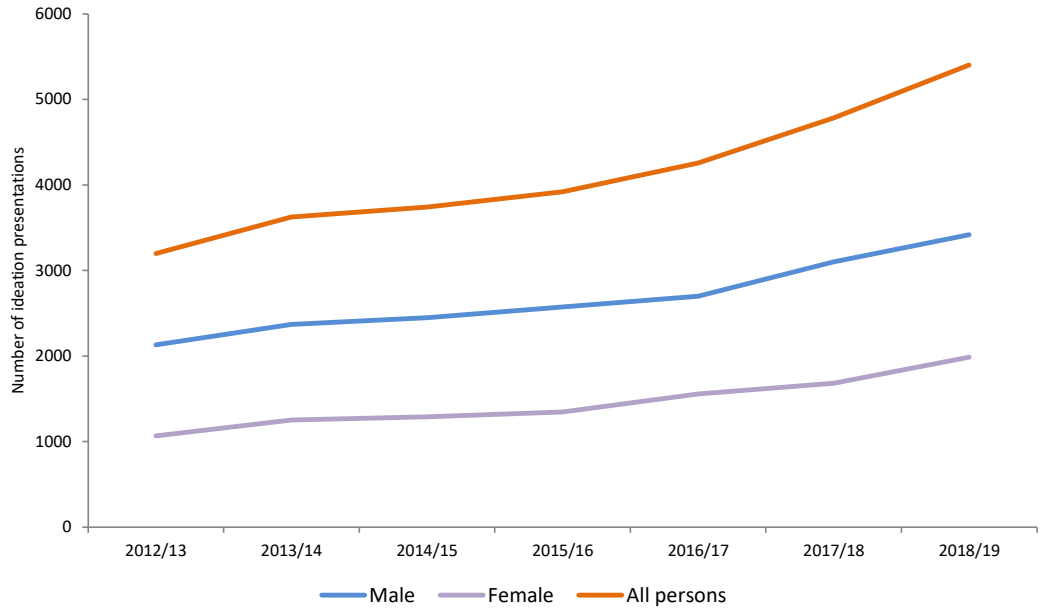


Figure 18: Number of ideation presentations to EDs in Northern Ireland, 2012/13 to 2018/19.

These 5,403 ideation presentations were made by 3,892 individuals (2,408 males and 1,484 females), Table 22.

Table 22 Individual persons presenting with ideation to EDs in Northern Ireland, 2012/13 to 2018/19.

Northern Ireland	Male		Female		All persons	
Year	Number	% change from previous year	Number	% change from previous year	Number	% change from previous year
2012/13	1,476	-	823	-	2,299	-
2013/14	1,657	+12%	959	+17%	2,616	+14%
2014/15	1,673	+1%	945	-1%	2,618	+<1%
2015/16	1,745	+4%	984	+4%	2,729	+4%
2016/17	1,804	+3%	1,112	+13%	2,916	+7%
2017/18	2,076	+15%	1,234	+11%	3,310	+14%
2018/19	**2,408**	**+16%**	**1,484**	**+20%**	**3,892**	**+18%**

5.2 Ideation repetition

The repetition rates for ideation are higher for males than females as detailed in Table 23 below. During 2018/19, 20% of males made at least one repeat act of ideation within the 12 months compared to 18% of females. There has been a slight decrease in repetition rates for ideation since 2016/17.

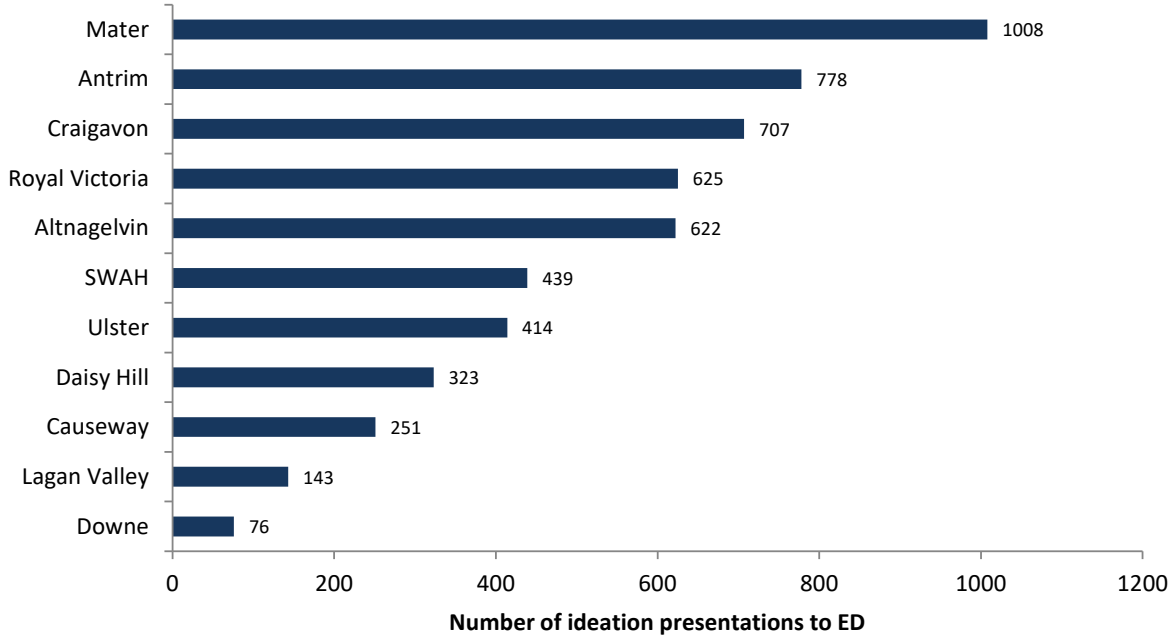
Table 23 Ideation repetition rate within 12 months, 2012/13 to 2018/19.

