Northern Ireland Registry of Self-Harm

Three-Year Report

2012/13 to 2014/15

HSC Public Health Agency
National Suicide Research Foundation
Department of Health | An Roinn Sláinte

Contents

List of tables

List of Figures

Foreword

In 2012 the Public Health Agency (PHA) introduced the Self Harm Registry initiative to all 12 acute hospitals in Northern Ireland, as part of the action plan to address self-harm and suicide prevention under the Protect Life Strategy. The regional introduction of the Registry followed an initial piloting of the service in the Western Health and Social Care Trust from 2007 to 2012.

The Registry has been highlighted as a model of best practice by the World Health Organisation (WHO) in its 2014 publication *Preventing Suicide – A Global Imperative*[1] . The Registry underpins the importance of adopting a Public Health approach to addressing suicide prevention, in which surveillance, through systematic data collection plays a key role. Northern Ireland and the Republic of Ireland are unique as the only jurisdictions in the world that collect data on self-harm in such a uniformed manner.

Through the Registry surveillance process the PHA are able to ensure that information on presentations of self-harm episodes attending emergency departments are collected and recorded in a standardised manner. This is the first step in supporting efforts to better understand self-harm and reduce deaths by suicide. Critical to good Public Health practice is the application of an epidemiological approach which examines the pattern, causes and effects of self-harm in defined populations. Such an approach informs policy decisions and practice by identifying risk factors for self-harm, while also targeting preventive healthcare. An epidemiological approch process includes the collection and statistical analysis of data, interpretation and dissemination of results (including publication in peer reviewed papers in academic journals and occasional systematic review of all published evidence), which ultimately informs the development and design of effective services.

Data has now been collected for three full calendar years, which provides statistics over a sufficient period of time to begin analysis of trends and to highlight key issues in respect of the extent of self-harm in Northern Ireland. The purpose of this report is to add to our understanding of the issue and the trends in self-harming behaviour in Northern Ireland. Significantly this analysis is also being used to help shape services to meet the needs of those who self-harm and their families. The report also needs to be read in the context of the wider Protect Life Strategy action plan, which has sought to encourage help seeking behaviour and to modernise and develop services in the statutory and non-statutory sectors. There has been an increased focus on the issue of self-harm over recent years alongside the establishment of the Registry. As the data was being collected health and social care bodies have been redesigning services and stimulating new investments to address the needs of those who self-harm. The evolution of Trust Mental Health Services to improve the response to people in crisis in our Emergency Departments (including the recent establishment of the RAID model in the Northern Trust) and the Self-Harm Intervention Project (SHIP) in the community across the province are just two examples of service improvements to support people who have self-harmed.

In the first two years the PHA published annual reports which have provided a one dimensional analysis of the issue of self-harm. In 2015, the PHA also published a six year report for the initial pilot in the Western area (2007–2012), and from that work a number of supplementary and peer review papers have been also published. These publications demonstrate the value of the Registry in terms of helping professionals and society at large to understand the challenges of self-harm to individuals, their families/carers, communities and services.

[1] World Health Organisation (2014). Preventing Suicide – A Global Imperative. WHO. Luxembourg.

As well as understanding the trends of self-harm in Northern Ireland it is also important that we have the ability to compare the incidence and patterns seen in Northern Ireland with other localities, to help define the scale of the issue and gain a fuller understanding of self-harm. This is a challenge given the uniqueness of the Registry and the fact that health care systems vary in different jurisdictions. Nonetheless, in this report comparison is made between rates in England and the Republic of Ireland. It is anticipated, with the support of WHO, that the self-harm surveillance process will emerge globally and in the future, will be better placed to understand the broader context of self-harm and how it can contribute to suicide prevention.

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

This publication will help highlight the extent of self-harm and emerging trends in Northern Ireland. I believe it will also inform efforts to address self-harm, promoting positive mental health, as well as recognising the wider social determinants of wellbeing. I am convinced that working in partnership we will bring about tangible benefits for those individuals who self-harm, their families and carers.

Mary Black CBE

Assistant Director of Public Health (Health Improvement)

Chair of the Self-Harm Registry Steering Group

1.0 Executive Summary

This is the third regional report from the Northern Ireland Self-Harm Registry, covering the period 1st April 2012 to 31st March 2015. 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, with effect from 1st April 2012.

The Public Health Agency (PHA) submits quarterly returns to the Department of Health (DoH) which collates Emergency Department (ED) data on self-harm in each Trust area. This publication covers a three-year period, building upon the previous 2012/13 and 2013/14 annual reports, allowing for comparisons to be drawn. However, this short period does not allow for the analysis of long-term trends at this point.

1.1 Key findings

Self-harm presentations

- For the period from 1st April 2012 to 31st March 2015, the Registry recorded 25,620 self-harm presentations to EDs in Northern Ireland, made by 16,301 individuals.
- The Royal Victoria Hospital in Belfast recorded the highest number of presentations over the three-year period, accounting for 17.3% (n=4,433) of total presentations, followed by the Ulster Hospital with a 13% share (n=3,317) and the Altnagelvin Hospital with 12.7% (n=3,251) of presentations.
- The largest number of self-harm presentations were recorded in the Belfast HSCT area (n=7,594), despite a low population share (19%).
- There was an even gender balance in presentations (12,800 by males and 12,820 by females).
- The number of self-harm presentations was highest on Sunday and Mondays, accounting for 32% of all presentations.
- Across the three-year period, an average of 23 presentations involving self-harm were recorded per day. Increased numbers of presentations were observed on the following days: January 1st, New Year's Day (mean n=43), March 18th (mean n=32) and July 12th (mean n=37).
- There was an increase in the frequency of self-harm attendances over the course of the day. The peak for males was 11pm and for females was midnight. Half (50%) of all self-harm presentations occurred between the hours of 8pm and 5pm.
- The majority (70%) of presentations were brought to hospital by emergency services (e.g. ambulance and police).

Methods of self-harm

- The most common method of self-harm was drug overdose, which was involved in almost three-quarters (73%) of all self-harm presentations. Self-cutting was also a common method of self-harm, present in one-quarter (25%) of all presentations.
- Almost one-third (32%) of all overdoses involved a minor tranquiliser. Paracetamol was present in some form in 38% of overdoses.
- While rare as a sole method of self-harm, alcohol was involved in half (49%) of all self-harm presentations.

Recommended next care following self-harm

- One in every two self-harm presentations resulted in admission to a general ward in the presenting hospital (54%). A further 4% resulted in admission to a psychiatric ward.
- Under one-third (31%) of cases of self-harm were discharged from ED following treatment.
- In 7% of presentations the patient left the ED without being seen and a further 3% left the ED before a next care recommendation could be made. In 2% of presentations, the patient refused admission, as recommended by the presenting hospital.
- Admission to a general ward in the presenting hospital was most common following presentations involving intentional drug overdose only (64%) and was least common for patients who presented with self-cutting only (21%).
- Patients were most likely to refuse admission or leave the ED without being seen/ before a recommendation was made when the presentation involved self-cutting (15%) and where alcohol was involved (12%).
- The proportion of patients who left the ED without being seen varied from 1% in the South Eastern HSCT to 14% in the Belfast HSCT.

Repetition of self-harm

- Of the 16,301 individuals, 3,799 (23%) made at least one repeat presentation to hospital with self-harm during the three-year period.
- One in five (20.3%) people attended hospital with a repeat presentation within 12 months.
- People who engaged in self-cutting as the sole method of self-harm were more likely to repeat, with 28% repeating within 12 months.
- Over the three-year period, 616 individuals attended with self-harm on five or more occasions, with 153 individuals making ten or more presentations, accounting for 10% of all self-harm presentations recorded.

Self-harm among under 18s

- Self-harm presentations by those under 18 years of age contributed to 10% (n=2,642) of all presentations during the three-year period. The majority of these self-harm presentations were female (70%).
- Drug overdose was the most common method of self-harm used by those aged under 18 (71%).

- Respectively, alcohol was involved in 25% and 16% of young male and female self-harm presentations.
- Half (49%) of all those aged under 18 years were admitted to a general ward following presentation with self-harm. A small proportion (4%) left the ED without being seen and 2% refused admission.

Key subgroups

- Approximately 4% (n=1,031) of presentations involved persons who were homeless at the time of attendance. The majority of these were male (70%) and presented to hospitals in the Belfast HSCT (51%).
- Approximately 1% (n=329) 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 341 presentations (1%) were made by residents of residential children's homes.
- A minority of presentations (n=74; 0.3%) were made by persons residing in acute or psychiatric hospitals.

Self-harm rates

- The overall age-standardised rate of self-harm in 2014/15 for Northern Ireland was 373 per 100,000 – 377 per 100,000 for males and 371 per 100,000 for females.
- Across the period April 2012 to March 2015, 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 832 per 100,000 for females and 844 per 100,000 for males in these age groups.
- The male rate of self-harm was 39% higher across 20-39 year-olds (603 vs. 434 per 100,000).
- For both males and females the highest rates of self-harm were observed in the Belfast HSCT area (452 and 415 per 100,000, respectively); 47% and 36% higher than the male and female rates for Northern Ireland, respectively.
- The lowest rate of self-harm for both male and female residents were recorded in the Southern HSCT area, where the male rate (253 per 100,000) was 17% lower than the regional male rate, and the female rate (248 per 100,000) was 19% lower than the regional female rate.
- During the reporting period the rate of self-harm increased by 12% (13% for males and 11% for females). The rate of self-harm increased in the Northern, Southern, Western and Belfast HSCT areas (+20%; +21%, +11% and +9%, respectively). The male rate of self-harm in the South Eastern HSCT area decreased by -10%.
- This increase was most pronounced in 15-19 year-olds, where a 30% increase was observed for males between 2012 and 2015 (543 per 100,000 to 708 per 100,000) and the female rate increased by 29% from 833 per 100,000 to 1075 per 100,000.
- Based on European age-standardised rates per 100,000 for those aged 15 and over, the incidence of hospital-treated self-harm in Northern Ireland, Republic of Ireland and England was compared across cities, using data from the National Self-Harm Registry Ireland and the Multicentre Study of Self-Harm in England. Across the three jurisdictions, Derry City Council reported the highest rate of self-harm at 708 per 100,000, followed by Belfast City Council (701 per 100,000). The highest rates of self-harm for males was recorded in Belfast City Council (748 per 100,000), while the highest female rate was in Derry City Council (704 per

100,000). The male rate exceeded the female rate in Belfast and Derry City Councils and in a small number of cities in the Republic of Ireland, whereas the pattern in English cities was that female rates exceeded the male rates.

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 10,563 ideation presentations recorded during the period from April 2012 to March 2015.
- A larger proportion of ideation presentations were attributable to males (66%) with 34% attributed to females.
- These 10,563 ideation presentations were made by 6,909 individuals.
- Just over half (53%) of all ideation presentations involved alcohol, and more so for males (55% vs. 49%).
- Craigavon Hospital recorded the highest number of presentations over the three-year period, accounting for 16.4% (n=1,736) of total presentations, followed by the Mater Hospital with a 15.4% share (n=1,630) of presentations.
- The largest number of ideation presentations were recorded in the Belfast HSCT area (n=2,914), accounting for 28% of all ideation presentations made during this period.
- Combined data for the three-year period shows that the number of ideation presentations was highest at weekends, with 30% of presentations occurring on Saturdays and Sundays.
- There was an increase in the frequency of ideation attendances over the course of the day with the highest numbers presenting around midnight. Half (50%) of all ideation episodes presented between the hours of 7pm and 4am.
- Approximately one-third (32%) of ideation presentations resulted in admission to a general ward following presentation to an ED, with 9% admitted to a psychiatric ward. One in seven (15%) presentations due to ideation resulted in the patient leaving the ED without being seen/ before a next care recommendation could be made.

