NATIONAL SELF-HARM REGISTRY IRELAND

ANNUAL REPORT 2021

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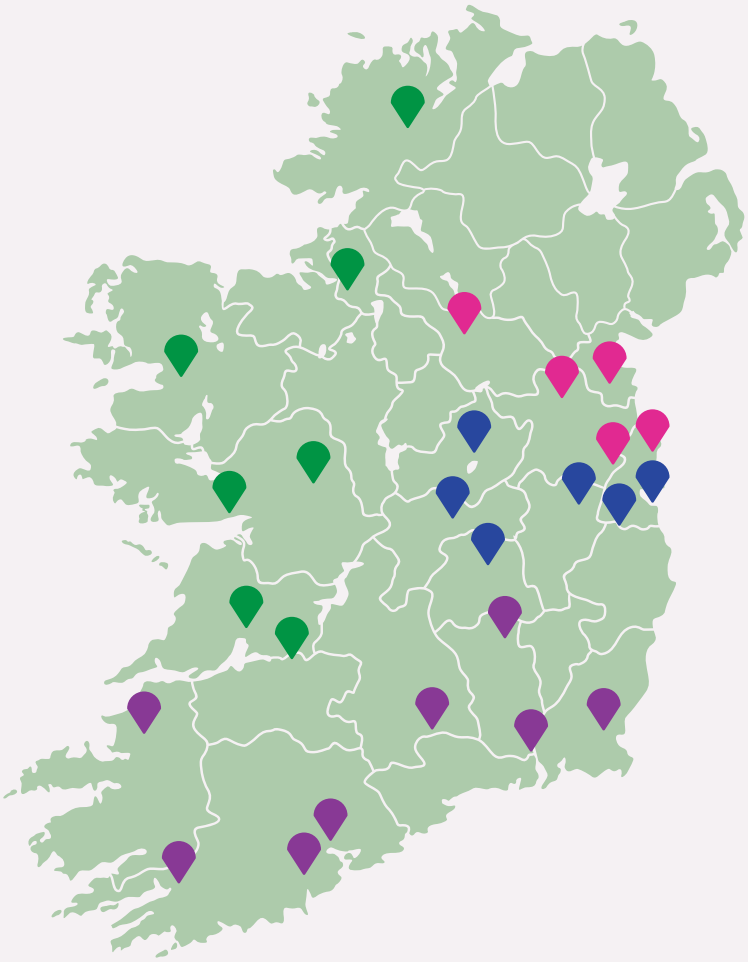
The following is the team of people who collected the data that formed the basis of this Annual Report. Their efforts are greatly appreciated.



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Western Gateway Building, University College Cork

Foreword

The National Self-Harm Registry Ireland was established in 2000 by the National Suicide Research Foundation, working in collaboration with the School of Public Health, University College Cork. The Registry was set up at the request of the Department of Health and Children and is funded by the Health Service Executive's National Office for Suicide Prevention. It is the world's first national registry of cases of intentional self-harm presenting to hospital emergency departments.

The Registry fulfils a major objective in providing timely data on trends and groups at high risk of self-harm in Ireland. The Registry has been able to assess the impact of the COVID-19 pandemic and its associated restrictions on hospital-presenting self-harm. Throughout the pandemic, the Registry provided regular updates to the Department of Health and relevant decision makers.

This report relates to hospital-presenting self-harm in 2021. This is the second year that data were recorded using an upgraded data entry system that was implemented in 2020. As in 2020, we have continued to collect data on additional variables such as the current care being received by the person who presented to hospital, and this information is presented in this report.

In 2020, *Sharing the Vision: A Mental Health Policy for Everyone* was published and in 2021, a HSE Implementation Group was established to progress implementing the recommendations.

For each recommendation, an implementation lead is responsible for achieving the recommended actions. Partners taking a lead in implementation include HSE Mental Health Services and HSE Community Operations who will work to deliver a mental health service that meets the needs of those who avail of it, including some of the individuals who present to hospital as a result of self-harm.

This report is being published approximately 15 months later than usual. Restrictions associated with the COVID-19 pandemic during 2021 continued to affect access in many hospitals for our Data Registration Officers. The HSE cyberattack in May 2021 caused further delays in data collection in some hospitals. Changes to policies and procedures in hospitals as a result of the pandemic and cyberattack, and within the context of GDPR requirements, have impacted on the work practices of Registry staff. I am especially grateful for the ongoing commitment and dedication of the Data Registration Officers and to the hospital staff for facilitating the operation of the Registry during such challenging times.

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Executive Summary

This is the twentieth annual report from the National Self-Harm Registry Ireland. It is based on data collected on hospital presentations of self-harm in the Republic of Ireland in 2021. Data are reported for 30 hospitals this year. Typically, the Registry reports on data from 32 hospitals which cover the 29 Emergency Departments (ED) nationally and three Level 2 hospitals. Three of the Children's Health Ireland hospitals are included in the 29 EDs. Data were not available for two hospitals for the period reported on in this report. Access issues arose during the COVID-19 pandemic and coincided with GDPR related changes in practices in both hospitals. It is anticipated that data from these hospitals will be reported at a later stage.

Main findings

In 2021, the National Self-Harm Registry Ireland recorded 11,415 presentations to hospitals as a result of self-harm, involving 8,595 individuals. Adjusting for the absence of data from two hospitals, we estimate that there was a total of 12,661 self-harm presentations made by 9,533 individuals in 2021. The age-standardised rate of individuals presenting to hospital following self-harm in 2021 was 196 per 100,000.[1] This was 2% lower than the rate in 2020, and 12% lower than the peak rate recorded by the Registry in 2010 (223 per 100,000).

In 2021, the national female rate of self-harm was 232 per 100,000, 4% higher than 2020. The male rate of self-harm in 2021 was 160 per 100,000, 9% lower than 2020. The male rate in 2021 is as low as has been recorded by the Registry. Consistent with previous years, the peak rate for women was in the 15-19 years age group at 888 per 100,000. The peak rate for men in 2021 was among 20-24 year-olds at 387 per 100,000. In 2020, the peak rate was among 25-29 year-olds, though in the years prior to that, the peak rate for men was consistently among 20-24 year-olds. These rates imply that one in every 113 girls in the age group 15-19 years, and one in every 258 men in the age group 20-24 years presented to hospital with self-harm in 2021.

There were 759 presentations made by residents of homeless hostels/ shelters and people of no fixed abode in 2021, accounting for approximately 6.6% of all presentations recorded by the Registry. This is comparable to the 7.5% reported in 2020.

Consistent with previous years, intentional drug overdose was the most common method of self-harm, involved in almost two-thirds (61%) of self-harm presentations in 2021. Minor tranquilisers were the most common drug type used which is the same as previous years. Self-cutting was the other most common method, recorded in 31% of all presentations. Attempted hanging was involved in 9% of all self-harm presentations (13% for men, 5% for women). Attempted drowning was involved in 4% of presentations and, although rare as a method of self-harm, self-poisoning was involved in 2% of presentations. Alcohol was involved in 30% of all presentations and was more often involved in male than female presentations (36% and 26% respectively). In general, the type of method used in self-harm was similar to recent years.

In 2021, for 67% of presentations, the patient was assessed by a member of the mental health team in the presenting hospital (*n* = 6,897). For a further 6%, an assessment was arranged in the presenting hospital (*n* = 594). Most commonly, in 49% of presentations, individuals were discharged following treatment in the ED. For the majority of these individuals, 80% were provided with a recommended referral or follow-up appointment. In 12% of presentations, the individual left the ED before a next care recommendation could be made. There was considerable variation in the recommendations for next care across hospital groups, particularly in relation to the proportion of patients admitted to the presenting hospital, leaving before a recommendation, or receiving a mental health assessment. For example, inpatient care (irrespective of type and whether the patient refused) was recommended for between 17% and 43% of adult presentations across six hospital groups while the proportion of adult patients who left before a recommendation could be made ranged from 6% to 15%. Similarly, the proportion of adults discharged following emergency treatment ranged from 39% in the RCSI Hospital Group to 65% in the University Limerick Hospital Group. This observed difference is likely to be due to variation in the availability of resources and services, but it also indicates that assessment and management procedures for self-harm patients are likely to vary across the country.

In 2021, for the second year, we sought to gather information on the current care for individuals presenting to hospital with self-harm. For 12% presentations (*n* = 1,358), it was noted that the individual was currently engaged with HSE Mental

[1] All rates per 100,000 presented in this report are based on extrapolated figures using estimates based on data from 2019.

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Health Services. In a further 3% of presentations, it was noted that the patient had previously been referred and was awaiting an appointment with Mental Health Services (*n* = 295). For 5% of presentations, individuals were either attending Counselling or Addiction services. Individuals were engaged with Homeless services in 2% of cases.

There was a similar proportion of presentations accounted for by repetition in 2021 as in 2020 (25% and 24%, respectively). Of the 8,595 self-harm patients who presented to hospital in 2021, 1,334 (15.5%) made at least one repeat presentation to hospital during the calendar year. Therefore, repetition continues to pose a major challenge to hospital staff and family members involved. The highest rate of repetition was reported in the Ireland East Hospital Group (20.5%). This is the highest repetition rate to be recorded by the Registry for a hospital group. In 2021, at least five self-harm presentations were made by 164 individuals. These patients account for 1.9% of all self-harm patients but their presentations represented 12.4% of all self-harm presentations. As in previous years, self-cutting was associated with an increased level of repetition whereby one in five individuals who used this method had a repeat presentation in 2021. In 2021, an increase was observed in repetition rates for those who presented with attempted drowning (19.2% in 2021 vs 13.3% in 2020).

Impact of COVID-19

The number of monthly presentations varied over the course of the year, coinciding with COVID-19 restrictions. ED closures during the COVID-19 pandemic were also responsible for some observed changes in the number of presentations to individual hospitals between 2020 and 2021. An example of this was the temporary relocation of acute paediatric services including ED at Tallaght to the Children's Hospitals at Crumlin and Temple Street. Level 5 COVID-19 restrictions were in place during January – April and in December 2021. There were fewer presentations in January and December, coinciding with these periods of restrictions. The lower than expected number of presentations during these months was most pronounced in January (-17%). However, the number of self-harm presentations subsequently increased across the first four months of 2021 when Level 5 restrictions applied. Of note is on the first day of easing of Level 5 restrictions on April 12th, one of the highest daily numbers of self-harm presentations in 2021 was recorded (*n* = 50).

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Recommendations

Clinical management of self-harm

The proportion of patients that received a mental health assessment (or for whom an assessment was arranged) in the presenting hospital (73%) remains similar to recent years, yet it is higher than that reported in other countries. The reported variation across hospital groups in the provision of mental health assessments and recommended next care underlines the importance of the implementation of a standardised and evidence-informed approach to the assessment and treatment of patients who present to hospital following self-harm. The National Clinical Programme for Self-Harm and Suicide-related Ideation (NCPSHI) was introduced in Ireland between 2014 and 2017 to standardise the care and management of self-harm in general hospital settings. The NCPSHI has been implemented across 24 adult EDs in Ireland and provides the following evidence-based recommendations[1]:

- All patients should receive an empathic, compassionate and timely response within the ED.
- All patients receive an expert biopsychosocial assessment and an assessment of needs and risks.
- In all cases, every effort should be made to encourage the patient to call a relative/ supportive friend to assist in the assessment and management.
- All patients should receive follow up and connecting to next appropriate care.

The 2021 findings from the Registry indicate that there remains considerable variation in recommended next care across hospitals, and that on average, one in nine patients leave the ED without being seen by a clinician or without a next care recommendation. An evaluation of the NCPSHI on patient outcomes and provision of care using data from the first 15 hospitals to implement the programme found the risk of not being assessed greatly reduced in hospitals with no prior service for self-harm. In hospitals that had a prior Liaison Psychiatry service, a decrease in self-discharge was observed.[2] The findings reported in the study by Cully and colleagues highlight the relevance of considering the pre-existing context when examining provision of care in hospitals at a national level.

Self-harm among young people

Over the past 20 years, the highest rates of self-harm have consistently been observed in young people. In this year's report, we further examined the trend in hospital-presenting self-harm by sex and age since 2007. For men, the highest rates have been in those aged 20-24 years while for women, it has been among girls aged 15-19 years. Among young adolescents aged 10-14 years, rates have increased for both sexes but in particular for girls, where it has more than tripled in just over a decade. The largest increase for this age group was observed from 2020 to 2021. This year's Registry findings map onto the priorities identified by the HSE's National Service Plan 2023[3] and the National Strategy to Reduce Suicide in Ireland, 2015-2024 *Connecting for*

[1] Health Service Executive (2016). National Clinical Programme for the Assessment and Management of Patients Presenting to the Emergency Department following Self-Harm. *https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/national-clinical-programme-for-the-assessment-and-management-of-patients-presenting-to-emergency-departments-following-self-harm.pdf*

[2] Cully, G., Corcoran, P., Gunnell, D. et al. (2023). Evaluation of a national clinical programme for the management of self-harm in hospital emergency departments: impact on patient outcomes and the provision of care. *BMC Psychiatry* 23, 917. *https://doi.org/10.1186/s12888-023-05340-4*

[3] Health Service Executive (2023). National Service Plan 2023. *https://www.hse.ie/eng/services/publications/serviceplans/national-service-plan-2023.pdf*

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Life: Goal 3, Action 3.3.[4] Specifically, evidence-based mental health programmes as well as appropriate referral and treatment options are crucial to address the needs of young people in the key transition stages between childhood and adolescence into adulthood. Increases in self-harm among children aged 10-14 years indicate that the age of onset of self-harm is decreasing, a phenomenon which has also been reported by the UK regional self-harm monitoring system with indications of an increasing trend of self-harm in children aged 5-12 years, as well as the use of highly lethal self-harm methods.[5] These trends underline the need for upstream and preventative interventions such as school-based universal mental health programmes that have been found to be effective in preventing suicide attempts in young adolescents.[6] Programmes in primary and post-primary settings are required, and these should focus on preventing suicidal behaviour as well as building resilience.

Self-harm among persons experiencing homelessness

In 2021, the proportion of self-harm presentations by persons experiencing homelessness/ of no fixed abode was comparable to 2020. An increase had been observed in the years prior to 2020. This group of individuals is a particularly vulnerable population, at high risk of repetition and mortality from all causes.[7] A recent study of the Irish Traveller indigenous population found that both male and female Traveller patients were at a greater risk of hospital-presenting self-harm than White Irish patients.[8] In accordance with Goal 3, Action 3.1 of *Connecting for Life*, these findings underline the need for targeted suicide prevention interventions among this group. One such example is a peer-delivered intervention which was trialled in Scotland and England to reduce harm and improve the well-being of individuals who experience both homelessness and problem substance misuse, and was found to be feasible and acceptable.[9] Further work to examine the specific risk and protective factors associated with self-harm among persons experiencing homelessness and those of no fixed abode is required. This is particularly important given the record levels of homelessness and migration in Ireland and other countries. Research on self-harm among refugees is a further important consideration in this context.

[4] Health Service Executive (2015). Connecting for Life: Ireland's National Strategy to Reduce Suicide 2015-2020. *https://www.hse.ie/eng/services/list/4/mental-health-services/nosp/preventionstrategy/connectingforlife.pdf*

[5] Geulayov, G., Casey, D., Bale, L. et al. (2022). Self-harm in children 12 years and younger: characteristics and outcomes based on the Multicentre Study of Self-harm in England. *Soc Psychiatry Psychiatr Epidemiol* 57, 139–148. *https://doi.org/10.1007/s00127-021-02133-6*

[6] Wasserman, D, et al. (2015). School-based suicide prevention programmes: The SEYLE cluster-randomised, controlled trial. *The Lancet*, 385:136-44.

[7] Haw, C., Hawton, K., & Casey, D. (2006). Deliberate self-harm patients of no fixed abode. *Social Psychiatry and Psychiatric Epidemiology*, 41(11), 918-925.

[8] Kavalidou, K., Daly, C., McTernan, N. et al. (2023). Presentations of self-harm and suicide-related ideation among the Irish Traveller indigenous population to hospital emergency departments: evidence from the National Clinical Programme for self-harm. *Soc Psychiatry Psychiatr Epidemiol* 58, 883–891. *https://doi.org/10.1007/s00127-023-02439-7*

[9] Parkes, T., Matheson, C., Carver, H. et al. (2022). Assessing the feasibility, acceptability and accessibility of a peer-delivered intervention to reduce harm and improve the well-being of people who experience homelessness with problem substance use: the SHARPS study. *Harm Reduct J* 19, 10. *https://doi.org/10.1186/s12954-021-00582-5*

Restricting access to means

Restricting access to means has been highlighted internationally as an effective strategy in reducing the incidence of self-harm or suicide.[10] An example of this is the positive impact shown for measures to reduce access to sites where people frequently engage in attempted or fatal drowning.[11] In Ireland, a new toolkit for preventing suicide in public places, recommending means restriction as part of a broader suicide prevention strategy, is due to be published in 2024. Initiatives to reduce access to means continue to be critical to reduce the incidence of self-harm in Ireland. Intentional drug overdose (IDO) is the most common method of self-harm recorded by the Registry. In 2022, a new campaign was launched in Ireland by the Paracetamol Working Group. The campaign promotes new information packs that are made available nationally to staff working in pharmacy and non-pharmacy retail settings. The objectives of the information campaign were to: 1) enhance the messaging around safe sales of paracetamol 2) support improved implementation of paracetamol sales regulations and 3) spotlight the importance of such regulations in the context of self-harm and suicide prevention efforts. In a similar related initiative, a positive effect was reported for codeine-related IDO whereby a reduction of 20% was observed following the implementation of guidance on restricted use of codeine-containing products in Ireland in 2010.[12] Measures to reduce access to drugs frequently used in IDO are in line with *Connecting for Life*, Goal 6.

The high incidence of attempted hanging in this report signifies the need for innovative and intensified efforts to reduce self-harm and suicide by hanging. These should include monitoring of media and social media platforms which increasingly have portrayed suicide by hanging and other highly lethal methods.[13] A recent study using Registry data reported an increase in rates of attempted hanging and drowning of 126% and 45% respectively over a 13-year period and incidence rates were highest among young people aged 15-24 years.[14] This year's Registry findings identified an increase in repetition rates for those who presented with attempted drowning. Such findings underline the need for more in-depth research into self-harm method escalation, from low to high lethality, especially among children and adolescents.

[10] Zalsman, G., Hawton, K., Wasserman, D., van Heeringen, K., Arensman, E., Sarchiapone, M., ... & Zohar, J. (2016). Suicide prevention strategies revisited: 10-year systematic review. *The Lancet Psychiatry*, 3(7), 646-659.

[11] Pirkis, J., Spittal, M. J., Cox, G., Robinson, J., Cheung, Y. T. D., & Studdert, D. (2013). The effectiveness of structural interventions at suicide hotspots: a meta-analysis. *International Journal of Epidemiology*, 42(2), 541-548.

[12] Birchall, E., Perry, I. J., Corcoran, P., Daly, C., & Griffin, E. (2021). The impact of guidance on the supply of codeine-containing products on their use in intentional drug overdose. *European journal of public health*, 31(4), 853-858.

[13] Sinyor, M., Schaffer, A., Nishikawa, Y., Redelmeier, D. A., Niederkrotenthaler, T., Sareen, J., ... & Pirkis, J. (2018). The association between suicide deaths and putatively harmful and protective factors in media reports. *CMAJ*, 190(30), E900-E907.

[14] White P, Corcoran P, Griffin E, Arensman E, Barrett P. (2023). The burden of attempted hanging and drowning presenting to hospitals in Ireland between 2007 and 2019: a national registry-based study. Soc Psychiatry Psychiatr Epidemiol. *https://doi.org/10.1007/s00127-023-02525-w* . Epub ahead of print. PMID: 37525008.

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A comprehensive suicide risk assessment, combined with psychiatric and psychosocial assessment, is vital for individuals who present with highly lethal self-harm considering the high risk of subsequent suicide for this group.[15]

Impact of concurrent public health emergencies on suicidal behaviour

The COVID-19 pandemic and associated measures to address it led to an increase in individual and population level risk factors for self-harm and suicide (e.g., anxiety, social isolation, loneliness). As a result, there were concerns that the pandemic may result in an increase in self-harm and suicide. Ongoing surveillance during and post-pandemic, as well as during concurrent public health emergencies including war/ conflict and climate change, is important to monitor the potential impact on such behaviours. During the COVID-19 pandemic, the Registry published periodic data briefings on the monthly number of self-harm presentations to a select number of hospitals during 2020 and 2021. Hospitals included in data briefings were those that had real-time data available and were nationally-representative given they were spread across the country and located in the centre of large cities, in city suburbs and in large towns. These data briefings were able to accurately determine no significant increase in self-harm rates during the early stages of the pandemic. This is in line with subsequent international reports where suicide numbers remain unchanged or declined during the pandemic.[16, 17] The use of surveillance data, including Registry data, is fundamental in addressing misinformation, particularly during a pandemic and/or other public health emergencies.[18] Ongoing surveillance is important, and the publication of data and associated findings remains a priority for the Registry.

