Self-harm: hospital admissions and measures of distress

If you only read four things:

1. Emergency admissions for self-harm are significantly higher in Suffolk than England as a whole.1
2. Most people (62.3%) who self-harm do not receive medical or psychological help.2
3. Rates of self-harm have more than doubled (across all age groups) since 2000.2
4. The association between deprivation and emergency admission rates for self-harm in Suffolk has increased since 2009/10-10/11 (admissions increase by 45.6 admissions per 100,000 residents for every unit increase in deprivation).

Key points

What is the issue?
Self-harm is when somebody damages or injures their body on purpose.3
Self-harm is not an illness, it is an expression of personal distress.4
Self-harm is not usually a suicide attempt but a way of coping with emotions, such as low self-esteem. If people who self-harm are not supported to deal with the reasons they self-harm, these reasons may cause suicidal feelings. The overwhelming feelings which lead someone to self-harm may be caused by social problems (such as relationships), traumatic events, or psychological causes (such as borderline personality disorder).3
Self-harm includes destructive, or dangerous behaviour such as cutting the skin or misusing alcohol or drugs. Intentional self-harm is referenced in the World Health Organization’s International Classification of Diseases (ICD-10) as “Intentional self-harm” (X60 to X84) and “Sequela of intentional self-harm - late effects” (Y87.0).

Why is it important for Suffolk?
Self-harm is one of the top five causes of acute medical admission and those who self-harm have a 1 in 6 chance of repeat attendance at A&E within the year.
Over half the people who die by suicide have a history of self-harm. One study of people presenting at Accident & Emergency (A&E) showed a subsequent suicide rate of 0.7% in the first year - 66 times the suicide rate in the general population. Half of adolescents (10-19) who die by suicide have a history of self-harm; young people who self-harm are 17 times more likely to die (than unaffected 10-19 year olds) by suicide within a year.
In recent years, there has been growing awareness of “digital self-harm,” defined as “anonymous online posting, sending, or otherwise sharing of hurtful content about oneself”. However, research in this area is very limited.
Overall the admissions for self-harm in Suffolk are significantly higher than rates for England. There are also notable inequalities, for example rates of self-harm in people with learning disabilities, as outlined below.
The numbers

Information on hospital admissions following self-harm is available for Suffolk, however, the Adult Psychiatric Morbidity Survey (APMS) suggests only 37.7% of people who have ever self-harmed received medical or psychological help\(^2\). Estimates of overall prevalence of self-harm for Suffolk are given in Tables 1 and 2.

In 2016-17, there were 1,396 emergency hospital admissions for intentional self-harm in Suffolk, and 103,723 in England\(^1\). 67.6% of the admissions were for female patients in Suffolk compared to 62.9% for England\(^4\). These figures exclude regular and day attenders\(^7\).

The emergency admission rate for self-harm among residents of Suffolk County (age-sex standardised) in financial year 2016/17 was 200.6 admissions per 100,000 residents (95% confidence interval: 211.4, 190.1). This is statistically significantly worse than the England rate (185.3 per 100,000; 95% confidence interval: 186.4, 184.1)\(^{10}\).

Figure 1: Emergency hospital admissions for intentional self-harm (Directly standardised rate - per 100,000), Suffolk

![Figure 1](image)

**Source:** Public Health England NHS. Mental Health and Wellbeing Joint Strategic Needs Assessment (JSNA) (2017)\(^1\)

Table 1: Emergency Hospital Admissions for Intentional Self-Harm (Directly standardised rate - per 100,000), Suffolk local authorities\(^{10}\)

<table>
<thead>
<tr>
<th>Area</th>
<th>Count</th>
<th>Rate</th>
<th>95% Lower CI</th>
<th>95% Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>103,723</td>
<td>185.3</td>
<td>184.1, 186.4</td>
<td>186.4, 186.4</td>
</tr>
<tr>
<td>Suffolk</td>
<td>1,396</td>
<td>200.6</td>
<td>196.1, 214.4</td>
<td>211.4, 214.4</td>
</tr>
<tr>
<td>Ipswich</td>
<td>370</td>
<td>262.3</td>
<td>236.0, 286.6</td>
<td>260.6, 286.6</td>
</tr>
<tr>
<td>St. Edmundsbury</td>
<td>245</td>
<td>229.9</td>
<td>201.5, 250.2</td>
<td>260.2, 250.2</td>
</tr>
<tr>
<td>Waveney</td>
<td>214</td>
<td>200.4</td>
<td>174.2, 229.5</td>
<td>219.5, 229.5</td>
</tr>
<tr>
<td>Mid Suffolk</td>
<td>157</td>
<td>194.2</td>
<td>156.2, 215.8</td>
<td>218.5, 215.8</td>
</tr>
<tr>
<td>Suffolk Coastal</td>
<td>189</td>
<td>182.7</td>
<td>156.6, 211.5</td>
<td>215.5, 211.5</td>
</tr>
<tr>
<td>Forest Heath</td>
<td>109</td>
<td>175.1</td>
<td>143.6, 212.4</td>
<td>212.4, 212.4</td>
</tr>
<tr>
<td>Babergh</td>
<td>112</td>
<td>135.7</td>
<td>111.2, 163.9</td>
<td>163.9, 163.9</td>
</tr>
</tbody>
</table>