Northern Ireland	Male		Female		All Presentations	
Year	Repetition Rate	% change from previous year	Repetition Rate	% change from previous year	Repetition Rate	% change from previous year
2012/13	19.7%	-	17.5%	-	18.9%	-
2013/14	20.2%	+0.5%	18.0%	+0.5%	19.4%	+0.5%
2014/15	20.6%	+0.4%	17.2%	-0.8%	19.4%	-
2015/16	21.0%	+0.4%	18.5%	+1.3%	20.1%	+0.7%
2016/17	21.4%	+0.4%	18.8%	+0.3%	20.4%	+0.3%
2017/18	20.7%	-0.7%	17.9%	-0.9%	19.6%	-0.8%
2018/19	**19.6%**	**-1.1%**	**17.7%**	**-0.2%**	**18.9%**	**-0.7%**

5.3 Ideation presentations by hospital EDs in Northern Ireland

The Mater Hospital recorded the highest number of ideation presentations in 2018/19, accounting for 19% (n=1,008) of total presentations, followed by Antrim and Craigavon Hospitals with a 14% and 13% share (n=778 and 707, respectively) of presentations. Excluding the Royal Hospital for Sick

Children, Downe Hospital had the lowest share of presentations (1%; n=76). The distribution of ideation presentations between hospitals is summarised in Figure 19.



**This graph omits the Royal Hospital for Sick Children due to small identifiable numbers*

Figure 19: Number of ideation presentations by hospital ED, 2018/19.

5.4 Ideation presentations by Health and Social Care Trust (HSCT) in Northern Ireland

The largest number of ideation presentations were recorded in the Belfast HSCT area (n=1,650), accounting for 31% of all ideation presentations made during 2018/19, despite a 19% population share (Table 24). The South Eastern HSCT area had the lowest proportion of ideation presentations (12%). The Northern HSCT area had a 19% share of ideation presentations despite having a larger population share (25%).

Table 24 Ideation presentations share by HSCT, 2018/19.

	BHSCT	SEHSCT	NHSCT	SHSCT	WHSCT	Northern Ireland
Number of presentations to ED with ideation	1,650	633	1,029	1,030	1,061	5,403
% share of ideation presentations	31%	12%	19%	19%	20%	100%
% of NI population resident in Trust*	19%	19%	25%	20%	16%	100%

**NISRA 2018 Mid-Year Estimate Resident Population*

Overall patients presented with ideation to a hospital within their Trust of residence. Over one-quarter (27%) of South Eastern HSCT residents presenting with ideation did so to a hospital in the

Belfast HSCT area, as did 9% of NHSCT residents. In the Belfast HSCT area, 9% of residents presented to a SEHSCT hospital (Table 25).

Table 25 Ideation presentations by resident HSCT area and presenting hospital location, 2018/19.

Ideation presentations		Presenting hospital location					
		BHSCT Hospitals	SEHSCT Hospitals	NHSCT Hospitals	SHSCT Hospitals	WHSCT Hospitals	Total
Resident Trust Area	BHSCT	**89%**	9%	1%	1%	0%	**100%**
	SEHSCT	27%	**68%**	1%	4%	0%	**100%**
	NHSCT	9%	0%	**88%**	2%	1%	**100%**
	SHSCT	1%	1%	1%	**96%**	1%	**100%**
	WHSCT	1%	0%	2%	1%	**96%**	**100%**

5.5 Ideation presentations by time of occurrence

5.5.1 Variation by month

The monthly average number of ideation presentations to hospitals in 2018/19 was 450. The month of April saw the fewest ideation presentations to ED at 377 (16% below average) while the peak month was August at 513 (14% above average), Figure 20.

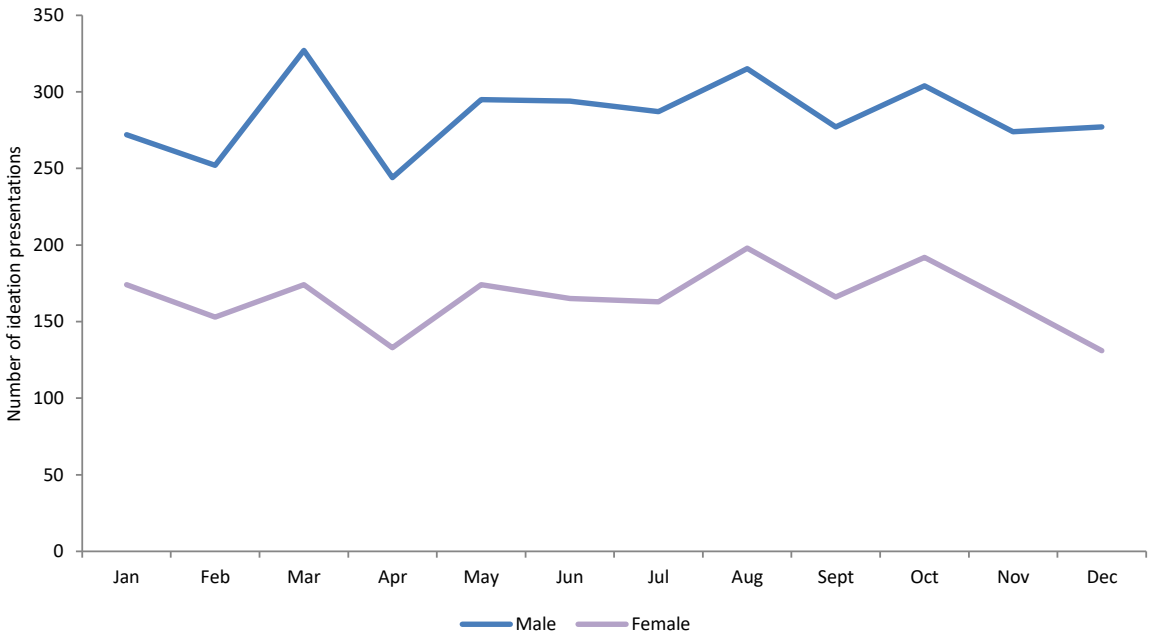


Figure 20: Number of ideation presentations by month of attendance and gender, 2018/19.

5.5.2 Variation by day and time of attendance

In 2018/19, an average of 15 presentations involving ideation were recorded per day. Similar to self-harm presentations, data shows that the number of ideation presentations was higher at weekends. Considering presentations made on weekdays (Monday to Friday), 33% were made between the hours of 9am and 5pm, with 30% made between 5pm and 10pm and 37% between 10pm and 9am. For presentations at the weekend (Saturday and Sunday), 26% occur between 5pm and 10pm and a further 47% occur between the hours of 10pm and 9am (Table 26).

