Case for Change: Self-harm in Children and Young People

Cath Lewis, Janet Ubido and Hannah Timpson
Contents

Summary .................................................................................................................................................. 1
1. Introduction ......................................................................................................................................... 4
2. Statistics .............................................................................................................................................. 4
   2.1 National statistics .......................................................................................................................... 4
   2.2 Statistics for Cheshire and Merseyside ......................................................................................... 8
   2.3 Summary of national and local data on self-harm .......................................................................... 13
3. Literature review .................................................................................................................................. 14
   What works ......................................................................................................................................... 14
   Protective factors ............................................................................................................................... 14
   Support within schools ...................................................................................................................... 15
   Risk management and secondary prevention .................................................................................... 17
   Hospital care ....................................................................................................................................... 19
   Hospital admissions: ......................................................................................................................... 19
   Joint working ...................................................................................................................................... 20
   Self-help and internet support ........................................................................................................... 20
   Barriers to help-seeking .................................................................................................................. 20
   Links between self-harm and adverse childhood experiences .......................................................... 21
4. Next steps and recommendations ...................................................................................................... 22
5. Conclusion .......................................................................................................................................... 25
6. References ........................................................................................................................................... 26
7. Appendices ......................................................................................................................................... 30
Summary
Liverpool John Moores University were commissioned by Champs Public Health Collaborative to produce a report on self-harm, covering children and young people aged 5-24 years in the 9 local authority areas in Cheshire and Merseyside. A project working group was established in order to provide guidance in compiling the report. ChiMat refer to self-harm as ‘self-harm happens when someone hurts or harms themselves’. The report includes a review of relevant literature on self-harm, available local and national data, an overview of the links between adverse childhood experiences (ACEs) and self-harm, as well as relevant suicide audit information.

The literature review on self-harm involved looking at reviews of research on self-harm that had been published on relevant electronic databases since the last NICE Quality Standard was issued in 2013. The review aimed to identify ‘what works’ for education and community-based interventions and clinical services relating to self-harm in children and young people, and also looked at any barriers and challenges that young people may experience in accessing services.

The report also looked at relevant national and local data. Self-harm is difficult to measure as it may not be reported or may not be recorded as self-harm. However, the most recent hospital episode statistics (HES) show large increases in hospital admissions for self-harm nationally over the last 9 years: the number of girls who needed hospital treatment due to poisoning, which accounted for 88% of self-harm admissions in children aged under 18, increased by 42% from 2005/6 to 2014/15, from 9,741 to 13,853.

A recent study published in the British Medical Journal, whose authors asserted that there is a lack of available data in self-harm in primary care populations, analysed electronic health records from 647 general practices in the UK, and found an incidence of 37.4 per 10,000 for girls and 12.3 per 10,000 for boys aged 10-19. There was a sharp increase in self-harm in girls aged 13-16, from 45.9 per 10 000 in 2011 to 77.0 per 10, 000 in 2014.

Local data on self-harm was more difficult to obtain. A&E attendance data was not obtained, as the time required to process requests for HES data fell beyond the timescales for this report. However, hospital admissions for self-harm in 10-24 year olds for 2015-16 were significantly worse than the England average in the Liverpool City Region overall and Cheshire & Warrington overall and are increasing.
North West Ambulance Service (NWAS) data on self-harm, focusing on the 2 codes that are linked to self-harm, was also received for each of the Cheshire and Merseyside local authority areas. For the financial year ending March 2008, there were 4709 NWAS call outs for self-harm. By the year ending March 2013, this had fallen to 3397, although it had risen again to 3688 by the year ending March 2017. In order to supplement local data available, data on the number of referrals to Child and Adolescent Mental Health Services (CAMHS) (NHS services for young people with emotional, behavioural or mental health difficulties)\(^1\) was collected, in order to demonstrate the level of use of services locally, alongside suicide audit information.

According to a recent report that was compiled by Cheshire and Merseyside Suicide Reduction Network\(^2\) (Knuckey, 2017), the most recent (2015) rate for Cheshire and Merseyside of 10.6 deaths for suicide and undetermined injury per 100,000 was similar to the England average (10.1 per 100,000). The suicide rates vary by local authority, from 8.9 per 100,000 in Knowsley, up to 13.7 per 100,000 in St.Helens’, which is significantly higher than the England average.

