Aftercare for self-harm patients following presentations to Irish hospital emergency departments, 2004-2012

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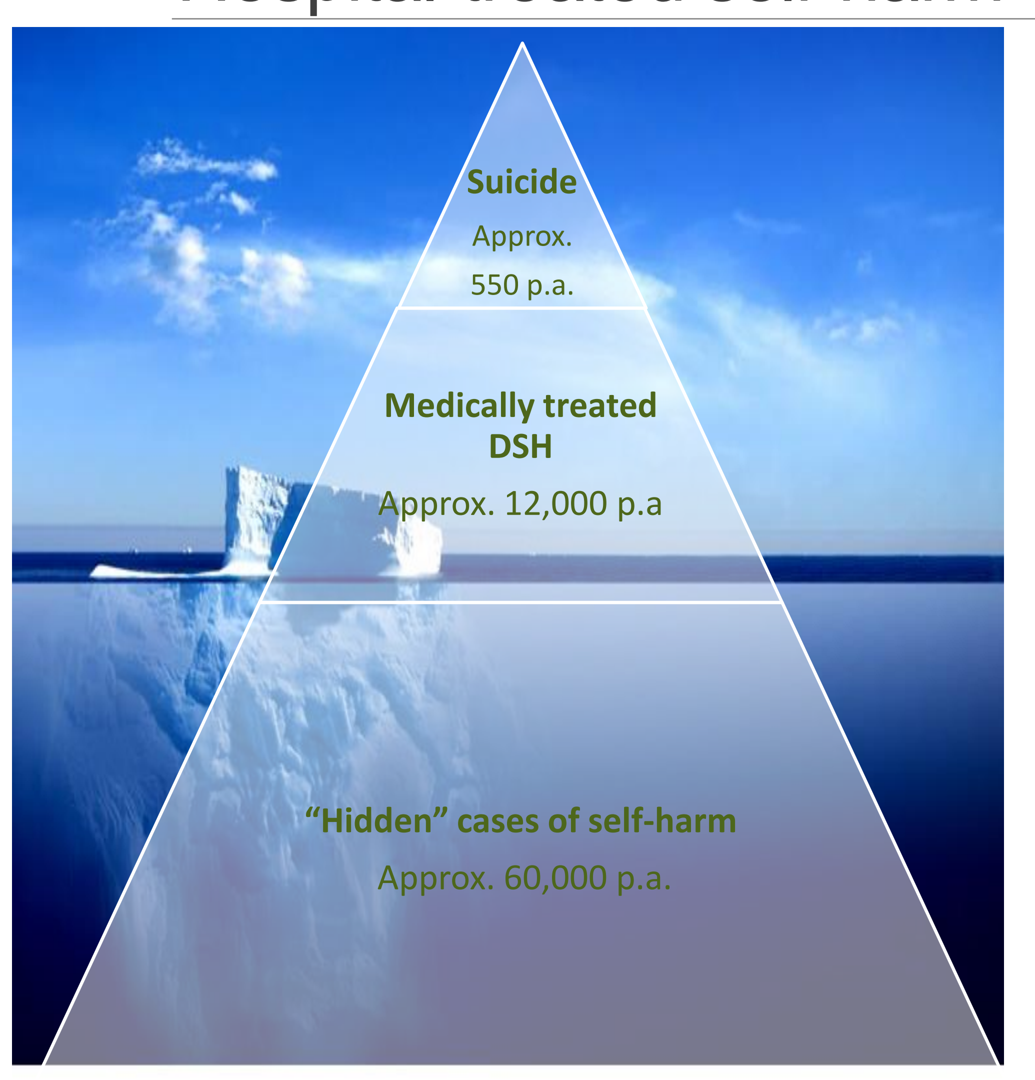
ESSSB 15,