Authors

This report was compiled by the National Suicide Research Foundation, Cork, with input from Dr Eve Griffin, in collaboration with the Public Health Agency, in particular Mr Brendan Bonner, Dr Denise O'Hagan, Mrs Linda Cassidy and Mrs Amanda O Neill.

1.2 Discussion Points

Rates of self-harm in Northern Ireland

The report highlights the incidence of self-harm in Northern Ireland, with the highest rates being observed among males and young people. In addition, rates were higher in urban areas, with the highest rates of self-harm recorded in the Belfast HSCT area. While the rates reported were higher than those from the Republic of Ireland or England, the profile and pattern of self-harm presentations is broadly consistent. The rates of self harm are higher among males than females in each Trust area with the exception of the Western Trust. When comparison is made with other UK and Irish cities, it can be seen that a small number of Irish cities experience higher rates in males but higher rates among females seems to be the usual pattern in England. This warrants further exploration, particularly as to the relationship with subsequent suicide in each gender in the Northern Ireland context. The association between non-fatal self-harm and risk of future suicide has been established internationally.[2] This highlights the importance of further research using data linkage studies of self-harm data with suicide mortality data, in order to better understand the predictors of suicide risk in Northern Ireland. Previous research has consistently found higher rates of self-harm in urban areas,[3,4,5] with more recent findings showing that proximity to hospital is an important factor in explaining some of this variation between urban and rural areas.[6]

These findings raise the question as to why the incidence of hospital treated self-harm in Northern Ireland is higher than that reported in the Republic of Ireland or in England. Hospital emergency care is free in the United Kingdom whereas the majority must pay in the Republic of Ireland. Thus, it may be that the incidence of self-harm in the population is similar but that a higher proportion present to hospital than in the Republic of Ireland. This issue warrants further investigation as it has important implications for service provision and the prevention of suicidal behaviour. Consideration should be given to exploring the impact of mental health awareness and suicide prevention campaigns by the Public Health Agency and how they have contributed to encouraging help seeking behaviour. The higher incidence of self-harm presenting to the Emergency Departments in Northern Ireland may be linked to higher levels of mental health problems in the Northern Ireland population as general population surveys have also reported high prevalence of DSM-IV disorders and of post-traumatic stress disorder (PTSD) in the Northern Ireland population.[7]

Methods of self-harm

[2] Hawton K, Bergen H, Cooper J, et al. Suicide following self-harm: Findings from the Multicentre Study of self-harm in England, 2000–2012. Journal of Affective Disorders. 2015; 175: 147-51.
[3] Corcoran P, Arensman E, Perry IJ. The area-level association between hospital-treated deliberate self-harm, deprivation and social fragmentation in Ireland. Journal of Epidemiology and Community Health. 2007; 61:1050–5.
[4] Hawton K, Harriss L, Hodder K, et al. The influence of the economic and social environment on deliberate self-harm and suicide: an ecological and person-based study. Psychological Medicine. 2001; 31:827–36.
[5] Corcoran P, Griffin E, O'Carroll A, Cassidy L, Bonner B. Hospital-treated deliberate self-harm in the Western area of Northern Ireland. Crisis. 2015; 36: 83-90.
[6] O'Farrell IB, Corcoran P, Perry IJ. Characteristics of small areas with high rates of hospital-treated self-harm: deprived, fragmented and urban or just close to hospital? A national registry study. Journal of Epidemiology and Community Health. 2015; 69:162-7.
[7] Ferry F, Bunting B, Murphy S, et al. Traumatic events and their relative PTSD burden in Northern Ireland: a consideration of the impact of the 'Troubles'. Social Psychiatry and Psychiatric Epidemiology. 2014; 49:435–46.

The most common method of self-harm recorded was intentional drug overdose, which is consistent with studies in the Republic of Ireland and England.[8,9] It has previously been reported that higher rates of self-harm are reported in Northern Ireland when compared with England and the Republic of Ireland.[4] Similarly, a recent comparative study exploring the characteristics of intentional drug overdose in the Republic of Ireland and Northern Ireland found a higher incidence of drug overdose in Northern Ireland (278 vs. 156 per 100,000, respectively).[10] Despite this, the profile of drug overdose presentations were similar in both countries.

The most common type of medication involved in drug overdose presentations was paracetamol, consistent with findings from England where paracetamol is involved in 43% of drug overdoses.[10] Almost one-third (32%) of all overdoses involved a minor tranquiliser/ benzodiazepine which is in line with findings from the Republic of Ireland.[4] However in England, minor tranquilisers and sedatives are involved in approximately 17% of presentations.[11] Differences between countries with regard to the frequency of such drugs used in intentional overdoses are likely to reflect differences in prescribing practice and access to these drugs via illegal sources and this warrants further investigation. This report found a higher proportion of minor tranquilisers among young males, and it would be important to understand the various ways in which such medication is accessed by this group.

While the Registry does not record information on the sources of medications taken in overdose acts, a previous study from Ireland found a clear association between the prescription of psychotropic medication and their use in overdoses, in particular among older people with multiple prescriptions.[12] While psychotropic drugs have an established efficacy in treating psychiatric conditions, these findings suggest that minor tranquilisers should be prescribed with caution in older people, and that consideration should be given to other evidence based therapies and interventions for patients with anxiety disorders, such as cognitive-behavioural therapy. Future research could focus on linkage studies from prescribing databases. In additional, longitudinal studies with a focus on primary care could help to disentangle the relationships between mental health problems, psychotropic medication and suicidal behaviour.[4]

This report found that 25% of presentations involved self-cutting. These presentations were more likely to leave the ED without being seen by a clinician. It has previously been reported that self-cutting in particular is associated with an increased risk of self-harm repetition.[13] Furthermore, previous research has shown that repeat self-harm presentations by those with more severe self-cutting in an index act were less prevalent but were more likely to involve high lethality methods of self-harm.[14] A study from the National Self-Harm Registry Ireland[5] found an over-representation of

[8] Griffin E, Arensman E, Dillon CB, Corcoran P, Williamson E, Perry IJ. National Self-Harm Registry Ireland Annual Report 2015. 2016. Cork: National Suicide Research Foundation.
[9] Bergen H, Hawton K, Waters K, Cooper J, Kapur N. Epidemiology and trends in non-fatal self-harm in three centres in England, 2000 to 2007. British Journal of Psychiatry. 2010;197: 493-98.
[10] Griffin E, Corcoran P, Cassidy L, O'Carroll A, Perry IJ, Bonner B. Characteristics of hospital-treated intentional drug overdose in Ireland and Northern Ireland. BMJ Open. 2014; 29;4(7):e005557.
[11] Hawton K, Casey D, Bale E, Ryall J, Brand F, Geulayov G (2016). Self-harm in Oxford 2014. Oxford: Centre for Suicide Research.
[12] Corcoran P, Heavey B, Griffin E, Perry IJ, Arensman E. Psychotropic medication involved in intentional drug overdose: implications for treatment. Neuropsychiatry. 2013;3: 285-93.
[13] Public Health Agency. Northern Ireland Registry of Self-Harm Western Area Six Year Summary Report 2007–2012. 2015. Belfast: Public Health Agency.
[14] Larkin C, Corcoran P, Perry IJ, Arensman E. Severity of hospital-treated self-cutting and risk of future self-harm: a national registry study. Journal of Mental Health. 2014;23: 115-9.

minor self-cutting presentations in areas close to hospital services, which may suggest that individuals from urban areas are more likely to present to hospital for less medically-serious self-harm than residents of rural areas in the Republic of Ireland. However, it may also indicate that self-harm in rural areas is associated with more suicidal intent, and so would be less likely to involve methods such as minor self-cutting. Such analysis has not yet been undertaken in Northern Ireland.

Involvement of alcohol in self-harm

This report found that alcohol was involved in almost half of all self-harm presentations, a higher proportion than reported in other countries,[1,2] but similar to a recent study from England.[15] In addition to the elevated presence of alcohol at weekends and in the evening,[2] increased patterns of alcohol use in self-harm acts around public holidays have previously been observed.[1] Future work is warranted to explore these temporal patterns of alcohol use in self-harm presentations. These findings highlight the need to further strengthen efforts to address alcohol consumption at a general population level. In Northern Ireland, a framework for reducing alcohol and drug related harm (2011-2016) was published by the Department for Health in 2011,[16] which identifies the reduction of alcohol consumption at a general level, as well as targeting advertisement, labelling and pricing of alcohol as key priorities and activities. Alcohol involvement was elevated in presentations leaving the ED without being seen, and these presentations were more likely to present out-of-hours. Alcohol intoxication at the time of presentation to the ED provides challenges for the assessment of patients, and may prolong waiting time. The combination of substance misuse issues, self-harm and failure to receive an assessment and the opportunity to engage in follow-up care following self-harm, may place an individual at higher risk. It is therefore consideration should be given to how services can try to address these issues in a joined up manner and that future research examines the outcomes for such individuals.

Self-harm repetition

The rate of repetition within 12 months was 34% based on presentations (8,642 of 25,620) and 20.3% based on people (3,311 of 16,301). This indicates that one in five self-harm patients represented to the ED with self-harm within 12 months of their first attendance. These figures are in line with international findings.[7, 10] A previous report by the Public Health Agency using data from the Western HSCT area found an increased risk of self-harm repetition among those who engaged in self-cutting, those who left the ED without being seen and among those who had made multiple presentations to the ED.[12] This report found that a relatively small number of individuals accounted for a significant proportion of all presentations**.** Frequent repetition of self-harm has previously been associated with a high prevalence of personality disorders and there is growing evidence for interventions such as Dialectical Behavioural Therapy for such patients.[17]

[15] Ness J, Hawton K, Bergen H, et al. Alcohol use and misuse, self-harm and subsequent mortality: an epidemiological and longitudinal study from the multicentre study of self-harm in England. Emergency Medicine Journal. 2015;32: 793-9.
[16] Department of Health, Social Services and Public Safety. New strategic direction for alcohol and drugs. Phase 2 2011-2016. 2011. Belfast, UK: Department of Health, Social Services and Public Safety.
[17] O'Connell, B. Dowling, M. Dialectical behaviour therapy (DBT) in the treatment of borderline personality disorder. Journal of Psychiatric and Mental Health Nursing. 2014; 21:518-25

Recommended next care for self-harm

The majority of self-harm presentations to hospital occurred out of normal working hours, and at the weekends, similar to findings in the Republic of Ireland and England.[7, 18] This underlines the need for service provision to be designed to ensure mental health services are available to provide a timely response to patients 24 hours a day, 7 days a week, in line with international guidelines.[19] There is evidence that having a psychosocial assessment following self-harm is associated with lower rates of non-fatal repetition, highlighting the importance of having appropriate services in place to offer psychosocial assessment.[20]

This report showed that recommended next care following self-harm varied significantly by HSCT area. It should be noted that the five HSCT areas differ in terms of geography, demographics and service configuration. This will contribute to some of the observed variation in the management of self-harm. In particular, the report found that one in ten self-harm presentations resulted in the individual leaving the ED without being seen/ before a next care recommendation could be made, and this also varied considerably by HSCT area. These findings underline the need for uniform assessment and management of self-harm patients in the ED in line with international best practice. They also highlight the need to implement measures that minimise the risk of patients leaving the ED without being seen and ensure appropriate sharing of information with appropriate services and follow up for those who do leave without being seen. Additionally, the findings emphasise the importance of sharing information with relevant sources, and appropriate training for all ED staff.