In 2015 in Cheshire & Merseyside 17 children and young people aged 10-19 years and 16 aged 20-24 years died by suicide. Of these seven had a history of self-harm and ten had previously attempted suicide (C&M Joint Suicide Audit 2015).

**Limitations of this report**

- Self-harm may be higher than quoted in official statistics in this report, as self-harm is under-reported, and young people may not present to services
- Official definitions of self-harm, where quoted, do not usually include drug and alcohol abuse, which is higher in young men than young women
- The report does not include A&E attendances for self-harm, as the time required to process requests for HES data fell beyond the report timescales

---

1 https://youngminds.org.uk/find-help/your-guide-to-support/guide-to-camhs/
2 The network is now called ‘Cheshire and Merseyside Suicide Prevention Network’
Priority recommendations for Cheshire and Merseyside

The following recommendations are a top priority in Cheshire and Merseyside. A full list of recommendations is provided in the main report.

Prevention
- Encourage parents to engage in their children’s digital lives as early as possible
- Improve mental health literacy in parents, children, teachers and other professionals
- Promote a whole school & college approach to emotional & mental wellbeing, including resilience skills, social norms, support services in schools & colleges and single-point of access
- Implement appropriate interventions to mitigate ACEs if they are identified

Early detection
- Improve young people’s, parents and carers awareness of what help is available and where they can access it
- Advice and guidance for young people and families should be available in online, digital and printed formats
- Move towards the THRIVE model of mental wellbeing
- All secondary schools and colleges should have regular access to on-site support from a CAMHS professional
- Improve training for professionals working with children and young people
- Establish clear self-harm pathways

Treatment
- Use psychological therapies specifically structured for people who self-harm to reduce repetition of self-harm
- Assessment of a young person’s digital life should form part of clinical assessments, when there are concerns about self-harm
- Positive mental health should be promoted in the acute hospital setting
- Mental health assessments should be available every day of the year where necessary, including weekends and Bank Holidays
- Young people under the age of 16 seen in A&E following acute self-harm should be admitted
- Promote joint working across the interface of NHS, community, local authorities with involvement of young people, such as a self-harm pathway
- In assessing barriers to engagement seek the views of young people who have disengaged from services, those whose views are not currently known, and those who are the most vulnerable
- Standardise data collection on hospital and community care attendances for self-harm across Cheshire and Merseyside in order to facilitate comparisons across local authority areas
- Development of a self-harm dataset

Local areas will be asked to conduct an audit in their area, to benchmark current practice against national guidelines, including NICE Guidance and the report recommendations.
1. Introduction
Liverpool John Moores University were commissioned by the Champs Public Health Collaborative to produce a report on self-harm, covering children and young people aged 5-24 years in the 9 local authority areas in Cheshire and Merseyside. A project working group, including key public health and mental health representatives from across Cheshire and Merseyside, was established in order to provide guidance in compiling the report. The report includes a review of relevant literature, which aims to identify ‘what works’ for education and community-based interventions and clinical services relating to self-harm in children and young people, and also looks at any barriers and challenges that young people may experience in accessing services.

Available local and national data on hospital admissions, as well as data on North West Ambulance Service call outs for self-harm, and data to show numbers of children and young people accessing Child and Adolescent Mental Health Services (CAMHS) in Cheshire and Merseyside, are also included in the report.

2. Statistics
2.1 National statistics
ChiMat refer to self-harm as ‘self-harm happens when someone hurts or harms themselves’ (2011), and in children and adolescents it most often involves overdoses, self-mutilation, scalding, banging head or other body parts against a wall, hair pulling and biting (ChiMat, 2011). According to NICE (2013), self-harm is not used to refer to harm arising from overeating, body piercing or tattooing, excessive consumption of alcohol or drugs, starvation arising from anorexia nervosa or accidental harm, which means that a proportion of young people who engage in what could be called self-harm are excluded from statistics that use this definition. This may also mean that certain groups, e.g. boys and young men who experience alcohol-related harm, are underrepresented in official statistics on self-harm.

In addition, self-harm is difficult to measure as it is not always reported. Despite this, rates of reported self-harm have increased in the UK over the past decade and are among the highest in Europe (ChiMat, 2011). Organisations including ChildLine report that the number of children disclosing self-harm has risen since the 1990s, although this increase may be partly due to increased awareness among both young people and professionals (ChiMat, 2011).