Table 26 Day and time of attendance, ideation episodes, 2018/19.

Northern Ireland			
Year	Mon-Fri	Sat-Sun	Total Mon-Sun
9am until 5pm	1,277 (33%)	415 (27%)	**1,692 (31%)**
5pm until 10pm	1,174 (30%)	388 (26%)	**1,562 (29%)**
10pm until 9am	1,432 (37%)	717 (47%)	**2,149 (40%)**
Total	3,383 (100%)	1,520 (100%)	**5,403 (100%)**

5.5.3 Variation by hour

As with self-harm presentations there was an increase in the frequency of ideation attendances over the course of the day however ideation patients present earlier in the evening than self-harm patients. The peak hour of attendance for males was 6pm and female presentations peaked at 7pm (Figure 21).

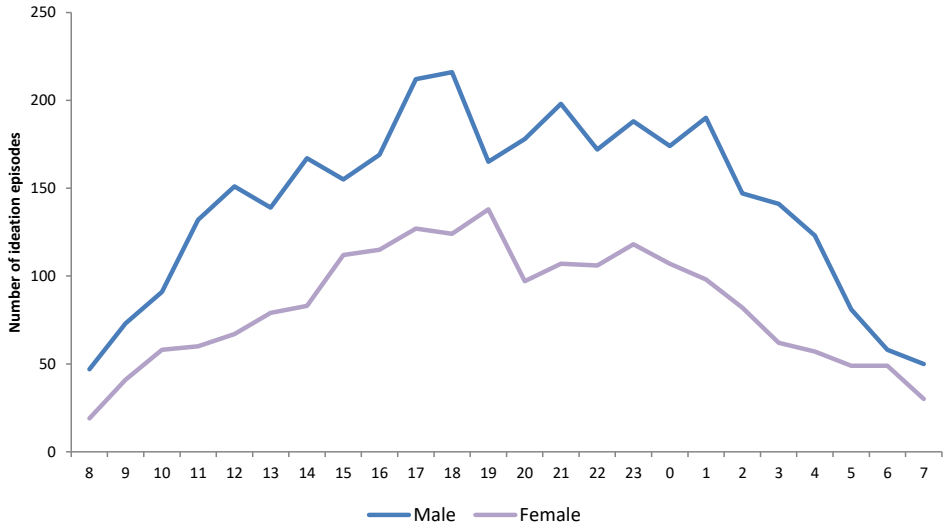


Figure 21: Number of ideation presentations by time of occurrence and gender, 2018/19.

5.6 Recommended next care following ideation

As outlined in Table 27, approximately one-quarter (26%) of ideation presentations resulted in admission to a general ward following presentation to an ED, with 8% admitted to a psychiatric ward. Most commonly, ideation presentations were discharged from the ED following treatment (55%). One in ten presentations due to ideation resulted in the patient leaving the ED without being seen (6%) or before a next care recommendation could be made (4%). There has been a 1% increase from 2017/18 in the percentage of people leaving the ED without being seen which now stands at 6%, but there has been a general improvement in this over time.

Table 27 Recommended next care following ideation attendance to hospital, 2012/13 to 2018/19.

Next care	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
General admission	995 (31%)	1,173 (32%)	1,161 (31%)	1,027 (26%)	988 (23%)	1,165 (24%)	**1,405 (26%)**
Psychiatric admission	314 (10%)	323 (9%)	302 (8%)	346 (9%)	389 (9%)	373 (8%)	**447 (8%)**
Refused admission	61 (2%)	43 (1%)	34 (1%)	36 (1%)	40 (1%)	33 (1%)	**32 (1%)**
Left ED before decision made regarding next care	110 (3%)	138 (4%)	135 (4%)	153 (4%)	193 (5%)	224 (5%)	**207 (4%)**
Left ED without being seen	426 (13%)	438 (12%)	359 (10%)	297 (8%)	214 (5%)	248 (5%)	**322 (6%)**
Discharged from ED following treatment	1,293 (40%)	1,509 (42%)	1,749 (47%)	2,061 (53%)	2,431 (57%)	2,741 (57%)	**2,990 (55%)**

Variation in recommended next care was observed across HSCT areas (Table 28). The lowest rates of admission to hospital (both general and psychiatric) were observed in the Belfast HSCT (26%), with the highest recorded in the Southern HSCT (45%). These variations may reflect differences in the balance of inpatient / community based psychiatric services between Trusts.

Table 28 Recommended next care following ideation attendance to hospital by HSCT area, 2018/19.

Next care	BHSCT n=(1,650)	SEHSCT n=(633)	NHSCT n=(1,029)	SHSCT n=(1,030)	WHSCT n=(1,061)	Northern Ireland n=(5,403)
General admission	381 (23%)	104 (16%)	317 (31%)	352 (34%)	251 (24%)	**1,405 (26%)**
Psychiatric admission	56 (3%)	68 (11%)	46 (5%)	109 (11%)	168 (16%)	**447 (8%)**
Refused admission	<10 (<1%)	<10 (<1%)	<10 (<1%)	12 (1%)	12 (1%)	**32 (1%)**
Left ED before decision made regarding next care	66 (4%)	11 (2%)	20 (2%)	25 (2%)	85 (8%)	**207 (4%)**
Left ED without being seen	164 (10%)	<10 (<2%)	61 (6%)	50 (5%)	42 (4%)	**322 (6%)**
Discharged from ED following treatment	978 (59%)	444 (70%)	583 (57%)	482 (47%)	503 (47%)	**2,990 (55%)**

The proportion of ideation presentations admitted to a general ward ranged from 16% in the South Eastern HSCT to 34% in the Southern HSCT. The lowest proportion of psychiatric admission following ideation presentation to ED was observed in the Belfast HSCT (3%) while the highest was recorded in the Western HSCT (16%).

Belfast HSCT had the highest proportion of presentations leaving the ED without being seen (10%) and in the Western HSCT 8% of ideation presentations left the ED before a next care recommendation could be made. These findings are similar to the patterns seen in relation to self-harm in both those Trust areas.