Self-harm and/ or suicidal ideation

Findings on persons presenting to hospital EDs in Northern Ireland as a result of self-harm and/ or suicidal ideation are presented in this report. This includes presentations by persons who have experienced thoughts of self-harm and/ or suicide, where no physical act has taken place. Northern Ireland is unique in that currently, this is the only regional data collection of such presentations to hospital EDs and this provides further insight into the patterns of help-seeking behaviour for suicidal behaviour in Northern Ireland. The majority of these attendances were made by males, involved alcohol, presented out-of-hours and were brought to hospital by the emergency services. Such findings highlight the challenge for ED staff in managing such presentations. However, this is a key point for early intervention for persons with suicidal thoughts and/ or contemplating self-harm/ suicide. Despite this, almost 15% of ideation presentations resulted in the person leaving the ED without being seen or before a recommendation could be made. This further underlines the need for standardised management procedures as well as the importance of providing psychosocial assessment for such attendances. It is not yet clear how many of these presentations will result in a repeat self-harm attendance, and future work from the Registry will address this issue.

[18] Gunnell D, Bennewith O, Peters TJ, et al. The epidemiology and management of self-harm amongst adults in England. Journal of Public Health. 2005; 27: 67-73.
[19] National Institute for Clinical Excellence (2004). Self-harm: The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care. https://www.nice.org.uk/guidance/cg16.
[20] Kapur N, Murphy E, Cooper J, et al. Psychosocial assessment following self-harm: results from the multi-centre monitoring of self-harm project. Journal of Affective Disorders. 2008; 106: 285-93.

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.
- 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, excluding Type 3 Minor Injury Units. 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 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 that have presented to the ED should be identified by the data collector, using the inclusion criteria (see section 2.2-2.4). The emergency department number, date and time of attendance, along with other relevant details are recorded on the password protected data collection sheet. Anonymised information on these cases 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 A&E episode which is automatically assigned by the A&E 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.

- **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, Social Services and Public Safety (DHSSPS) as part of the PHA's commissioning objectives and relates to the 36 month period from 1st April 2012 to 31st March 2015.

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 EDs in Northern Ireland.

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. It is recommended that findings are not used to determine trends as this report is only the second of its kind.

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.

2.14 Comparisons

Where it was applicable the report has sought to make comparisons with other reliable data, namely:

- 2012/13 & 2014/15 Northern Ireland Registry of Self-Harm Annual Reports.
- The National Self-Harm Registry Ireland 2014, National Suicide Research Foundation, Republic of Ireland.
- Multicentre Study of Self-harm in England.

Section 3: Self-harm presentations

3.1 Number of self-harm presentations

For the period from 1st April 2012 to 31st March 2015, the Registry recorded 25,620 self-harm presentations 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.

Of the recorded attendances, there was an even gender balance with 12,800 male and 12,820 female self-harm presentations over the three-year period.

Table 1 Number of self-harm presentations to EDs in Northern Ireland, 2012/13 to 2014/15

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%
3 Year Total	12,800		12,820		25,620	

Given that one individual may have made multiple presentations, the recorded 25,620 episodes were made by 16,301 individuals, summarised in Table 2. The even gender split between males and females is reflected in the number of individuals presenting.

Table 2 Individual persons presenting with self-harm to EDs in Northern Ireland, 2012/13 to 2014/15

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	3,325	+11.3%	3,305	+10.3%	6,630	+10.8%
3 Year Total	8,128		8,173		16,301	

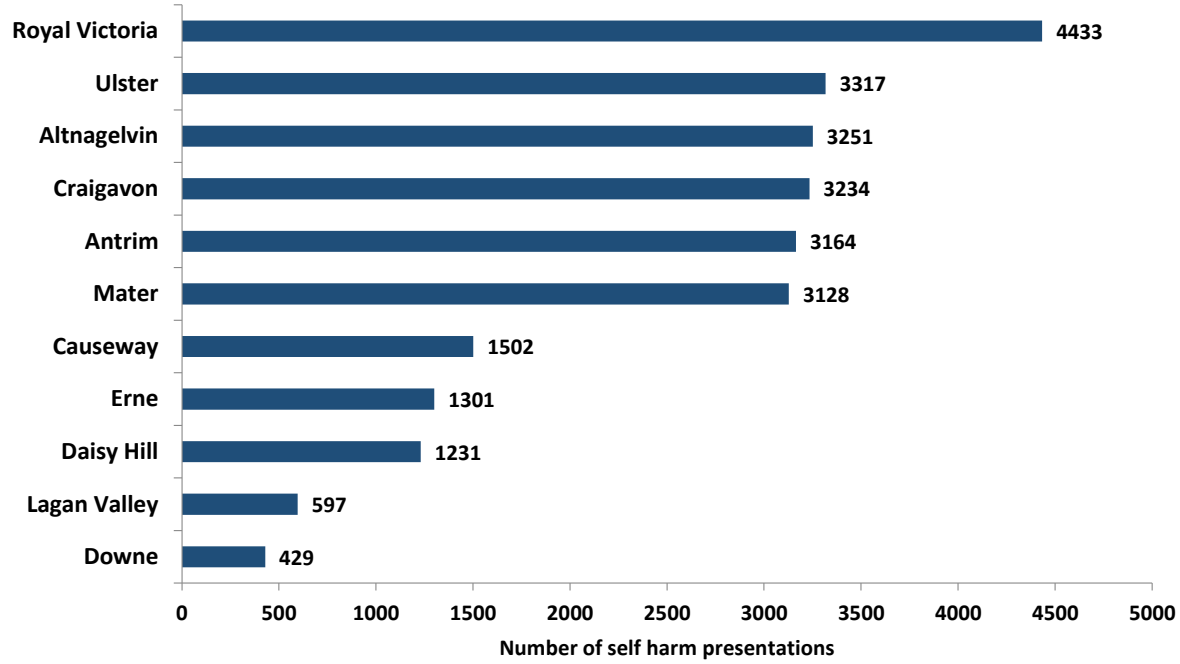
Note: Total individual persons does not equal sum of individual years

3.2 Self-harm presentations by hospital

The Registry records data across all twelve EDs in Northern Ireland. The Royal Victoria Hospital in Belfast recorded the largest number of presentations over the three-year period, accounting for 17% (n=4,433) of total presentations, followed by the Ulster and Altnagelvin Hospitals both with a 13% share (n=3,317 and 3,251, respectively) of presentations. Excluding the Royal Hospital for Sick Children, Downe Hospital had the lowest share of presentations (2%; n=429).

The distribution of self-harm presentations between hospitals is summarised in Figure 1, below.

Figure 1 Number of self-harm presentations by hospital ED, 2012/13 to 2014/15



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

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 in the Belfast HSCT area (n=7,594), accounting for 30% of all presentations in Northern Ireland during the three-year period, despite the Trust area only 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, 2012/13 to 2014/15

	BHSCT	SEHSCT	NHSCT	SHSCT	WHSCT	Northern Ireland
Hospital based self-harm presentations	7,594	4,343	4,666	4,465	4,552	25,620
% share of self-harm presentations	30%	17%	18%	17%	18%	100%
% of NI population resident in Trust*	19%	19%	26%	20%	16%	100%

**NISRA 2014 Mid-Year Estimate Resident Population*

While overall patients presented to a hospital within their Trust of residence, there were some observed variations. Over the three-year period almost one fifth (19%) of Belfast trust residents presenting with self-harm did so to a hospital in the South Eastern HSCT area (Table 4). In the South Eastern area, almost one quarter (23%) presented to hospitals in BHSCT. In the Northern HSCT area, 13% of those who presented to hospital with self-harm did so to a BHSCT hospital.

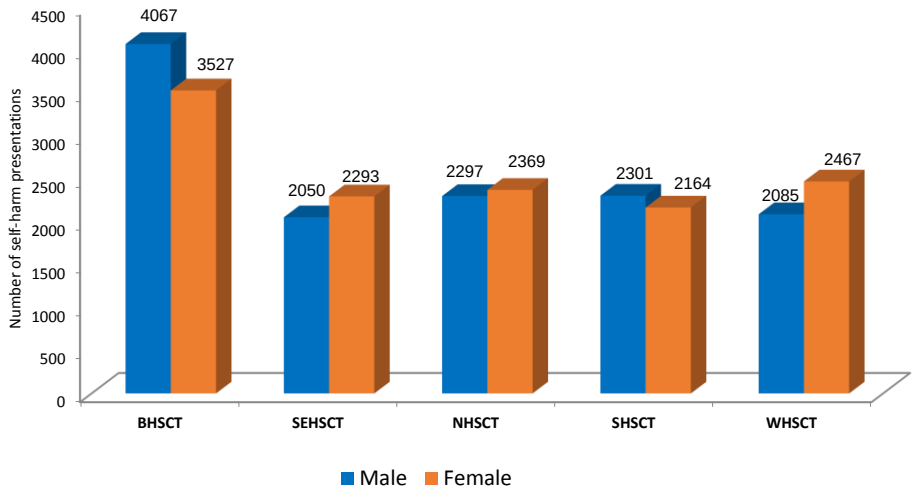
The majority (96%) of presentations to hospitals in both the Southern and Western HSCT areas were by residents from within their respective Trust.

Table 4 Self-harm presentations by Trust of residence and presenting hospital of Trust residents, 2012/13 to 2014/15

Self-harm presentations		Presenting hospital location					
		BHSCT Hospitals	SEHSCT Hospitals	NHSCT Hospitals	SHSCT Hospitals	WHSCT Hospitals	Total
Resident Trust Area	BHSCT	**80%**	19%	1%	<1%	<1%	100%
	SEHSCT	23%	**69%**	1%	6%	<1%	100%
	NHSCT	13%	1%	**84%**	2%	<1%	100%
	SHSCT	1%	1%	<1%	**96%**	1%	100%
	WHSCT	<1%	<1%	3%	<1%	**96%**	100%

Although there was an even balance of self-harm presentations between the genders regionally, there was some variation by Trust area. The South Eastern, Northern and Western HSCT areas had a higher number of female presentations, while male presentations were higher in Belfast and Southern HSCT areas (Figure 2).

Figure 2 Number of self-harm presentations by gender and HSCT area in Northern Ireland, 2012/13 to 2014/15

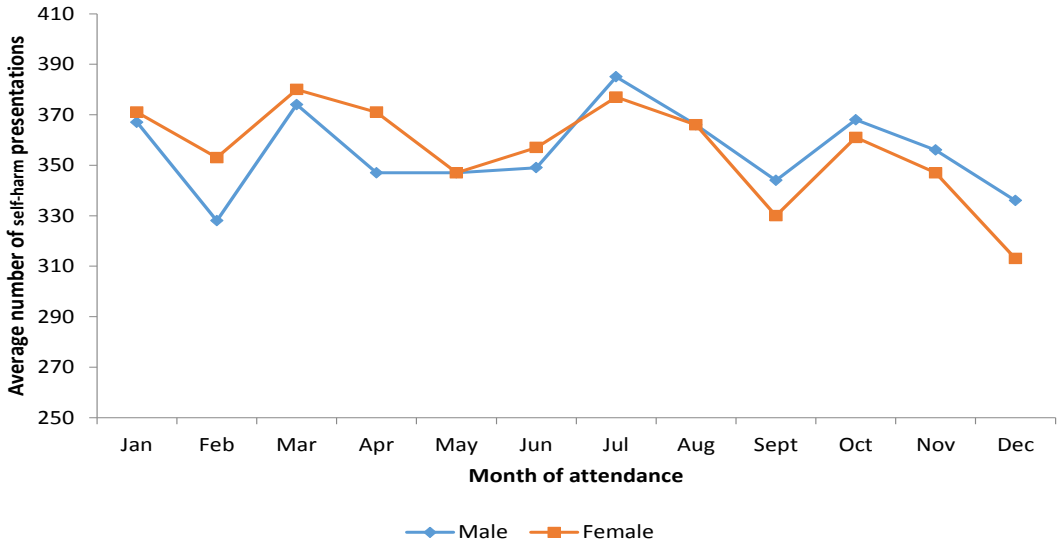


3.4 Self-harm presentations by time of occurrence

Variation by month

The monthly average number of self-harm presentations to hospitals across the three-year period was 712. The month of December saw the fewest self-harm presentations to EDs at 649 (9% below average) while the peak months were March and July with an average of 754 and 762 presentations (6% and 7% above average, respectively; Figure 3).