According to Hospital Episode Statistics (HES, 2016) data, there were 430.5 per 100,000 hospital admissions for self-harm in 10-24 year olds in 2015/16. This has increased since 2011/12, when the rate was 347.4 per 100,000. Public Health England (PHE) conducted a survey of 5,335 students aged 11-15 years (Brooks et al, 2017) and found that 22% of 15 year olds had ever self-harmed. The proportion who had self-harmed was much higher in girls (32%) than boys (11%). Rates of self-harm had risen compared with earlier studies (Hawton et al, 2012; O’Connor et al, 2009).
The findings of the PHE survey also showed that levels of self-harm varied by socio-economic status – self-harming was associated with lower socio-economic status. The Family Affluence Scale (FAS), which was designed as a measure of self-harm suitable for young people, found that 18% of boys aged 11-15 years from ‘low’ FAS groups self-harmed, compared with 10% from medium and high FAS groups – 18% of boys aged 11-15 years self-harmed overall. 41% of girls from low FAS groups self-harmed, compared to 34% from medium FAS groups and 25% from high, compared to 30% overall.

Self-harming behaviour was also more prevalent among young people who lived in one parent households – 35% of young people aged 11-15 years who lived with one parent had self-harmed, compared with 17% of those who lived with both parents (Brooks, 2017). However, this may be at least partially explained by the fact that one parent households are more likely to be below the poverty line, which is itself linked with self-harm (Brooks, 2017) and poor mental health (Wickham et al, 2017).
According to the PHE (Brooks, 2017) report, self-harm was more likely among young people who had been bullied or cyberbullied.

Cyberbullying is bullying using electronic communication, including social media and mobile phones (Whitaker et al, 2015). Among young people who reported self-harming, 49% had experienced traditional forms of bullying over the last 2 months, and 32% had experienced cyberbullying, whilst among young people who reported never self-harming, 24% had experienced traditional bullying and 11% had experienced cyberbullying (Brooks, 2017). In addition, young people who felt more positively about their relationships with their peers were less likely to have self-harmed (Brooks, 2017). Young people who felt positively about the community in which they lived – for example, those who felt safe in their community, had good relationships with neighbours and felt that there were good places for young people to go in their community – were also less likely to have self-harmed (Brooks, 2017).

A 2008 systematic review (Fliege et al, 2008) found a strong association between childhood sexual abuse and self-harm, but concluded that more research, particularly longitudinal studies, was needed to identify risk factors.

The most recent HES data show large increases in hospital admissions for self-harm nationally over the last 9 years: the number of girls who needed hospital treatment due to poisoning, which accounted for 88% of self-harm admissions in children aged under 18, increased by 42% from 2005/6 to 2014/15; an increase from 9,741 to 13,853 (HSCIC, 2017), although admissions for self-poisoning among boys remained stable. Hospital admissions as a result of cutting increased by 285% in girls aged under 18 from 600 in 2005/6 to 2,311 in 2014/15. Numbers of boys admitted as a result of cutting were smaller, but also increased by 186% from 160 in 2005/6 to 457 in 2014/15. The number of girls treated by A&E teams because of hanging also increased from 29 to 125 over that time period, and the figure increased from 47 to 95 in boys (HSCIC, 2017). Self-harm results in about 150,000 attendances at accident and emergency
departments each year and is one of the top five causes of acute medical admission (ChiMat, 2011).

A recent study published in the British Medical Journal (Morgan et al, 2017), whose authors asserted that there is a lack of available data on self-harm in primary care populations, analysed electronic health records from 647 general practices in the UK, and found an incidence of 37.4 per 10,000 for girls and 12.3 per 10,000 for boys aged 10-19. There was a sharp increase in self-harm in girls aged 13-16, from 45.9 per 10,000 in 2011 to 77.0 per 10,000 in 2014.

Although there were more incidences of self-harm among young people registered at the most socially deprived GP practices, referrals to mental health services within 12 months of the self-harm episode were actually 23% less likely for these patients (Morgan et al, 2017).
2.2. Statistics for Cheshire and Merseyside
Local data on self-harm was more difficult to obtain. A&E attendance data was not obtained, as the time required to process requests for HES data fell beyond the timescales for this report. Due to the variation in local hospital data there could be a need to enquire about coding and collection, and variation in treatment and hospital admittance may impact on Cheshire & Merseyside data. However, this report presents hospital attendances for self-harm by local authority, alongside North West Ambulance Service data for call-outs related to self-harm.