5.7 Ideation behaviour in young people (under 18 years)

Ideation presentations by those under 18 years of age contributed to 7% (n=373) of all ideation presentations to EDs in Northern Ireland during 2018/19 (Table 29). There was an increase of 38% in ideation presentations between 2017/18 and 2018/19 with a higher increase experienced among young females (+41%) than males (+34%).

Table 29 Number of ideation presentations by young people under 18 years, 2012/13 to 2018/19.

Northern Ireland	Male <18 yrs		Female < 18 yrs		All Presentations <18 yrs	
Year	Number	% difference from previous year	Number	% difference from previous year	Number	% difference from previous year
2012/13	80	-	63	-	143	-
2013/14	86	+8%	87	+38%	173	+21%
2014/15	89	+4%	81	-7%	170	-2%
2015/16	103	+16%	115	+42%	218	+28%
2016/17	126	+22%	162	+41%	288	+32%
2017/18	123	-2%	148	-9%	271	-6%
2018/19	**165**	**+34%**	**208**	**+41%**	**373**	**+38%**

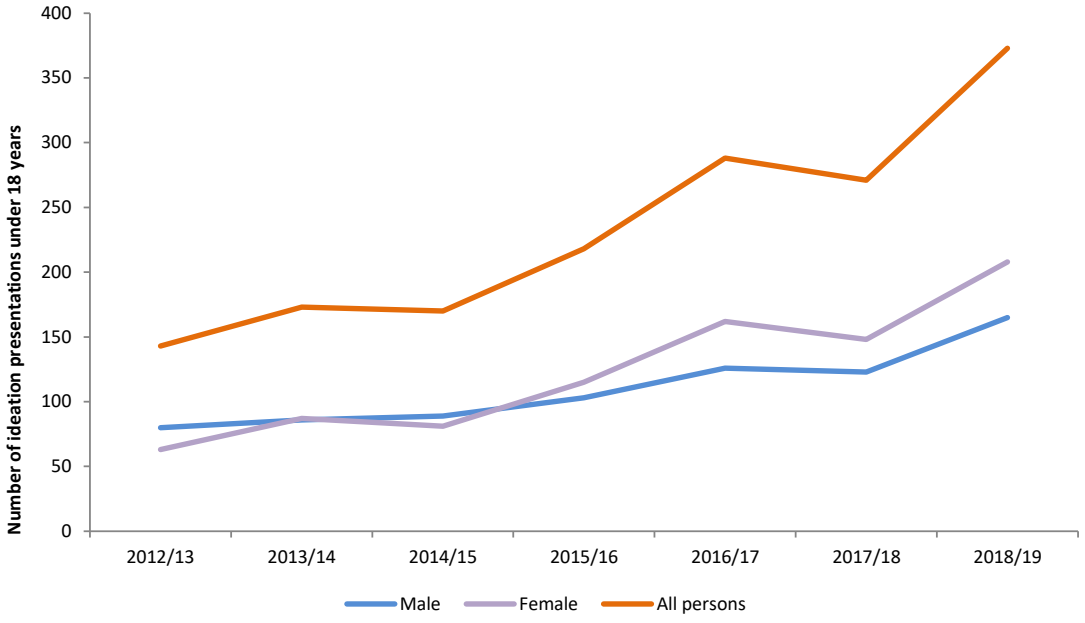


Figure 22: Number of ideation presentations by young people under 18 years, 2012/13 to 2018/19.

For ideation presentations by those under 18 years of age, over two-thirds (70%) were discharged from the ED following treatment, with 24% admitted to a general ward in the presenting hospital and a further 3% admitted to a psychiatric ward (Table 30). Fewer than 2% of presentations left the ED without being seen.

Considering the period 2012-2019, although there is some year to year variation there is some evidence of reduction in the proportion admitted to the general hospital with a trend towards a greater proportion of cases being managed in the ED.

Table 30 Recommended next care following ideation attendance to hospital, under 18 years, 2012/13 to 2018/19.

Next Care	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
General admission	51 (36%)	60 (35%)	72 (42%)	54 (25%)	69 (24%)	75 (28%)	**89 (24%)**
Psychiatric admission	<10 (<7%)	<10 (<3%)	<10 (<6%)	<10 (<5%)	<10 (<3%)	<10 (<4%)	**12 (3%)**
Refused admission	0 (0%)	<10 (<2%)	0 (0%)	0 (0%)	<10 (<1%)	<10 (<1%)	**0 (0%)**
Left ED before decision made regarding next care	<10 (<1%)	<10 (<1%)	0 (0%)	<10 (<3%)	<10 (<2%)	<10 (<3%)	**<10 (<2%)**
Left ED without being seen	10 (7%)	<10 (<6%)	<10 (<6%)	<10 (<3%)	<10 (<4%)	<10 (<2%)	**<10 (<2%)**
Discharged from ED following treatment	72 (50%)	97 (56%)	80 (47%)	143 (66%)	198 (69%)	173 (64%)	**262 (70%)**

There was some variation in general admission rates among those aged under 18 years by HSCT area. In the Southern HSCT area, 44% of children and young people were admitted to a general ward following presentation with ideation to ED compared to 36% in the Western, 24% in the Northern, 15% in the South Eastern and 11% in the Belfast HSCT areas.

5.8 Key subgroup analysis, ideation.

5.8.1 Older People. Older people aged over 65 years accounted for 3% of ideation presentations (n=168).

5.8.2 Homeless. Of all ideation presentations, 93% (n=5,030) involved persons living in a private residence. Approximately 7% (n=371) cases involved persons who were homeless at the time of attendance. The majority (76%) of these were male (n=281) and presented to hospitals in Belfast HSCT (62%; n=230). Almost half of those who were homeless were aged between 25-44 years (43%). There has been a 3% (n=11) reduction in the number of ideation presentations made by homeless people since 2017/18.

5.8.3 Residential children's homes. There were 20 ideation presentations made by residents of residential children's homes (<1%).