Figure 3 Average number of self-harm presentations by month of attendance, 2012/13 to 2014/15



Variation by day and time of attendance

Across the three-year period, an average of 23 presentations involving self-harm were recorded per day. Increased numbers of presentations were observed on the following days:

- January 1st, New Year's Day (mean n=43),
- March 18th (mean n=32) and
- July 12th (mean n=37).

However it wasn't possible to determine if this trend was significant.

Table 5 examines the pattern of self-harm attendances by weekday and time of attendance. Considering presentations made on weekdays (Monday to Friday), only 29% were made between the hours of 9am to 5pm, with 26% made between 5pm and 10pm and 45% made between 10pm and 9am. For presentations at the weekend (Saturday and Sunday), 23% occur between 5pm and 10pm and a further 53% occur between the hours of 10pm and 9am.

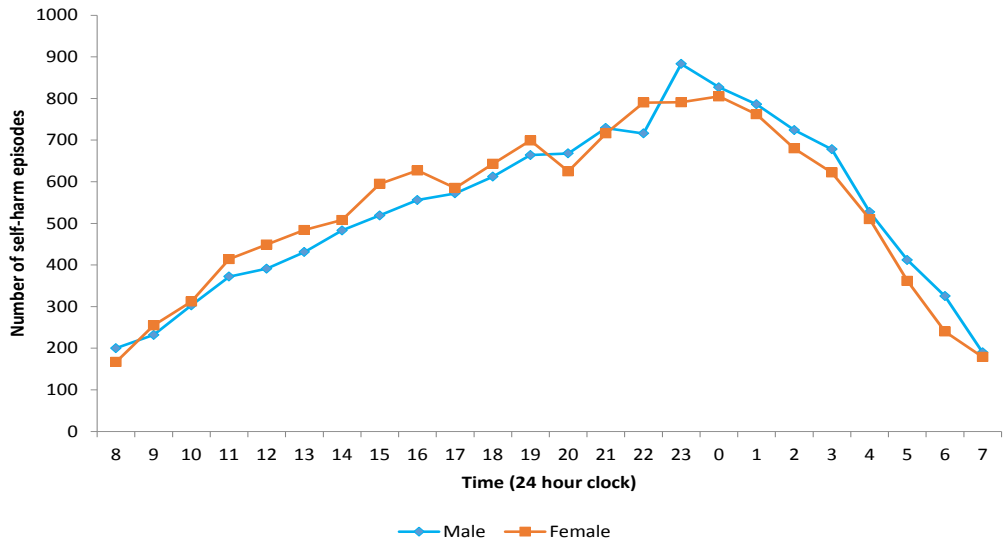
Table 5 Self-harm episodes by day and time of presentation and gender, 2012/13 to 2014/15

Northern Ireland	All persons		
	Mon-Fri	Sat-Sun	Total Mon-Sun
9am until 5pm	5,011 (29%)	1,920 (24%)	6,931 (27%)
5pm until 10pm	4,637 (26%)	1,876 (23%)	6,513 (25%)
10pm until 9am	7,856 (45%)	4,320 (53%)	12,176 (48%)
Total	17,504 (100%)	8,116 (100%)	25,620 (100%)

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 4). Numbers for both males and females gradually increased during the day. The peak for males was 11pm and for females was midnight. Half (50%) of all self-harm episodes presented from 8pm until 5am and by contrast 27% of presentations occurred from 9am until 5pm.

Figure 4 Number of self-harm presentations by time of occurrence, 2012/13 to 2014/15



Mode of arrival

In self-harm presentations, patients may be accompanied to the hospital by more than one service. The majority (70%) of presentations were brought to hospital by emergency services (e.g. ambulance and police). In one-quarter of presentations (26%), the patient self-presented to the hospital ED.

3.5 Methods of self-harm

Table 6 details the methods involved in self-harm presentations in Northern Ireland. The most common method of self-harm was drug overdose, which was involved in almost three-quarters (73%) of all self-harm presentations. Drug overdose was more common among females than males (77% vs. 69% respectively). Self-cutting was the only other common method of self-harm, present in one-quarter (24%) of all presentations (Table 6).

Table 6 Methods of self-harm by gender, 2012/13 to 2014/15

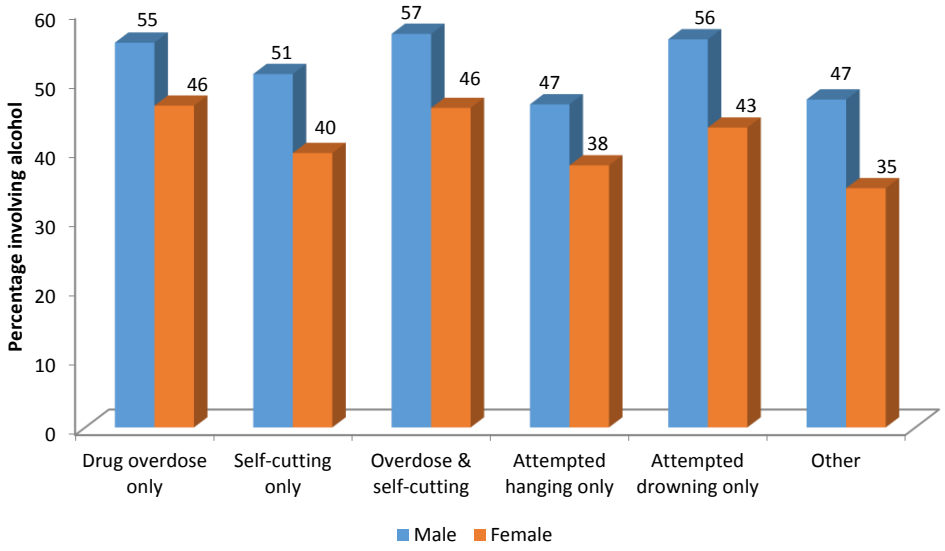
	Drug Overdose	Self-cutting	Self-poisoning	Attempted hanging	Attempted drowning	Other
Male	8,893	3,348	217	660	160	456
%	(69.5%)	(26.2%)	(1.7%)	(5.2%)	(1.3%)	(3.6%)
Female	9,926	2,923	119	298	96	318
%	(77.4%)	(22.8%)	(0.9%)	(2.3%)	(0.7%)	(2.5%)
Total	**18,819**	**6,271**	**336**	**958**	**256**	**774**
%	**(73.5%)**	**(24.5%)**	**(1.3%)**	**(3.7%)**	**(1%)**	**(3%)**

While rare as a sole method of self-harm, alcohol was involved in half (49%) of all self-harm presentations. The proportion was higher among males than females (54% v 45%), and among those aged between 45-64 years (62%).

The involvement of alcohol varied across HSCT area, ranging from 41% in the South Eastern to 57% in the Western HSCT.

Alcohol involvement was elevated in self-harm presentations among males where overdose and self-cutting were combined (57%). Alcohol involvement was lower among presentations due to attempted hanging for both males and females (47% and 38%, respectively) (Figure 5).

Figure 5 Alcohol involvement in self-harm episodes by method and gender, 2012/13 to 2014/15



Method of self-harm varied according to age (Figure 6). Drug overdose accounted for a higher proportion of self-harm presentations in the older groups, particularly for females. In contrast, self-cutting was most common among young people.

Figure 6 Method of self-harm used by gender and age group, 2012/13 to 2014/15

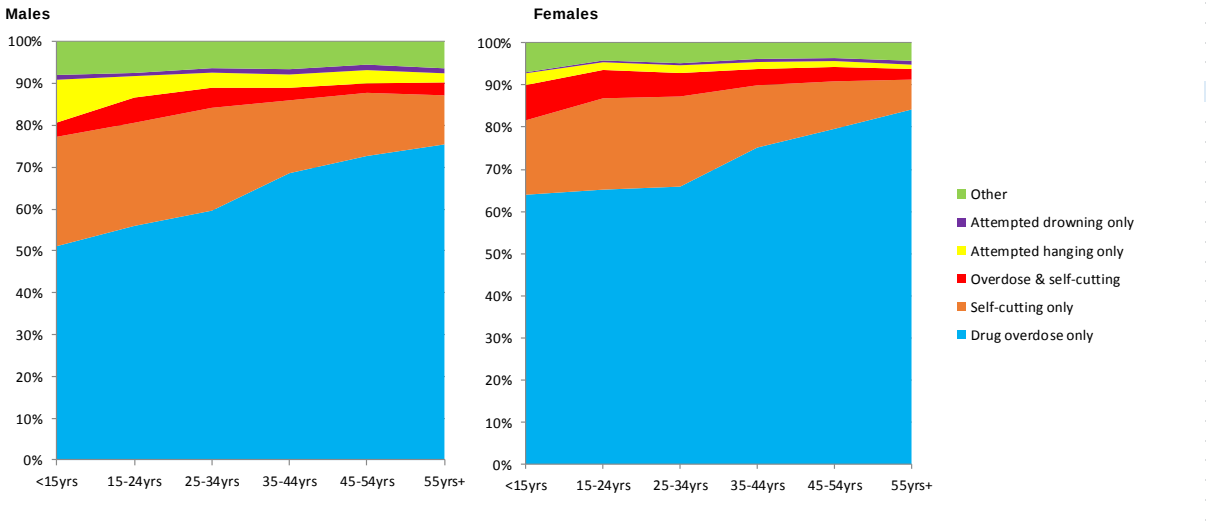
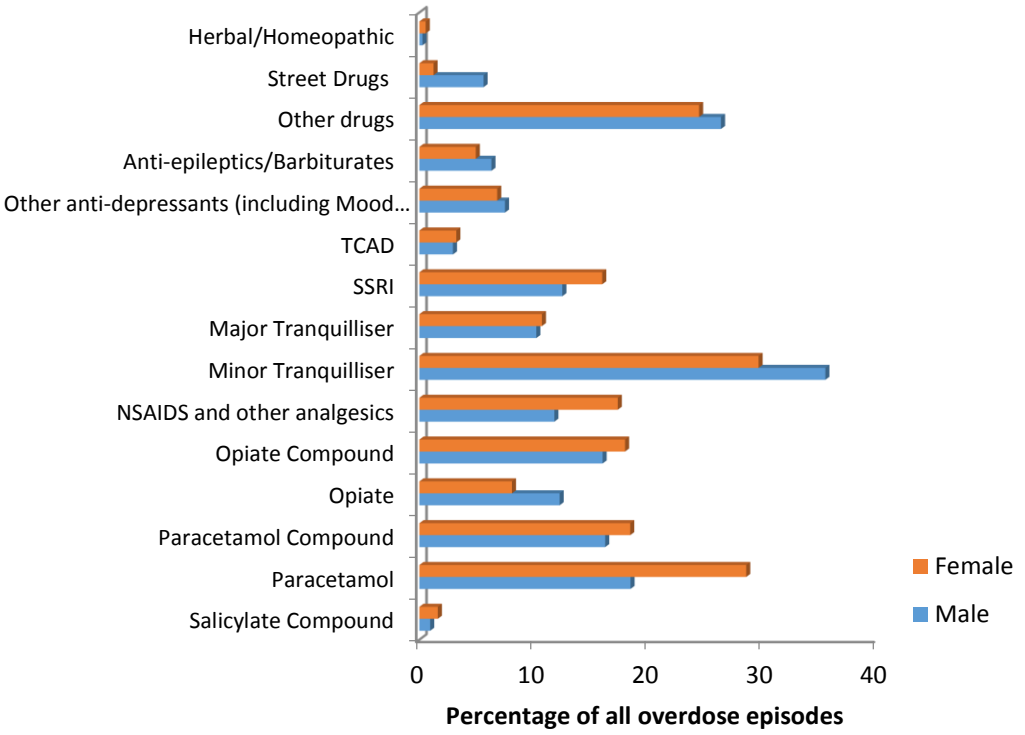