Hospital admissions for self-harm for 10-24 year olds for 2015-16 were significantly worse than the England average in the Liverpool City Region overall and Cheshire & Warrington overall (Brooks, 2017), and are increasing. Table 1 below shows that, according to HES data for 2015/16, (HES, 2017), rates of hospital admissions for self-harm in 10-24 year olds were higher in 7 of the 9 Cheshire and Merseyside local authority areas, ranging from 958.9 in St.Helens to 493.9 in Cheshire East. Cheshire as a whole, as well as the Liverpool City Region as a whole, also had rates that were higher than the England average for 2014/15 (Ubido et al, 2017). The North West region also had higher rates than the England average. Only Cheshire West and Chester had rates which were similar to the England average.

A request was also made, early in the project, for detailed HES data on A&E attendances for self-harm. However, it was not possible for this request to be processed within the project timescales.

Table 1: Hospital admission rates per 100,000 in Cheshire and Merseyside

<table>
<thead>
<tr>
<th>Local authority</th>
<th>Hospital admissions as a result of self-harm in 10-14 year olds</th>
<th>Hospital admissions as a result of self-harm in 15-19 year olds</th>
<th>Hospital admissions as a result of self-harm in 20-24 year olds</th>
<th>Hospital admissions as a result of self-harm in 10-24 year olds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheshire East</td>
<td>272.2</td>
<td>701.0</td>
<td>507.1</td>
<td>493.9</td>
</tr>
<tr>
<td>Cheshire West and Chester</td>
<td>255.8</td>
<td>592.3</td>
<td>357.5</td>
<td>400.5</td>
</tr>
<tr>
<td>Halton</td>
<td>357.5</td>
<td>936.4</td>
<td>1182.9</td>
<td>836.1</td>
</tr>
<tr>
<td>Knowsley</td>
<td>582.9</td>
<td>1064.3</td>
<td>708.4</td>
<td>783.0</td>
</tr>
<tr>
<td>Liverpool</td>
<td>385.0</td>
<td>684.7</td>
<td>328.6</td>
<td>462.0</td>
</tr>
<tr>
<td>Sefton</td>
<td>268.5</td>
<td>794.7</td>
<td>619.1</td>
<td>562.5</td>
</tr>
<tr>
<td>St.Helens</td>
<td>470.9</td>
<td>1563.3</td>
<td>852.4</td>
<td>958.9</td>
</tr>
<tr>
<td>Warrington</td>
<td>253.5</td>
<td>915.5</td>
<td>1005.5</td>
<td>733</td>
</tr>
<tr>
<td>Wirral</td>
<td>503.1</td>
<td>873.1</td>
<td>699</td>
<td>691.9</td>
</tr>
<tr>
<td>North West region</td>
<td>325.5</td>
<td>756.3</td>
<td>483.2</td>
<td>520.5</td>
</tr>
<tr>
<td>England</td>
<td>225.1</td>
<td>648.8</td>
<td>410.3</td>
<td>430.5</td>
</tr>
</tbody>
</table>

Source: Hospital Episode Statistics (HES) 2016, 2015/16 statistics
RED - Significantly worse than the England average
YELLOW - Similar to the England average
GREEN - Significantly better than the England average
2.2.1 NWAS data
North West Ambulance Service (NWAS) data on self-harm, focusing on the 2 codes that are linked to self-harm\(^3\) was received for each of the Cheshire and Merseyside local authority areas. Owing to geographic changes over the last ten years, a combination of LSOA codes and PCT codes were used to ascertain Cheshire & Merseyside call outs from the 07/08 data. For this reason there may be some slight discrepancies when comparing LSOA data between years owing to boundary changes. For the financial year ending March 2008\(^4\), there were 4,709 NWAS call outs for self-harm. By the year ending March 2013, this had fallen to 3,397, although it had risen again to 3688 by the year ending March 2017. The chart below shows the number of call outs for each local authority area. For comparison purposes, a table showing the population of children and young people in each area is provided in Appendix 3.

Gender differences
For the year ending March 2008, of the 4702 self-harm related ambulance call outs where gender was recorded, 2821 (60%) were for females, and 1881 (40%) were for males. For the year ending March 2013, 1883 of the 3394 calls outs where the patient’s gender was known were for females (55.4%), and 1511 were for males (44.6%). For the year ending March 2017, 2084 (57%) of the 3687 calls where the gender of the patient was known were female, whilst 1603 (43%) of the 3687 were for males.