15th European Symposium on Suicide and Suicidal Behaviour,

27-30 August, Tallinn

Hospital-treated self-harm

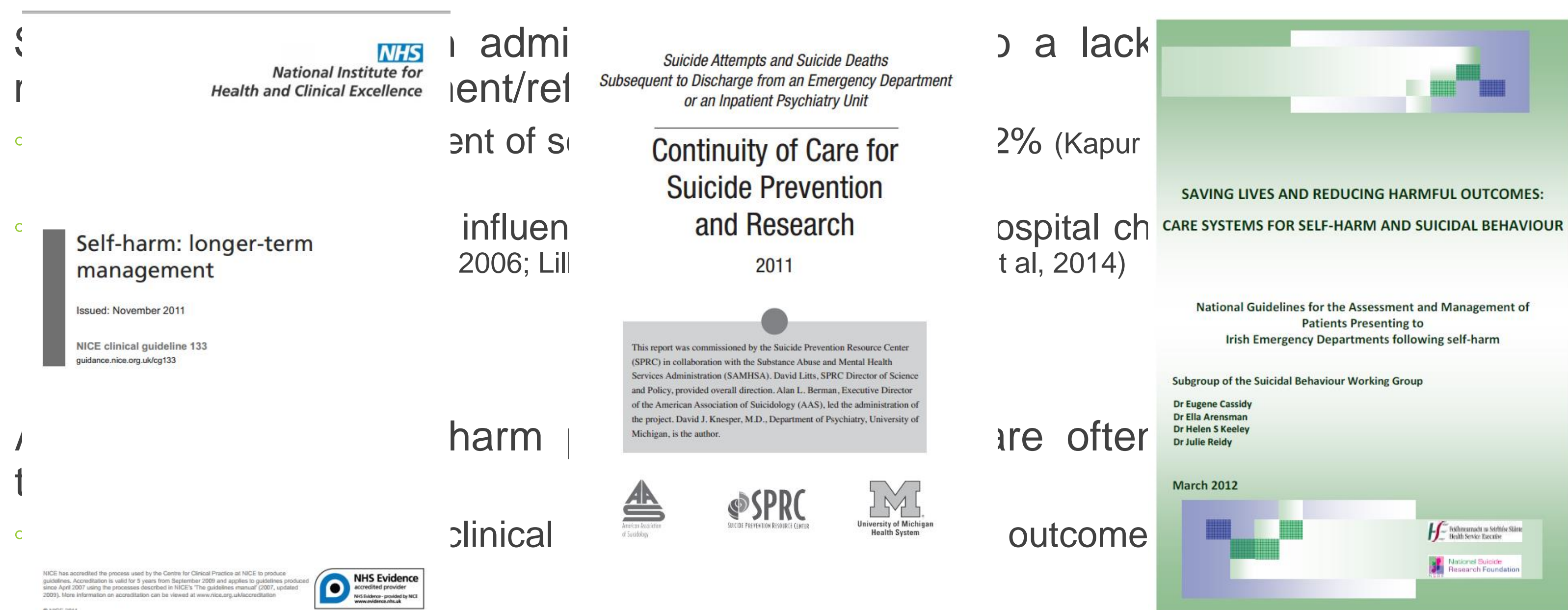


- In Ireland, approximately 12,000 presentations to EDs each year, involving 9,400 people
- Approximately 1.2m presentations annually (2012) (self-harm represents approx. 1%)
- One in five presentations are due to a repeat act

Source: Griffin et al, 2013

Background

- Clinical guidelines support standardised assessment and management of self-harm patients [NICE Guidelines (2011); American Psychiatric Association (2004); Guidelines of the Suicidal Behaviour Working Group in Ireland (Cassidy et al, 2012)]
- Management of self-harm patients has been associated with improved outcomes of self-harm patients (Bergen et al, 2010; Kapur et al, 2013)



Background

- Admission following aftercare has been shown to vary according to:
  - Method of self-harm, hospital, older age, previous history (Lilley et al, 2008; Bennewith et al, 2004; Suominen & Lonnqvist, 2006; Jimenez-Trevino et al., 2014)

- Previous studies have focused on factors associated with psychiatric hospitalisation in patients with suicidal ideation, following suicide attempts and self-poisoning (Baca-Garcia et al, 2004; Goldberg et al, 2007; Suominen & Lonnqvist, 2006; Kapur et al, 1998)

- Aims: To examine aftercare following self-harm for patients presenting to Irish EDs