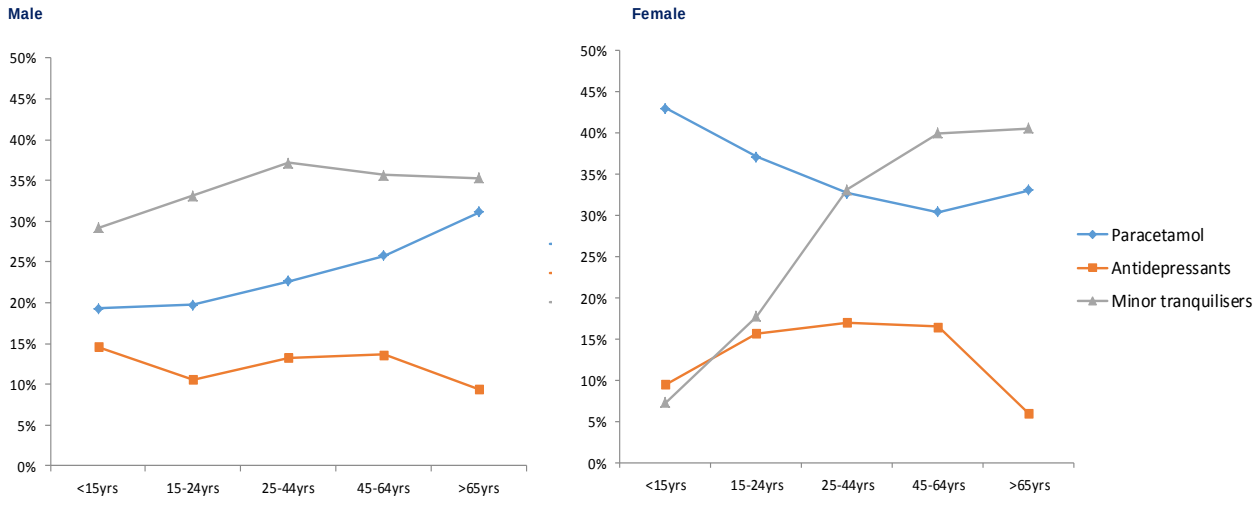
Figure 7 illustrates the frequency with which the most common types of drugs were used in overdose. It should be noted is that the medication taken in cases of overdose are determined from hospital notes and are dependent on the information given to the ED staff by the patient, as toxicology results will not always be available. Furthermore, the Registry does not record information on the sources of these medication. Almost one-third (32%) of all overdoses involved a minor tranquiliser, and were more often taken by males than females (35% vs. 30%, respectively). In total, 58% of all female overdose acts and 48% of male acts involved an analgesic drug. Paracetamol was the most common analgesic drug taken, present in some form in 38% of overdoses. Paracetamol-containing medication was used significantly more often by females than males (44% vs. 32%).

Figure 7 Variation in the types of drugs used in intentional overdose cases by gender, 2012/13 to 2014/15



As detailed in Figure 8, drugs used in overdose acts varied according to age. Minor tranquilisers were more often used by older adults. For those aged 65 years and over, minor tranquilisers were present in 41% of female and 35% of male overdoses. However, under one-third (29%) of overdoses by males aged under 15 years involved a minor tranquiliser, compared with 7% of females of the same age. Paracetamol-containing medication was most often involved in overdoses by young females, present in 43% of presentations by those aged under 15 years.

Figure 8 Drugs used in intentional overdose by age for males (left) and females (right), 2012/13 to 2014/15



3.6 Recommended next care following self-harm

Table 7 illustrates the recommended next care for self-harm presentations made to hospital EDs. For an explanation of these terms refer to section 2.7. Admission to either a general or psychiatric ward occurred in 58% of presentations. One in every two self-harm presentations resulted in admission to a general ward (54%) with a further 4% resulting in psychiatric admission.

Just under one-third (31%) of cases of self-harm were discharged from the ED following treatment.

In 7% of presentations, the patient left the ED without being seen and this was more common among males (8% vs. 6%). In 3% of presentations, the patient left the ED before a decision regarding next care was made, with 2% of presentations resulting in the patient refusing admission, as recommended by the presenting hospital.

Regarding the group who left the ED without being seen, the majority were male (57%) and aged between 15 and 34 years (56%). Most of these presentations occurred outside of the hours of 9am to 6pm (77%), with 74% brought by ambulance/ other emergency services. Alcohol was present in 57% of these attendances.

Table 7 Recommended next care following self-harm attendance to hospital emergency departments in Northern Ireland, 2012/13 to 2014/15

Next care	2012/13	2013/14	2014/15	Total 3 years
General admission	4,817 (58%)	4,442 (5%)	4,588 (52%)	13,847 (54%)
Psychiatric admission	313 (4%)	311 (4%)	346 (4%)	970 (4%)
Refused admission	163 (2%)	147 (2%)	90 (1%)	400 (2%)
Left ED before decision made regarding next care	207 (2%)	275 (3%)	264 (3%)	746 (3%)
Left ED without being seen	533 (6%)	747 (9%)	499 (6%)	1,779 (7%)
Discharged from ED following treatment	2,246 (27%)	2,534 (30%)	3,098 (35%)	7,878 (31%)

Recommended next care varied depending on the presenting method of self-harm used (Table 8). General admission was most common following presentations involving intentional drug overdose only, or where combined with self-cutting (64% and 59%, respectively). General admission was least common for patients who presented with self-cutting only (21%) and these patients were most often discharged from the ED following treatment (56%).

Psychiatric admission was most common in presentations involving highly lethal methods of self-harm, in particular following attempted hanging (12%) and attempted drowning (14%). Patients were most likely leave the ED without being seen when the presentation involved self-cutting (12%) and where alcohol was involved (8%).

Table 8 Recommended next care by method of self-harm, 2012/13 to 2014/15

Next care	Drug overdose only (n=17,244)	Self-cutting only (n=4,859)	Overdose & self-cutting (n=1,204)	Attempted hanging (n=715)	Attempted drowning (n=208)	Other (n=1,390)	Total (n=25,620)
General admission	64%	21%	59%	41%	39%	44%	54%
Psychiatric admission	3%	5%	4%	12%	14%	9%	4%
Refused admission	2%	2%	1%	2%	1%	2%	2%
Left ED before decision made regarding next care	3%	4%	3%	3%	3%	4%	3%
Left ED without being seen	6%	12%	5%	6%	6%	6%	7%
Discharged from ED following treatment	23%	56%	29%	36%	37%	35%	31%

Recommended next care varied significantly by HSCT area (Table 9). The proportion of patients who left the ED without being seen varied from 1% in the South Eastern HSCT to 14% in the Belfast HSCT.

Across HSCT area, general admission was recommended for 49% of self-harm patients in the Western, 52% in the Belfast, 53% in the South Eastern, 54% in the Southern and 63% in the Northern HSCT.

Table 9 Recommended next care by HSCT area, 2012/13 to 2014/15

Next care	BHSCT	SEHSCT	NHSCT	SHSCT	WHSCT	Northern Ireland
General admission	3,964 (52%)	2,304 (53%)	2,929 (63%)	2,431 (54%)	2,219 (49%)	13,847 (54%)
Psychiatric admission	77 (1%)	252 (6%)	81 (2%)	283 (6%)	277 (6%)	970 (4%)
Refused admission	112 (2%)	72 (2%)	45 (1%)	125 (3%)	46 (1%)	400 (2%)
Left ED before decision made regarding next care	242 (3%)	105 (2%)	83 (2%)	85 (2%)	231 (5%)	746 (3%)
Left ED without being seen	1,051 (14%)	60 (1%)	227 (5%)	184 (4%)	257 (6%)	1,779 (7%)
Discharged from ED following treatment	2,148 (28%)	1,550 (36%)	1,301 (28%)	1,357 (30%)	1,522 (33%)	7,878 (31%)

3.7 Repetition of self-harm

There were 16,301 individuals treated for 25,620 self-harm episodes over the three-year period from April 2012 to March 2015. This implies that more than one-third (36%) of the presentations were due to repeat acts. Of the 16,301 individuals, 3,799 (23%) made at least one repeat presentation to hospital with self-harm.

The rate of repetition within 12 months was 20.3% based on persons (3,311 of 16,301). This indicates that one in five self-harm patients represented to the ED with self-harm within 12 months of an index episode.

In total, five or more presentations were made by 616 individuals, with 153 individuals making ten or more presentations, accounting for 10% of all self-harm presentations recorded (Table 10).

Table 10 Repetition distribution of self-harm presentations in Northern Ireland, 2012/13 to 2014/15

Number of presentations	Individual Persons	% of persons	Episodes	% of episodes
1	12,502	77%	12,502	49%
2	2,139	13%	4,278	17%
3	724	4%	2,172	9%
4	320	2%	1,280	5%
5 to 9	463	3%	2,907	12%
10 or more	153	1%	2,481	10%
Total	**16,301**		**25,620**	

The rate of repetition varied significantly according to the method of self-harm involved (Table 11). Of the commonly used methods of self-harm, self-cutting was associated with increased rates of repeat self-harm. More than one in four people (28%) who used self-cutting as a method of self-harm during the index episode made at least one subsequent self-harm presentation within 12 months. Attempted drowning was associated with a lower rate of repetition within 12 months (12%).

Table 11 Repetition of self-harm by method used in index episode, 2012/13 to 2014/15

	Drug Overdose only	Self-cutting only	Attempted hanging	Attempted drowning	Self-poisoning	Other
Number of individuals treated	12541	3338	629	171	212	415
Number who repeated	2361	1051	116	21	36	99
Percentage who repeated	**19%**	**28%**	**18%**	**12%**	**17%**	**22%**

As outlined in Table 12, the rate of repetition was similar across HSCT areas, and slightly elevated in the Belfast Trust (22%).