5.9 Incidence rates of Ideation in Northern Ireland

The European age standardised rate of ideation in 2018/19 for Northern Ireland was 219 per 100,000 – 272 per 100,000 for males and 167 per 100,000 for females (Table 31). The rate in 2018/19 has increased by 18% from the previous year (2017/18) and is 71% higher than the baseline in 2012/13 (128 per 100,000).

Since the baseline in 2012/13 the male rate has increased by 63% while the female rate has increased by 84%.

Table 31 European age-standardised rate (EASR) of persons presenting to hospital in Northern Ireland following ideation, 2012/13 to 2018/19.

Northern Ireland	Male		Female		All	
Year	Rate	% change from previous year	Rate	% change from previous year	Rate	% change from previous year
2012/13	167	-	91	-	128	-
2013/14	188	+13%	106	+16%	147	+15%
2014/15	189	+1%	105	-1%	147	-
2015/16	198	+5%	110	+5%	153	+4%
2016/17	204	+3%	123	+12%	163	+7%
2017/18	234	+15%	138	+12%	186	+14%
2018/19	**272**	**+16%**	**167**	**+21%**	**219**	**+18%**

In 2018/19 the highest rate of ideation in Northern Ireland was observed among 20 – 24 year old males at 658 per 100,000. The peak rate of ideation for females was among 15 – 19 year olds at 380 per 100,000 population.

The male rate of ideation was higher than the female rate in the majority of age groups with the exception of those aged 10 – 19 years (Figure 23).

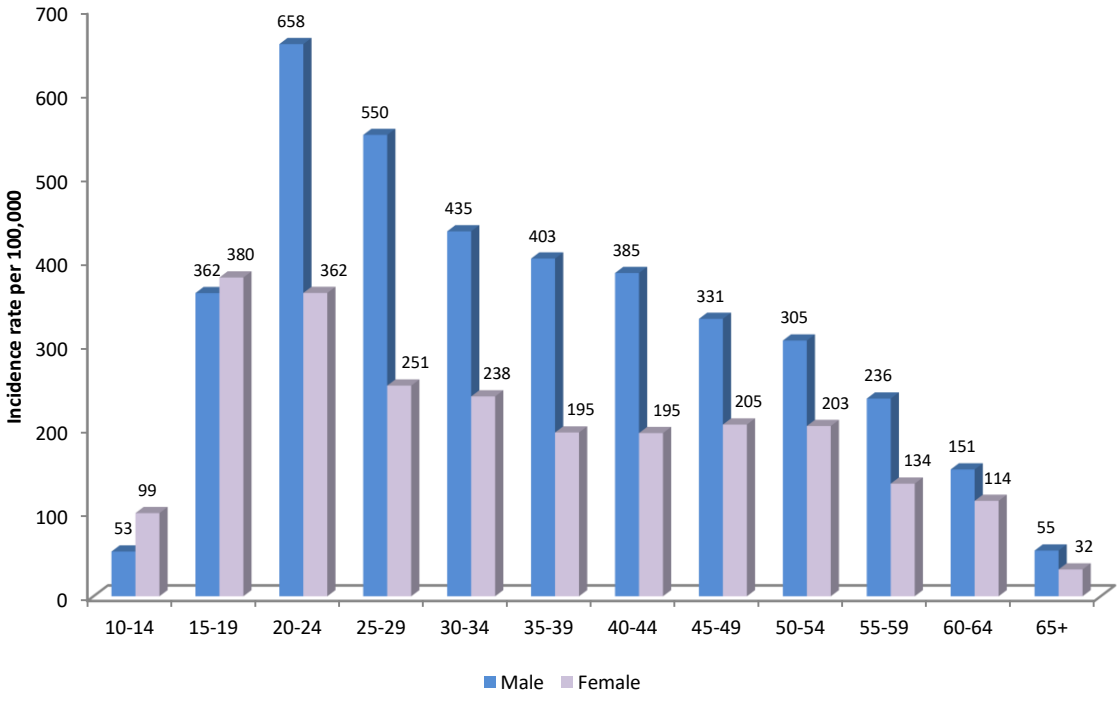


Figure 23: Incidence rate of ideation per 100,000 in Northern Ireland by age and gender, 2018/19.

5.9.1 Incidence rates of Ideation by HSCT area

For males the highest rate of ideation was observed in the Belfast HSCT area (395 per 100,000): 45% higher than the male rate for Northern Ireland. The highest female rate was observed in the Western HSCT (208 per 100,000): 25% higher than the rate for Northern Ireland.

The lowest rate of ideation for male residents was recorded in the South Eastern HSCT area (200 per 100,000) and the lowest female rate was recorded in the Northern HSCT area (144 per 100,000). The male rate exceeded the rate for females in all HSCT areas (Figure 24).

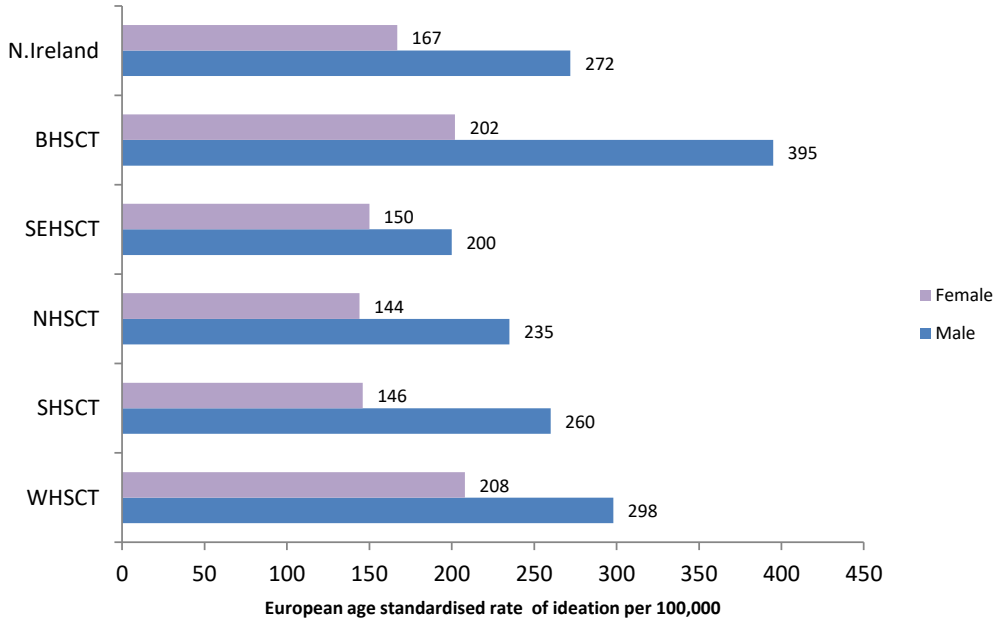


Figure 24: European age standardised rate of ideation, all ages per 100,000 by gender and HSCT area in Northern Ireland, 2018/19.