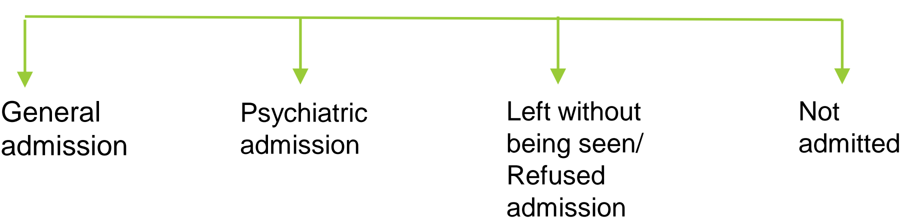
  a) The variation in aftercare of self-harm patients by standard demographics and clinical characteristics;

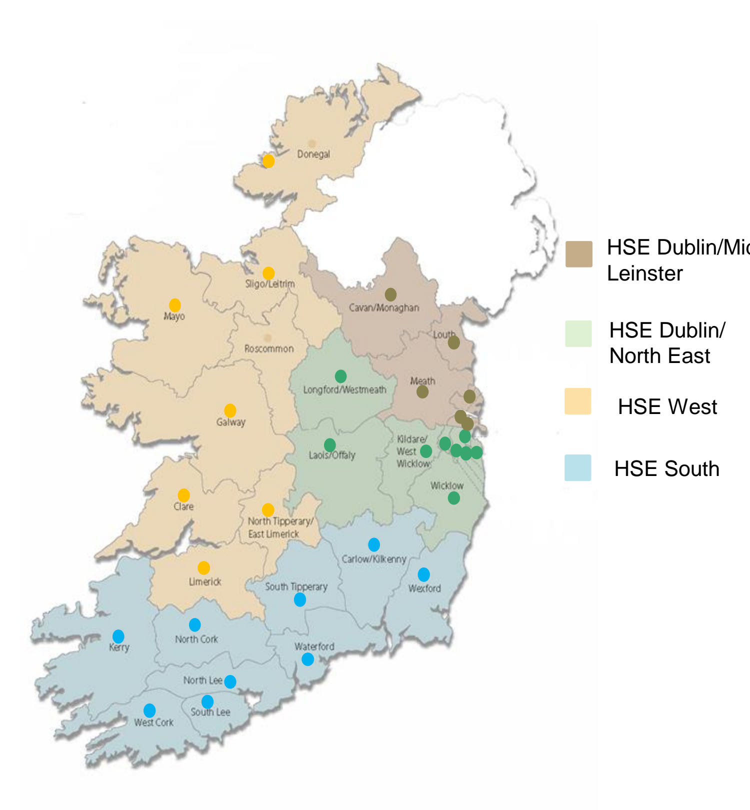
  b) Regional and temporal variation in aftercare of self-harm patients

  c) The factors which predict aftercare following self-harm

Study design

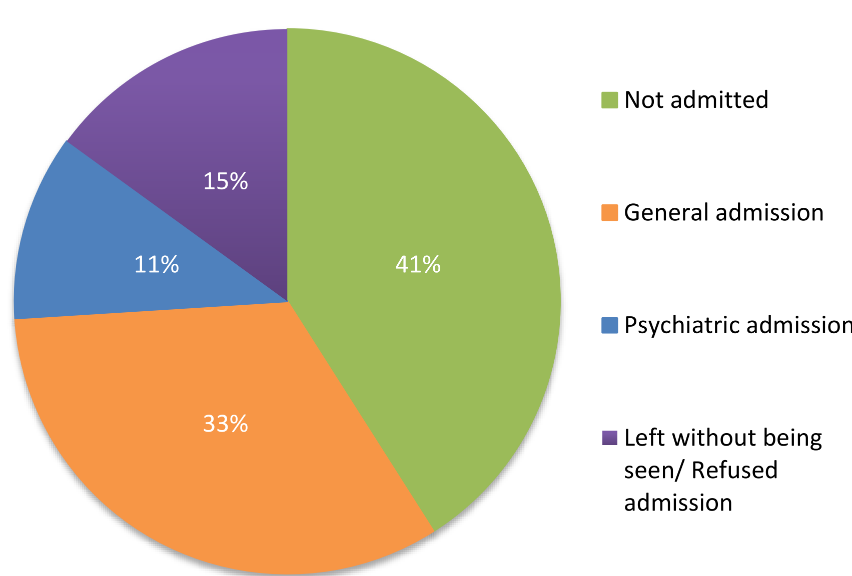
- Data: Self-harm presentation to all Emergency Departments in Ireland across an 8-year period (1 Jan 2004 to 31 Dec 2012)
- Methods: Univariate analysis and multinomial logistic regression
- Outcome variable: Aftercare