Table 12 Repetition of self-harm by HSCT Area, 2012/13 to 2014/15

	BHSCT	SEHSCT	NHSCT	SHSCT	WHSCT
Number of individuals treated	4709	2785	3116	2789	2902
Number who repeated	1021	547	608	554	584
Percentage who repeated	**22%**	**20%**	**20%**	**20%**	**20%**

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

Self-harm presentations by those under 18 years of age contributed to 10% (n=2,642) of all self-harm presentations during the three-year period. The majority of these self-harm presentations were female (70%) (Table 13).

Table 13 Number of self-harm presentations by young people under 18 years, 2012/13 to 2014/15

Northern Ireland	Male		Female		All Presentations	
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%
3 Year Total	781 (30%)		1,861 (70%)		2,642 (100%)	

Drug overdose was the most common method of self-harm used by those aged under 18, and more so for females than males (73% vs. 64%) (Table 14). Self-cutting was a common method of self-harm used by young people, accounting for just under one-third of self-harm presentations (31% for males, 29% for females).

Table 14 Methods of self-harm used by young people under 18 years by gender, 2012/13 to 2014/15

	Drug overdose	Self- cutting	Self-poisoning	Attempted hanging	Attempted drowning	Other
Male	502	242	18	54	<10	26
%	(64%)	(31%)	(2%)	(7%)	(<1%)	(3%)
Female	1,366	538	32	45	<10	50
%	(73%)	(29%)	(2%)	(2%)	(<1%)	(3%)
Total	**1,868**	**780**	**50**	**99**	**<10**	**76**
%	**(71%)**	**(30%)**	**(2%)**	**(4%)**	**(<1%)**	**(3%)**

3.8.1 Alcohol involvement, under 18 years

Respectively, alcohol was involved in 25% and 16% of young male and female self-harm presentations to EDs in Northern Ireland over the three-year period. The frequency of alcohol involvement in presentations by young people varied to some extent with method of self-harm but numbers are relatively small and therefore no real conclusion can be drawn from the figures.

3.8.2 Recommended next care, under 18 years

Half (49%) of all those aged under 18 years were admitted to a general ward following presentation with self-harm. A small proportion (4%) left with the ED without being seen and 2% refused admission (Table 15). The majority of these presentations involved self-cutting (41%), and were made by those aged 15-19 years (87%).

Table 15 Recommended next care, under 18 years, 2012/13 to 2014/15

Next care	2012/13	2013/14	2014/15	Total 3 years
General admission	406 (52%)	422 (49%)	473 (48%)	1,301 (49%)
Psychiatric admission	13 (2%)	13 (2%)	14 (1%)	40 (2%)
Refused admission	10 (1%)	<10 (<1%)	<10 (<1%)	16 (1%)
Left ED before decision made regarding next care	<10 (<2%)	12 (1%)	15 (2%)	36 (1%)
Left ED without being seen	27 (4%)	49 (6%)	29 (3%)	105 (4%)
Discharged from ED following treatment	317 (41%)	367 (42%)	460 (46%)	1,144 (43%)

3.9 Key subgroup analysis

Homeless

Of all self-harm presentations over the three-year period, 94% (n=24,186) involved persons recorded as living in private residence. Approximately 4% (n=1,031) cases involved persons who were recorded as homeless at the time of attendance. The majority (70%) of these were male (n=726) and presented to hospitals in Belfast HSCT (51%; n=531). Three-quarters (72%) of those who were homeless were under the age of 35 years, with 28% aged between 20-24 years.

Prisons[21]

Approximately 1% (n=329) 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 (92%, n=304) were male. The majority of these (63%, n=207) were presentations brought from Maghaberry Prison, with one-quarter (n=83; 25%) from Hydebank Wood Prison and 12% (n=39) from Magilligan Prison. Most of those presenting from a prison were aged between 20-29 years (68%). It should be noted that in the first instance episodes of self-harm are dealt with by the Northern Ireland Prison Service and will only present to Emergency Departments at acute hospitals if intensive intervention is required.

Residential children's homes

A total of 341 presentations (1.3%) were made by residents of residential children's homes. The majority were females (n=244; 72%) and highest numbers were observed in the 15-19 year age group for both genders (n=299; 88%). Most presentations by residents of residential children's homes were made to hospitals in the Belfast (n=148; 43%) and South Eastern (n=135; 40%) HSCT trust areas. 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.

Acute or psychiatric hospitals

A minority of presentations (n=71; 0.3%) were made by persons residing in acute or psychiatric hospitals.

[21] 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, and to allow for comparison with other regions. Based on the reported data, the age standardised rate of self-harm in 2014/15 for Northern Ireland was 373 per 100,000 – 377 per 100,000 for males and 371 per 100,000 for females (Table 16). The rate in 2014/15 was 12% higher than in 2012/13 (334 per 100,000).

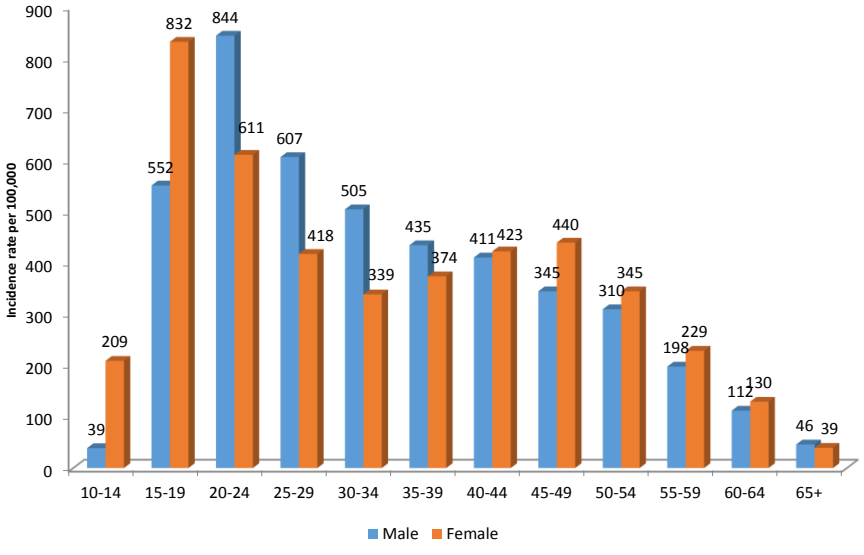
Table 16 European age-standardised rate (EASR) of persons presenting to hospital in Northern Ireland following self-harm, 2012/13 to 2014/15.

Northern Ireland	Male		Female		All	
Year	Rate	% change from previous year	Rate	% change from previous year	Rate	% change from previous year
2012/13	335	-	334	-	334	-
2013/14	337	+1%	335	0%	335	+<1%
2014/15	377	+13%	371	+11%	373	+12%

Combined data for the three years show 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 832 per 100,000 for females and 844 per 100,000 for males in these age groups (see Figure 9).

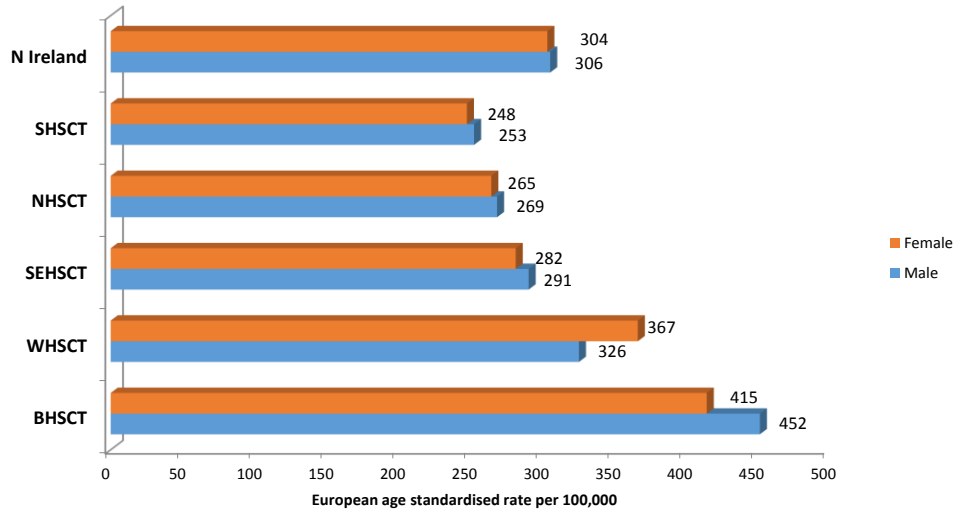
The female rate of self-harm among 10-19 year-olds was 75% higher than the male rate. The female rate was also higher among 45-49 year-olds (+28%). However the male rate of self-harm was 39% higher across 20-39 year-olds (603 vs. 434 per 100,000)

Figure 9 Incidence rate of self-harm per 100,000 in Northern Ireland by age and gender, 2012/13 to 2014/15



For both males and females the highest rates of self-harm were observed in the Belfast HSCT area (452 and 415 per 100,000, respectively): 47% and 36% higher than the male and female rates for Northern Ireland, respectively. The lowest rate of self-harm for both male and female residents were recorded in the Southern HSCT area, where the male rate (253 per 100,000) was 17% lower than the regional male rate, and the female rate (248 per 100,000) was 19% lower than the regional female rate (see Figure 10). In all Trust areas with the exception of the Western area, the rate for males exceeded the rate for females

Figure 10 Incidence rates of self-harm, all ages per 100,000 by gender and HSCT area, 2012/13 to 2014/15



4.2 Incidence rates of self-harm – comparison with other localities

The incidence of hospital-treated self-harm in Northern Ireland, Republic of Ireland and England was compared across cities, using data from the National Self-Harm Registry Ireland[22] and from the Multicentre Study of Self-Harm in England[23]. For the purposes of this comparison, European age-standardised rates per 100,000 were calculated (for individuals aged 15 years and over), using data from the most recent available year for each country.

The legacy Derry City Council, before the 2015 Review of Public Administration for Local Government, reported the highest rate of self-harm at 708 per 100,000, followed by Belfast City Council (701 per 100,000). The highest rate of self-harm for males was recorded in Belfast City Council (748 per 100,000), while the highest female rate was in Derry City Council (704 per 100,000) (Table 17).

[22] Griffin, E, Arensman, E, Corcoran, P, Dillon, CB, Williamson, E, Perry, IJ. (2015). National Self-Harm Registry Ireland Annual Report 2014. Cork: National Suicide Research Foundation.
[23] Multicentre Study of Self-harm in England (2016). http://cebmh.warne.ox.ac.uk/csr/mcm/

Table 17 European age-standardised rate (EASR) per 100,000 of self-harm (15+) for cities in Northern Ireland, England and Republic of Ireland

	Male	Female	All
Derry City Council	717	704	**708**
Belfast City Council	748	657	**701**
Limerick	423	482	**453**
Cork	490	395	**444**
Derby	336	533	**434**
Manchester	378	479	**428**
Dublin	298	378	**337**
Galway	272	322	**296**
Waterford	328	255	**291**
Oxford	209	358	**284**

*Rates calculated using data for the most recent year available (2014/15 data for Northern Ireland; 2013 data for England; 2014 data for Ireland).

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 10,563 ideation presentations recorded during the three-year period from April 2012 to March 2015 (Table 18). A larger proportion of ideation presentations were attributable to males (67%), in contrast to the even gender balance among self-harm presentations.

Table 18 Number of ideation presentations to EDs in Northern Ireland, 2012/13 to 2014/15

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%
3 Year Total	6,951		3,612		10,563	

These 10,563 ideation presentations were made by 6,909 individuals (4,391 males and 2,518 females), Table 19.

Just over half (53%) of all ideation presentations involved alcohol, and more so for males (55% vs. 49%).