5.9.2 Incidence rates of ideation by Local Government District (LGD) area

The highest EASR male rate of ideation was observed in the Belfast LGD area (341 per 100,000) followed by Fermanagh & Omagh (279 per 100,000) and Derry City & Strabane (278 per 100,000). The highest male rate in Belfast LGD was 25% higher than the male rate for Northern Ireland.

The lowest EASR rate of ideation for male residents was recorded in the Mid Ulster LGD area (140 per 100,000). This was 49% lower than the regional male rate.

The highest EASR female rate of ideation was recorded in the Derry City & Strabane LGD area (206 per 100,000) followed by Belfast (200 per 100,000) and Fermanagh & Omagh (178 per 100,000) LGD areas. The highest female rate in Derry City & Strabane was 23% higher than the regional female rate.

The lowest EASR rate of ideation for female residents was recorded in Ards & Down LGD area at 98 per 100,000. This was 41% lower than the Northern Ireland female rate.

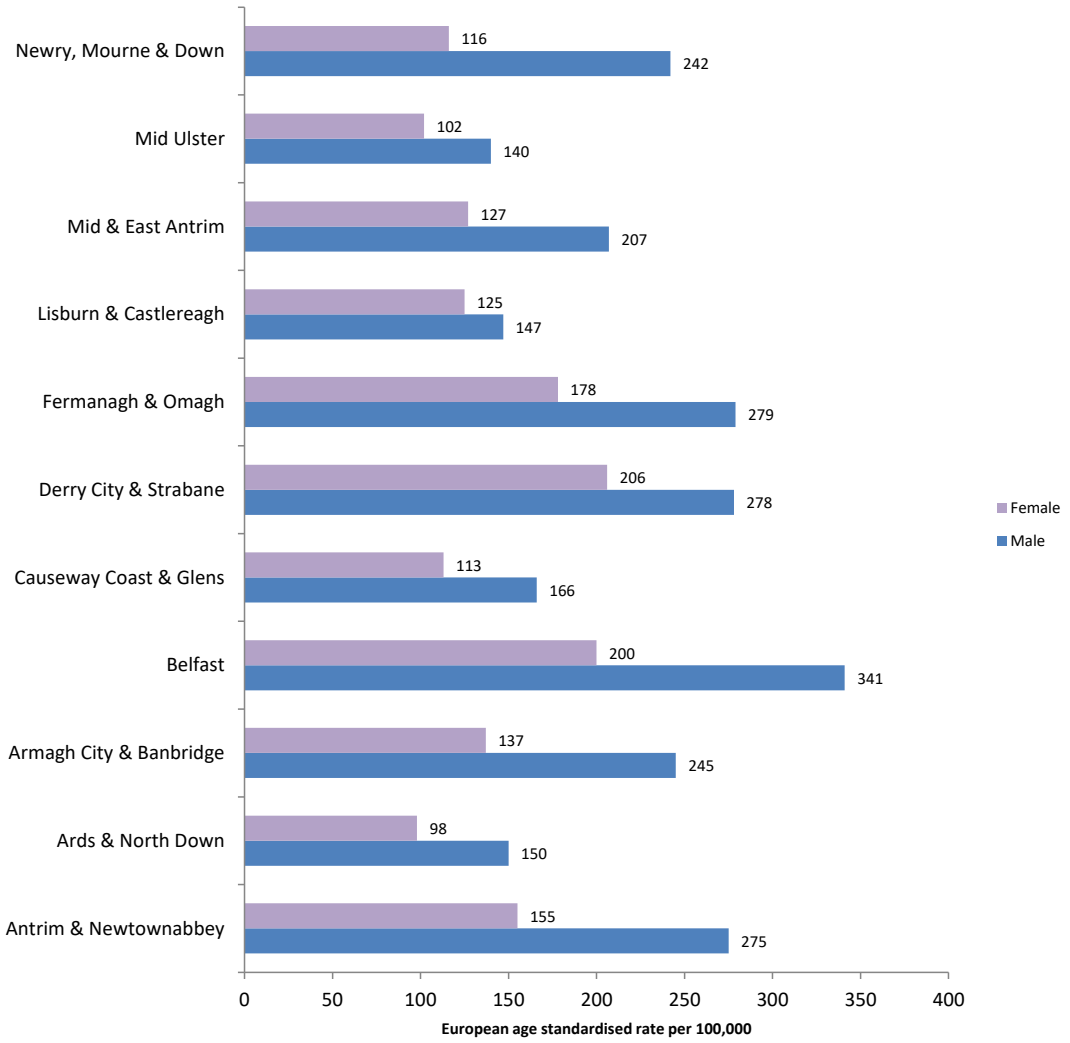


Figure 25: European age standardised rate of ideation, all ages per 100,000 by gender and Local Government District (LGD) area in Northern Ireland, 2018/19.

Section 6: Total self-harm and ideation presentations

6.1 Self harm and ideation presentations to EDs in Northern Ireland combined

The total number of self-harm and ideation attendances to EDs in Northern Ireland during 2018/19 was 14,645.

This represents almost 2% of all Type 1 and Type 2 ED attendances during 2018/19 highlighting the importance of ED staff being skilled in this area and having good referral pathways in place with mental health services.

Almost two-thirds (63%) of presentations were due to self-harm (n=9,242) and there were 5,403 ideation attendances. Almost half (44%) of these presentations occurred between 10pm and 9am.