**Source:** Public Health England. Public Health Outcomes Framework (PHOF) (2018).\(^{10}\)
Figure 2: Self-harm ever (reported face to face) by age, England


Table 2: Self-harm and suicidal thoughts (estimated) by Suffolk CCG

<table>
<thead>
<tr>
<th>Condition</th>
<th>Self-harm (ever) 16-74</th>
<th>Suicidal thoughts (past year) 16-74</th>
<th>Suicide attempts (past year) 16-74</th>
<th>Any CMD* (16+)</th>
<th>Total patients 16+</th>
<th>Total patients 16-74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Yarmouth &amp; Waveney</td>
<td>12,864</td>
<td>10,712</td>
<td>1,482</td>
<td>33,990</td>
<td>199,941</td>
<td>173,484</td>
</tr>
<tr>
<td>Ipswich &amp; East Suffolk</td>
<td>21,537</td>
<td>17,935</td>
<td>2,481</td>
<td>56,909</td>
<td>334,756</td>
<td>294,406</td>
</tr>
<tr>
<td>West Suffolk</td>
<td>13,381</td>
<td>11,142</td>
<td>1,541</td>
<td>35,355</td>
<td>207,973</td>
<td>182,730</td>
</tr>
</tbody>
</table>

* CMD = Common Mental Disorder

Table 3: Self-harm and suicidal thoughts (estimated) by Suffolk local authority

<table>
<thead>
<tr>
<th>Condition</th>
<th>Self-harm (ever) 16-74</th>
<th>Suicidal thoughts (past year) 16-74</th>
<th>Suicide attempts (past year) 16-74</th>
<th>Any CMD * (16+)</th>
<th>Estimated population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prevalence per 1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suffolk</td>
<td>64</td>
<td>54</td>
<td>7</td>
<td>170</td>
<td>615,866</td>
</tr>
<tr>
<td>Babergh</td>
<td>39,623</td>
<td>32,995</td>
<td>4,564</td>
<td>104,697</td>
<td>533,813</td>
</tr>
<tr>
<td>Forest Heath</td>
<td>4,787</td>
<td>3,987</td>
<td>551</td>
<td>12,650</td>
<td>74,410</td>
</tr>
<tr>
<td>Ipswich</td>
<td>3,375</td>
<td>2,811</td>
<td>389</td>
<td>8,919</td>
<td>52,464</td>
</tr>
<tr>
<td>Mid Suffolk</td>
<td>7,081</td>
<td>5,896</td>
<td>816</td>
<td>18,709</td>
<td>110,055</td>
</tr>
<tr>
<td>St Edmundsburry</td>
<td>5,408</td>
<td>4,504</td>
<td>623</td>
<td>14,291</td>
<td>84,063</td>
</tr>
<tr>
<td>Suffolk Coastal</td>
<td>6,730</td>
<td>5,604</td>
<td>692</td>
<td>15,879</td>
<td>93,407</td>
</tr>
<tr>
<td>Waveney</td>
<td>6,233</td>
<td>5,190</td>
<td>718</td>
<td>16,468</td>
<td>96,872</td>
</tr>
</tbody>
</table>

* CMD = Common Mental Disorder


92.4% of diagnoses for intentional self-harm hospital admissions in Suffolk 2014/15-16/17 were poisoning. 5.9% were from “sharp or blunt object”. NB, these figures are for hospital admissions, so should be interpreted as showing that more cases of self-harm by poisoning require specialist intervention not that there are more instances of self-harm by poisoning overall. Monthly data for Suffolk 2014/15 to 2016/17 shows no apparent seasonal variation. Self-cyberbullying has been called “Digital Munchausen” as it differs from physical self-harm in seeking a response from others.
An American survey of students (12 – 17 years old) suggested 6% self-harmed digitally. Digital self-harmers were more likely to experience mental ill health (depression, physical self-harm, or more than two psychiatric issues during high school), to be bullied, or to report being frequent users of drugs and alcohol.