Age differences
The charts below show that the smallest proportion of call outs were for young people aged 5-14, with the highest proportion of call outs for 20-24 year olds.
### Ambulance call outs for self-harm, numbers by age, sex and local authority, 2016/17

<table>
<thead>
<tr>
<th>Local Authority</th>
<th>5-14</th>
<th>15-19</th>
<th>20-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wirral</td>
<td>111</td>
<td>105</td>
<td>139</td>
</tr>
<tr>
<td>St. Helens</td>
<td>54</td>
<td>54</td>
<td>62</td>
</tr>
<tr>
<td>Liverpool</td>
<td>271</td>
<td>316</td>
<td>277</td>
</tr>
<tr>
<td>Knowsley</td>
<td>47</td>
<td>44</td>
<td>36</td>
</tr>
<tr>
<td>Halton</td>
<td>37</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Warrington</td>
<td>76</td>
<td>76</td>
<td>54</td>
</tr>
<tr>
<td>Cheshire West</td>
<td>105</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td>Cheshire East</td>
<td>117</td>
<td>117</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>100</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>78</td>
<td></td>
</tr>
</tbody>
</table>

F= female, M= male

Age group
- 5-14
- 15-19
- 20-24

Trauma and Injury Intelligence Group, Public Health Institute,

---

3 NWAS call outs for ‘overdose/poisoning’ and ‘psychiatric/suicide attempt’

4 These dates were selected in order to demonstrate changes over a ten year peri
2.2.2. CAMHS data
In order to supplement local data available, data on the number of referrals to CAMHS (NHS services for young people with emotional, behavioural or mental health difficulties)\(^5\) was collected, in order to demonstrate the level of use of services locally. A table showing the number of children and young people in contact with CAMHS\(^6\) from each of the Cheshire and Merseyside local authorities is provided in Appendix 1.

2.2.3 Suicide audit information
Self-harm is a risk factor for suicide (Hawton et al, 2009). People who self-harm are between 50 and 100 times more likely to die by suicide within a year than people who do not self-harm (Hawton et al, 2003). Between 0.5% and 2% of people attending hospital for self-harm die from suicide within a year, and 5% die within nine years (Owens et al, 2002). Although suicide is considered a low risk factor in young children (Hawton et al, 2008) the link between suicide and self-harm is well established (Morgan et al, 2017). A more recent UK study of 647 GP practices found that young people who had self-harmed were 17 times more likely to die by suicide than those who had not self-harmed (Morgan et al, 2017). A national inquiry (University of Manchester, 2017) found that 52% of under 20s and 41% of 20-24 year olds who died by suicide had previously self-harmed.

Suicide and self-harm also share several risk factors, including personality disorders, eating disorders, depression and anxiety, substance misuse, childhood emotional, physical or sexual abuse, and living in deprived areas (Hawton et al, 2009; Fliege et al, 2008).

NICE (2013) recommend that initial assessment of people who have self-harmed should include risks of suicide, as well as assessment of the risk of repetition of self-harm, alongside assessment of physical and mental health, safeguarding concerns, and social circumstances.

The authors of a recent study (Morgan et al, 2017) concluded that, although self-harm is the strongest risk factor for suicide, the lack of national data sources mean that it is difficult to establish incidence of non-fatal self-harm, and evidence from primary care populations was particularly limited. However, the fact that young people who self-harmed were at higher risk of premature mortality, particularly from suicide and alcohol or drug poisonings, mean that effective interagency collaboration is paramount.

According to a recent report that was compiled by Cheshire and Merseyside Suicide Reduction Network\(^7\) (Knuckey, 2017), the most recent (2015) rate for Cheshire and Merseyside of 10.6 deaths for suicide and undetermined injury per 100,000 was similar to the England average (10.1 per 100,000). After a low of 160 deaths in 2010, there were 248 deaths in 2014, the highest number since 2002. By 2015, however, the total had fallen to 228. Of these, 33 people were aged under 25.

---

\(^5\) [https://youngminds.org.uk/find-help/your-guide-to-support/guide-to-camhs/]

\(^6\) This basic measure of caseload includes people in contact with learning disability services and children and young people’s or Child and Adolescent (CAMHS) mental health services.