Earlier sections in this report noted a 12 % increase in self harm presentations and a 69% increase in ideation presentations since 2012/13. Figure 26 illustrates the trend in self-harm and ideation presentations to EDs in Northern Ireland over the seven year period. Overall there has been a 28% rise in self-harm and ideation presentations since 2012/13 when these presenting issues are combined. This highlights the increasing pressure on the services responding to these issues. This rise varies from 45% for combined presentations among <18 year olds to 26% for adult presentations.

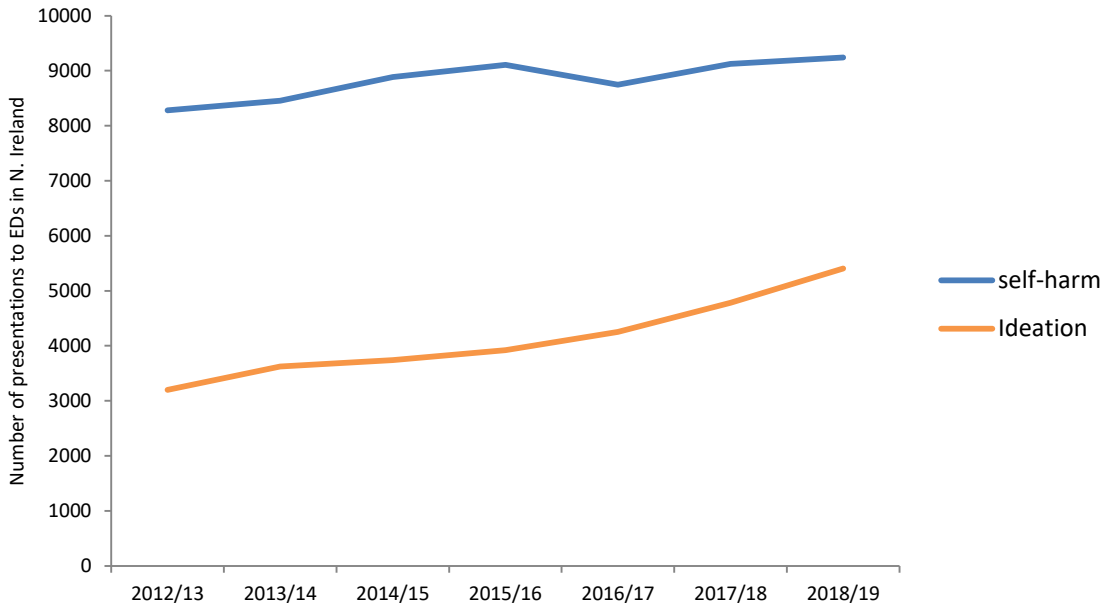


Figure 26: Number of self-harm and ideation presentations to EDs in Northern Ireland, 2012/13 to 2018/19.

6.2 Ratio of self-harm to ideation presentations in Northern Ireland

The ratio of self-harm to ideation presentations to ED has changed over time, particularly among those aged under 18 years. In 2012/13, when all ages are considered, there were 2.6 times more self-harm presentations than ideation presentations. The number of presentations has increased since 2012/13 for both self-harm and ideation but to a greater extent for ideation. As a result, in 2018/19 the ratio of self-harm to ideation has reduced to 1.7 (Table 32). The ratio has changed more significantly for those aged under 18 years. This highlights the importance of having care pathways in place for both ideation and self-harm presentations.

Table 32 Ratio of self-harm to ideation presentations, 2012/13 to 2018/19.

Northern Ireland	*Under 18 years*			Adults 18 years and over			All Ages		
Year	Number of presentations to ED		*Ratio*	Number of presentations to ED		*Ratio*	Number of presentations to ED		*Ratio*
	Self-harm	Ideation		Self-harm	Ideation		Self-harm	Ideation	
2012/13	782	143	*5.5*	7,497	3,056	*2.5*	8,279	3,199	*2.6*
2013/14	866	173	*5.0*	7,590	3,451	*2.2*	8,456	3,624	*2.3*
2014/15	994	170	*5.8*	7,891	3,570	*2.2*	8,885	3,740	*2.4*
2015/16	1,050	218	*4.8*	8,060	3,702	*2.2*	9,110	3,920	*2.3*
2016/17	955	288	*3.3*	7,790	3,967	*2.0*	8,745	4,255	*2.1*
2017/18	1,096	271	*4.0*	8,031	4,513	*1.8*	9,127	4,784	*1.9*
2018/19	**968**	**373**	***2.6***	**8,274**	**5,030**	***1.6***	**9,242**	**5,403**	***1.7***

6.3 Number of self-harm and ideation presentations to EDs in Northern Ireland by young people (under 18 years)

In 2018/19 there was a total of 1,341 presentations to EDs by young people for self-harm and ideation. Self-harm accounted for 72% of these attendances (n=968) and there were 373 ideation presentations. Figure 26 illustrates the trend in self-harm and ideation presentations to EDs in Northern Ireland by young people over a seven year period from 2012/13 to 2018/19.

There has been a 45% increase in these presentations when combined highlighting the pressure on services responding to such issues.