[15] Geulayov, G., Casey, D., Bale, L., Brand, F., Clements, C., Farooq, B., ... & Hawton, K. (2019). Suicide following presentation to hospital for non-fatal self-harm in the Multicentre Study of Self-harm: a long-term follow-up study. *The Lancet Psychiatry*, 6(12), 1021-1030.

[16] Pirkis, J., Gunnell, D., Shin, S., Del Pozo-Banos, M., Arya, V., Aguilar, P. A., ... & Spittal, M. J. (2022). Suicide numbers during the first 9-15 months of the COVID-19 pandemic compared with pre-existing trends: An interrupted time series analysis in 33 countries. *EClinicalMedicine*, 51.

[17] da Cunha Varella, A. P., Griffin, E., & Kabir, Z. (2023). Suicide rates before and during the COVID-19 pandemic: a systematic review and meta-analysis.

[18] Benson, R., Rigby, J., Brunsdon, C., Cully, G., Too, L. S., & Arensman, E. (2022). Quantitative methods to detect suicide and self-harm clusters: a systematic review. *International journal of environmental research and public health*, 19(9), 5313.

2021 Statistics at a Glance

2020	2021
200	196

Rate of self-harm is similar to that recorded in 2020

Presentations
12,661

Persons
9,533

RATES:

196
per 100,000

1 in every 510
had a self-harm act

Men: 20-24 year-olds
1 in every 258

Women: 15-19 year-olds
1 in every 113

PEAK RATES WERE AMONG YOUNG PEOPLE

TIME:

Peak time
11pm

Almost half
of presentations made between 4pm-midnight (44%)

JAN **17%** ↓

DEC **10%** ↓

There were fewer presentations in January and December coinciding with COVID-19 restrictions

METHOD:

2 in every 3
involved **overdose**

61%

3 in every 10
involved **alcohol**

36% **Men**

26% **Women**

3 in every 10
involved **self-cutting**

31%

TREATMENT:

67% received an assessment in the presenting hospital

80% received a follow-up recommendation after discharge

12% left ED before a recommendation was made

1 in 6
persons had a repeat attendance in 2021

15.5%

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Recent publications from the Registry (2021-2022)

The Registry disseminates findings from the data we collect in various ways. One way in which data are disseminated is via peer-reviewed articles that are published in academic journals. Information on a selection of articles published in 2021 and 2022 is provided below.

As a result of challenges to data collection since the COVID-19 pandemic and subsequent delays with the publication of national data via our Annual Report, we looked at other ways to present findings from data collected by the Registry. In December 2020, we published our first data briefing on the monthly number of self-harm presentations to a selection of hospitals during 2020. Hospitals included in data briefings were those that had data available and were nationally-representative given they were spread across the country and located in the centre of large cities, in city suburbs and in large towns. The final data briefing published by the Registry pertains to 2021 data and is included in Appendix E. Data briefings are also available on our website: **www.nsrf.ie/findings/briefings/**

Time of self-harm presentations to hospital emergency departments: a scoping review

Background

The time at which a self-harm presentation occurs has been shown to be a significant factor as to whether a patient receives a psychiatric assessment or not, which may benefit the patient's future care. This scoping review sought to identify studies that report on the peak time of day for self-harm presentations to hospital Emergency Departments (EDs). This could help hospital managers to properly allocate the appropriate services for self-harm patients when they are needed the most.

Methods

A scoping review of the literature from the year 2000 until 30th June 2021 was carried out using the PubMed, Web of Science, Embase and the Cochrane library databases.

Findings

There were 22 studies that were included for data extraction. The findings from 20 of these studies indicate that self-harm presentations tend to occur outside of working hours (09:00–17:00, Monday to Friday). The majority of studies found that the peak time for self-harm presentations was in the hours before and after midnight.

Conclusion

While this scoping review identified a satisfactory number of studies for data extraction, examination of time of day of presentation was a secondary outcome across most studies. Given that the majority of studies focused on adult samples, further research is necessary to investigate peak times for other age cohorts. More research on this topic is also needed in low- and middle-income countries. Consideration should be given to ensure that the necessary resources to treat hospital presenting self-harm are allocated outside of typical working hours.

Source: Evoy DM, Clarke M, Joyce M. Time of self-harm presentations to hospital emergency departments: a scoping review. Soc Psychiatry Psychiatric Epidemiology 2022 Sep;02 (58): 335-54. https://doi.org/10.1007/s00127-022-02353-4

Factors associated with psychiatric admission and subsequent self-harm repetition: a cohort study of high-risk hospital-presenting self-harm

Background

Individuals presenting to hospital with self-harm of high lethality or high suicidal intent are at high risk of subsequent suicide.

Aim

To examine factors associated with psychiatric admission and self-harm repetition following high-risk self-harm (HRSH).

Method

A cohort study of 324 consecutive HRSH patients was conducted across three urban hospitals (December 2014-February 2018). Information on self-harm repetition was extracted from the National Self-harm Registry Ireland. Logistic regression models examined predictors of psychiatric admission and self-harm repetition. Propensity score (PS) methods were used to address confounding.

Findings

Forty percent of the cohort were admitted to a psychiatric inpatient setting. Factors associated with admission were living alone, depression, previous psychiatric admission, suicide note and uncommon self-harm methods. History of emotional, physical or sexual abuse was associated with not being admitted. Twelve-month self-harm repetition occurred in 17.3% of cases. Following inverse probability weighting according to the PS, psychiatric admission following HRSH was not associated with repetition. Predictors of repetition were recent self-harm history, young age (18-24 years) and previous psychiatric admission.

Conclusion

Findings indicate that psychiatric admission following HRSH is not associated with repeated self-harm and reaffirms the consistent finding that history of self-harm and psychiatric treatment are strong predictors of repetition.

Source: Cully G, Corcoran P, Leahy D, Cassidy E, Steeg S, Griffin E, Shiely F, Arensman E. Factors associated with psychiatric admission and subsequent self-harm repetition: a cohort study of high-risk hospital-presenting self-harm. Journal of mental health. 2021 Nov 2;30(6):751-9. https://doi.org/10.1080/09638237.2021.1979488

The impact of guidance on the supply of codeine-containing products on their use in intentional drug overdose

Background

Concerns about the misuse of codeine led to the introduction of guidance restricting the supply of over-the-counter (OTC) codeine-containing products in Ireland in 2010. The aim of this study was to examine the impact of this guidance on the national rate of hospital-presenting self-harm involving codeine-related intentional drug overdose (IDO).

Methods

Presentations involving IDO to Irish general hospitals between 1 January 2007 and 31 December 2013, as recorded by the National Self-Harm Registry Ireland, were analyzed. Event-based rates per 100 000 were calculated using national population data. Poisson regression models were used to assess rate changes between pre- and post-guidance periods and to calculate excess presentations.

Findings

Between January 2007 and December 2013, a total of 57 759 IDOs were recorded, with 4789 (8.3%) involving a codeine-containing product. The rate of codeine-related IDOs was 20% lower in the period following implementation of the guidance (incidence rate ratio: 0.80; 95% CI: 0.75 to 0.85), representing a total of 509 (95% CI: 624, 387) fewer codeine-related IDOs in that period. Reductions were observed across all ages and were more pronounced for females (0.76, 0.71 to 0.82) than males (0.87, 0.79 to 0.97). The rate of IDOs involving other drugs decreased by 3% in the same period (0.97, 0.95 to 0.98).

Conclusion

Our findings indicate that the rate of codeine-related IDOs was significantly lower in the period following the implementation of the guidance. There is a large body of evidence supporting the restriction of potentially harmful medication as an effective strategy in suicide prevention.

Source: Birchall E, Perry IJ, Corcoran P, Daly C, Griffin E. The impact of guidance on the supply of codeine-containing products on their use in intentional drug overdose. European journal of public health. 2021 Aug;31(4):853-8. https://doi.org/10.1016/j.eclinm.2020.100378

IMPACT OF THE REGISTRY AT GLOBAL LEVEL

Technical support for the establishment of self-harm surveillance systems in Guyana, Suriname and Trinidad-Tobago

In 2023, the NSRF supported the development of the second National Suicide Prevention plan for Guyana by implementing a consultation plan, utilising the World Health Organisation (WHO) comprehensive guidance LIVE LIFE, which focuses on strategies that are feasible, practical and based on evidence. In 2023, the NSRF initiated phase three of the Pan American Health Organisation (PAHO)/ WHO office in Washington collaboration: consolidation and upscaling of self-harm surveillance in Guyana. The World Health Organisation Collaborating Centre for Surveillance and Research in Suicide Prevention (WHOCC) team at the NSRF worked with PAHO and Guyana to develop the second National Suicide Prevention plan for Guyana. In addition, the WHOCC team provided further support to Guyana, Suriname and Trinidad-Tobago for the implementation of a self-harm surveillance system in three regions in each of the countries.

Review of National Action Plan for Suicide Prevention in Nepal

At the request of the WHO, the NSRF's WHOCC reviewed the National Action Plan for Suicide Prevention in Nepal in January 2023.

Technical assistance for introducing a surveillance system in Poland

At the request of the Ministry of Health, the Institute of Psychiatry and Neurology (IPIN) in Poland is further developing a surveillance system for monitoring suicide attempts and self-harm based on hospital admission. The system is being piloted in two areas in Poland (two pilot regions of the country will be selected by IPIN (two administrative units – level: powiat)).

Irish National Suicide Prevention Strategy – *Connecting for Life*

At the request of the WHO, the NSRF provided an update of the implementation of the Irish National Suicide Prevention Strategy for the Reduction of Suicide, *Connecting for Life, 2015-2024*, in March 2023, with reference to the relevance of the self-harm surveillance data provided by the National Self-Harm Registry Ireland.

Re-designation of World Health Organisation Collaborating Centre for Surveillance and Research in Suicide Prevention

In December 2023, the NSRF received the re-designation for the WHOCC for a period of four years. One of the key objectives of the WHOCC workplan is to facilitate technical support to an increasing number of countries globally, to implement self-harm surveillance systems based on the model of the National Self-Harm Registry Ireland.

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Methods

Background

The National Self-Harm Registry is operated by the National Suicide Research Foundation. The National Suicide Research Foundation was founded in November 1994 by the late Dr Michael J Kelleher and is governed by a Board of Directors. The National Suicide Research Foundation team is led by Dr Eve Griffin (Chief Executive Officer, formerly Ms Eileen Williamson until October 2023), Dr Paul Corcoran (Head of Research) and Professor Ella Arensman (Chief Scientist). Dr Paul Corcoran is also Head of the National Self-Harm Registry Ireland. Dr Mary Joyce is the Manager of the Registry.

Funding statement

The National Self-Harm Registry Ireland is a national surveillance system which monitors the occurrence of hospital-presenting self-harm. It was established by the National Suicide Research Foundation at the request of the Department of Health and Children and is funded by the Health Service Executive's National Office for Suicide Prevention. This report has been commissioned by the National Office for Suicide Prevention.

Definition and terminology

The Registry uses the following definition of self-harm: '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'. This definition was developed by the World Health Organisation/ Euro Multicentre Study Working Group and was associated with the term 'parasuicide'. Internationally, the term parasuicide has been superseded by the term 'deliberate self-harm' and consequently, the Registry has adopted the term 'self-harm'. The definition includes acts involving varying levels of suicidal intent and various underlying motives such as loss of control, cry for help or self-punishment.

Inclusion criteria

- All methods of intentional self-harm, as listed in the 10th Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) codes of X60-X84, are included i.e., intentional 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 admission to hospital following a self-harm act are included.

Exclusion criteria

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

- Accidental overdoses of medicinal or illegal drugs e.g., an individual who takes additional medication in the case of illness or used drugs for recreational purposes, without any intention to self-harm.
- Alcohol overdoses alone where there was no intention to self-harm.
- Individuals who are dead on arrival at hospital as a result of suicide.

Quality control

The validity of the Registry findings is dependent on the standardised application of the case-definition and inclusion/ exclusion criteria. The data are continuously checked for consistency and accuracy. In addition, the Registry also undertakes a cross-checking process in which pairs of Data Registration Officers independently collect data from two hospitals for the same consecutive series of attendances to the ED. While cross-checking was not conducted on 2021 data because of continued hospital access issues related to the pandemic, in previous years, results of the cross-checking process have indicated that there is a very high level of agreement between Data Registration Officers.

Data recording

Since 2020, the Registry records data via a cloud-based clinical data management platform, Castor Electronic Data Capture (EDC), which meets all European Union standards related to secure data storage of health research data. Data are available in real-time as Data Registration Officers input data to this electronic system. The move to Castor EDC for the electronic processing of Registry data in 2020 was a positive and necessary update for several reasons including its modern design, user friendly interface, secure log-in, real-time access and ease of data upload. Castor EDC includes several features such as data monitoring, query function, comment option, progress bar for each data entry, and audit trails. These features have enhanced the way the Registry manages data and completes quality checks.

Patient identifiers are not recorded in Castor EDC. Instead, name, sex and date of birth are entered into a separate software programme to generate a unique ID code for each patient. The bespoke software programme was designed specifically for the Registry by Millennium Software. The generated ID code is then recorded in the Registry dataset via Castor EDC while patient identifiers are not.

All Data Registration Officers receive regular, ongoing training on the use of Castor EDC and the code generator software.

Data items

A minimal dataset has been developed to determine the extent of self-harm, the circumstances relating to both the act and the individual, and to examine trends by area. While the data items below will enable the data processing system to avoid duplicate recording and to recognise repeat acts of self-harm by the same individual, it is impossible to identify an individual based on the data held in the Registry database.

Initials

Initial letters from an individual self-harm patient's name are recorded in an encrypted form via the code generator software programme for the purposes of avoiding duplication, to ensure that repeat episodes are recognised and to calculate incidence rates based on persons rather than events.

Sex
The sex of the patient is recorded when known.

Date of birth
Date of birth is recorded in an encoded format to further protect the identity of the individual. As well as being used to identify repeat self-harm presentations by the same individual, date of birth is used to calculate age.

Area of residence
Patient addresses are coded to the appropriate electoral division and small area code where applicable.

Date and hour of attendance at hospital
The date of attendance and hour of attendance (in 24-hour format) is recorded.

Mode of arrival
Information is recorded about patients who were brought to hospital by Ambulance or other Emergency Services (e.g., An Garda Siochana). If a patient self-presented or was brought in by someone (e.g., family member), this information is recorded when known.

Method(s) of self-harm
The method(s) of self-harm are recorded according to the ICD-10 codes for intentional injury (X60-X84). The main methods are intentional 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., intentional overdose of medications and self-cutting. In this report, results generally relate to the 'main method' of self-harm. In keeping with standards recommended by the World Health Organisation/ Euro Study on Suicidal Behaviour, the 'main method' is taken as the most lethal method employed. For acts involving self-cutting, the treatment received is recorded when known. Since 2020, further detail is also recorded on certain self-harm methods such as X70 (whether it was hanging, strangulation or suffocation) and X78 (further information on wounds).

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

Medical card status
Whether the individual presenting has a medical card or not is recorded.

Mental health assessment
Whether the individual presenting had an assessment by the psychiatric team in the presenting hospital is recorded.

Recommended next care
Recommended next care following treatment in the hospital ED is recorded.

Current care
In 2020, coinciding with the move to the new data management platform, we added a new variable to gather information on the current care of the patient and whether they are engaged with hospital/ community-based services i.e., Mental Health Service supports, Addiction Services, Homeless Services etc.

Confidentiality and data protection

Confidentiality is strictly maintained. The National Suicide Research Foundation is registered with the Data Protection Agency and complies with the Irish Data Protection Act of 1988, the Irish Data Protection (Amendment) Act of 2003 and the General Data Protection Regulation (GDPR) 2018. All staff members are trained in GDPR and adhere to all GDPR guidelines when collecting and working on data. The names and addresses of patients are not recorded in the Registry database. Only anonymised data are released in aggregate form in reports. Individuals may request to access their information or to have their information withdrawn from the Registry at any time by contacting the Registry team. An enquiry can also be made via an online form on our website: **www.nsrf.ie/how-the-registry-records-and-processes-data/**

Ethical approval

Ethical approval has been granted by the National Research Ethics Committee of the Faculty of Public Health Medicine. The Registry has also received ethical approval from individual hospital and Health Service Executive (HSE) ethics committees. In 2020, the Registry received approval from the Health Research Consent Declaration Committee to continue the operation of the Registry utilising a waiver of consent.

Registry coverage

In 2021, self-harm data were collected from all but two hospitals in the Republic of Ireland (pop: 5,074,700). The hospitals for which data are presented in this report are listed by hospital group in the **table opposite**.

In total, self-harm data were collected for the full calendar year of 2021 for 27 of the 29 EDs that operated in Ireland during this year. This is inclusive of three children's hospitals.

In 2013, a number of hospital EDs were re-designated as Model 2 status hospitals as part of the HSE's *Securing the Future of Smaller Hospitals* framework, with some of these hospitals closing their ED and others operating on reduced hours. The hospitals included in this report which continue to have their ED on reduced hours or provide an Urgent Care Centre as an alternative are: Bantry General Hospital, Ennis Hospital, and St. Michael's Hospital, Dun Laoghaire. These hospitals are referred to as Model 2 hospitals throughout this report. Data from these hospitals continue to be recorded by the Registry for 2021.

Population data

For 2021, the Central Statistics Office population estimates were utilised. These estimates provide age-sex-specific population data for the country and its constituent regional authority areas. Proportional differences between the 2021 regional authority population estimates and the equivalent National Census 2016 figures were calculated and applied to the National Census 2016 population figures for Irish cities, counties and HSE region figures in order to derive population estimates for 2021.

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Calculation of rates

In 2021, as data were unavailable for two hospitals, we estimated the number of presentations and people presenting to this hospital using data from 2019. Data from 2019 were used as this was the most recent year with data contributed from all hospitals nationally. In addition, by utilising 2019 data, potential effects of the pandemic on hospital-presenting self-harm did not have to be considered. The calculated estimates were used to provide a national estimate of self-harm presentations and individuals who presented to hospital with self-harm. All rate calculations presented in this report are based on those national estimates.

Self-harm rates were calculated based on the number of persons who engaged in self-harm. Crude and age-specific rates per 100,000 population were calculated by dividing the number of persons who engaged in self-harm (n) by the relevant population figure (p) and multiplying the result by 100,000, i.e., (n/ p)*100,000.

European age-standardised rates (EASR) 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 ensures 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. EASR 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.

A note on small numbers

Calculated rates that are based on less than 20 events may be an unreliable measure of the underlying rate. In addition, self-harm events may not be independent of one another, although these assumptions are used in the calculation of confidence intervals, in the absence of any clear knowledge of the relationship between these events.

The Registry recorded one case of self-harm for which the patient initials, sex or date of birth was unknown. This case has been excluded from the findings reported here. In addition, a small number of self-harm patients presented to hospital more than once on the same calendar day. This happened for a variety of reasons including being transferred to another hospital, absconding and returning, etc. These patients were considered as receiving one episode of care and were recorded once in the finalised Registry database for 2021.

A note on confidence intervals

Confidence intervals provide us with a margin of error within which underlying rates may be presumed to fall on the basis of observed data. Confidence intervals assume that the event rate (n/p) is small and that the events are independent of one another. A 95% confidence interval for the number of events (n), is $n \pm 2\sqrt{n}$. For example, if 25 self-harm presentations are observed in a specific region in one year, then the 95% confidence interval will be $25 \pm 2\sqrt{25}$ or 15 to 35. Thus, the 95% confidence interval around a rate ranges from $(n - 2\sqrt{n}) / p$ to $(n + 2\sqrt{n}) / p$, where p is the population at risk. If the rate is expressed per 100,000 population, then these quantities must be multiplied by 100,000.