The impact
Self-harm increases the likelihood that the person will eventually die by suicide. A wide range of psychiatric problems are associated with self-harm.

Around half of the people who attend an emergency department after an incident of self-harm will have visited their GP in the previous month. A similar proportion will visit their GP within 2 months after an incident of self-harm.

What are the key inequalities?

Groups that are at greater risk from self-harm include:

- women (see Figure 4) especially young women. 16-24-year-old women are more than twice as likely to self-harm than young men (19.7% compared to 7.9% 16-24-year-old men)
- people under 60 who live on their own
- people who are lesbian, gay, bisexual or gender reassigned. This is linked to bullying at school and to hate crime and fear of hate crime among adults
- people with or recovering from drug and alcohol problems
- people living in areas of deprivation (see Figure 7)
- employment status is strongly associated with self-harm for men (see Figure 6)

Gender

The age-standardised emergency admission rate for self-harm among females in Suffolk in 2016/17: 275.0 admissions per 100,000 residents was significantly higher than the rate among males: 129.5. 83% of Suffolk emergency hospital admissions for intentional self-harm in 15-18-year olds were female.

Figure 4: 2.10ii - Emergency hospital admissions for intentional self-harm by sex, Suffolk, 2016/17, directly standardised rate per 100,000

American boys are more likely to digitally self-harm than girls\textsuperscript{12} (7.1\% to 5.3\%).

**Age**
- 13\% of Suffolk emergency hospital admissions for an accident or injury were due to intentional self-harm in 15-18-year olds\textsuperscript{15}.

Table 4a: Suffolk and North East Essex STP Hospital admissions as a result of self-harm (directly standardised rate, 10-24-year olds)

<table>
<thead>
<tr>
<th>Area</th>
<th>Value</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>417.4</td>
<td>412.3</td>
<td>422.5</td>
</tr>
<tr>
<td>Suffolk and North East Essex</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NHS North East Essex CC</td>
<td>527.1</td>
<td>471.9</td>
<td>587.0</td>
</tr>
<tr>
<td>NHS Ipswich And East Su</td>
<td>427.2</td>
<td>378.1</td>
<td>480.9</td>
</tr>
<tr>
<td>NHS West Suffolk CCG</td>
<td>380.8</td>
<td>320.6</td>
<td>448.9</td>
</tr>
</tbody>
</table>


Table 4b: Norfolk and Waveney STP Hospital admissions as a result of self-harm (directly standardised rate, 10-24-year olds)

<table>
<thead>
<tr>
<th>Area</th>
<th>Value</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>417.4</td>
<td>412.3</td>
<td>422.5</td>
</tr>
<tr>
<td>Norfolk and Waveney</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NHS Great Yarmouth And...</td>
<td>501.0</td>
<td>432.4</td>
<td>577.3</td>
</tr>
<tr>
<td>NHS West Norfolk CCG</td>
<td>470.2</td>
<td>390.5</td>
<td>561.5</td>
</tr>
<tr>
<td>NHS North Norfolk CCG</td>
<td>458.2</td>
<td>376.8</td>
<td>551.9</td>
</tr>
<tr>
<td>NHS Norwich CCG</td>
<td>381.9</td>
<td>325.1</td>
<td>445.6</td>
</tr>
<tr>
<td>NHS South Norfolk CCG</td>
<td>326.3</td>
<td>269.5</td>
<td>391.6</td>
</tr>
</tbody>
</table>

People over 65 years old who self-harm are much more likely to continue to self-harm, and to attempt suicide, than younger adults according to NICE\textsuperscript{4,13}.

**Socio-economic status**

Young people (aged 10-19) were 23\% less likely to be referred to mental health services if they were registered at a practice in the most deprived areas\textsuperscript{8}.

\textbf{Figure 5: Method of self-harming, by age, England}

![Figure 5: Method of self-harming, by age, England](image)


**Figure 6: Self-harm ever, by employment status (age standardised, 16-64), England**

![Figure 6: Self-harm ever, by employment status (age standardised, 16-64), England](image)

Figure 7: Age-sex standardised emergency admission rates for self-harm by deprivation deciles in Suffolk, 2013/14-15/16, all ages

For this analysis, data for lower-layer Super Output Areas (LSOAs) were grouped into deprivation deciles according to estimated Index of Multiple Deprivation 2010 scores, i.e. most deprived 10% of LSOAs in Suffolk, second most deprived 10% of LSOAs in Suffolk, and so on.