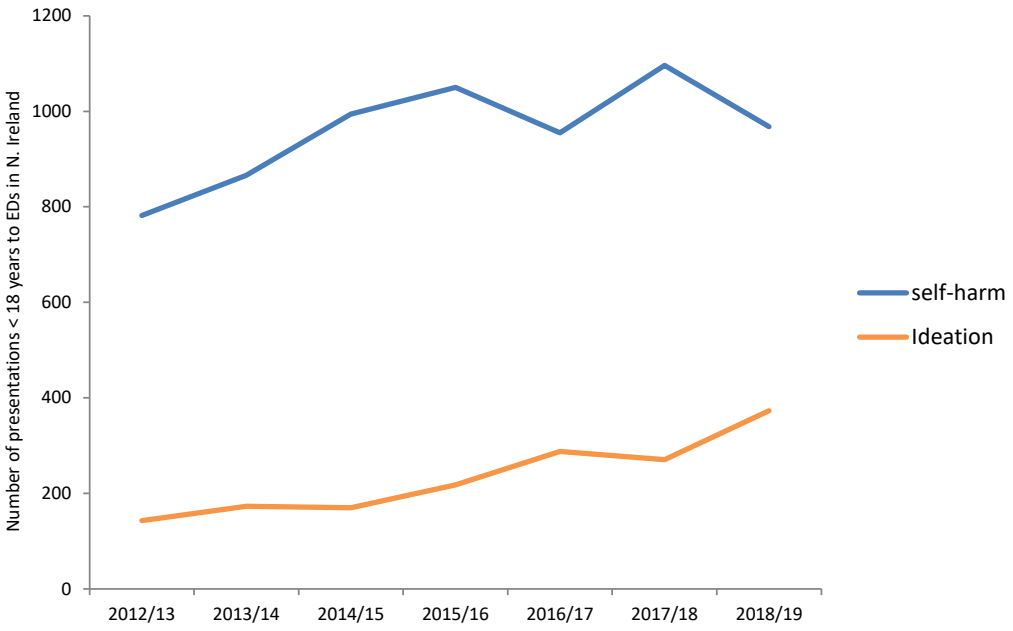


Figure 27: Number of self-harm and ideation presentations by young people under 18 years, to EDs in Northern Ireland, 2012/13 to 2018/19.

6.4 Next care following self-harm and ideation presentations combined.

Considering both self-harm and ideation presentations together it can be seen that almost half (49%) of all attendances are managed within the ED and do not require admission (Table 33). Approximately one in three cases (35%) are admitted to the general hospital and 7% to a psychiatric ward. A considerable proportion leave the ED prematurely before their care has been completed (8%).

Table 33 Next care following self-harm and ideation presentations combined, 2018/19.

Next Care	Self-harm	Ideation	Combined	%
General admission	3,718	1,405	**5,123**	**35%**
Psychiatric admission	591	447	**1,038**	**7%**
Refused admission	72	32	**104**	**1%**
Left ED before decision made regarding next care	332	207	**539**	**4%**
Left ED without being seen	270	322	**592**	**4%**
Discharged from ED following treatment	4,259	2,990	**7,249**	**49%**
Total	**9,242**	**5,403**	**14,645**	**100%**

6.5 Referral for specialist mental health assessment.

National guidelines for self-harm recommend that all patients who self-harm should be offered a psychosocial assessment. There are no similar guidelines for presentations following ideation. Emergency department clinicians undertake a preliminary assessment and will usually offer the patient a referral to mental health services for a more comprehensive assessment. The Registry captures data from ED records regarding referral by ED staff to mental health staff for a specialist mental health assessment / the need for referral during the hospital admission. These specialist assessments may be conducted in the ED prior to discharge from hospital; or the following day if the patient is discharged with a 'Card Before You Leave'; or if admitted to hospital, they will be carried out when medically fit for assessment. The Registry collects data on assessment that took place while the patient was in the ED but the Registry is not able to collect data on whether patients who were referred for assessment later in a hospital ward or elsewhere in the community following discharge had their planned assessment carried out.

In 2018/19 there was documented evidence of referral for specialist assessment in 83% of people presenting with self-harm and 89% of people presenting with ideation (Table 34). As noted in sections 3.6 and 5.6, 3% of those presenting with self-harm and 6% of those presenting with ideation leave the ED before being seen by a clinician and therefore leave before they have the opportunity to be referred for specialist assessment. The Registry team is currently working with Trusts to further examine the data in relation to those individuals who appear not to be referred for specialist assessment.

The data highlights the importance of adequately skilled and resourced mental health teams to be able to respond to the level of demand presenting to the EDs.

Table 34: Referrals for mental health assessment, 2018/19.

	Self-harm	Ideation
Numbers of presentations	9,242	5,403
Number of presentations where referral /need for referral for specialist psychosocial assessment was documented. (% of all presentations)	7,634 (83%)	4,803 (89%)
Number of presentations where specialist psychosocial assessment was carried out while in the ED (% of all presentations)	3,152 (34%)	2,557 (47%)

End

Appendix 1:

Peer reviewed publications using data from the Northern Ireland Registry of Self-harm

Corcoran, P., Griffin, E., O'Carroll, A., Cassidy, L., & Bonner, B. (2016). 'Hospital-treated deliberate self-harm in the Western area of Northern Ireland.' *Crisis* 36(2):83–90

Griffin, E., Corcoran, P., Cassidy, L., O'Carroll, A., Perry, IJ., and Bonner, B. (2014) 'Characteristics of hospital-treated intentional drug overdose in Ireland and Northern Ireland.' *BMJ Open*. 4(7):e005557.

Griffin E, Corcoran P, Cassidy L, et al.
Characteristics of hospital-treated intentional drug overdose in Ireland and Northern Ireland.
BMJ Open 2014;4:e005557.

Griffin, E., Arensman, E., Perry, IJ., Bonner, B., O'Hagan, D., Daly, C., and Corcoran, P. (2017) 'The involvement of alcohol in hospital-treated self-harm and associated factors: findings from two national registries.' *Journal of Public Health* 40(2):e157–e163

Griffin, E., Bonner, B., Dillon, CB., O'Hagan, D., Corcoran, P. (2019) 'The association between self-harm and area-level characteristics in Northern Ireland: an ecological study.' *Eur J Public Health* 29:948–53.

Griffin, E., Bonner, B., O'Hagan, D., Griffin, Kavalidoua, K., Corcoran, P. (2019) 'Hospital-presenting self-harm and ideation: Comparison of incidence, profile and risk of repetition.' *General Hospital Psychiatry* 61:76–81

Griffin, E., Kavalidou, K., Bonner, B., O'Hagan, D. and Corcoran, P. (2020) 'Risk of repetition and subsequent self-harm following presentation to hospital with suicidal ideation: A longitudinal registry study'. *E Clinical Medicine* 23:100378

Maguire, A., Ross, E., Tseliou, F., O'Hagan, D., and O'Reilly, D. (2019) 'What happens after self-harm? An exploration of self-harm and suicide using the Northern Ireland Registry of Self-Harm' *International Journal of Population Data Science* 4(3)

Maguire, A. and McKenna, S. (2020) 'Children's Mental Health and Social Care in Northern Ireland.' *Administrative Data Research – Northern Ireland*. https://doi.org/10.17034/TDW9-S778

Notes