A 95% confidence interval may be calculated to establish whether the two rates differ statistically significantly. The difference between the rates is calculated. The 95% confidence interval for this rate difference (rd) ranges from $rd - 2\sqrt{(n_1 / p_1^2 + n_2 / p_2^2)}$ to $rd + 2\sqrt{(n_1 / p_1^2 + n_2 / p_2^2)}$. If the rates were expressed per 100,000 population, then $2\sqrt{(n_1 / p_1^2 + n_2 / p_2^2)}$ must be multiplied by 100,000 before being added to and subtracted from the rate difference. If zero is outside of the range of the 95% confidence interval, then the difference between the rates is statistically significant.

HOSPITAL GROUP	HOSPITALS IN THE GROUP
Ireland East	Mater Misericordiae University Hospital, Dublin
	Midland Regional Hospital Mullingar
	Our Lady's Hospital, Navan
	St. Luke's General Hospital, Carlow/ Kilkenny
	St. Michael's Hospital, Dun Laoghaire
	Other
	Wexford General Hospital
Dublin Midlands	Midland Regional Hospital Portlaoise
	Midland Regional Hospital Tullamore
	Naas General Hospital
	St. James's Hospital
	Tallaght University Hospital
RCSI	Cavan General Hospital
	Connolly Hospital, Blanchardstown
	Our Lady of Lourdes Hospital, Drogheda
South/ South West	Bantry General Hospital
	Cork University Hospital
	Mercy University Hospital, Cork
	Tipperary University Hospital
	University Hospital Kerry
	University Hospital Waterford
University of Limerick	Ennis Hospital
	University Hospital Limerick
Saolta	Letterkenny University Hospital
	Mayo University Hospital
	Portiuncula University Hospital
	Sligo University Hospital
Children's Health Ireland	Children's Health Ireland at Crumlin
	Children's Health Ireland at Tallaght
	Children's Health Ireland at Temple Street

SECTION I:
Hospital Presentations

Hospital presenting self-harm in the Republic of Ireland

For the period from 1 January to 31 December 2021, the Registry recorded 11,415 self-harm presentations to hospital that were made by 8,595 individuals. These figures do not include presentations to two hospitals as outlined earlier (see Executive Summary). Adjusting for the absence of data from two hospitals, we estimate that there was a total of 12,661 self-harm presentations made by 9,533 individuals. Thus, the number of self-harm presentations and the number of persons involved were similar to that reported in 2020. Table 1 summarises the changes in the number of presentations and persons since the Registry reached near national coverage in 2002.

	PRESENTATIONS		PERSONS	
YEAR	Number	% difference	Number	% difference
2002	10,537	-	8,421	-
2003	11,204	+6%	8,805	+5%
2004	11,092	-1%	8,610	-2%
2005	10,789	-3%	8,594	-<1%
2006	10,688	-1%	8,218	-4%
2007	11,084	+4%	8,598	+5%
2008	11,700	+6%	9,218	+7%
2009	11,966	+2%	9,493	+3%
2010	12,337	+3%	9,887	+4%
2011	12,216	-1%	9,834	-<1%
2012	12,010	-2%	9,483	-4%
2013	11,061	-8%	8,772	-8%
2014	11,126	+<1%	8,708	-<1%
2015	11,189	+1%	8,791	+1%
2016	11,445	+2%	8,876	+1%
2017	11,620	+2%	9,114	+3%
2018	12,588	+8%	9,785	+7%
2019	12,465	-1%	9,705	-1%
2020	12,553	+1%	9,550	-2%
2021	12,661	+1%	9,533	-<1%

Table 1: Number of self-harm presentations and persons who presented to hospital in the Republic of Ireland in 2002-2021 (2002-2005 and 2020 figures extrapolated to adjust for hospitals not contributing data).

The age-standardised rate of individuals presenting to hospital in the Republic of Ireland following self-harm in 2021 was 196 per 100,000 (95% Confidence Interval (CI): 192 to 200). This was a slight decrease (-2%) on the rate of 200 per 100,000 (95% CI: 196 to 204) from 2020. The incidence of self-harm in Ireland is examined in more detail in Section II of this report.

Of the recorded presentations in 2021, 41% were made by men and 59% were made by women. Self-harm presentations were higher among the younger age groups. More than half of all presentations (54%) were by people under 30 years of age and 87% of presentations were by people aged less than 50 years. The number of self-harm presentations to hospitals in Ireland by age and sex are provided in Appendix A, Tables A1-A8.

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In most age groups, the number of self-harm presentations by women exceeded the number by men. This was most pronounced in the 10-19 years age group where there were more than three times as many female presentations (2,333 vs 697). The number of self-harm presentations by men was marginally higher than the number by women in the 35-44 years age group only (996 vs 910).

There were 1,108 presentations from non-household residents, accounting for 9.7% of all presentations. The number of self-harm presentations made by residents of homeless hostels and people of no fixed abode was 759, representing 6.6% of all presentations. This is comparable to the 7.5% reported in 2020. Adolescents in Residential Care Units accounted for 86 (0.8%) presentations. A minority (61; 0.6%) of presentations were made by hospital inpatients. Presentations from other non-household residents include those in prisons, halting sites, nursing homes and direct provision centres among others (n = 202).

Self-harm by HSE hospital group

Based on figures acquired from the HSE Business Information Unit, self-harm accounted for 0.95% of total attendances to Emergency Departments of hospitals included in this report. The percentage of attendances accounted for by self-harm varied by HSE hospital group from 0.50% in Children's Health Ireland and 0.68% in the Saolta to 1.22% in the Dublin Midlands and 1.27% in the University Limerick Hospital Groups.

In terms of the overall number of self-harm presentations (n = 11,415; 100%), the proportion accounted for by hospital group ranged from 5% by Children's Health Ireland and 8% by Saolta, to 10% by University Limerick, 11% by RCSI, 20% by the South/ South West, 21% by the Dublin Midlands and 26% by the Ireland East Hospital Groups.

In 2021, the proportion of male to female self-harm presentations was 41% to 59% nationally. When examined at hospital group level, the proportion of male to female self-harm presentations varied across the groups, though presentations by women outnumbered those by men in each (Figure 1).

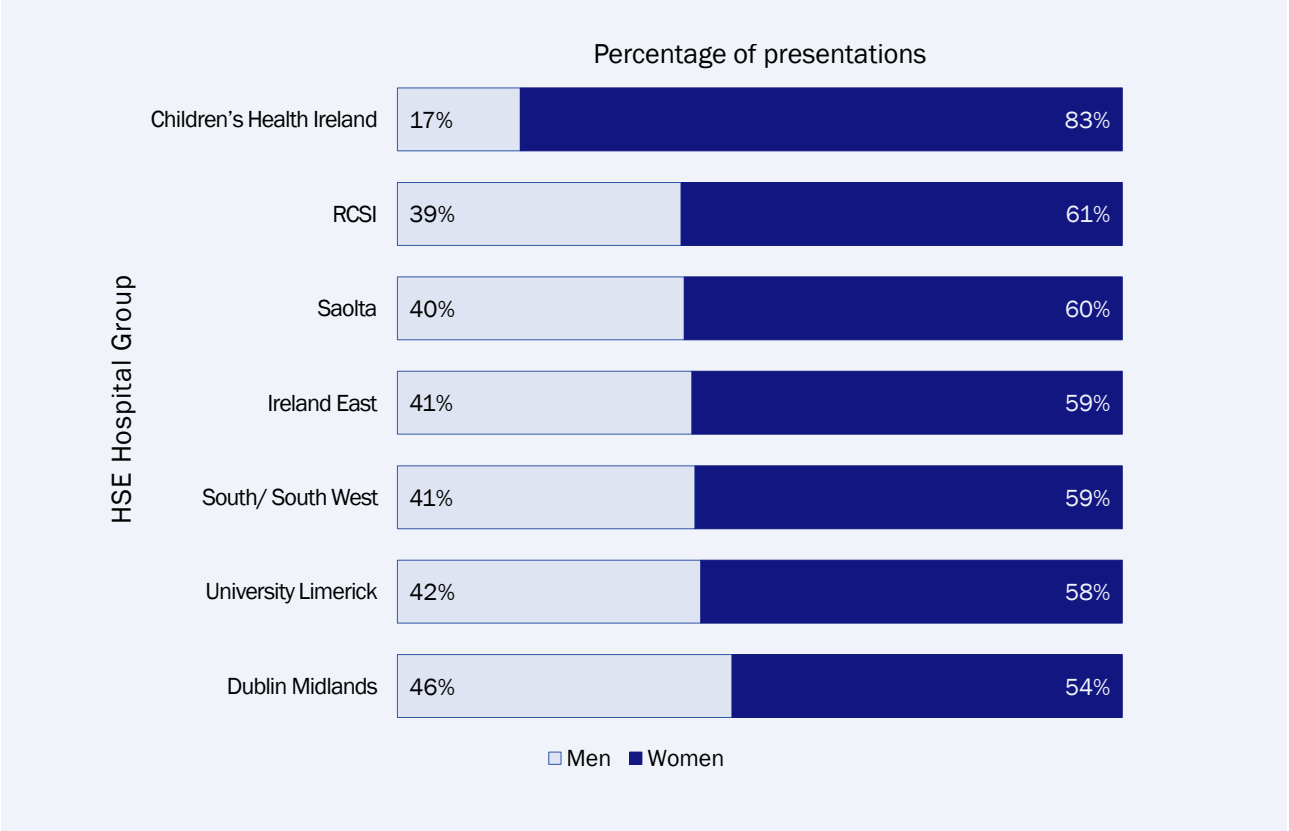

Figure 1: Proportion of male and female self-harm presentations by HSE hospital group, 2021.

*Note. The RCSI and Saolta Hospital Groups are each missing data from one hospital.

Annual change in self-harm presentations to individual hospitals

While the national number of self-harm presentations to hospital in 2021 was similar to that recorded in 2020, there were some relatively large changes in the number of presentations at the level of individual hospitals. Overall, 17 hospitals saw an increase in self-harm presentations between 2020 and 2021 (Figure 2a) while a further 11 hospitals saw a decrease during the same time-period (Figure 2b).

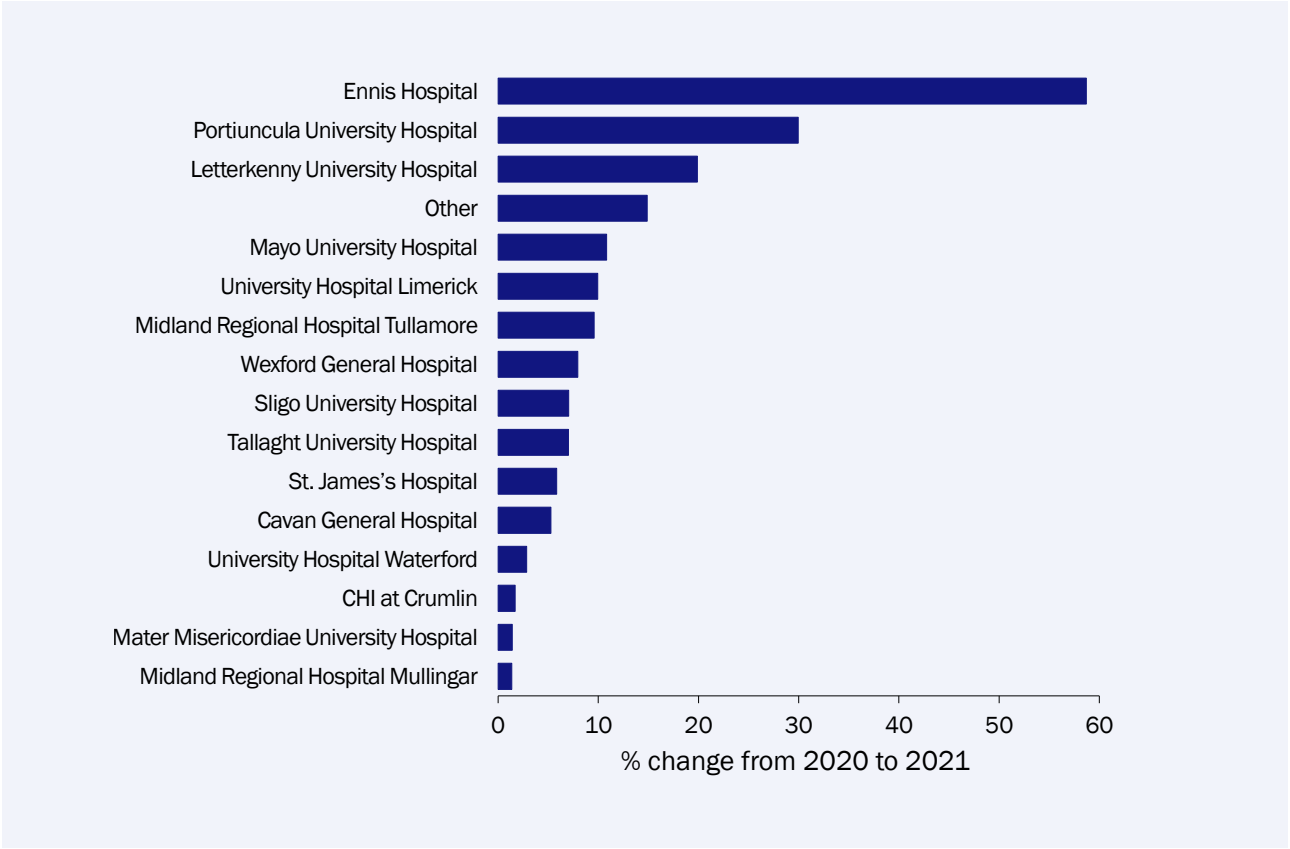

Figure 2a: Hospitals with a higher number of self-harm presentations in 2021 than in 2020.

Note: This figure excludes Children's Health Ireland at Tallaght for which an increase of 100% was observed between 2020 and 2021.

In some instances, ED closures during the COVID-19 pandemic were responsible for the observed changes. For example, there was variation in presentations to the Children's Health Ireland hospitals during 2020 and 2021 resulting from the temporary relocation of acute paediatric services including ED at Tallaght to the children's hospitals at Crumlin and Temple Street.

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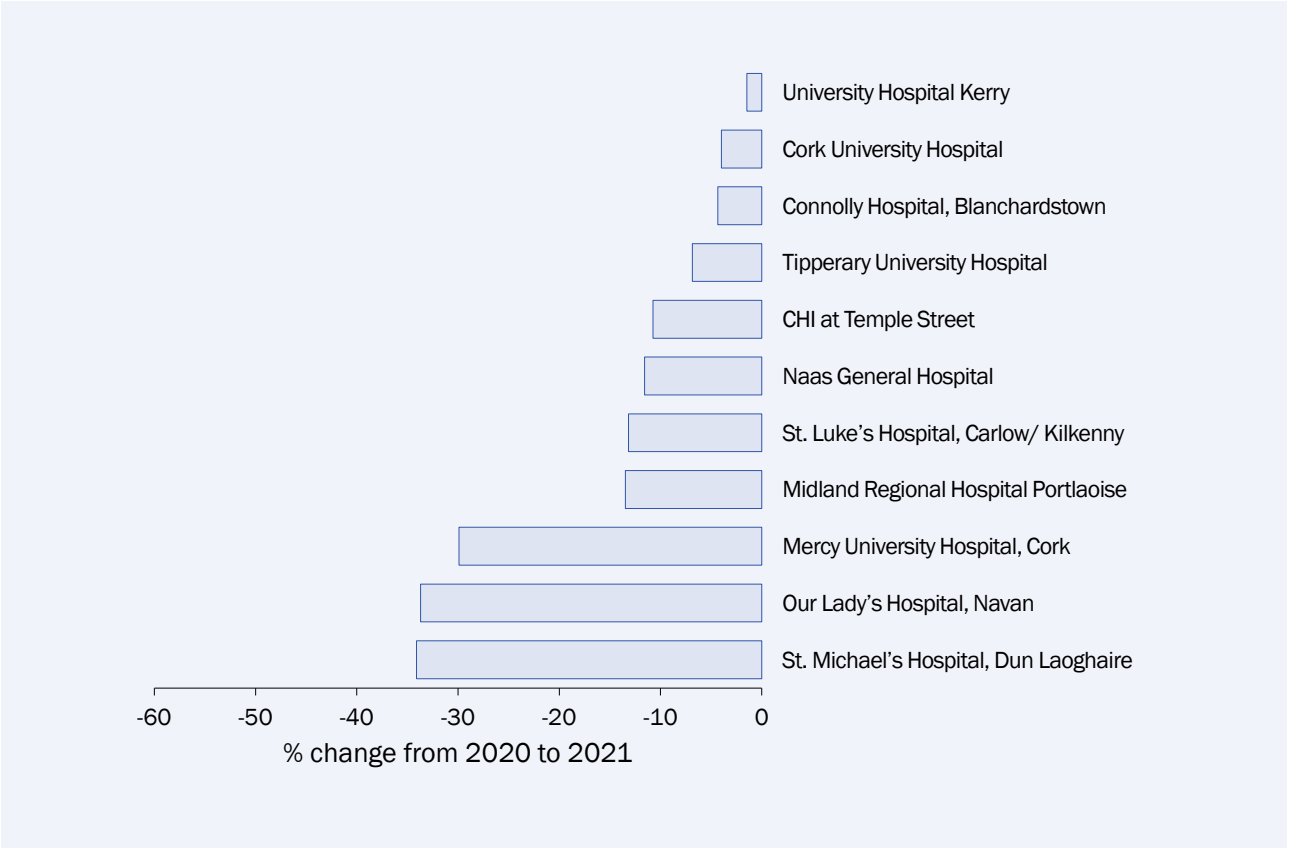

Figure 2b: Hospitals with a lower number of self-harm presentations in 2021 than in 2020.

Presentations by time of occurrence

Variation by Month

The number of self-harm presentations to hospitals in 2021 is presented by month for men and women in Table 2.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Men	314	372	429	408	355	424	403	420	392	373	372	377	4,639
Women	487	526	614	638	575	573	543	531	604	583	602	500	6,776
Total	801	898	1,043	1,046	930	997	946	951	996	956	974	877	11,415

Table 2: Number of self-harm presentations in 2021 by month for men and women.

The monthly average number of self-harm presentations to hospitals in 2021 was 951. Figure 3 illustrates the percentage difference between observed and expected number of presentations while accounting for the number of days in each calendar month.

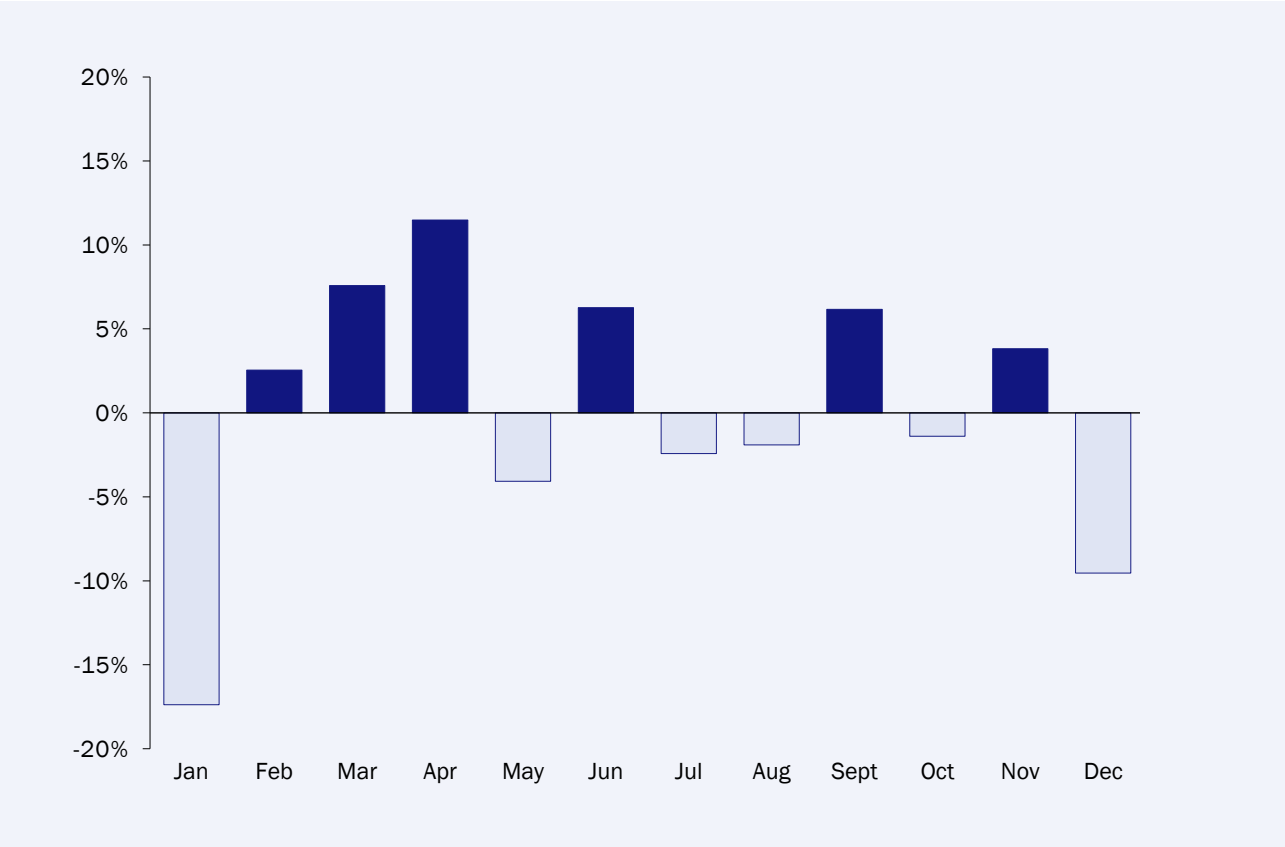

Figure 3: Percentage difference between observed and expected number of self-harm presentations by month in 2021.