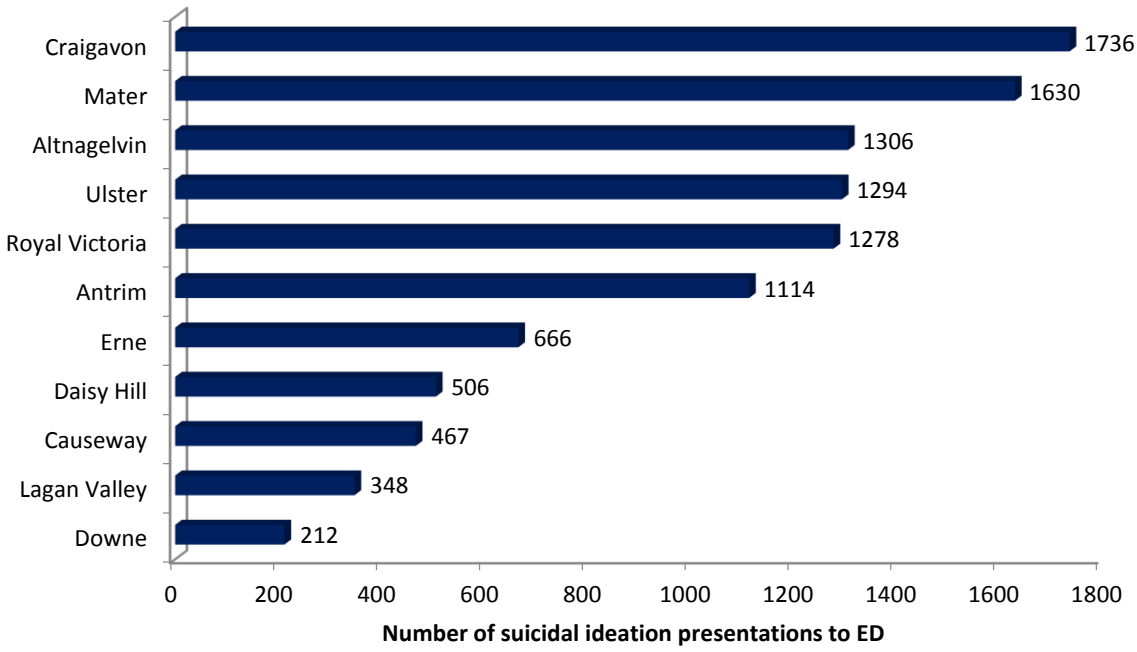
Table 19 Individual persons presenting with ideation to EDs in Northern Ireland, 2012/13 to 2014/15

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	1,815	+10%	1,014	+6%	2,829	+8%
3 Year Total	4,391		2,518		6,909	

5.2 Ideation presentations by hospital EDs in Northern Ireland

Craigavon Hospital recorded the highest number of presentations over the three-year period, accounting for 16.4% (n=1,736) of total presentations, followed by the Mater Hospital with a 15.4% share (n=1,630) of presentations. Excluding the Royal Hospital for Sick Children, Downe Hospital had the lowest share of presentations (2.0%; n=212). The distribution of ideation presentations between hospitals is summarised in Figure 11, below.

Figure 11 Number of ideation presentations by hospital ED, 2012/13 to 2014/15



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

5.3 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=2,914), accounting for 28% of all ideation presentations made during this period, despite a 19% population share (Table 20). The Northern HSCT area had the lowest proportion of ideation presentations (15%), despite having a larger population share (26%).

Table 20 Ideation presentations share by HSCT, 2012/13 to 2014/15

	BHSCT	SEHSCT	NHSCT	SHSCT	WHSCT	Northern Ireland
Hospital based ideation presentations	2,914	1,854	1,581	2,242	1,972	10,563
% share of ideation presentations	28%	17%	15%	21%	19%	100%
% of NI population resident in Trust*	19%	19%	26%	20%	16%	100%

Almost one fifth (18%) of those who presented with ideation to hospitals in the South Eastern HSCT were residents of the Belfast HSCT area, and likewise 18% of those who presented to Belfast HSCT area hospitals were residents of the South Eastern HSCT; Table 21).

Table 21 Ideation presentations by resident HSCT area and presenting hospital location, 2012/13 to 2014/15

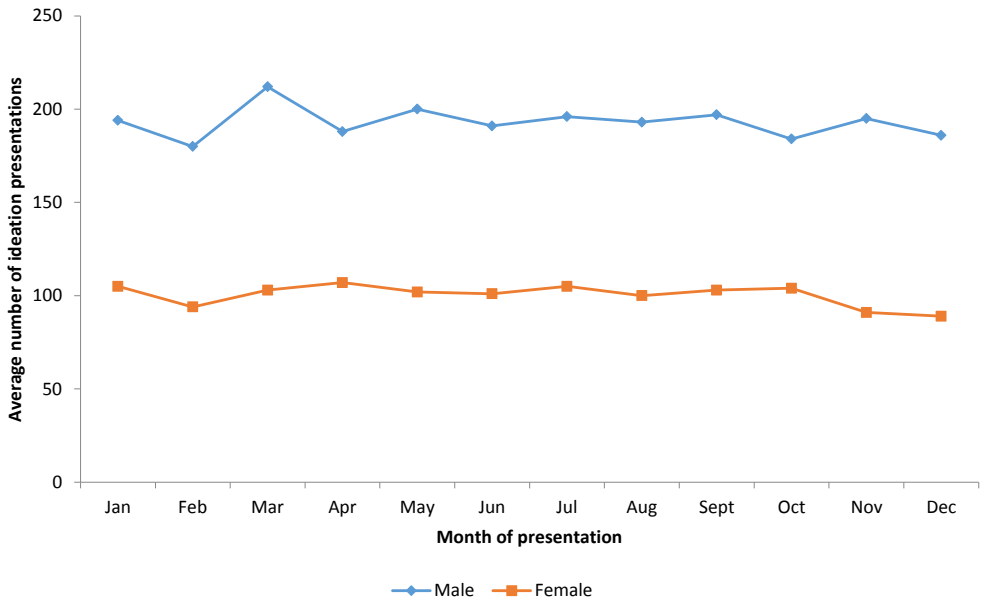
Ideation presentations		Presenting hospital location					
		BHSCT Hospitals	SEHSCT Hospitals	NHSCT Hospitals	SHSCT Hospitals	WHSCT Hospitals	Total
Resident Trust Area	BHSCT	80%	18%	1%	<1%	<1%	**100%**
	SEHSCT	18%	**77%**	1%	4%	<1%	**100%**
	NHSCT	11%	1%	**84%**	3%	1%	**100%**
	SHSCT	1%	1%	<1%	**96%**	1%	**100%**
	WHSCT	<1%	<1%	1%	<1%	**98%**	**100%**

5.4 Ideation presentations by time of occurrence

Variation by month

The monthly average number of ideation presentations to hospitals for the three-year period was 293. The month of February saw the fewest ideation presentations to ED at 273 (7% below average) while the peak month was March at 315 (7% above average), Figure 12.

Figure 12 Average number of ideation presentations by month of attendance, 2012/13 to 2014/15



Variation by day and time of attendance

Across the three-year period, an average of 10 presentations involving ideation were recorded per day. As with self-harm presentations, increased numbers of presentations involving ideation were observed across the following days: January 1st, New Year's Day (mean n=17), 16th, 17th and 18th March (mean n=14) and July 12th (mean n=15).

Similar to self-harm presentations, combined data for the three-year period shows that the number of ideation presentations was highest at weekends, with half (50%; n=1,589) of presentations occurring on Saturdays and Sundays between 10pm and 9am and 24% (n=756) occurring between the hours of 5pm and 10pm (Table 22).

Table 22 Day and time of attendance, ideation episodes, 2012/13 to 2014/15

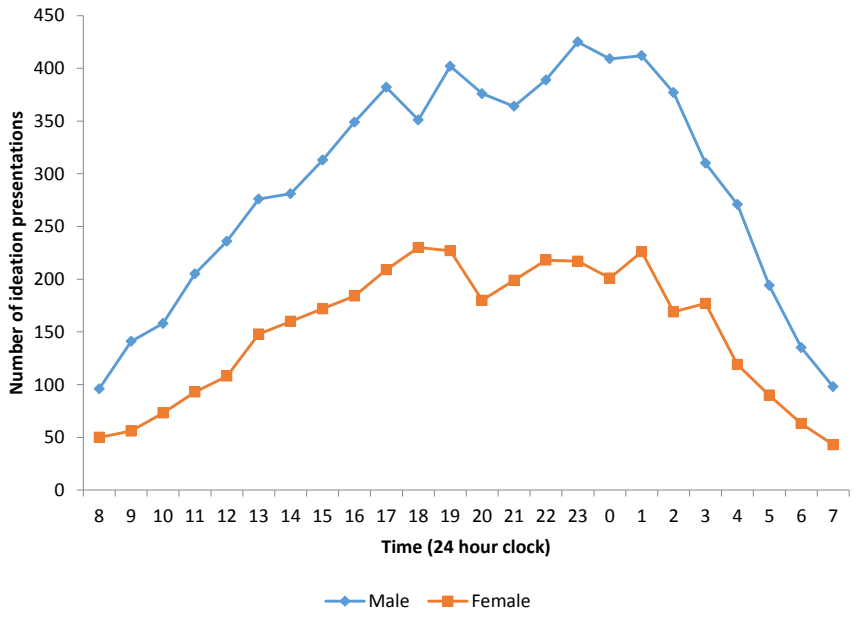
Northern Ireland	All Persons		
Year	Mon-Fri	Sat-Sun	Total Mon-Sun
9am until 5pm	2,112 (29%)	841 (26%)	2,953 (28%)
5pm until 10pm	2,164 (29%)	756 (24%)	2,920 (28%)
10pm until 9am	3,100 (42%)	1,589 (50%)	4,689 (44%)
Total	7,376 (100%)	3,186 (100%)	10,562* (100%)

**Time of presentation unknown for n=1*

Variation by hour

As with self-harm presentations there was an increase in the frequency of ideation attendances over the course of the day with the highest numbers presenting around midnight (Figure 13). However this pattern was more pronounced for males than females. Half (50%) of all ideation episodes presented between the hours of 7pm and 4am and by contrast 28% of presentations occurred between 9am and 5pm.

Figure 13 Number of ideation presentations by time of occurrence, 2012/13 to 2014/15



Mode of Arrival

In ideation presentations, patients may be accompanied to the hospital by more than one service. Almost two-thirds (64%) of presentations were brought to hospital by emergency services. In one-third (31%) of presentations, the patient self-presented to the ED.

5.5 Recommended next care following ideation

As outlined in Table 23, approximately one-third (32%) of ideation presentations resulted in admission to a general ward following presentation to an ED, with 9% admitted to a psychiatric ward. Most commonly, ideation presentations were discharged from the ED following treatment (43%). One in seven (15%) presentations due to ideation resulted in the patient leaving the ED without being seen or before a next care recommendation could be made. Almost one half (48%) of these presentations were made by 35-54 year olds. Almost two-thirds of these presentations involved alcohol (64%). Most presented outside the hours of 9am to 5pm (79%) and 71% were brought to the ED by emergency services.