Results: Sample

- Over the 8-year period there were 101,904 presentations made to hospital recorded by the Registry, involving 63,457 individuals
- 55% (n=55,538) were female
- Drug overdose was the most common method of self-harm (72%, followed by self-cutting (22%)
- Most often, patients were discharged from the presenting hospital



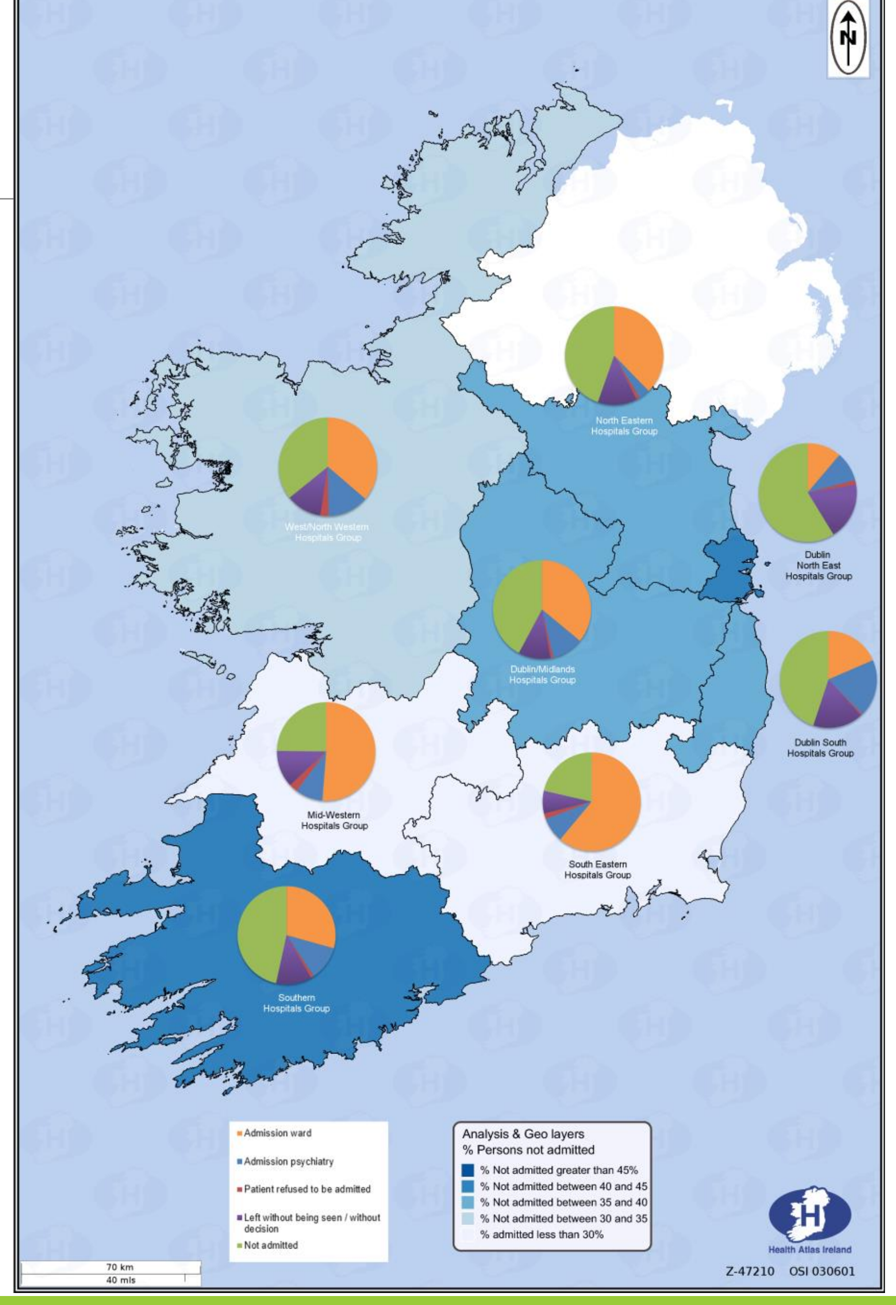
Aftercare by region

1. By Hospital

- General admission: 9% – 79%
- Psychiatric admission: 0% – 28%
- Left without being seen: 3% – 24%