The number of presentations was considerably less than the monthly average in January coinciding with COVID-19 restrictions (-17%). However, the number of self-harm presentations subsequently increased across the months of Level 5 restrictions which applied in January-April 2021. Specifically, there were more self-harm presentations than might be expected in March and April (8% and 11%, respectively). The number of presentations was less than the monthly average in May during a time of easing of restrictions. Of note also is the 10% difference between observed and expected presentations in the month of December, once again during a period of restrictions.

Variation by Day

The number and percentage of self-harm presentations to hospitals in 2021 is presented by weekday for men and women in Table 3. On average, each day would be expected to account for 14.3% of presentations.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Men	685	664	600	686	673	638	693	4,639
	(14.8%)	(14.3%)	(12.9%)	(14.8%)	(14.5%)	(13.8%)	(14.9%)	(100%)
Women	1,075	935	993	967	887	880	1,039	6,776
	(15.9%)	(13.8%)	(14.7%)	(14.3%)	(13.1%)	(13%)	(15.3%)	(100%)
Total	1,760	1,599	1,593	1,653	1,560	1,518	1,732	11,415
	(15.4%)	(14.0%)	(14.0%)	(14.5%)	(13.7%)	(13.3%)	(15.2%)	(100%)

Table 3: Self-harm presentations in 2021 by weekday for men and women.

The number of self-harm presentations was highest on Mondays, Thursdays, and Sundays. These days accounted for 45% of all presentations. The variation in weekday presentations by men and women is visually presented in Figure 4. The number of presentations by day of the week was consistently higher for women.

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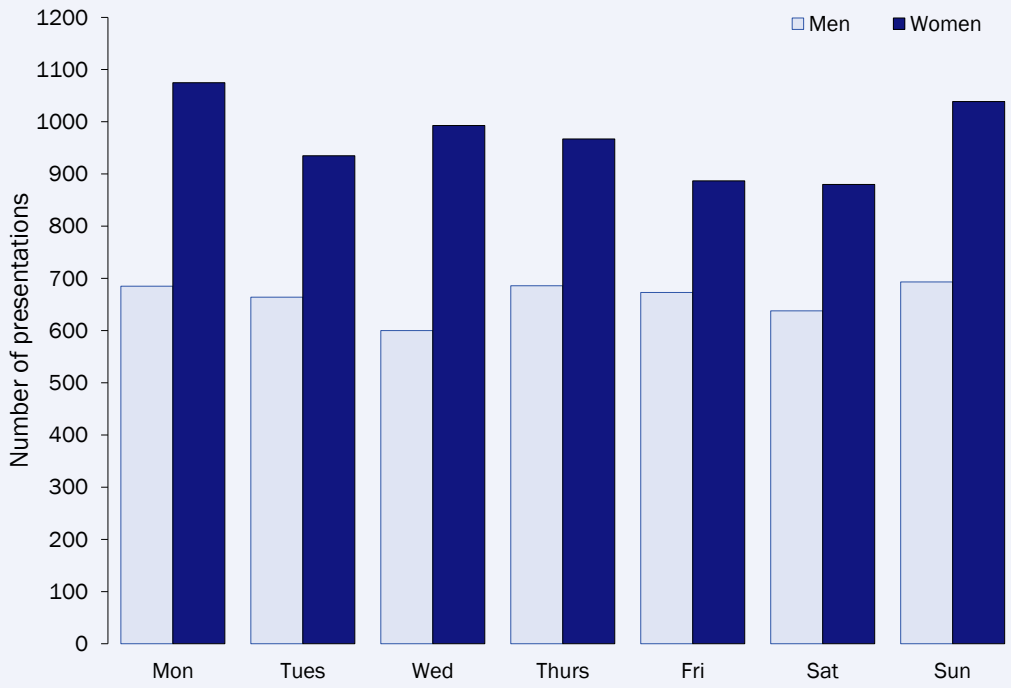

Figure 4: Number of self-harm presentations in 2021 by weekday for men and women.

During 2021, there was an average of 31 self-harm presentations to hospital each day. There were 17 days in 2021 on which 45 or more self-harm presentations were made including April 12th (n=50) which was the first day of easing of Level 5 restrictions in 2021. The highest daily number of self-harm presentations in 2021 was on November 1st (n=56). There were 7 days in 2021 on which fewer than 20 self-harm presentations were made, four of which were in January (7th, 8th, 10th and 22nd) coinciding with COVID-19 restrictions.

Variation by Hour

The number of self-harm presentations to hospitals in 2021 is presented by time of attendance for men and women in Figure 5.

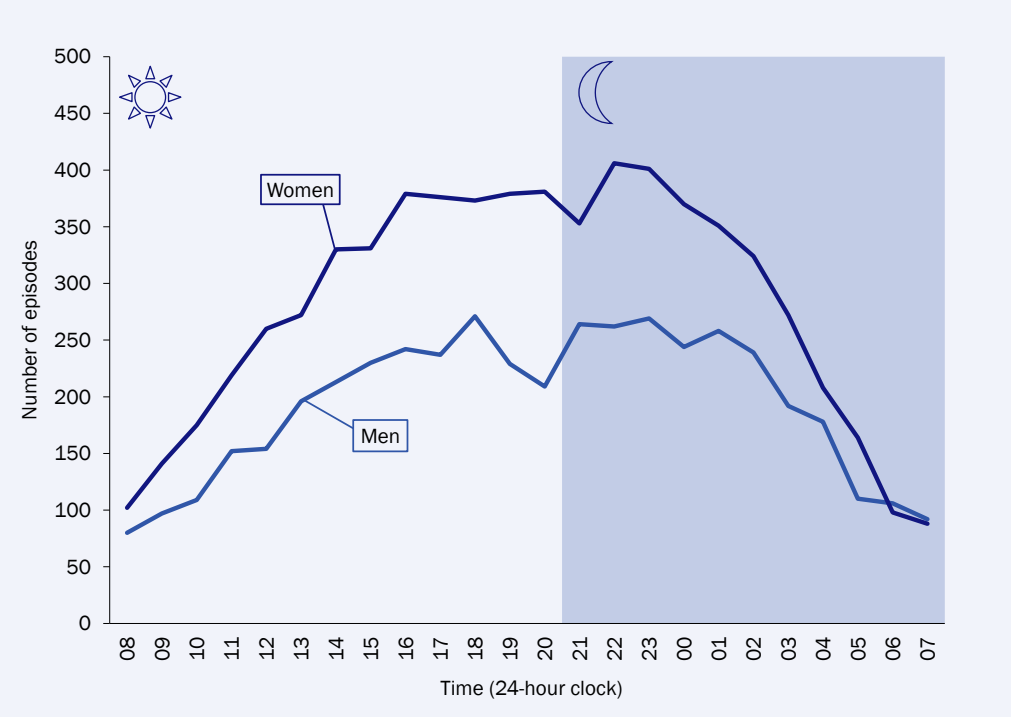

Figure 5: Number of self-harm presentations in 2021 by time of attendance for men and women.

As in previous years, there was a striking pattern in the number of self-harm presentations seen over the course of the day. The numbers for both men and women gradually increased over the course of the day. The peak time for men was 6 p.m. while it was 10 p.m. for women. Almost half of the total number of presentations (44%) were made during the eight-hour period 4 p.m. – midnight. This contrasts with the quietest eight-hour period of the day, 4 a.m. – midday, which accounted for just over 18% of all presentations.

In 2021, more than half (54%) of all presentations involved a transfer to hospital by ambulance and a further 4% were brought to hospital by other emergency services such as An Garda Siochana. For 22% of presentations, individuals were brought to hospital (or accompanied) by someone (i.e., a family member/ friend) while for 18% of presentations, individuals self-presented to ED. The proportion of cases brought to the ED by ambulance or other emergency services varied over the course of the day from 44% of presentations between midday and 4 p.m. to 73% of presentations between 4 a.m. and 8 a.m.

Method of self-harm

The methods of self-harm[1] involved in presentations to hospital in 2021 are presented in Table 4.

	Intentional Drug Overdose	Alcohol	Self-poisoning	Attempted Hanging	Attempted Drowning	Self-cutting	Other
Men (n=4,639)	2,547	1,658	120	604	231	1,468	424
	(54.9%)	(35.7%)	(2.6%)	(13.0%)	(5.0%)	(31.6%)	(9.1%)
Women (n=6,776)	4,409	1,770	136	362	178	2,099	402
	(65.1%)	(26.1%)	(2.0%)	(5.3%)	(2.6%)	(31.0%)	(5.9%)
All	6,956	3,428	256	966	409	3,567	826
	(60.9%)	(30.0%)	(2.2%)	(8.5%)	(3.6%)	(31.2%)	(7.2%)

Table 4: Methods of self-harm involved in presentations to hospital in 2021 by sex.

Approximately 61% of all self-harm presentations to hospitals in 2021 involved an intentional drug overdose (IDO). IDO was more commonly used as a method of self-harm by women than men, involved in 65% of female and 55% of male presentations. Alcohol was involved in 30% of presentations. Alcohol was more likely to be involved in male compared to female presentations (36% vs 26% respectively).

Self-cutting was the only other common method of self-harm, involved in 31% of all presentations. The proportion of presentations involving self-cutting were similar for men and women (32% and 31%, respectively). In 86% of all cases involving self-cutting, the treatment received was recorded. The majority of presentations (64%) did not require any treatment. In 15% of presentations, the patient received steristrips or steribonds, 1% had the wound glued, 17% required sutures, and 2% were referred for plastic surgery. Men who engaged in self-cutting required more intensive treatment than women. Respectively, 20% of male presentations resulted in the receipt of sutures and 3% resulted in referral for plastic surgery compared to 15% and 1% of female presentations.

Attempted hanging was involved in 8.5% of self-harm presentations (13% for men and 5% for women). The same percentage of attempted hanging presentations were reported in 2020, where it was noted that the number of self-harm presentations involving attempted hanging had increased more than twofold between 2007 and 2020 (444 to 1,011). Attempted drowning was involved in 3.6% of presentations (n = 409) and although rare as a method of self-harm, self-poisoning was involved in 2.2% of presentations.

The greater involvement of IDO as a method of self-harm for women is illustrated in Figure 6. IDO also accounted for a higher proportion of self-harm presentations in the older age groups (45-54 years and 55 years+), especially for women, whereas self-cutting was less common amongst these age groups. Self-cutting was most common among young people, involved in 37% of presentations by boys and 35% of presentations by girls aged under 15 years.

[1]Some presentations involved multiple methods of self-harm so the sum of the percentages per row exceeds 100%.

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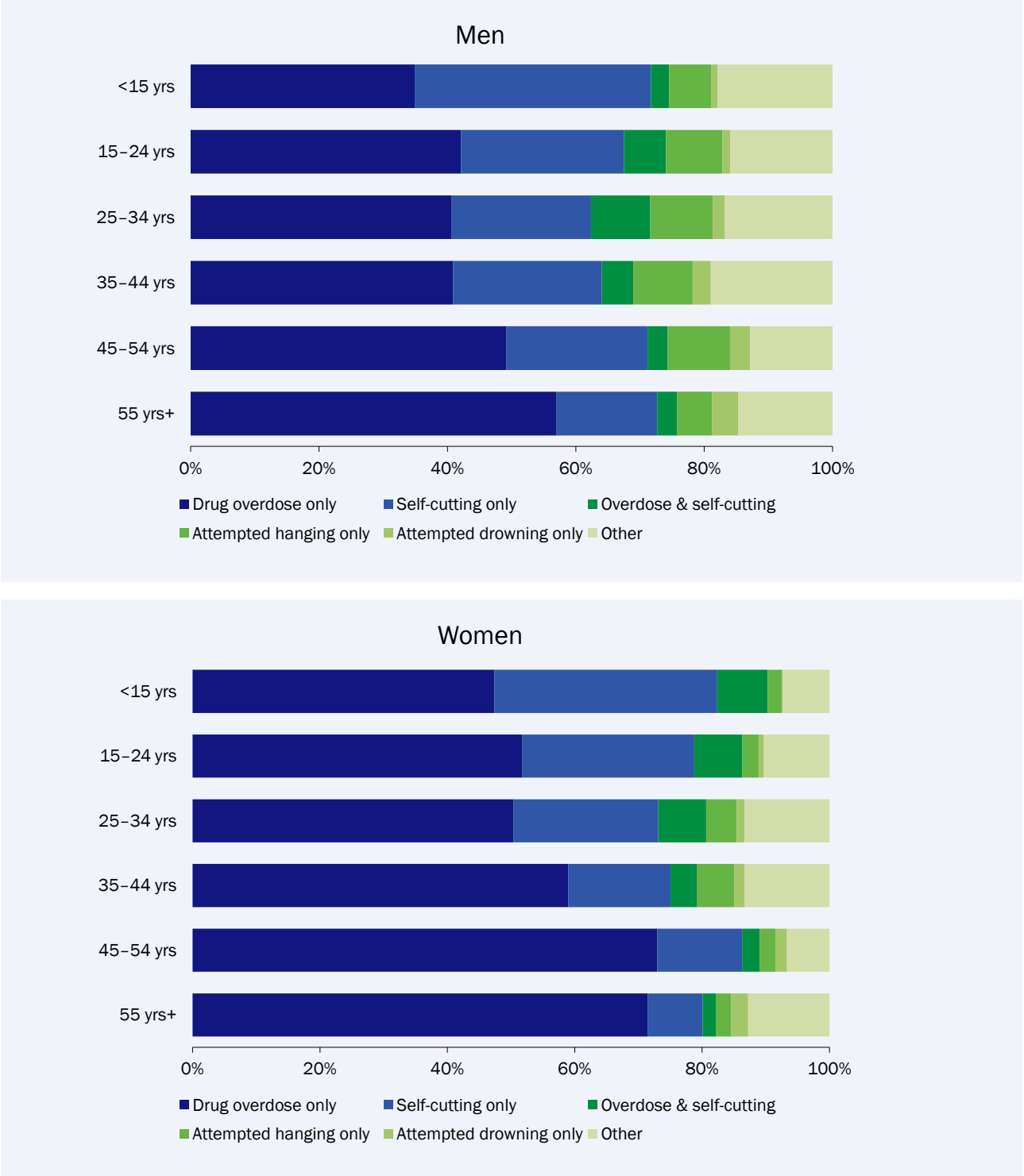

Figure 6: Method of self-harm used by men and women across age groups in 2021.

Drugs used in intentional drug overdose

The total number of tablets taken was known for 67% of all presentations involving intentional drug overdose (IDO). On average, 27 tablets were taken in IDO presentations. More than three-quarters of drug overdose acts (76%) involved less than 35 tablets, approximately half involved 20 tablets or less and one quarter involved 11 tablets or less. On average, the number of tablets taken in overdose acts was higher among men than women (mean: 31 vs. 26). Figure 7 illustrates the number of tablets taken in IDO presentations by sex. Over half of female IDO presentations (54%) and 45% of male presentations involved 10-29 tablets.

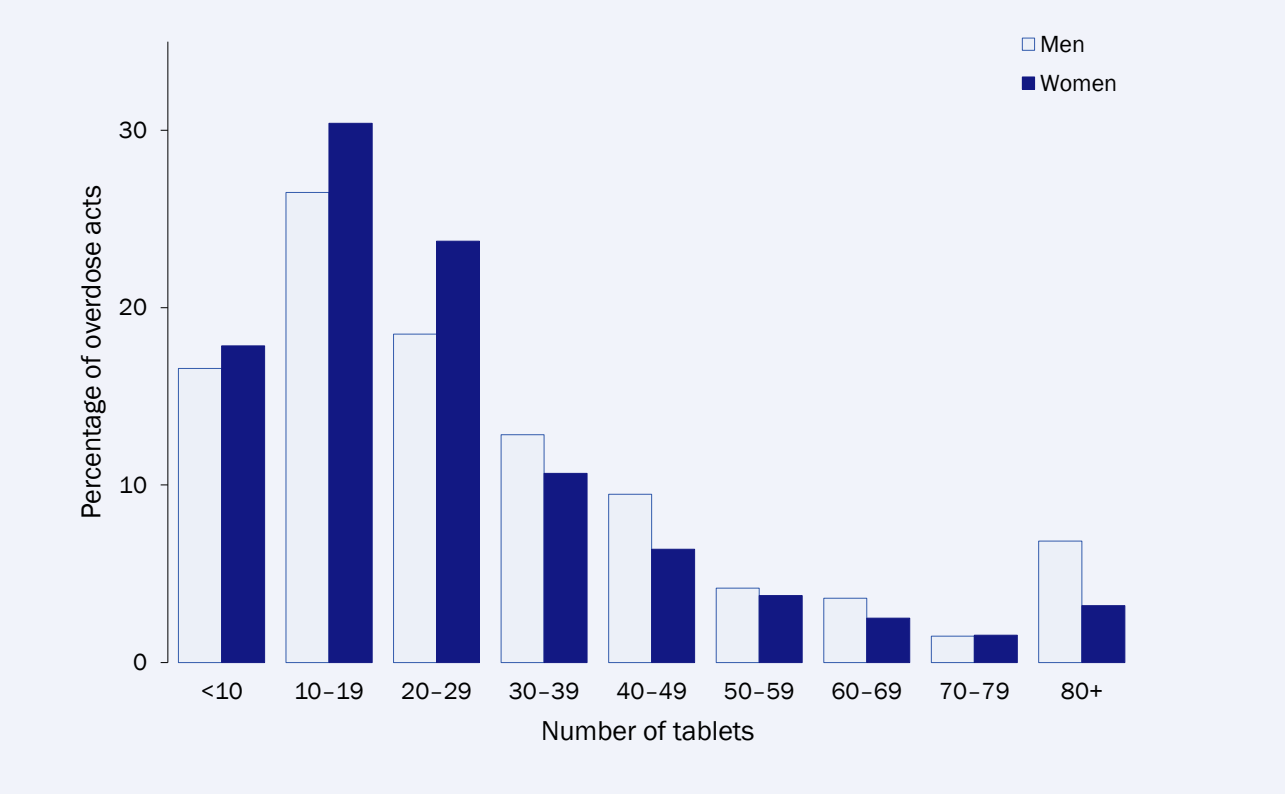

Figure 7: Number of tablets taken by men and women in intentional drug overdoses in 2021.

Figure 8 illustrates the frequency with which the most common drug types were used by men and women in IDO.