Table 23 Recommended next care following ideation attendance to hospital, 2012/13 to 2014/15

Next care	2012/13	2013/14	2014/15	Total 3 years
General admission	995 (31%)	1,173 (32%)	1,161 (31%)	**3,329 (32%)**
Psychiatric admission	314 (10%)	323 (9%)	302 (8%)	**939 (9%)**
Refused admission	61 (2%)	43 (1%)	34 (1%)	**138 (1%)**
Left ED without being seen / before decision	536 (17%)	576 (16%)	494 (13%)	**1,606 (15%)**
Discharged from ED following treatment	1,293 (40%)	1,509 (42%)	1,749 (47%)	**4,551 (43%)**

Variation in recommended next care was observed across HSCT areas (Table 24). The lowest rates of admission to hospital (both general and psychiatric) were observed in the Belfast HSCT (26%), with the highest recorded in the Northern HSCT (52%). Belfast HSCT also had the highest proportion of presentations leaving the ED without being seen or before a next care recommendation could be made (26%).

Table 24 Recommended next care following ideation attendance to hospital by HSCT area, 2012/13 to 2014/15

Next care	BHSCT	SEHSCT	NHSCT	SHSCT	WHSCT	Northern Ireland
General admission	650 (22%)	631 (34%)	764 (48%)	707 (32%)	577 (29%)	**3329 (32%)**
Psychiatric admission	104 (4%)	241 (13%)	62 (4%)	326 (15%)	206 (10%)	**939 (9%)**
Refused admission	22 (1%)	22 (1%)	16 (1%)	55 (3%)	23 (1%)	**138 (1%)**
Left ED without being seen / before decision	743 (26%)	121 (7%)	200 (13%)	204 (9%)	338 (17%)	**1606 (15%)**
Discharged from ED following treatment	1395 (48%)	839 (45%)	539 (34%)	950 (42%)	828 (42%)	**4551 (43%)**

5.6 Ideation behaviour in young people (under 18 years)

Ideation presentations by those under 18 years of age contributed to 4.6% (n=486) of all ideation presentations to EDs in Northern Ireland during the three-year period (Table 25).

Table 25 Number of ideation presentations by young people under 18 years, 2012/13 to 2014/15

Northern Ireland	All presentations	
Year	**Number**	**% difference from previous year**
2012/13	143	-
2013/14	173	+21%
2014/15	170	-2%
3-Year Total	**486 (100%)**	

For ideation presentations by those under 18 years of age, 51% were discharged from the ED following treatment, with 42% admitted to either a general or psychiatric ward in the presenting hospital (Table 26). In 6% of presentations, the patient left the ED without being seen or before a next care recommendation could be made.

Table 26 Recommended next care following ideation attendance to hospital, under 18 years, 2012/13 to 2014/15

Next Care	2012/13	2013/14	2014/15	Total 3 years
General admission	51 (36%)	60 (35%)	72 (42%)	183 (38%)
Psychiatric admission	<10 (<7%)	<10 (<3%)	<10 (<6%)	22 (4%)
Refused admission	0 (0%)	<10 (<2%)	0 (0%)	<10 (<1%)
Left ED without being seen / before decision	11 (8%)	10 (6%)	<10 (<6%)	30 (6%)
Discharged from ED following treatment	72 (50%)	97 (56%)	80 (47%)	249 (51%)

5.7 Key subgroup analysis

Homeless

Of all ideation presentations over the three-year period, 94% (n=9,937) involved persons living in private residence. Approximately 6% (n=614) cases involved persons who were homeless at the time of attendance. The majority (80%) of these were male (n=492) and presented to hospitals in Belfast HSCT (54%; n=332). Almost two-thirds (64%) of those who were homeless were under the age of 40 years, with 21% aged between 20-24 years.

Prisons

There were fewer than ten presentations made by persons currently in prison.

Residential children's homes

There were 33 ideation presentations made by residents of residential children's homes (0.3%).

Section 6: Summary of trends, 2012/13 to 2014/15

6.1 Self-harm presentations

- During the period March 2012 to April 2015 the number of self-harm presentations recorded by the Registry increased by 7% (from 8,279 to 8,885), while the number of persons increased by 11% (from 5,977 to 6,630). This increase was observed across the Northern (+22%), Belfast and Southern (+16%) and Western (+8%) HSCT areas, whereas a decrease in self-harm presentations was observed in the South Eastern area (-26%).
- During this period, fluctuations in self-harm presentations due to self-harm were observed across hospital emergency departments. In particular, attendances to Antrim, Craigavon and Mater hospitals increased by 32%, 21% and 17%, respectively. On the other hand, attendances to Downe, Lagan Valley and Ulster hospitals decreased by 62%, 36% and 18%, respectively. The decreases in presentations at Lagan Valley and Downe hospitals can be accounted for reduced ED hours introduced in January 2014 (Monday to Friday, 8am-8pm).

6.2 Self-harm rates

- Between 2012/13 and 2014/15 the rate of self-harm in Northern Ireland increased by 12%, from 334 to 373 per 100,000. The male rate increased by 13% (from 335 to 377 per 100,000) and the female rate increased by 11% (from 334 to 371 per 100,000).
- Significant changes in the European age-standardised rate (EASR) of self-harm were observed across Health and Social Care Trust areas in Northern Ireland.
- The rate of self-harm in the Northern HSCT area increased by 20% from 277 to 333 per 100,000. In this area the male rate increased by 18% (from 289 to 341 per 100,000), while the female rate increased by 22% (from 267 to 325 per 100,000).
- The rate of self-harm in the Southern HSCT area increased by 21% (from 265 to 320 per 100,000). The male rate increased by 29% (from 260 to 334 per 100,000) and the female rate increased by 13% (from 270 to 306 per 100,000).
- The Western HSCT area saw an increase of 11% (from 387 to 429 per 100,000). This increase was significant for the male rate, which increased by 15% (from 359 to 413 per 100,000).
- An increase in the self-harm rate of 9% (from 469 to 509 per 100,000) in the Belfast HSCT area was observed.
- A decrease (-10%) was observed in the male self-harm rate for the South Eastern HSCT area (from 344 to 309 per 100,000).

6.3 Self-harm rates by age

- Between 2012/13 and 2014/15 there was a 20% increase in the rate of self-harm among 10-34 year-olds, from 528 to 633 per 100,000. In particular, the rate among 15-19 year-olds increased by 30% and 29% among males and females respectively. This increase was reflected across the Belfast, Northern, Southern and Western HSCT areas (+26%, +34%, +34% and +28%, respectively).

6.4 Methods

- There was little variation in methods of self-harm used over the report period. The proportion of female presentations involving alcohol decreased from 47% in 2012/13 to 44% in 2014/15.
- The proportion of self-harm presentations involving self-cutting increased from 22% to 26% for females and from 25% to 27% for males. This increase was most pronounced among 15-24 year-olds, where the proportion of presentations involving self-cutting increased from 28% in 2012/13 to 32% in 2014/15.

6.5 Recommended next care

- Over the report period there was a 5% decrease in the proportion of patients being admitted to a general ward following presentation to an ED with self-harm, to 52% in 2014/15. As a corollary, the proportion of presentations resulting in the patient being discharged from the ED following treatment increased from 27% in 2012/13 to 35% 2014/15.
- The largest decreases in general admissions were observed in the South Eastern (62% to 38%) and Belfast (57% to 51%) HSCT areas.
- Belfast HSCT also saw the largest decrease in presentations leaving the ED without being seen (from 13% to 9%).

6.6 Repetition of self-harm

- The rate of self-harm repetition was 18.9% in 2012/13, 19.8% in 2013/14, and 17% in 2014/15.
- The rate of repetition was relatively consistent for each HSCT area, across the report period (range: 14% to 21%). In the South Eastern HSCT area, the repetition rate reduced from 20% in 2012/13 to 14% in 2014/15.

6.7 Ideation

- During the period March 2012 to April 2015 the number of ideation presentations recorded by the Registry increased by 17% (from 3,199 to 3,740), while the number of persons increased by 23% (from 2,299 to 2,829). This increase was observed across the Belfast (+21%), Southern (+23%) and Western (+14%) HSCT areas. The number of presentations in the Northern HSCT increased by 87%, from 360 to 672. A decrease in ideation presentations was observed in the South Eastern area (-30%).

Section 7: Regional variations of self-harm across HSCT areas

7.1 Self-harm rate

- The highest rates of self-harm in Northern Ireland were recorded for both male and females residents of the Belfast HSCT area, at 452 per 100,000 and 415 per 100,000, respectively. The male rate was 48% higher than the equivalent rate for Northern Ireland, while the female rate was 36% higher.
- The Western HSCT area also had rates of self-harm higher than the regional average. The male rate (326 per 100,000) was 7% higher, while the female rate (367 per 100,000) was 21% higher.
- The rate of self-harm among residents of the Southern HSCT area was 17% lower for males (253 per 100,000) and 19% lower for females (248 per 100,000).
- The rate of self-harm for Northern HSCT area residents were 12% and 13% lower for males (269 per 100,000) and females (265 per 100,000), respectively.
- Finally, for residents of the South Eastern HSCT area, the female rate was 8% lower (282 per 100,000). The male rate was 5% lower than that recorded regionally (291 per 100,000).
- Across all HSCT areas the peak self-harm rate among female residents was for 15-19 year-olds (1297 per 100,000 for Belfast; 882 per 100,000 for Western; 804 per 100,000 for South Eastern; 717 per 100,000 for Southern; 701 per 100,000 for Northern).
- Similarly, all HSCT areas recorded the highest male rates among those aged 20-24 years (1193 per 100,000 for Belfast; 931 per 100,000 for Western; 924 per 100,000 for South Eastern; 708 per 100,000 for Northern; 672 per 100,000 for Southern).

7.2 Methods

- An increased proportion of self-harm presentations involving an intentional drug overdose was observed among presentations made to hospitals in the Northern Trust (77% vs. 73% regionally), particularly among females (82%).
- Presentations made to hospital in Western HSCT area were more likely to involve alcohol (57% vs. 50% regionally). Alcohol was present in almost two-thirds (65%) of male presentations in the Western HSCT area.
- There was observed variation in the proportion of self-harm presentations involving alcohol by those aged under 18 years. This proportion ranged from 12% in South Eastern HSCT, 17% in Belfast and Northern, 22% in Southern, to 30% in the Western Trust.

7.3 Recommended next care

- Recommended next care varied significantly by HSCT area, with the proportion of patients who left the ED without being seen varying from 1% in the South Eastern HSCT to 14% in the Belfast HSCT.
- Across HSCT area, general admission was recommended for 49% of self-harm patients in the Western, 52% in the Belfast, 53% in the South Eastern, 54% in the Southern and 63% in the Northern HSCT.

- General admission rates varied for those aged under 18 years, from 39% in the Southern Eastern, 43% in the Western and 51% in the Belfast, to 58% in the Northern and 60% in the Southern HSCTs.
- Among those aged under 18 years, the proportion of patients leaving the ED without being seen was highest in the Belfast HSCT area (8% vs. 4%, regionally).

7.4 Ideation

- The proportion of alcohol involved in ideation presentations varied across HSCT area, with the highest proportion recorded in the Western Trust (68%).
- The proportion of ideation presentations admitted to a general ward ranged from 22% in the Belfast HSCT to 48% in the Northern HSCT.
- The lowest proportion of psychiatric admission was observed in the Belfast and Northern HSCT areas (4%) while the highest was recorded in the Southern HSCT (14%).
- Belfast HSCT had the highest proportion of ideation presentations leaving the ED without being seen (22%). This proportion was lowest for the South Eastern HSCT (3%).
- General admission rates among those aged under 18 years ranged from 26% in the Western HSCT, 30% in the Belfast and South Eastern HSCTs, 50% in the Southern HSCT and 57% in the Northern HSCT.

End

Notes

Notes