2. By Hospitals Group

- General admission was lowest in Dublin North East (11%) and highest in South Eastern Group (61%)
- Dublin NE Group had highest proportion of patients leaving without being seen (19%)

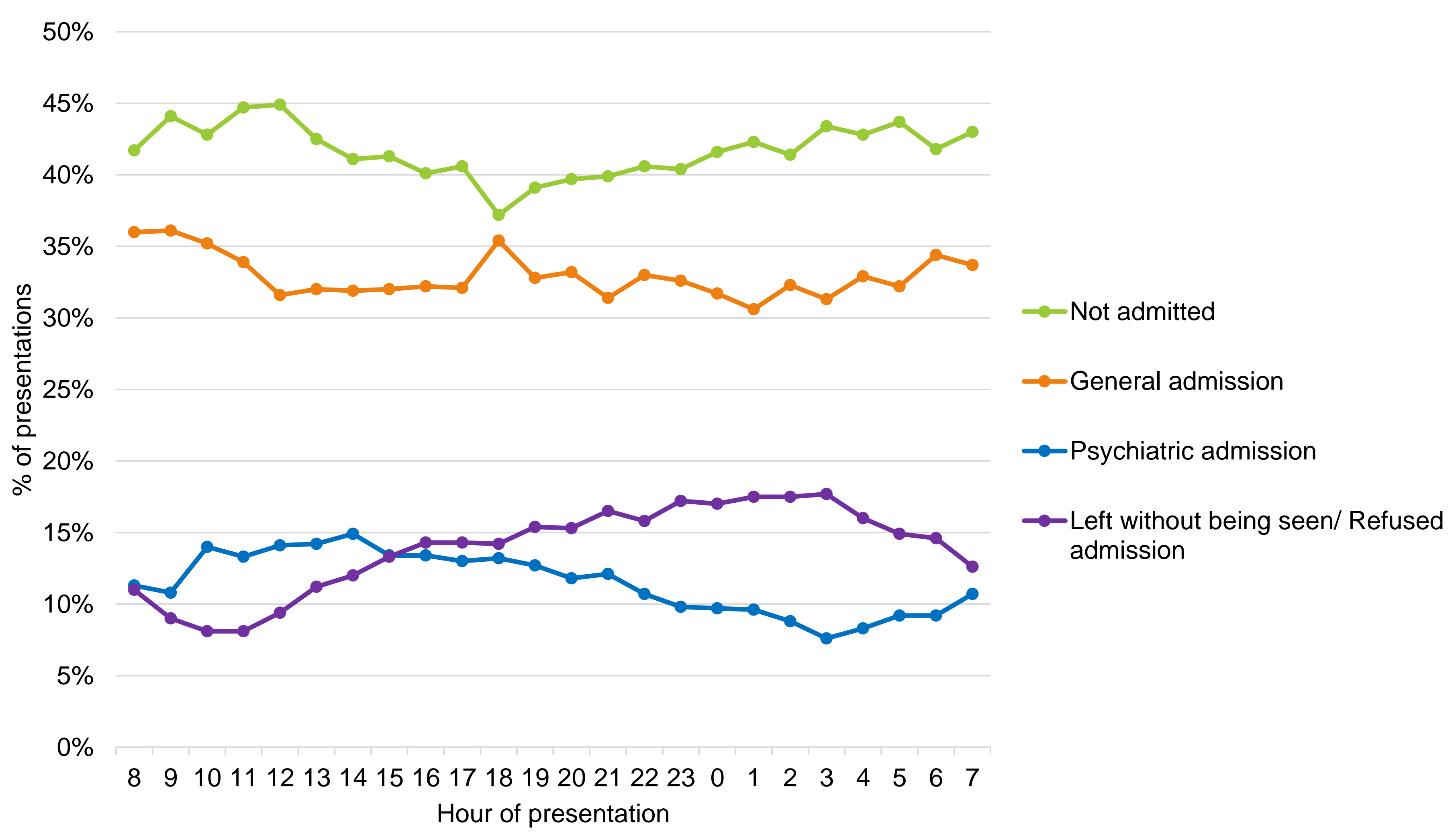


Trends in aftercare over time

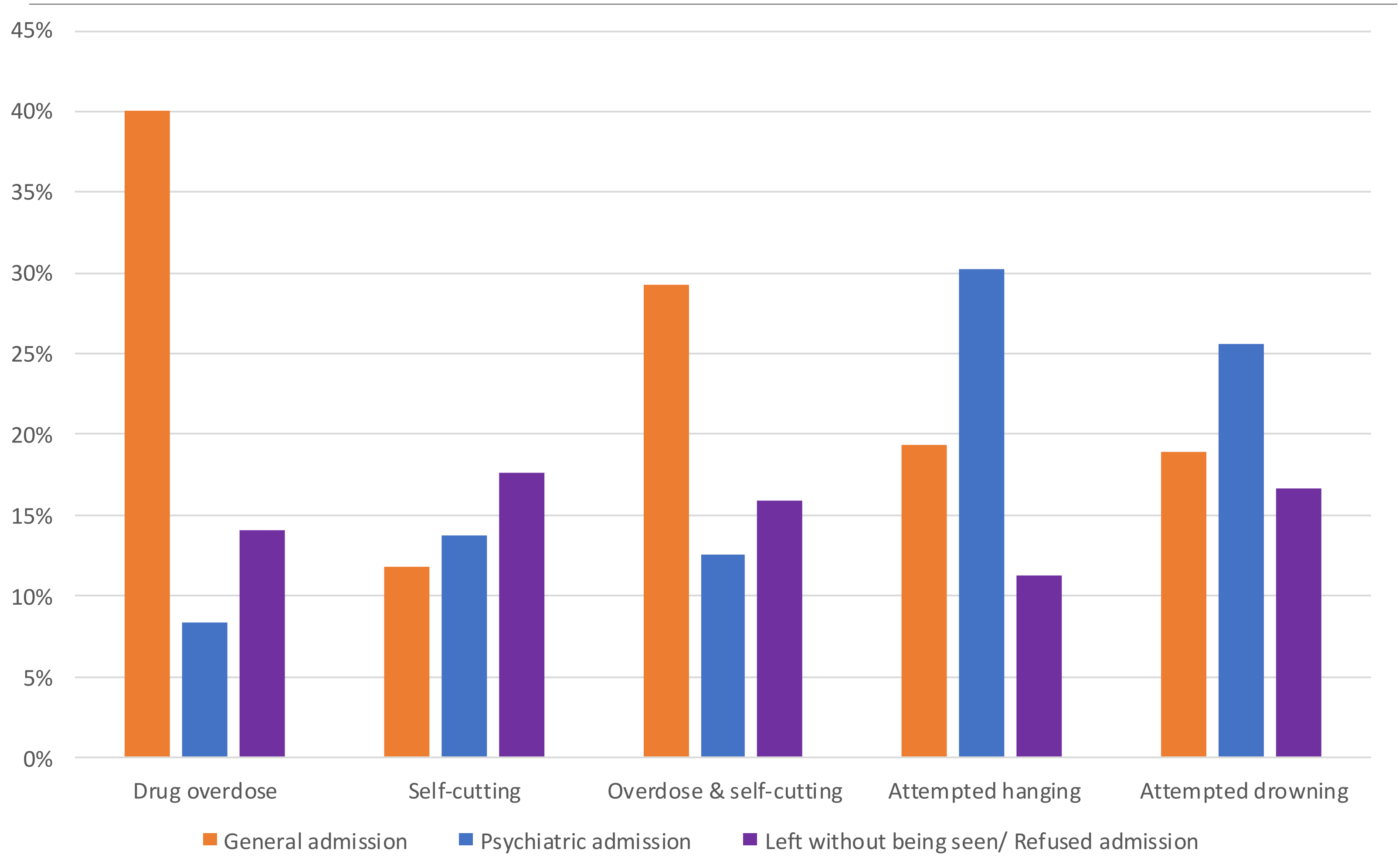
	Not admitted	% diff	General admission	% diff	Psychiatric admission	% diff	Refused admission/ Left without being seen	% diff
2004	30%	-	40%	-	15%	-	15%	-
2005	30%	-	40%	-	14%	-4	15%	+3
2006	37%	+23	35%	-13	13%	-9	15%	-4
2007	41%	+10	34%	-3	11%	-13	14%	-6
2008	44%	+8	33%	-4	10%	-9	13%	-6
2009	44%	+1	31%	-7	10%	-4	16%	+19
2010	44%	-1	30%	-3	11%	+8	16%	+1
2011	49%	+10	27%	-9	10%	-6	15%	-6
2012	48%	-2	28%	+3	10%	+3	14%	-1