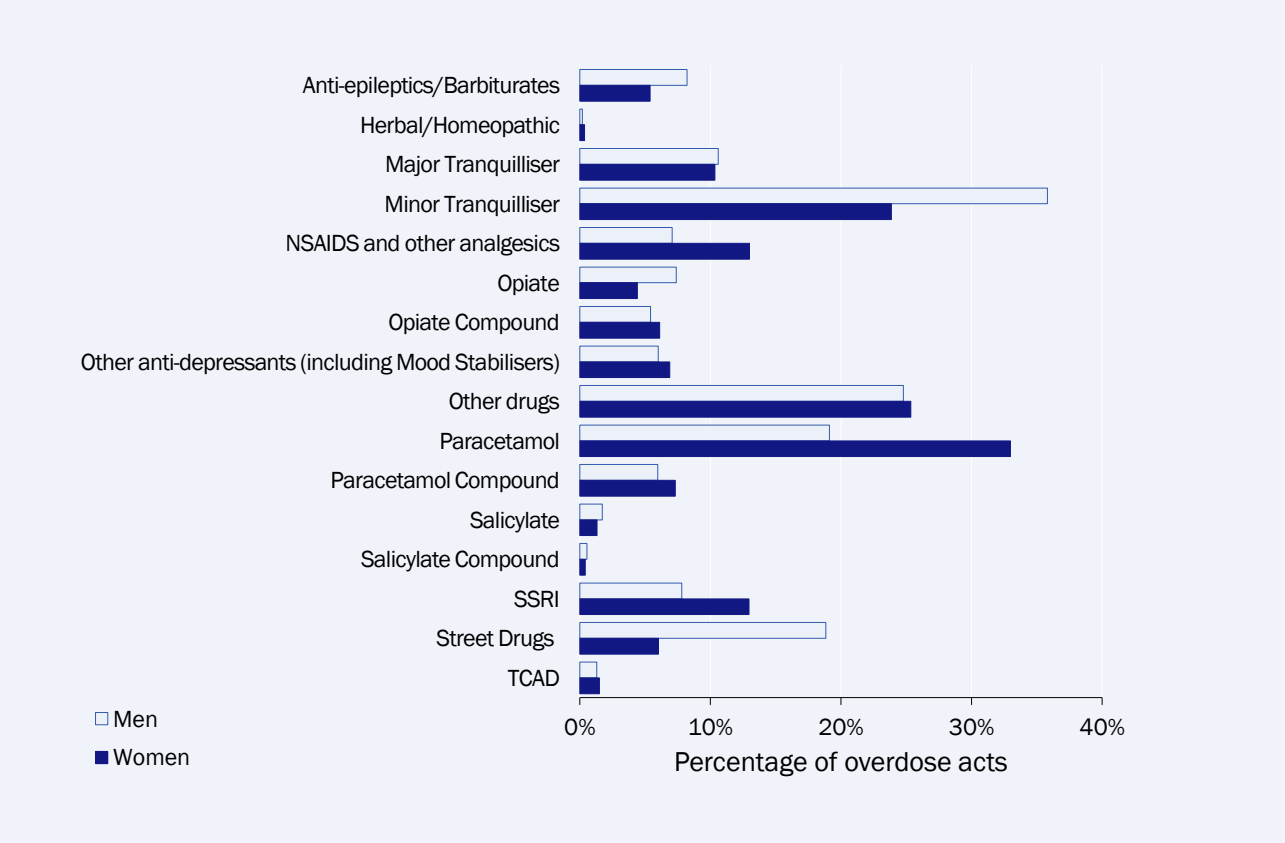

Figure 8: Types of drugs used by men and women in IDO presentations in 2021.
Note: Some drugs (e.g., compounds containing paracetamol and an opiate) are counted in two categories.

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More than a quarter of all IDO presentations (28%) involved a minor tranquilliser which were used more often by men than women (36% vs. 24%, respectively). A major tranquilliser was involved in 10% of overdoses. In total, 50% of female overdoses and 35% of male overdoses involved an analgesic drug. Paracetamol-containing drugs were involved in 33% of drug overdoses and significantly more so by women (39%) than by men (24%). Almost one fifth (18%) of overdose acts involved an anti-depressant/ mood stabiliser. The group of anti-depressant drugs known as Selective Serotonin Reuptake Inhibitors (SSRIs) were present in 11% of overdose cases. Illegal or street drugs were involved in 19% of male and 6% of female overdose acts. 'Other classified drugs' were taken in one quarter of all overdoses.

The proportion of hospital self-harm presentations involving IDO in 2021 was similar to that recorded in 2020 (62%). However, there was some fluctuation in the proportion of presentations involving each of the drug types described here. Most notably, there was a reduction in self-harm presentations involving street/ illegal drugs in 2021, specifically for men. While the female rate remains similar to that reported in 2020, the male rate reduced by almost a third between 2020 and 2021. Between 2007 and 2021, the rate per 100,000 of IDO involving illegal drugs increased by 31% for men while the female rate has almost doubled.

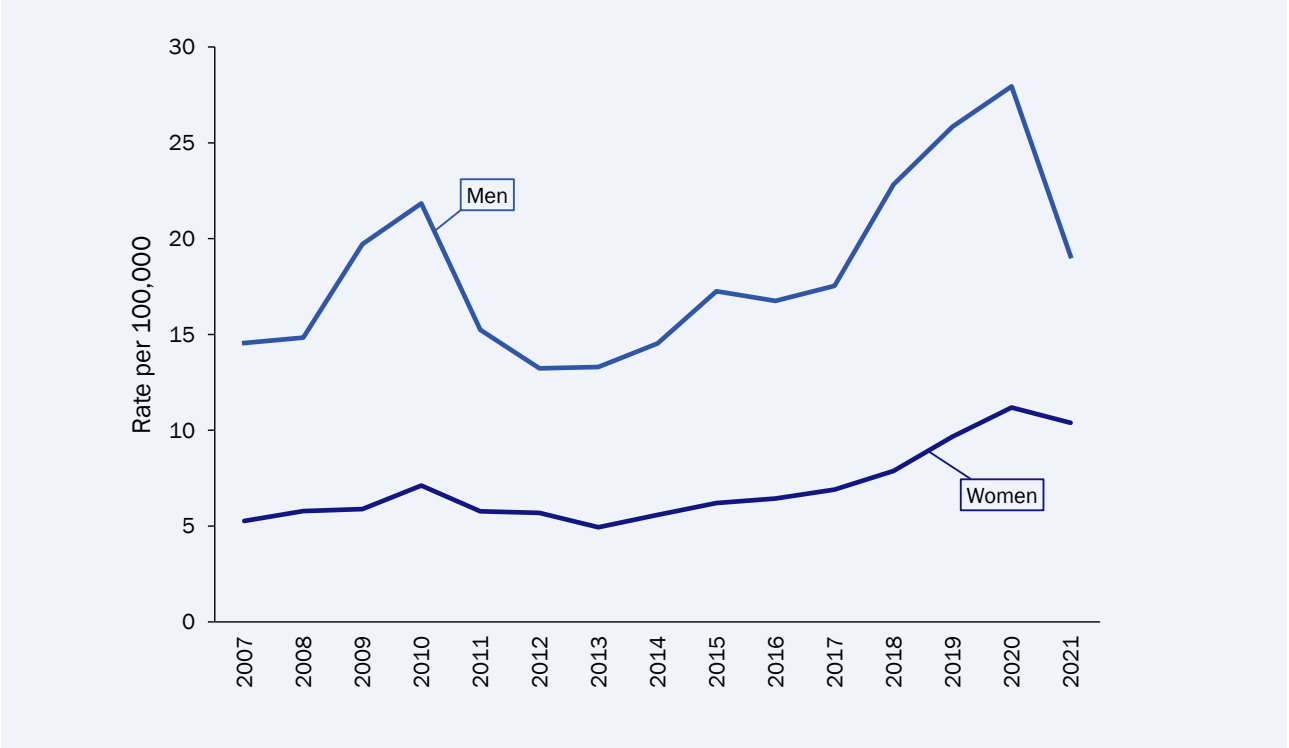

Figure 9: Trends in the male and female rate of intentional drug overdose involving illegal drugs, 2007-2021.

Cocaine and cannabis were the most common illegal drugs recorded by the Registry in 2021, present in 7% and 3% of overdose acts, respectively. Cocaine was more commonly used among men than women and was involved in 20% of overdose acts by 25-34 year-old men. Cannabis was most common among men aged 15-24 years – present in 7% of overdose acts.

Recommended next care

In 2021, most commonly, in 49% of presentations, patients were discharged following treatment in the ED. An inpatient admission was the next care recommended for 33% of presentations after treatment in the ED. Inpatient admissions are classified as admissions to the Intensive Care Unit (ICU), both general and psychiatric admissions, and whether the patient refused admission or not. Of all self-harm presentations, 25% resulted in an admission to a general ward in the treating hospital, 6% were admitted for psychiatric inpatient treatment while 2% were admitted to the ICU. It may not always be recorded in the ED that a patient has been directly admitted to psychiatric inpatient care. In addition, some of the patients admitted to a general hospital ward will subsequently be admitted as psychiatric inpatients. Therefore, direct psychiatric admission figures provided here may be underestimated. For 6% of presentations, the patient was transferred to another hospital or psychiatric unit/ hospital. For 12% of presentations, the patient left the ED before a next care recommendation could be made and for 1% of presentations, the patient refused to be admitted for general or psychiatric care.

Next care recommendations in 2021 were similar for men and women. However, men more frequently left the ED before a recommendation was made in comparison to women (15% vs 9%). Conversely, women were more frequently admitted to a general ward of the treating hospital than men (29% vs 20%).

The recommendations for next care also varied according to the method of self-harm (Table 5).

	Intentional drug overdose (n=6,956)	Alcohol (n=3,450)	Self-poisoning (n=256)	Attempted hanging (n=966)	Attempted drowning (n=409)	Self-cutting (n=3,567)	Other (n=876)	All (n=11,415)
General admission	33.7%	20.8%	34.0%	10.7%	9.0%	14.1%	11.8%	25.3%
Psychiatric admission	4.0%	3.8%	3.5%	14.3%	15.2%	4.5%	11.6%	5.6%
Admission ICU	2.0%	1.4%	2.3%	3.0%	0%	0.4%	0.5%	1.6%
Patient would not allow admission	1.0%	1.7%	1.6%	1.2%	1.5%	0.7%	0.5%	0.9%
Transferred to another hospital/ psychiatric unit/ psychiatric hospital	4.9%	5.0%	9.8%	12.1%	7.1%	5.5%	8.6%	5.7%
Left before recommendation	11.0%	16.5%	10.5%	9.1%	12.0%	14.2%	10.2%	11.6%
Discharged from Emergency Department	42.9%	50.2%	38.3%	49.4%	54.3%	60.0%	56.2%	48.7%

Table 5: Recommended next care by methods of self-harm in 2021.

Approximately 34% of presentations involving intentional drug overdose and self-poisoning were admitted for general inpatient care. For other methods of self-harm, general inpatient care was recommended for 9% - 21% of presentations. Given that 14% of presentations involving self-cutting resulted in a general inpatient admission, this may be an indication of the superficial nature of the injuries sustained in some cases. Of the presentations where the patient used self-cutting, 60% were discharged after receiving treatment in the ED.

Highly lethal methods of self-harm including attempted hanging and attempted drowning were associated with a higher proportion of patients being admitted for psychiatric inpatient care directly from the ED (14% and 15% respectively). Admission to ICU was also highest for presentations involving attempted hanging (3%).

Recommendations for next care also varied significantly by HSE Hospital Group (Table 6). The proportion of self-harm patients who left before a recommendation was made varied from 0.2% in the Children's Health Ireland to 15% in the RCSI and Dublin Midlands Hospital Groups. Across the hospital groups, inpatient care (irrespective of type and whether the patient refused) was recommended for 17% of presentations in the University Limerick, 32% in the Ireland East and South/ South West, 33% in the Dublin Midlands, 36% in the RCSI, 43% in the Saolta, and 62% in the Children's Health Ireland Hospital Groups.

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As a corollary to this, the proportion of cases discharged following emergency treatment ranged from a low of 37% in the Children's Health Ireland and 39% in the RCSI Hospital Groups to a high of 65% in the University Limerick Hospital Group. The balance of general and psychiatric admissions directly after treatment in the ED differed significantly by hospital group. Direct general admissions were more common that direct psychiatric admissions across all hospital groups.

	Ireland East	Dublin Midlands	RCSI	South/ South West	University Limerick	Saolta	Children's Health Ireland	Republic of Ireland
	(n=2,911)	(n=2,361)	(n=1,308)	(n=2,242)	(n=1,113)	(n=955)	(n=525)	(n=11,415)
General admission	25.4%	26.6%	28.5%	22.3%	7.6%	25.0%	60.8%	25.3%
Psychiatric admission	3.2%	5.0%	5.4%	8.3%	5.4%	12.1%	0%	5.6%
Admission ICU	2.5%	0.5%	1.7%	0.7%	1.8%	4.0%	0.6%	1.6%
Patient would not allow admission	0.8%	0.6%	0.6%	0.7%	1.9%	2.1%	0.6%	0.9%
Transferred to another hospital/ psychiatric unit/ psychiatric hospital	8.2%	5.0%	10.0%	2.7%	5.8%	3.9%	0.4%	5.7%
Left before recommendation	12.7%	14.7%	14.7%	9.8%	12.1%	6.1%	0.2%	11.6%
Discharged from emergency department	46.3%	47.2%	38.7%	55.4%	65.2%	45.1%	37.0%	48.7%

Table 6: Recommended next care in 2021 by HSE Hospital Group.

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. As a result, the figures for direct psychiatric admission detailed in this table may be underestimates.

Note: RCSI and Saolta Hospital Groups are each missing data from one hospital.

The recommended next care after a self-harm presentation is provided by hospital in Appendix B, Tables B1-B7. Within each hospital group, there were significant differences between the hospitals in their next care recommendations.

In 2021, 12% of patients left the ED before a recommendation could be made. The funnel plot in Figure 10 illustrates the percentage of presentations per hospital for which the patient left before a recommendation could be made. For approximately half of all hospitals (n=11), the proportion was similar to the national rate. However, there were 13 hospitals falling outside of the dashed lines which indicates that their rate is different to the national rate.

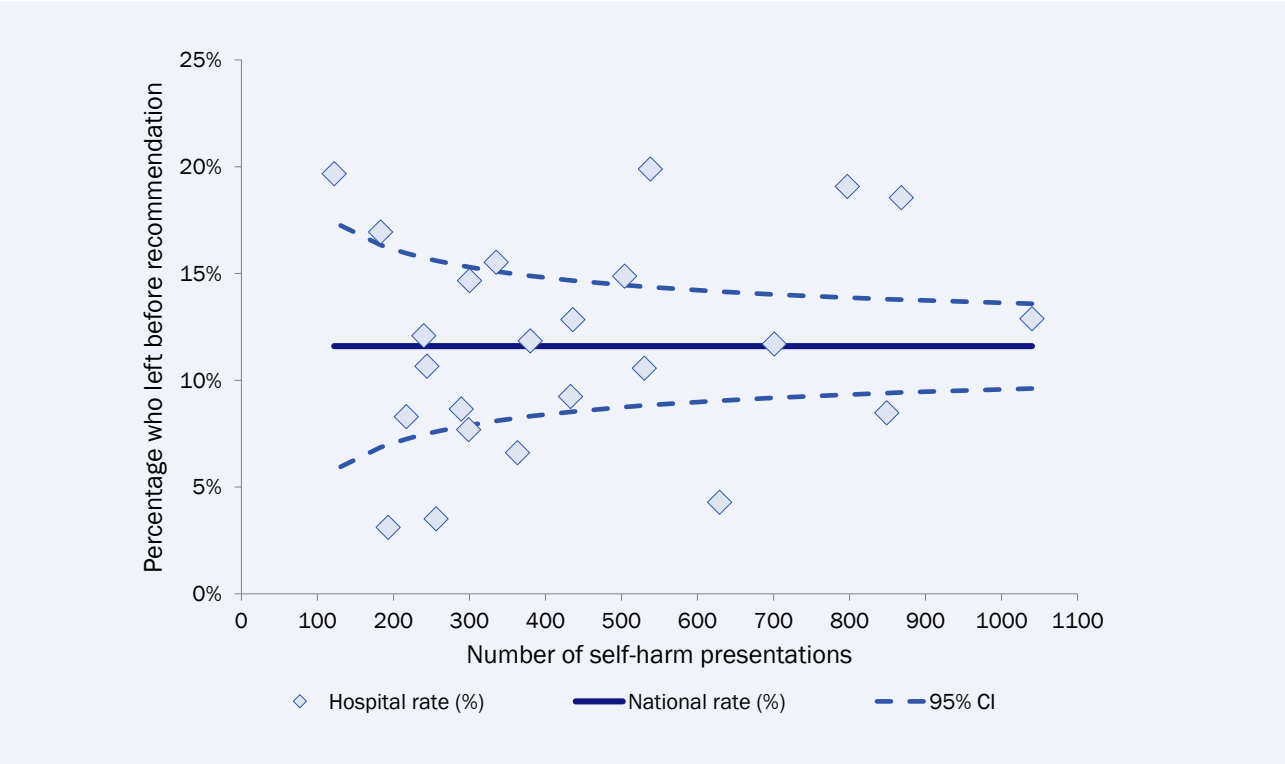

Figure 10: Funnel plot of the percentage of presentations in which the patient left before recommendation, by hospital, 2021.

Note: Due to small numbers, data for Children's Health Ireland and Level 2 hospitals have been excluded.

Current Care

Data were collected about the current care of individuals who presented to hospital with self-harm in 2021. For 12% of presentations (n = 1,358), it was noted that the patient was currently attending Mental Health Services. For a further 6% of presentations (n = 650), it was noted in the file that the patient was known to Mental Health Services, and for a further 3% (n = 295), it was noted that the patient had previously been referred and was awaiting an appointment with Mental Health Services. For 3% of presentations (n = 316), individuals were attending Addiction Services while 2% of presentations were engaged with Homeless Services (n = 188). For a large number of cases however (41%; n = 4,693), information on current care was not documented.

Women were more likely than men to be engaged with Mental Health Services (69% vs 31%). Conversely, men were more likely than women to be attending Addiction Services (64% vs 36%) and Homeless Services (67% vs 33%).

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Self-harm cases discharged from Emergency Department

For presentations that resulted in the patient being discharged from the ED following treatment (n = 5,563), information on the type of follow-up care or referral offered is presented in Figure 11.

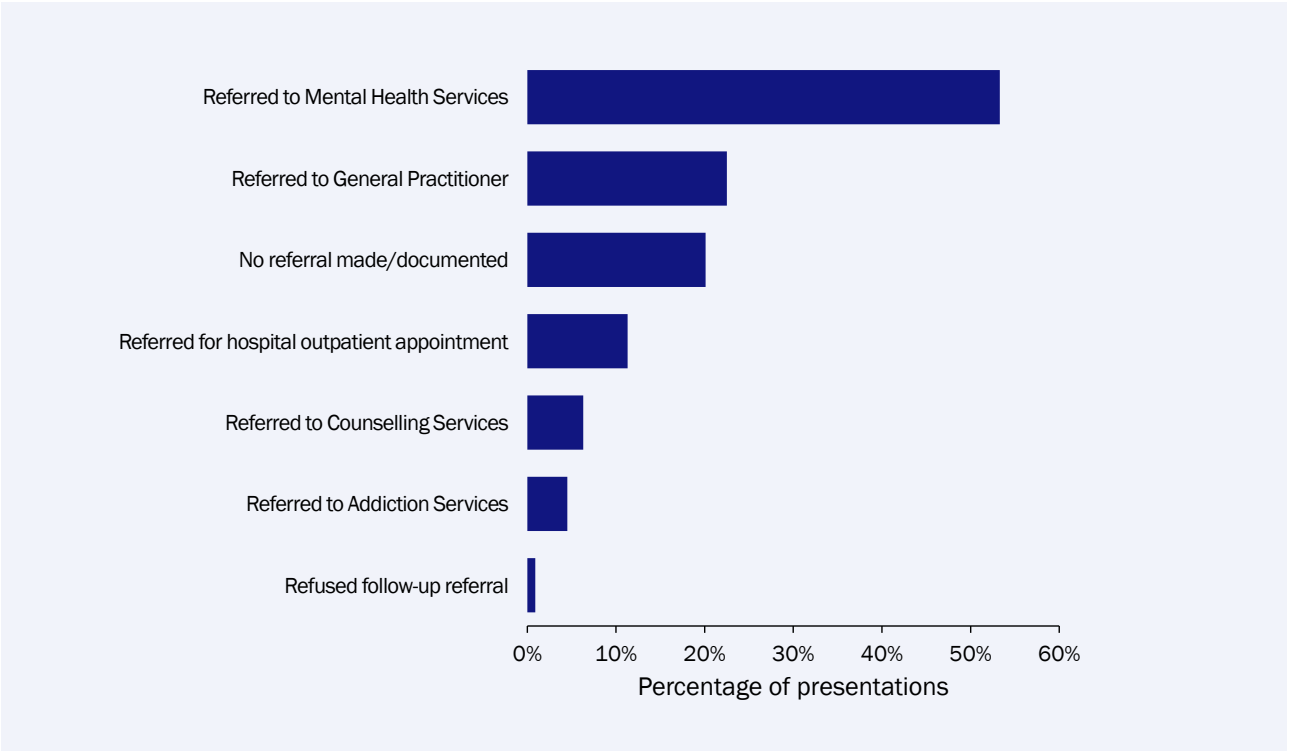

Figure 11: Self-harm presentation referral in 2021 following discharge from the Emergency Department.