A simple linear regression model fitted to these data indicated a statistically significant association between age-sex standardised emergency admission rates for self-harm and deprivation in Suffolk in 2013/14-2015/16 (P=0.0001).

Over 85% of the variation in emergency admission rates for self-harm in 2013/14-2015/16 was explained by deprivation (R²=0.8503).

The model indicated that, for each unit increase in deprivation, emergency admission rates for self-harm in Suffolk in 2013/14-2015/16 increased by 45.6 admissions per 100,000 residents (95% confidence interval of slope: 17.1, 34.9).

Inequalities in emergency admission rates for self-harm exist in Suffolk, with these rates increasing significantly with increasing levels of deprivation. The inequality has got notably worse since 2009/10-10/11:

- 85% (an increase from 75%) of variation in emergency admissions is explained by deprivation
- the increase of emergency admission rates by unit of deprivation has more than doubled, from 22.7 admissions per 100,000 residents in 2009/10-10/11 to 45.6 admissions per 100,000 in 2013/14-2015/16

People with learning disabilities

Some people with learning disabilities may self-injure. This self-injurious behaviour (SIB) is often considered a “challenging behaviour” rather than self-harm. SIB commonly includes skin picking, self-biting and head punching\(^{17}\), contrasting with the common methods of self-harm (cutting, poisoning, burning)\(^{18}\).

Studies of people with LD suggest a prevalence of self-injurious behaviour of 13.6-17.4%\(^{19}\).
Costs

Mean costs for hospital treatment of self-harm are estimated to be between £753 (only self-injury) to £987 (self-poisoning with self-injury). The psychosocial assessment part of the costs, averaged at £228 (adults) and £392 for under-18s.20

Figure 8: Suffolk public mental health expenditure and emergency admissions for intentional self-harm (2017)21

What else could we do?

The guidance, Self-harm in over 8s: short-term management and prevention of recurrence (CG16), NICE (2004) (reviewed in 2016) included detailed recommendations for immediate treatment within the first 48 hours, and for long term support.

Summary of NICE Guidance 164:

1. Clinical and non-clinical staff should be provided with appropriate training to equip them to understand and care for people who have self-harmed.
2. Ambulance and emergency department services should ensure activated charcoal is always immediately available to staff.
3. All people who have self-harmed should be offered a preliminary psychosocial assessment at triage to determine mental capacity and the possible presence of mental illness.
4. People who have self-harmed should be offered treatment for the physical consequences of self-harm, regardless of their willingness to accept psychosocial assessment or psychiatric treatment.
5. All people who have self-harmed should be offered a comprehensive assessment of needs, including evaluation of the social, psychological and motivational factors, current suicidal intent and an assessment of their full mental health and social needs.
6. Prescribing to service users at risk of self-poisoning: always prescribe those drugs that are the least dangerous in overdose and prescribe fewer tablets at any one time.

NICE Self-harm in over 8s: long-term management Guidance and guidelines (CG133)¹³ 2011 (reviewed in 2016) addresses the longer-term psychological treatment and management of both single and recurrent episodes of self-harm, and does not include physical treatment of self-harm or for psychosocial management as in NICE clinical guideline 16.

The guidance outlines knowledge on self-harm i.e. that it is common, especially among younger people. The following recommendations were identified as priorities for implementation.

Health and social care professionals working with people who self-harm should:
1. aim to develop a trusting, supportive and engaging relationship with them and be aware of the stigma and discrimination sometimes associated with self-harm
2. ensure that people are fully involved in decision-making about their treatment and care
3. aim to foster people's autonomy and independence wherever possible
4. maintain continuity of therapeutic relationships wherever possible
5. ensure that information about episodes of self-harm is communicated sensitively to other team members
6. offer an integrated and comprehensive psychosocial assessment of needs and risks to understand and engage people who self-harm and to initiate a therapeutic relationship.

Recommendations
1. Commissioners should ensure there is multidisciplinary training for all professionals on risks and impacts, and implementation of NICE guidance
2. Further analysis of the reasons for the inequalities should be explored and the development of targeted approaches considered
3. Further analysis should be undertaken to identify how many of the admissions in Suffolk are repeated episodes

Related mental health needs assessments
- Trans and non-binary people and mental health

References