X^2 for trend(1)=46.14; $p<0.001$

Aftercare by time of attendance



Aftercare by method



X^2 (15)=7644.56; $p<0.001$

Results: multinomial logistic regression (1)

The presenting hospital was the variable which was most associated with aftercare

		General admission	Psychiatric admission	Left without being seen/ Refused admission
Year of presentation	2004	Ref	Ref	Ref
	2005	1.01	0.93	0.98
	2006	0.77*	0.68*	0.75*
	2007	0.63*	0.48*	0.61*
	2008	0.55*	0.41*	0.55*
	2009	0.50*	0.40*	0.62*
	2010	0.49*	0.44*	0.65*
	2011	0.43*	0.36*	0.55*
	2012	0.44*	0.38*	0.55*
Time of attendance	midnight < 4am	0.95	0.85*	1.00
	4am < 8am	0.97	0.87	0.85*
	8am < noon	1.10	1.11	0.54*
	noon < 4pm	0.94	1.20*	0.71*
	4pm < 8pm	1.03	1.18*	0.94
	8pm < midnight	Ref	Ref	Ref

* = p<0.001; ref group (outcome) = Not admitted

Results: multinomial logistic regression (2)

		General admission	Psychiatric admission	Left without being seen/ Refused admission
Gender	Male	1.10*	1.15*	1.30*
	Female	Ref	Ref	Ref
Age	<15	1.11	0.18*	0.48*
	15-24	0.45*	0.43*	1.01
	25-34	0.57*	0.71*	1.28*
	35-44	0.66*	0.80*	1.39*
	45-54	0.80*	0.88*	1.38*
	55+	Ref	Ref	Ref
Residence	Household resident	Ref	Ref	Ref
	Hospital inpatient	1.75*	9.61*	0.47*
	Homeless	0.67*	0.80*	1.14*
	Prisoner	0.39*	0.05*	0.25
City Resident	Yes	0.90	1.00	1.28*
	No	Ref	Ref	Ref

* = p<0.001; ref group (outcome) = Not admitted

Results: multinomial logistic regression (3)

		General admission	Psychiatric admission	Left without being seen/ Refused admission
Presentation number	1st	Ref	Ref	Ref
	2nd	1.13*	1.44*	1.20*
	3rd	1.12*	1.63*	1.32*
	4th	1.11	1.67*	1.38*
	5th plus	0.96	1.64*	1.64*
Method	Drug overdose only	Ref	Ref	Ref
	Self-cutting only	0.16*	0.99	0.77*
	Drug overdose and self-cutting	0.70*	1.45*	0.92
	Attempted hanging	0.45*	4.00*	0.75*
	Attempted drowning	0.36*	2.95*	0.93
	Other	0.57*	2.04*	0.82*
Alcohol	Yes	0.95	0.68	1.24*
	No	Ref	Ref	Ref
Weekend presentation	Yes	Ref	Ref	Ref
	No	0.97	1.00	0.98

* = p<0.001; ref group (outcome) = Not admitted

Discussion

- Over the study period, a declining number of presentations result in inpatient admission to the presenting hospital following self-harm

- Large proportion of presentations (15%) leave the ED without being seen or refuse admission

- Being male, older age, method, chronicity/recidivism, time of attendance, residence all affect aftercare in Ireland
  - Presenting hospital matters most of all

- Admission to a psychiatric ward may reflect availability of psychiatric teams

- Repeaters leaving the ED without recommendation suggests a gap in services

Limitations

- Lack of knowledge about self-harm history
- No information on psychosocial assessment of self-harm patients
- No information on referrals made for patients not admitted to the emergency department

Recommendations

- Variation in aftercare pose a challenge for the assessment and management of self-harm
- There is need for uniform assessment and referral procedures, in line with international best practice, to ensure the most appropriate treatment
- Need for the implementation of national evidence informed training programmes to address attitudes, knowledge and confidence of hospital staff
- Further research is required among people who present to hospital following self-harm and who subsequently leaving without an assessment and recommendation for next care

Thank You!

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