- For 53% of presentations, patients were referred to Mental Health Services.
- A referral to the patient's General Practitioner was given in 23% of presentations.
- For 11% of presentations, the patient was referred for a general hospital outpatient appointment.
- Other services including counselling support services (e.g., Pieta House) and Addiction Services were recommended for 11% of presentations discharged from the ED.
- For one in five presentations, patients were discharged home from the ED with either no referral recommendation made or documented.

Referrals offered to self-harm patients following discharge from the ED varied according to HSE Hospital Group. As an example, 38% of presentations in the RCSI Hospital Group received a referral to a General Practitioner compared with 13% in the Saolta Hospital Group. A referral for a general hospital outpatient appointment was made for just 0.3% of presentations in the University Limerick Hospital Group compared with 34% in the Dublin Midlands Hospital Group. In terms of referral to local support services, 76% of presentations in University Limerick Hospital Group and 74% in Children's Health Ireland received a referral to Mental Health Services compared with 41% in the South/ South West Hospital Group. In the University Limerick Hospital Group, 13% of presentations were referred to counselling support services such as Pieta House in comparison to 3% in the Saolta Hospital Group.

Mental health assessment

Information was recorded about whether the patient had a mental health assessment in the ED in 90% of presentations (n = 10,314). For 60% of presentations (n = 6,167), an assessment was completed in the ED. For 7% of cases (n = 730), an assessment was later completed in the presenting hospital while for a further 6% (n = 594), an assessment was arranged in the presenting hospital. A minority of patients (4%) refused a mental health assessment at the time of presentation (n = 438).

Assessment was most common for presentations with methods involving attempted hanging (76%) and attempted drowning (75%). Those who presented with self-poisoning were less likely to receive an assessment (60%).

For more than three-quarters of presentations (79%) that subsequently resulted in discharge from the ED, patients received a mental health assessment prior to discharge. In contrast, only 7% of patients who left before recommendation received an assessment.

Provision of a mental health assessment varied according to whether the self-harm presentation was a repeat presentation or not. In 2021, 68% of first presentations of self-harm were assessed, compared with 56% of those with 5 or more presentations.

The plot in Figure 12 illustrates widespread variation in the proportion of presentations per hospital in which the patient received a mental health assessment.

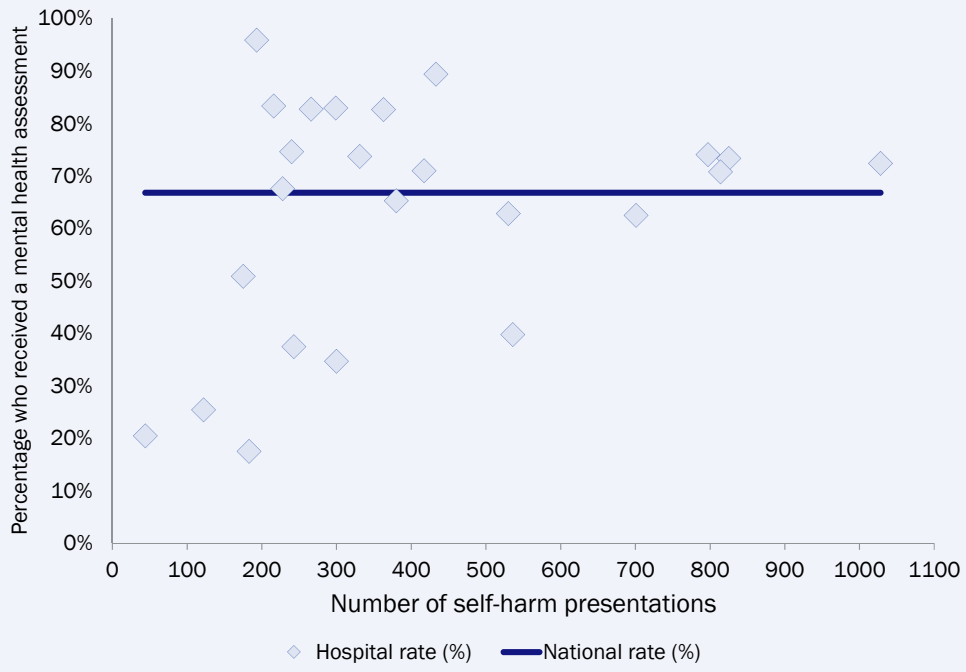

Figure 12: Plot of the percentage of presentations that receive a mental health assessment, by hospital, 2021.

Note: Due to small numbers, data for Children's Health Ireland and Level 2 hospitals have been excluded.

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Repetition of self-harm

There were 8,595 individuals who presented to hospital with 11,415 self-harm presentations in 2021. This implies that one in four (n = 2,820; 25%) of the presentations in 2021 were due to repeat acts. Of the 8,595 self-harm patients who presented to hospital, 1,334 (15.5%) made at least one repeat presentation to hospital during the calendar year. Similar to the 15.7% reported in 2020, this proportion is slightly higher than what has been reported in recent years (2014-2019: 14.5-15.0%). At least five self-harm presentations were made by 164 individuals. These patients accounted for just 1.9% of all self-harm patients in the year but their presentations represented 12.4% of all self-harm presentations recorded in 2021 (n = 1,412).

The rate of repetition varied according to the method of self-harm involved in the self-harm act (Table 7).

	Intentional Drug Overdose	Alcohol	Self-poisoning	Attempted hanging	Attempted drowning	Self-cutting	Other	All
Number of individuals who presented	5,436	2,648	188	746	318	2,412	588	8,595
Number who repeated	791	407	25	107	61	474	98	1,334
Percentage who repeated	14.6%	15.4%	13.3%	14.3%	19.2%	19.7%	16.7%	15.5%

Table 7: Number and percentage of individuals who had a repeat self-harm presentation in 2021 by method of self-harm.

Of the most common methods of self-harm, self-cutting was associated with an increased level of repetition. One in five individuals (19.7%) who used cutting as a method of self-harm in their index presentation made at least one subsequent self-harm presentation in the calendar year. In 2021, an increase was observed in repetition rates for those who presented with attempted drowning (13.3% in 2020 vs 19.2% in 2021).

The rate of repetition nationally was the same for men and women (15.6% and 15.5% respectively). However, repetition varied significantly by age. The proportion of individuals who repeated was highest amongst people aged 25-44 years (17.0%). Approximately 15.1% of all self-harm patients aged less than 20 years re-presented with self-harm.

There was some variation in repetition rates when examined by HSE hospital group (Table 8). The lowest rate was among self-harm patients presenting in the Children's Hospital Group (12.0%) while the highest was in the Ireland East Hospital Group (20.5%). This is the highest repetition rate to be recorded by the Registry for a hospital group. Rates of repetition ranged from 13.1% - 16.0% across the other groups.

		Ireland East	Dublin Midlands	RCSI	South/ Southwest	UL	Saolta	Children's Health Ireland	Republic of Ireland
Number of individuals who presented	Men	695	697	351	679	291	268	72	3,540
	Women	999	809	564	883	378	403	331	5,055
	TOTAL	1,694	1,506	915	1,562	669	671	403	8,595
Number who repeated	Men	185	128	71	89	59	44	8	553
	Women	251	159	97	147	62	57	47	781
	TOTAL	436	287	168	236	121	101	55	1,334
Percentage who repeated	Men	21%	15.5%	16.8%	11.6%	16.9%	14.1%	10%	15.6%
	Women	20.1%	16.4%	14.7%	14.3%	14.1%	12.4%	12.4%	15.5%
	TOTAL	20.5%	16.0%	15.5%	13.1%	15.3%	13.1%	12%	15.5%

Table 8: Number and percentage of men and women who made a repeat self-harm presentation in 2021 by HSE hospital group.

The funnel plot in Figure 13 illustrates the rate of repetition for each hospital. The average rate of repetition nationally was 15.5%. For the majority of hospitals, the rate of repetition was similar to the national rate, suggesting little variation in the rate of repetition across hospitals. City based hospitals including the Mater Misericordiae University Hospital and St James's Hospital noted the highest rate of repetition across all hospitals.

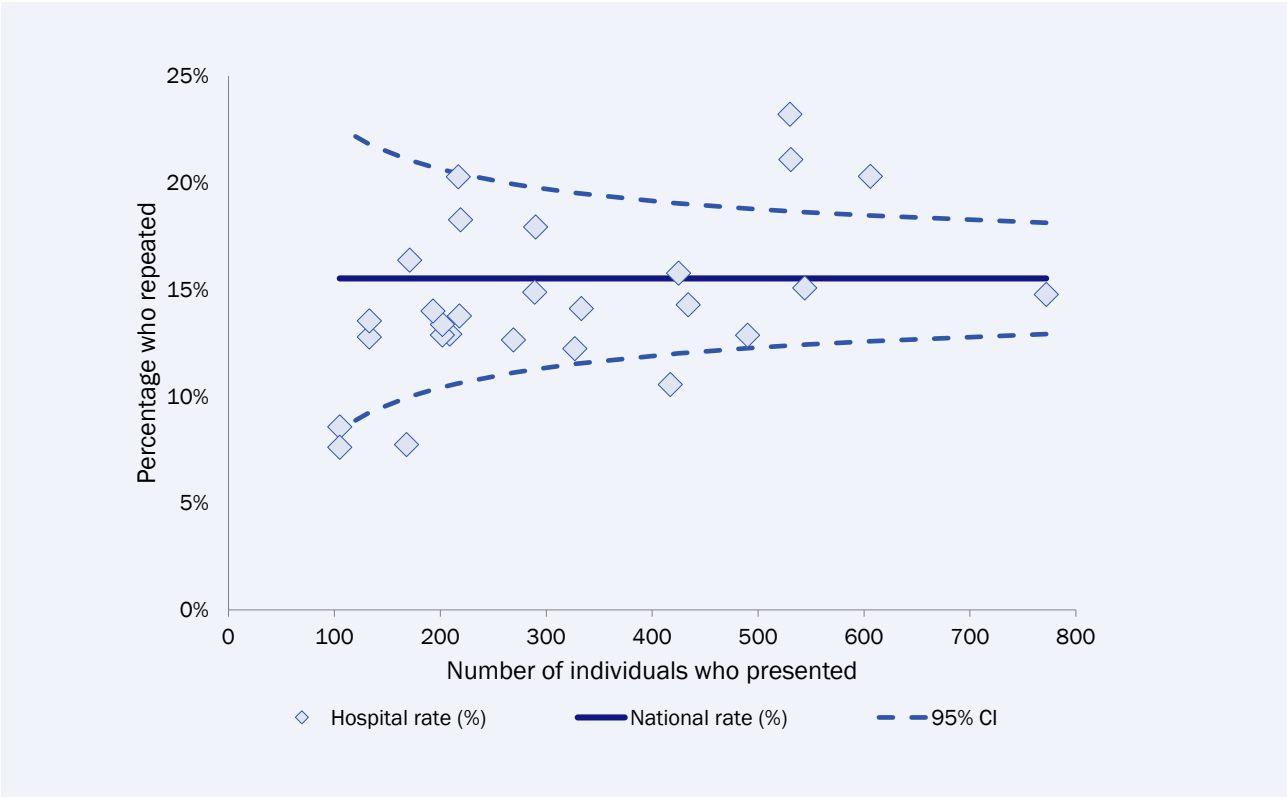

Figure 13: Funnel plot of the rate of repetition by hospital, 2021.

Note: Due to small numbers, data for Level 2 hospitals have been excluded.

The repetition rate by hospital for men, women and all patients who presented to hospital with self-harm are detailed in Appendix C, Tables C1 – C7. Caution should be taken in interpreting the repetition rates associated with smaller hospitals as the calculations may be based on a small number of patients.

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SECTION II:
Incidence Rates

For the period from 1 January to 31 December 2021, the Registry recorded 11,415 self-harm presentations to hospital that were made by 8,595 individuals. These figures do not include presentations to two hospitals as outlined earlier (see Executive Summary). Adjusting for the absence of data from two hospitals, we estimate that there was a total of 12,661 self-harm presentations made by 9,533 individuals. Based on these estimates, the person-based crude and age-standardised rate of self-harm in 2021 was 188 (95% CI: 184 to 192) and 196 (95% CI: 192 to 200) per 100,000 respectively. The age-standardised rate, which accounts for the age distribution of the population, indicated that from 2020 to 2021, there was a 2% decrease in the rate of persons presenting to hospital as a result of self-harm. Table 9 presents the age-standardised rates for men and women and all persons, and the change in rates each year, since the Registry reached near national coverage in 2002.

	MALE		FEMALE		ALL	
YEAR	Rate	% difference	Rate	% difference	Rate	% difference
2002	167	-	237	-	202	-
2003	177	+7%	241	+2%	209	+4%
2004	170	-4%	233	-4%	201	-4%
2005	167	-2%	229	-1%	198	-2%
2006	160	-4%	210	-9%	184	-7%
2007	162	+2%	215	+3%	188	+2%
2008	180	+11%	223	+4%	200	+6%
2009	197	+10%	222	-<1%	209	+5%
2010	211	+7%	236	+6%	223	+7%
2011	205	-3%	226	-4%	215	-4%
2012	195	-5%	228	+1%	211	-2%
2013	182	-7%	217	-5%	199	-6%
2014	185	+2%	216	-<1%	200	+1%
2015	186	+1%	222	+3%	204	+2%
2016	184	-1%	228	+3%	205	+<1%
2017	181	-2%	219	-4%	199	-3%
2018	193	+7%	229	+5%	210	+6%
2019	187	-3%	226	-1%	206	-2%
2020	176	-6%	224	-1%	200	-3%
2021	160	-9%	232	+4%	196	-2%

Table 9: Person-based age-standardised rate of self-harm in the Republic of Ireland in 2002-2021 (extrapolated data used for 2002-2005 and 2020-2021 to adjust for non-participating hospitals).

Variation by sex

The person-based age-standardised rate of self-harm for men and women in 2021 was 160 (95% CI: 155 - 165) and 232 (95% CI: 227 - 238) per 100,000 respectively. This represents a 9% decrease in the male rate of self-harm from 2020 and a 4% increase in the female rate. Figure 14 provides a visual overview of the age-standardised rates of self-harm for men and women from 2002 – 2021.

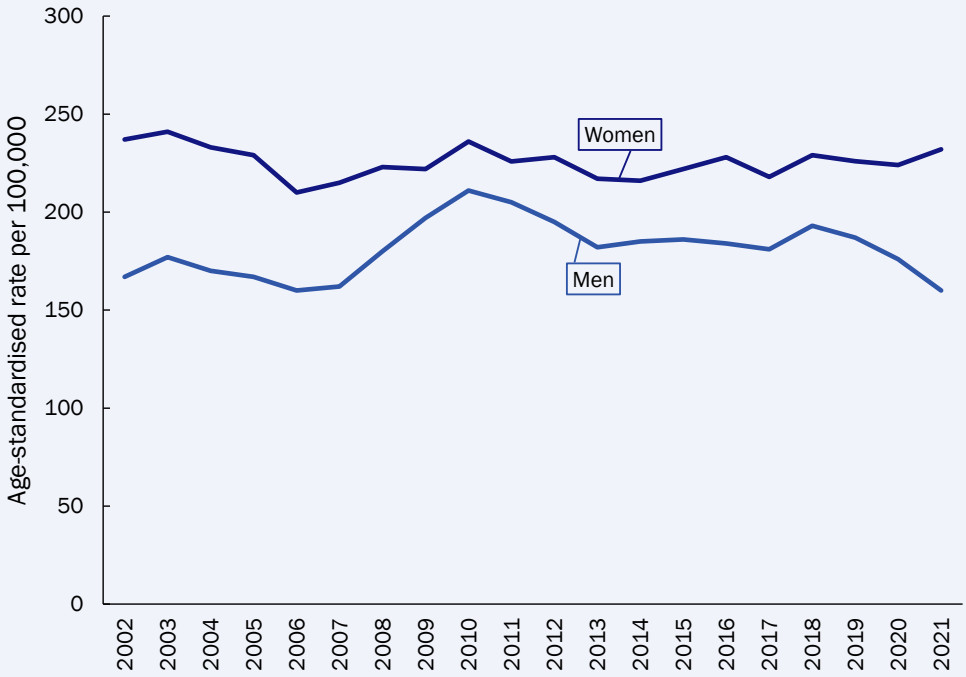

Figure 14: Person-based age-standardised rate of self-harm in the Republic of Ireland for men and women, 2002-2021.

The rate of self-harm for men has been mostly decreasing since 2010 when the peak rate of 211 per 100,000 was recorded. The rate of 160 per 100,000 in 2021 was 24% lower than that peak in 2010. The male rate in 2021 is as low as has been recorded by the Registry. Previously, a similar rate was recorded in 2006 and 2007, before the economic recession. The rate for women has remained relatively stable since 2010 with yearly rates varying by +/- 5%.

The female rate of self-harm in 2021 was 45% higher than the male rate. This is a substantially greater difference between women and men than the 27% reported in 2020. In the 10 years up to and including 2019, a difference of 10-24% had been reported. This disparity in rates between men and women was last noted to be greater than 24% in 2006 and 2007 when the female rate was 32% and 33% higher than the male rate, respectively.

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Variation by age

There was a striking pattern in the incidence of self-harm when examined by age. The rate was highest among younger age groups (see Figure 15). At 888 per 100,000, the peak rate for women was among 15-19 year-olds which is an increase of 14% from 2020. An increase of 7% had previously been reported in this age group between 2019 and 2020. This rate implies that one in every 113 girls in this age group presented to hospital in 2021 following an episode of self-harm. The peak rate for men was 387 per 100,000 among 20-24 year-olds or one in every 258 men. The incidence of self-harm gradually decreased with increasing age for men. This was the case to a lesser extent in women as the self-harm rate for 45-54 year-olds was similar or higher than it was for 40-44 year-olds. Population figures and the number and rate of persons who presented to hospital following self-harm in 2021 are given for men and women by age group in Appendix D.

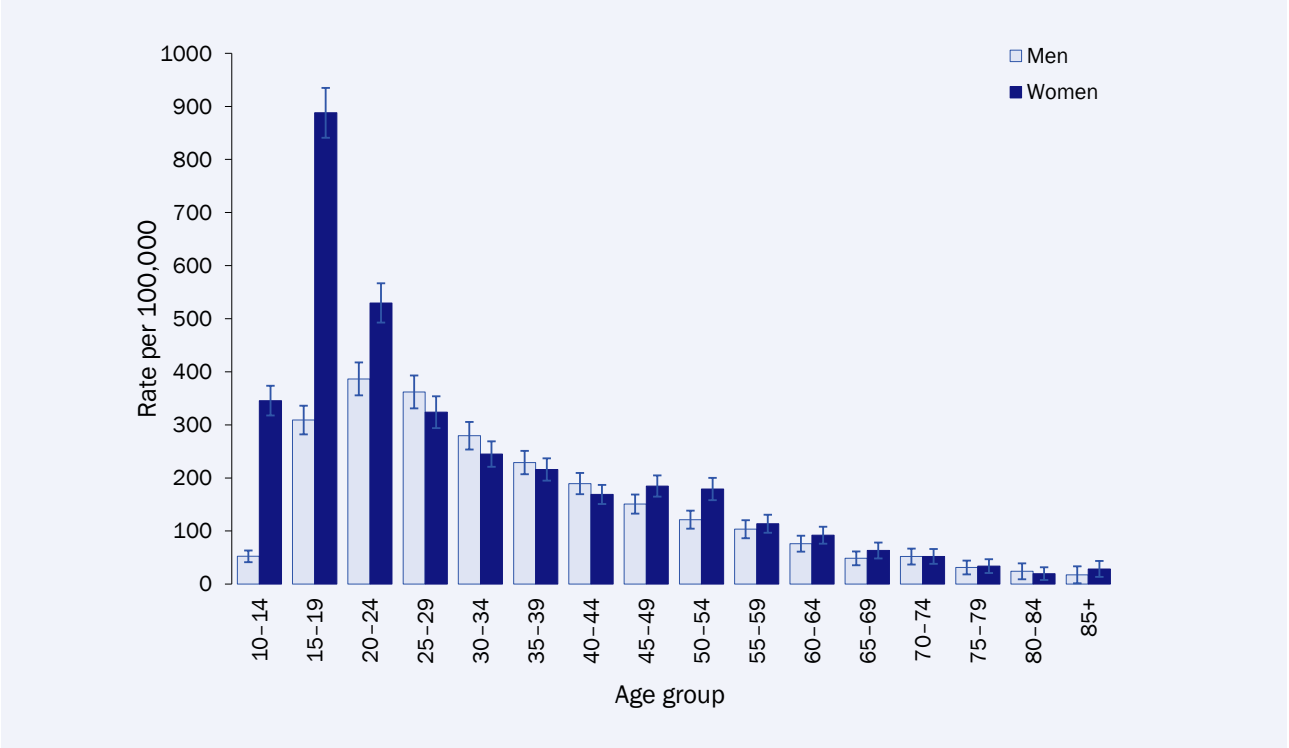

Figure 15: Person-based rate of self-harm for men and women in 2021 by 5-yr age group.

Sex differences in the incidence of self-harm varied with age. The female rate was almost seven times the male rate in 10-14 year-olds (346 vs 52 per 100,000), it was almost three times higher in 15-19 year-olds (888 vs 309 per 100,000) and 37% higher in 20-24 year-olds (530 vs 387 per 100,000). In other age groups, rates were similar except for 45-54 year-olds where the female rate was 33% higher (182 vs 137 per 100,000).

During the previous 12 years, 2009-2020, the annual self-harm rate among 25-29 year-olds was significantly higher in men than it was in women, whereas in 2021, there was little difference (362 and 324 per 100,000 respectively). This was due to a 16% reduction in the male self-harm rate from 430 per 100,000 to 362 per 100,000 in 2021.

In 2021, the male rate of self-harm among 10-24 year-olds was 240 per 100,000, 8% lower than the rate of 261 per 100,000 in 2020. In contrast, the female rate in this age group increased by 18%, from 494 to 580 per 100,000. The peak rates among younger people (<25 years) were in 15 year-old girls and 19 year-old men with rates of 902 and 407 per 100,000 respectively (see Figure 15). This represents a peak at a younger age than usual for male and female hospital-presenting self-harm. In the previous ten years, 2011-2020, the peak male rate was among 20, 21 or 22 year-olds and, in all but one of those years, the peak female rate was at an age in the range 16-20 years.

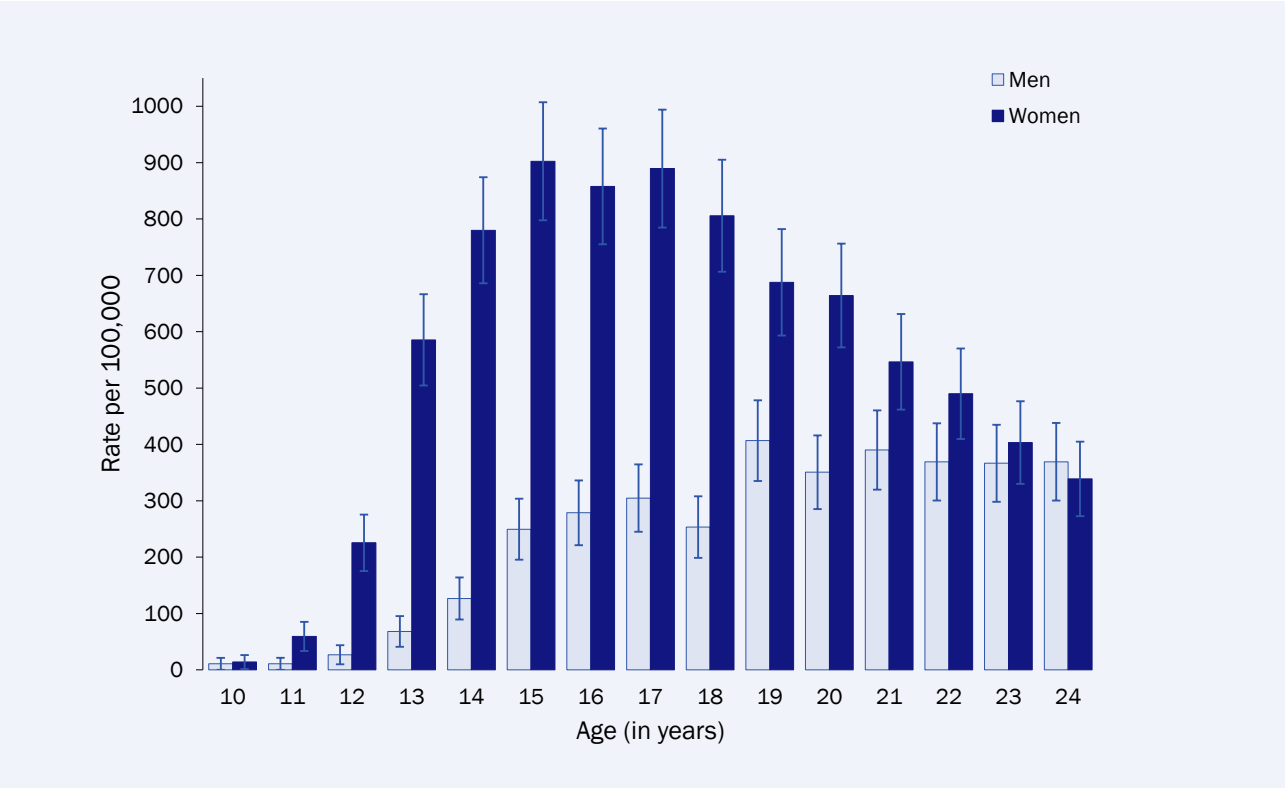

Figure 16: Person-based rate of self-harm for men and women aged 10-24 years in 2021 by single year of age.

Hospital-presenting self-harm by 10-13 year-old boys and 10-11 year-old girls was relatively rare. However, with each single year increase in age the rate increased significantly, and this was especially so for girls. The rate exceeded 200 per 100,000 for 12 year-old girls, but it was almost three times higher at 586 per 100,000 for 13 year-olds and a further 54% higher, at 902 per 100,000 for 15 year-olds. As a consequence of the earlier and greater increase in female self-harm by age, the maximum ratio of girls to boys was among 12 and 13 year-olds, for whom the female rate was more than eight times that of the boys (225 vs 27 per 100,000 for 12 year-olds and 586 vs 68 per 100,000 for 13 year-olds). The female rate of hospital-presenting self-harm was significantly higher than the male rate at each age from 11-22 years, so even at the peak male rate of 407 per 100,000 among 19 year-olds, the female rate was approximately 70% higher at 688 per 100,000.

Trend over time by sex and age

Figure 17 illustrates the trend in hospital-presenting self-harm by sex and age since 2007. Consistently, 20-24 year-olds have had the highest rate for men. The rate among this age group has been volatile but similar for men and women. There was a striking increase during the years of economic recession and austerity, after which their self-harm rate decreased for several years before increasing again around 2018. Since then, the rate has returned to its pre-recession level for men but not for women.

In contrast, male and female hospital-presenting self-harm among 15-19 year-olds has been very different in both incidence and trend. In 2007, the female rate of 600 per 100,000 was approximately twice the male rate. Economic recession, austerity and recovery were associated with a marked increase and decrease in the male rate but no change in the female rate. During 2013-2021, the female self-harm rate increased by 50%, with the largest increase in 2021. The male self-harm rate among 15-19 year-olds was increasing gradually during 2013-2019 but there was a sharp decrease associated with the COVID-19 pandemic. As a result, the male rate among 15-19 year-olds in 2021 was the same as it was in 2007, approximately 300 per 100,000, whereas the female self-harm rate in 2021 was three times higher at almost 900 per 100,000.

Among young adolescents aged 10-14 years, hospital-presenting self-harm has increased for both sexes. The male self-harm rate has been relatively low and the increase has been modest, reaching 52 per 100,000 in 2021. However, the female self-harm rate in 10-14 year-olds more than tripled in just over a decade, from approximately 100 per 100,000 in 2011 to 346 per 100,000 in 2021, with the largest increase being observed from 2020 to 2021.

Among adults aged at least 25 years, the incidence of hospital-presenting self-harm is highest among 25-34 year-olds, it decreases with increasing age and is lowest among persons aged 65 years or more. For each age group, the incidence is similar for men and women. There were increases in hospital-presenting self-harm by men across the age range 25-54 years during 2007-2011 and among men and women aged 25-34 years during 2014-2019. However, for the five age groups presented, the male and female self-harm rate in 2021 was similar to, or lower than, what it was in 2007.

Figure 17: Trend in the rate of hospital-presenting self-harm by sex and age group, 2007-2021.

Appendices

APPENDIX A: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE REPUBLIC OF IRELAND

TABLE A1: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE REPUBLIC OF IRELAND[1] BY HOSPITAL GROUP, 2021

HOSPITAL GROUP	IRELAND EAST		DUBLIN MIDLANDS		RCSI		SOUTH/ SOUTH WEST		UNIVERSITY OF LIMERICK		SAOLTA		CHILDREN'S HEALTH IRELAND		REPUBLIC OF IRELAND[2]		REPUBLIC OF IRELAND (Estimate)[3]	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
10-14yrs	10	71	<5	46	7	74	17	121	8	27	9	61	45	289	99	689	108	737
15-19yrs	139	410	116	282	66	203	125	337	50	125	59	140	43	147	598	1,644	660	1,868
20-24yrs	172	282	215	163	90	106	158	200	90	142	68	75	-	-	793	968	856	1,100
25-29yrs	170	210	137	135	76	61	148	160	58	91	52	45	-	-	641	702	709	763
30-34yrs	166	152	108	158	71	67	102	102	53	42	39	42	-	-	539	563	586	638
35-39yrs	146	128	135	84	50	70	88	89	69	56	43	48	-	-	531	475	573	547
40-44yrs	128	96	138	120	56	65	82	69	33	61	28	24	-	-	465	435	527	477
45-49yrs	91	125	102	83	23	43	61	83	25	31	23	50	-	-	325	415	358	452
50-54yrs	54	94	47	79	36	53	44	56	27	35	12	33	-	-	220	350	247	393
55-59yrs	47	57	30	46	17	22	37	31	18	16	23	26	-	-	172	198	182	212
60-64yrs	29	46	29	31	13	15	20	31	12	5	10	14	-	-	113	142	121	158
65-69yrs	15	33	11	22	*	7	14	8	7	8	5	7	-	-	57	85	64	102
70-74yrs	5	9	5	17	*	<5	16	24	12	*	<5	6	-	-	42	65	52	70
75-79yrs	6	10	10	<5	0	<5	<5	8	<5	*	<5	<5	-	-	23	26	27	28
80-84yrs	<5	<5	<5	<5	0	<5	<5	<5	<5	0	<5	<5	-	-	8	9	10	10
85yrs+	<5	<5	<5	<5	0	<5	0	<5	<5	0	<5	<5	-	-	6	7	6	10
Total	1,183	1,728	1,090	1,271	512	796	921	1,321	466	647	378	577	89	436	4,639	6,776	5,093	7,568

[1]Presentations of persons aged <10 years are not included in this table to avoid risk of disclosure.
[2]Number of self-harm presentations for all except two hospitals in the Republic of Ireland during 2021.
[3]Estimated number of self-harm presentations for all hospitals in the Republic of Ireland in 2021.
*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

TABLE A2: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE IRELAND EAST HOSPITAL GROUP, 2021

	MATER MISERICORDIAE UNIVERSITY HOSPITAL		MIDLAND REGIONAL HOSPITAL, MULLINGAR		OUR LADY'S HOSPITAL, NAVAN		ST. LUKE'S GENERAL HOSPITAL, CARLOW/ KILKENNY		ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE		OTHER		WEXFORD GENERAL HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<16yrs	*	0	*	34	0	*	7	31	0	<5	<5	13	6	35
16-17yrs	18	36	10	17	<5	9	6	31	0	<5	24	75	6	15
18-24yrs	67	141	14	27	7	27	29	34	<5	<5	81	174	27	57
25-34yrs	128	132	25	33	5	15	59	34	5	5	75	88	39	55
35-44yrs	119	73	20	22	5	10	23	16	<5	<5	69	74	34	27
45-54yrs	65	41	12	34	8	17	14	43	0	0	35	55	11	29
55-64yrs	24	17	11	19	<5	9	9	*	0	0	16	29	13	*
65yrs+	*	5	*	10	<5	*	8	*	<5	<5	8	31	8	*
Total	423	445	104	196	33	89	155	208	14	15	310	539	144	236

*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

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TABLE A3: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2021

	TALLAGHT UNIVERSITY HOSPITAL		MIDLAND REGIONAL HOSPITAL, PORTLAOISE		MIDLAND REGIONAL HOSPITAL, TULLAMORE		NAAS GENERAL HOSPITAL		ST. JAMES'S HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<16yrs	0	0	5	52	<5	6	<5	0	0	0
16-17yrs	21	81	<5	14	<5	13	6	25	11	28
18-24yrs	87	88	16	24	15	16	56	65	110	79
25-34yrs	54	86	18	20	23	44	43	51	107	92
35-44yrs	70	61	21	27	7	20	50	39	125	57
45-54yrs	38	36	12	16	6	13	29	39	64	58
55-64yrs	15	24	5	*	7	5	8	17	24	22
65yrs+	13	27	<5	*	<5	0	<5	5	9	11
Total	298	403	81	163	66	117	195	241	450	347

*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

TABLE A4: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE RCSI HOSPITAL GROUP, 2021

	CAVAN GENERAL HOSPITAL		CONNOLLY HOSPITAL, BLANCHARDSTOWN		OUR LADY OF LOURDES HOSPITAL, DROGHEDA	
	Male	Female	Male	Female	Male	Female
<16yrs	<5	28	0	0	10	68
16-17yrs	6	12	15	46	<5	43
18-24yrs	18	34	52	77	54	75
25-34yrs	36	23	65	61	46	44
35-44yrs	18	17	52	66	36	52
45-54yrs	10	19	24	37	25	40
55-64yrs	8	*	*	18	13	14
65yrs+	<5	*	*	5	<5	11
Total	101	139	220	310	191	347

*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

TABLE A5: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE SOUTH/ SOUTH WEST HOSPITAL GROUP, 2021

	BANTRY GENERAL HOSPITAL		CORK UNIVERSITY HOSPITAL		UNIVERSITY HOSPITAL, KERRY		MERCY UNIVERSITY HOSPITAL, CORK		TIPPERARY UNIVERSITY HOSPITAL		UNIVERSITY HOSPITAL, WATERFORD	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<16yrs	0	<5	14	83	<5	28	6	34	<5	10	8	46
16-17yrs	0	<5	15	48	9	17	8	12	10	24	5	36
18-24yrs	5	7	52	92	37	42	44	65	28	43	57	68
25-34yrs	<5	8	69	55	36	49	77	54	33	39	33	57
35-44yrs	<5	5	53	40	23	13	45	55	18	20	30	25
45-54yrs	<5	<5	23	25	21	13	36	33	6	40	15	25
55-64yrs	0	<5	23	20	11	12	7	11	5	10	11	*
65yrs+	<5	<5	11	6	<5	18	10	7	<5	7	6	*
Total	14	28	260	369	143	192	233	271	106	193	165	268

*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

TABLE A6: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE UNIVERSITY LIMERICK HOSPITAL GROUP, 2021

	ENNIS HOSPITAL		UNIVERSITY HOSPITAL, LIMERICK	
	Male	Female	Male	Female
<16yrs	0	<5	11	52
16-17yrs	0	0	15	39
18-24yrs	0	29	122	174
25-34yrs	<5	26	108	107
35-44yrs	<5	12	101	105
45-54yrs	0	<5	52	65
55-64yrs	0	0	30	21
65yrs+	0	0	23	15
Total	<5	69	462	578

TABLE A7: SELF-HARM PRESENTATIONS TO HOSPITALS IN THE HSE SAOLTA HOSPITAL GROUP, 2021

	LETTERKENNY UNIVERSITY HOSPITAL		MAYO UNIVERSITY HOSPITAL		PORTIUNCULA UNIVERSITY HOSPITAL		SLIGO UNIVERSITY HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female
<16yrs	7	30	*	24	5	28	<5	9
16-17yrs	6	11	7	*	<5	12	9	21
18-24yrs	30	16	22	29	12	28	25	62
25-34yrs	7	16	32	23	21	28	31	20
35-44yrs	16	23	14	18	19	17	22	14
45-54yrs	7	13	7	32	7	16	14	22
55-64yrs	*	*	13	15	6	5	11	15
65yrs+	*	*	*	*	<5	5	5	6
Total	76	117	104	152	78	139	120	169

*At least one cell in this column has a value of <5. This is done to avoid showing disclosive data.

TABLE A8: SELF-HARM PRESENTATIONS BY CHILDREN <16 YEARS TO HOSPITALS IN THE CHILDREN'S HEALTH IRELAND GROUP, 2021

	CHILDREN'S HEALTH IRELAND AT TEMPLE STREET		CHILDREN'S HEALTH IRELAND AT TALLAGHT		CHILDREN'S HEALTH IRELAND AT CRUMLIN	
	Male	Female	Male	Female	Male	Female
<16yrs	42	199	27	137	20	100

APPENDIX B: RECOMMENDATIONS FOR NEXT CARE FOLLOWING SELF-HARM PRESENTATION

TABLE B1: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE IRELAND EAST HOSPITAL GROUP, 2021

	MATER MISERICORDIAE UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, MULLINGAR	OUR LADY'S HOSPITAL, NAVAN	ST. LUKE'S GENERAL HOSPITAL, CARLOW/ KILKENNY	ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE	OTHER	WEXFORD GENERAL HOSPITAL
	(n=868)	(n=300)	(n=122)	(n=363)	(n=29)	(n=849)	(n=380)
Admitted (General, Psychiatric, ICU)	17.4%	27.7%	30.3%	58.1%	27.6%	27.4%	47.9%
Patient would not allow admission	0.0%	0.3%	0.0%	0.0%	0.0%	2.7%	0.0%
Left before recommendation	18.5%	14.7%	19.7%	6.6%	3.4%	8.5%	11.8%
Not admitted	59.7%	43.0%	18.9%	34.4%	65.5%	51.5%	25.8%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 – B7 may be underestimates.

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TABLE B2: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2021

	TALLAGHT UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, PORTLAOISE	MIDLAND REGIONAL HOSPITAL, TULLAMORE	NAAS GENERAL HOSPITAL	ST. JAMES'S HOSPITAL
	(n=701)	(n=244)	(n=183)	(n=436)	(n=797)
Admitted (General, Psychiatric, ICU)	32.0%	57.0%	19.7%	28.2%	29.6%
Patient would not allow admission	1.3%	0.4%	0.5%	0.7%	0.1%
Left before recommendation	11.7%	10.7%	16.9%	12.8%	19.1%
Not admitted	53.2%	31.1%	21.3%	56.7%	47.6%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 – B7 may be underestimates.

TABLE B3: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE RCSI HOSPITAL GROUP, 2021

	CAVAN GENERAL HOSPITAL	CONNOLLY HOSPITAL, BLANCHARDSTOWN	OUR LADY OF LOURDES HOSPITAL, DROGHEDA
	(n=240)	(n=530)	(n=538)
Admitted (General, Psychiatric, ICU)	41.3%	37.7%	31.0%
Patient would not allow admission	0.0%	1.5%	0.0%
Left before recommendation	12.1%	10.6%	19.9%
Not admitted	44.6%	47.2%	27.7%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 – B7 may be underestimates.

TABLE B4: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SOUTH/ SOUTH WEST HOSPITAL GROUP, 2021

	BANTRY GENERAL HOSPITAL	CORK UNIVERSITY HOSPITAL	UNIVERSITY HOSPITAL, KERRY	MERCY UNIVERSITY HOSPITAL, CORK	TIPPERARY UNIVERSITY HOSPITAL	UNIVERSITY HOSPITAL, WATERFORD
	(n=42)	(n=629)	(n=335)	(n=504)	(n=299)	(n=433)
Admitted (General, Psychiatric, ICU)	66.7%	37.4%	32.2%	17.5%	36.8%	30.0%
Patient would not allow admission	2.4%	0.0%	0.0%	0.2%	0.3%	3.0%
Left before recommendation	7.1%	4.3%	15.5%	14.9%	7.7%	9.2%
Not admitted	21.4%	53.7%	52.2%	64.3%	50.5%	56.8%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 – B7 may be underestimates.

TABLE B5: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE UNIVERSITY LIMERICK HOSPITAL GROUP, 2021

	ENNIS HOSPITAL	UNIVERSITY HOSPITAL, LIMERICK
	(n=73)	(n=1,040)
Admitted (General, Psychiatric, ICU)	2.7%	15.7%
Patient would not allow admission	0.0%	2.0%
Left before recommendation	1.4%	12.9%
Not admitted	94.5%	63.2%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 – B7 may be underestimates.

TABLE B6: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SAOLTA HOSPITAL GROUP, 2021

	LETTERKENNY UNIVERSITY HOSPITAL	MAYO UNIVERSITY HOSPITAL	PORTIUNCULA UNIVERSITY HOSPITAL	SLIGO UNIVERSITY HOSPITAL
	(n=193)	(n=256)	(n=217)	(n=289)
Admitted (General, Psychiatric, ICU)	62.2%	34.8%	41.9%	32.2%
Patient would not allow admission	0.0%	6.6%	0.0%	1.0%
Left before recommendation	3.1%	3.5%	8.3%	8.7%
Not admitted	34.2%	45.3%	37.3%	58.1%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 – B7 may be underestimates.

TABLE B7: RECOMMENDED NEXT CARE BY HOSPITAL IN THE CHILDREN'S HEALTH IRELAND GROUP, 2021

	CHILDREN'S HEALTH IRELAND AT TEMPLE STREET	CHILDREN'S HEALTH IRELAND AT TALLAGHT	CHILDREN'S HEALTH IRELAND AT CRUMLIN
	(n=241)	(n=164)	(n=120)
Admitted (General, Psychiatric, ICU)	39.4%	84.1%	74.2%
Patient would not allow admission	0.8%	0.6%	0.0%
Left before recommendation	0.0%	0.6%	0.0%
Not admitted	59.3%	13.4%	24.2%

Note: It may not always be recorded in the Emergency Department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Tables B1 – B7 may be underestimates.

APPENDIX C: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITAL WITH SELF-HARM IN 2021

TABLE C1: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE IRELAND EAST HOSPITAL GROUP, 2021

		MATER MISERICORDIAE UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, MULLINGAR	OUR LADY'S HOSPITAL, NAVAN	ST. LUKE'S GENERAL HOSPITAL, CARLOW/ KILKENNY	ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE	OTHER	WEXFORD GENERAL HOSPITAL
Number of individuals who presented	Men	279	93	31	134	*	231	113
	Women	287	133	82	162	*	396	193
	All	566	226	113	296	27	627	306
Number who repeated	Men	83	17	2	18	*	47	23
	Women	62	29	9	28	*	88	39
	All	145	46	11	46	7	135	62
Percentage who repeated	Men	29.7%	18.3%	6.5%	13.4%	*	20.3%	20.4%
	Women	21.6%	21.8%	11%	17.3%	*	22.2%	20.2%
	All	25.6%	20.4%	9.7%	15.5%	25.9%	21.5%	20.3%

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TABLE C2: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2021

		TALLAGHT UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, PORTLAOISE	MIDLAND REGIONAL HOSPITAL, TULLAMORE	NAAS GENERAL HOSPITAL	ST. JAMES'S HOSPITAL
Number of individuals who presented	Men	241	78	62	165	300
	Women	329	131	76	176	277
	All	570	209	138	341	577
Number who repeated	Men	40	5	5	15	72
	Women	51	23	14	27	53
	All	91	28	19	42	125
Percentage who repeated	Men	16.6%	6.4%	8.1%	9.1%	24%
	Women	15.5%	17.6%	18.4%	15.3%	19.1%
	All	16%	13.4%	13.8%	12.3%	21.7%

TABLE C3: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE RCSI HOSPITAL GROUP, 2021

		CAVAN GENERAL HOSPITAL	CONNOLLY HOSPITAL, BLANCHARDSTOWN	OUR LADY OF LOURDES HOSPITAL, DROGHEDA
Number of individuals who presented	Men	82	189	156
	Women	118	275	278
	All	200	464	434
Number who repeated	Men	14	36	23
	Women	17	39	47
	All	31	75	70
Percentage who repeated	Men	17.1%	19%	14.7%
	Women	14.4%	14.2%	16.9%
	All	15.5%	16.2%	16.1%

TABLE C4: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE SOUTH/ SOUTH WEST HOSPITAL GROUP, 2021

		CORK UNIVERSITY HOSPITAL	UNIVERSITY HOSPITAL, KERRY	MERCY UNIVERSITY HOSPITAL, CORK	TIPPERARY UNIVERSITY HOSPITAL	UNIVERSITY HOSPITAL, WATERFORD
Number of individuals who presented	Men	213	120	200	88	150
	Women	292	152	236	140	212
	All	505	272	436	228	362
Number who repeated	Men	30	17	20	15	14
	Women	42	17	32	28	36
	All	72	34	52	43	50
Percentage who repeated	Men	14.1%	14.2%	10%	17%	9.3%
	Women	14.4%	11.2%	13.6%	20%	17%
	All	14.3%	12.5%	11.9%	18.9%	13.8%

Note: Due to small numbers, data on the number of patients who presented to Bantry Hospital are not included in this table to avoid risk of disclosure.

TABLE C5: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE UNIVERSITY LIMERICK HOSPITAL GROUP, 2021

		ENNIS HOSPITAL	UNIVERSITY HOSPITAL, LIMERICK
Number of individuals who presented	Men	*	348
	Women	*	437
	All	12	785
Number who repeated	Men	*	58
	Women	*	62
	All	6	120
Percentage who repeated	Men	*	16.7%
	Women	*	14.2%
	All	50%	15.3%

Note: Due to small numbers, the numbers of males and females who presented to Ennis Hospital are masked to avoid risk of disclosure.

TABLE C6: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE HSE SAOLTA HOSPITAL GROUP, 2021

		LETTERKENNY UNIVERSITY HOSPITAL	MAYO UNIVERSITY HOSPITAL	PORTIUNCULA UNIVERSITY HOSPITAL	SLIGO UNIVERSITY HOSPITAL
Number of individuals who presented	Men	61	84	70	101
	Women	108	120	113	122
	All	169	204	183	223
Number who repeated	Men	7	12	12	14
	Women	6	16	19	17
	All	13	28	31	31
Percentage who repeated	Men	11.5%	14.3%	17.1%	13.9%
	Women	5.6%	13.3%	16.8%	13.9%
	All	7.7%	13.7%	16.9%	13.9%

TABLE C7: SELF-HARM REPETITION FOR INDIVIDUALS WHO PRESENTED TO HOSPITALS IN THE CHILDREN'S HEALTH IRELAND GROUP, 2021

		CHILDREN'S HEALTH IRELAND AT TEMPLE STREET	CHILDREN'S HEALTH IRELAND AT TALLAGHT	CHILDREN'S HEALTH IRELAND AT CRUMLIN
Number of individuals who presented	Boys	*	*	*
	Girls	*	*	*
	All	213	138	108
Number who repeated	Boys	*	*	*
	Girls	*	*	*
	All	27	19	9
Percentage who repeated	Boys	*	*	*
	Girls	*	*	*
	All	12.7%	13.8%	8.3%

Note: Due to small numbers, the number of boys and girls who had a repeat self-harm presentation in the Children's Health Ireland hospitals are masked to avoid risk of disclosure.

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APPENDIX D: NUMBER AND RATE OF PERSONS WITH HOSPITAL-PRESENTING SELF-HARM IN 2021

TABLE D1: ESTIMATED NUMBER AND RATE OF PERSONS[4] WITH HOSPITAL-PRESENTING SELF-HARM IN THE REPUBLIC OF IRELAND IN 2021

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI[1]	Population	Persons	Rate	95% CI[1]
0-4yrs	154,100	0	0	(+/-0)	146,800	0	0	(+/-0)
5-9yrs	176,000	7	4	(+/-3)	166,700	3	2	(+/-3)
10-14yrs	185,600	97	52	(+/-13)	178,500	617	346	(+/-23)
15-19yrs	167,600	518	309	(+/-27)	161,400	1,433	888	(+/-43)
20-24yrs	158,300	612	387	(+/-32)	153,100	811	530	(+/-35)
25-29yrs	147,500	534	362	(+/-33)	147,300	477	324	(+/-30)
30-34yrs	161,000	450	280	(+/-27)	169,400	415	245	(+/-24)
35-39yrs	184,300	422	229	(+/-22)	198,700	429	216	(+/-21)
40-44yrs	197,500	374	189	(+/-20)	206,100	348	169	(+/-20)
45-49yrs	183,100	276	151	(+/-19)	185,100	342	185	(+/-21)
50-54yrs	164,800	200	121	(+/-19)	164,700	295	179	(+/-21)
55-59yrs	149,000	154	103	(+/-17)	152,200	173	114	(+/-19)
60-64yrs	132,700	101	76	(+/-15)	135,800	125	92	(+/-17)
65-69yrs	115,500	56	48	(+/-12)	118,600	75	63	(+/-15)
70-74yrs	96,500	50	52	(+/-12)	99,800	52	52	(+/-14)
75-79yrs	70,400	22	31	(+/-16)	76,800	26	34	(+/-15)
80-84yrs	41,600	10	24	(+/-12)	50,800	10	20	(+/-17)
85yrs+	28,600	5	17	(+/-19)	49,000	14	29	(+/-11)
Total[2]	2,514,000	3,888	160	(+/-5)	2,560,600	5,645	232	(+/-6)

[1] 95% Confidence Interval.
[2] The total rates are age-standardised rates per 100,000.

TABLE D2: NUMBER AND RATE OF PERSONS[5] WITH HOSPITAL-PRESENTING SELF-HARM IN THE REPUBLIC OF IRELAND IN 2021

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI[1]	Population	Persons	Rate	95% CI[1]
0-4yrs	154,100	0	0	(+/-0)	146,800	0	0	(+/-0)
5-9yrs	176,000	7	4	(+/-3)	166,700	3	2	(+/-3)
10-14yrs	185,600	89	48	(+/-13)	178,500	589	330	(+/-23)
15-19yrs	167,600	477	285	(+/-27)	161,400	1263	783	(+/-43)
20-24yrs	158,300	562	355	(+/-32)	153,100	707	462	(+/-35)
25-29yrs	147,500	479	325	(+/-33)	147,300	440	299	(+/-30)
30-34yrs	161,000	412	256	(+/-27)	169,400	380	224	(+/-24)
35-39yrs	184,300	390	212	(+/-22)	198,700	362	182	(+/-21)
40-44yrs	197,500	332	168	(+/-20)	206,100	315	153	(+/-20)
45-49yrs	183,100	251	137	(+/-19)	185,100	313	169	(+/-21)
50-54yrs	164,800	180	109	(+/-19)	164,700	261	158	(+/-21)
55-59yrs	149,000	144	97	(+/-17)	152,200	160	105	(+/-19)
60-64yrs	132,700	93	70	(+/-15)	135,800	112	82	(+/-17)
65-69yrs	115,500	51	44	(+/-12)	118,600	62	52	(+/-15)
70-74yrs	96,500	40	41	(+/-12)	99,800	48	48	(+/-14)
75-79yrs	70,400	20	28	(+/-16)	76,800	24	31	(+/-15)
80-84yrs	41,600	8	19	(+/-12)	50,800	9	18	(+/-17)
85yrs+	28,600	5	17	(+/-19)	49,000	7	14	(+/-11)
Total[2]	2,514,000	3,540	146	(+/-5)	2,560,600	5,055	208	(+/-6)

[1] 95% Confidence Interval.
[2] The total rates are age-standardised rates per 100,000.

[4] Estimated number and rate of persons based on extrapolated data from 2019.
[5] Number and rate of persons based on presentations to all except two hospitals in the Republic of Ireland during 2021.

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APPENDIX E: DATA BRIEFING 'HOSPITAL-PRESENTING SELF-HARM DURING 2021'

National Self-Harm Registry Ireland

Hospital-presenting self-harm during 2021

Data Briefing, March 2023

The COVID-19 pandemic and associated measures to address it led to an increase in individual and population level risk factors for self-harm and suicide. Surveillance of mental health issues including depression, anxiety, self-harm and suicidal behaviours were identified as a priority in order to inform interventions and comprehensive responses (Sinyor et al., 2021).

The year 2021 was associated with many more cases of COVID-19 in Ireland than in 2020 but thankfully the illness was far less severe for the vast majority of those affected. Ireland experienced its third and largest wave of COVID-19 in early 2021, even achieving the highest seven-day infection rate in the world in mid-January (Figure 1). Level 5 restrictions applied throughout January-March 2021, with a phased return to schools in March. The lockdown remained in place until May 2021 and indoor hospitality remained closed through June. Restrictions continued to be eased in the second half of the year. A highly-effective vaccination programme was rolled out in 2021 resulting in almost 80% of the population aged over six months being fully vaccinated by the year's end.

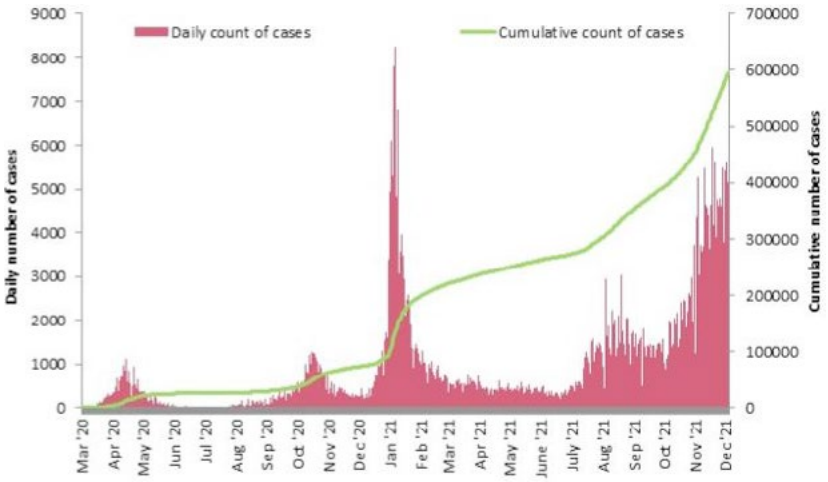

Figure 1: Number and cumulative number of confirmed COVID-19 cases in Ireland (Available at: hpsc.ie)

The National Self-Harm Registry Ireland (NSHRI), operated by the National Suicide Research Foundation (NSRF) and funded by the Health Service Executive National Office for Suicide Prevention, collects data on self-harm presentations to hospital emergency departments in the Republic of Ireland. This data briefing provides information on the monthly number of self-harm presentations to 24 hospitals during 2021, compared to presentations made to the same hospitals in 2018 and 2019. Data from 2018 and 2019 are used for comparison because 2020 was associated with the outbreak of the pandemic in Ireland.

These 24 hospitals provide nationally representative data given they are spread across the country and are located in the centres of large cities, in city suburbs and in large towns. In 2018 and 2019, these hospitals accounted for 67% of the national number of self-harm presentations recorded by the NSHRI. It should be noted that the data presented for 2021 are provisional and subject to change.

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The NSHRI recorded a total of 8,300 self-harm presentations to the 24 hospitals during 2021, equivalent to 22.7 self-harm presentations per day. A total of 16,864 self-harm presentations to these 24 hospitals were recorded for the years 2018 and 2019, equating to a rate of 23.1 per day. Therefore, the rate of hospital-presenting self-harm was just 1.6% lower in 2021 compared to 2018-2019 (Rate ratio=0.984, 95% confidence interval=0.959, 1.011).

While there was no overall difference in hospital-presenting self-harm between 2021 and the period 2018-2019, there were marked differences in specific months, namely fewer self-harm presentations than expected in January and May 2021 and more presentations than expected in April 2021 (Figure 2).

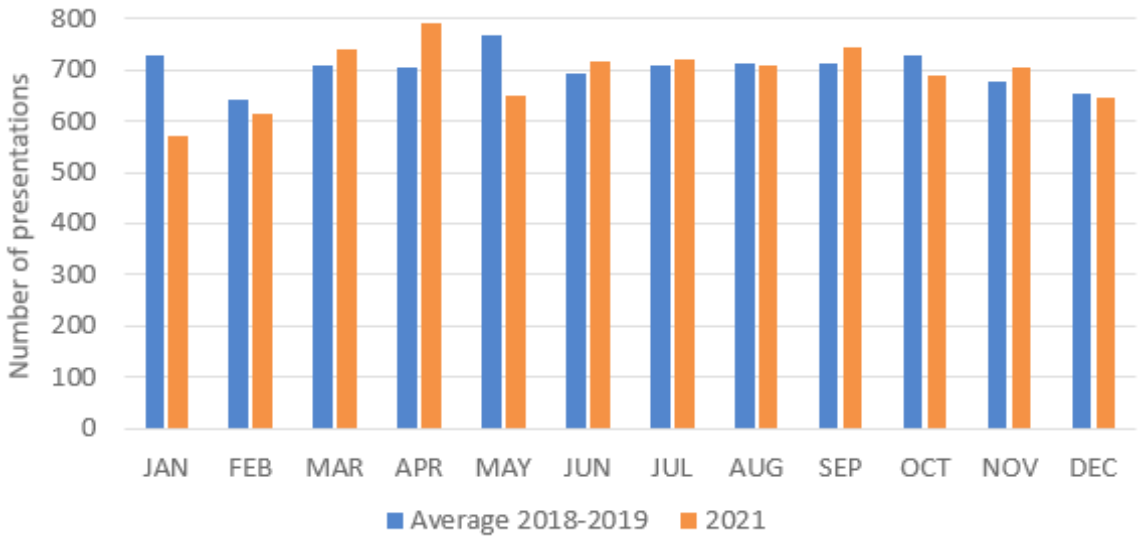

Figure 2: Monthly self-harm presentations to 24 hospitals in Ireland during 2018-2019 and 2021

In January 2021, there were 570 self-harm presentations to the 24 hospitals. The daily rate was 18.4, which is 22% lower than the rate of 23.4 per day in January 2018-2019 (Table 1). In February and March 2021, the daily rate was broadly in line with the rate for the same months of 2018-2019. However, the rate of hospital-presenting self-harm increased across the four months of lockdown so that in April 2021, it was 44% higher than it was in January (Rate ratio=1.44, 95% confidence interval=1.29, 1.60) and 12% higher than it was in the April of 2018-2019. Then, coinciding with the easing of restrictions in May, the self-harm rate fell by 21% (Rate ratio=0.79, 95% confidence interval=0.72, 0.88). This reduction meant the rate in May 2021 was 15% lower than in May 2018-2019. For the remaining seven months of 2021, the rate of hospital-presenting self-harm was similar to the rate for the equivalent month in 2018-2019.

Table 1: Monthly self-harm presentations to 24 hospitals during 2021 and 2018-2019

Month	Number (daily rate) in 2021	Average number (daily rate) in 2018-2019	Rate ratio (95% confidence interval)
January	570 (18.4)	1,453 (23.4)	0.78 (0.71, 0.86)
February	614 (21.9)	1,287 (23.0)	0.95 (0.87, 1.05)
March	740 (23.9)	1,414 (22.8)	1.05 (0.96, 1.14)
April	793 (26.4)	1,411 (23.5)	1.12 (1.03, 1.23)
May	651 (21.0)	1,533 (24.7)	0.85 (0.77, 0.93)
June	718 (23.9)	1,385 (23.1)	1.04 (0.95, 1.13)
July	721 (23.3)	1,417 (22.9)	1.02 (0.93, 1.11)
August	710 (22.9)	1,425 (23.0)	1.00 (0.91, 1.09)
September	745 (24.8)	1,427 (23.8)	1.04 (0.96, 1.14)
October	688 (22.2)	1,456 (23.5)	0.95 (0.86, 1.03)
November	705 (23.5)	1,352 (22.5)	1.04 (0.95, 1.14)
December	645 (20.8)	1,304 (21.0)	0.99 (0.90, 1.09)
Total	8,300 (22.7)	16,864 (23.1)	0.98 (0.96, 1.01)

Note: The rate ratio (RR) is the daily rate for a period in 2021 divided by the daily rate in the same period of 2018-2019. RRs equal or close to one indicate that the rate in 2021 was equal or similar to the rate in 2018-2019. RRs greater than one indicate that the rate in 2021 was higher than in 2018-2019. RRs less than one indicate that the rate was lower in 2021. The difference between the rate in 2021 and 2018-2019 is statistically significant if the 95% confidence interval for the RR does not include the value one, which is the case for January, April and May.

Key Findings

- Overall, the rate of hospital-presenting self-harm to the 24 hospitals with available data was just 1.6% lower in 2021 than it was in 2018-2019.
- The rate in January 2021, at the peak of the third wave of COVID-19 and start of the third lockdown, was 22% lower than it was in January 2018-2019
- The rate increased across the four months of lockdown and in April 2021, the rate was 44% higher than in January and 12% higher than in April 2018-2019
- Coinciding with the easing of restrictions in May, the self-harm rate fell by 21%, a reduction that meant the rate in May 2021 was 15% lower than in May 2018-2019
- For the remaining seven months of 2021, the rate of hospital-presenting self-harm was similar to the rate for the equivalent month in 2018-2019

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