\(^7\) The network is now called ‘Cheshire and Merseyside Suicide Prevention Network’
The suicide rates vary by local authority, from 8.9 per 100,000 in Knowsley, up to 13.7 per 100,000 in St.Helens, which is significantly higher than the England average.

Of the total of 248 deaths in 2014 (the latest year for which inquests have been completed, which included both adults and children), 184 were in men and 64 were in women, meaning 74% (three-quarters) of the deaths were in males. This is in contrast to official statistics on self-harm, which show higher rates of self-harm in women, possible because self-harm as a result of drug/alcohol use is often not included. Ten residents were aged up to 16, whilst 33 were aged up to 25. Of those aged under 25, the most important risk factor was drug misuse, which applied to 44% of the 33 people, followed by relationship problems (39%), having a diagnosis of mental health problems (36%), and previous suicide attempts. Other ‘notable risk factors’, according to the report, were domestic abuse, and being LGBT (lesbian, gay, bisexual or transgender). In 2015 in Cheshire & Merseyside 17 children and young people aged 10-19 years and 16 aged 20-24 years died by suicide. Of these seven had a history of self-harm and ten had previously attempted suicide (C&M Joint Suicide Audit 2015). In order to reduce suicide rates in Cheshire and Merseyside, it is paramount to prevent self-harm and suicidal behaviour in young people and their subsequent adult lives.
2.3 Summary of national and local data on self-harm

2.3.1 National data
Self-harm is difficult to measure as it is not always reported. Despite this, rates of reported self-harm have increased in the UK over the past decade and are among the highest in Europe (ChiMat, 2011). The most recent Hospital Episode Statistics (HES) data show large increases in hospital admissions for self-harm nationally over the last 9 years: the number of girls who needed hospital treatment due to poisoning, which accounted for 88% of self-harm admissions in children aged under 18, increased by 42% from 2005/6 to 2014/15; an increase from 9,741 to 13,853 (HSCIC, 2017). Hospital admissions as a result of cutting increased by 285% in girls aged under 18 from 600 in 2005/6 to 2,311 in 2014/15, and in boys increased by 186% from 160 in 2005/6 to 457 in 2014/15 (HSCIC, 2017). Self-harm results in about 150,000 attendances at accident and emergency departments each year and is one of the top five causes of acute medical admission (ChiMat, 2011).

2.3.2 Cheshire and Merseyside
Local data on self-harm was less readily available. However, hospital admissions for self-harm for 10-24 year olds for 2015-16 were significantly worse than the England average in the Liverpool City Region overall and Cheshire & Warrington overall (Brooks, 2017), and are increasing. According to HES data for 2015/16, (HES, 2017), rates of hospital admissions for self-harm in 10-24 year olds were higher in 7 of the 9 Cheshire and Merseyside local authority areas than the national average, ranging from 958.9 in St.Helens to 493.9 in Cheshire East. Cheshire as a whole, as well as the Liverpool City Region as a whole, also had rates that were higher than the England average (Ubido et al, 2017). Only Cheshire West and Chester had rates which were similar to the England average.

North West Ambulance Service (NWAS) data on self-harm, focusing on the 2 codes that are linked to self-harm, was also received for each of the Cheshire and Merseyside local authority areas. For the financial year ending March 2008, there were 4709 NWAS call outs for self-harm. By the year ending March 2013, this had fallen to 3397, although it had risen again to 3688 by the year ending March 2017. Children’s Adolescent Mental Health Service data was also included in the report, to give an indication of need locally, alongside suicide audit information. North West Ambulance Service (NWAS) data on the two codes that are linked to self-harm were showed that, for the financial year ending March 2008, there were 4709 NWAS call outs for self-harm. By the year ending March 2013, this had fallen to 3397, although it had risen again to 3688 by the year ending March 2017.
3. Literature review
A rapid literature review was undertaken to identify ‘what works’ for education and community-based interventions and clinical services relating to self-harm in children and young people. Also considered was the scale of the problem of non-presentation to medical services, involving the identification of any research on why young people do not present to services, the barriers and challenges they experience.

The literature review, as well as including major pieces of work such as the recent PHE document (Brooks et al., 2017), focused on reviews included on electronic databases published since 2013, when the NICE Quality Standard (NICE, 2013) was published. The following electronic databases were searched: Web of Science (including medline); NICE Evidence; and SCIE. Specialist databases were also searched: MaSH (University of Manchester self-harm project) and the Multicentre Study of Self-harm in England (which includes MaSH).

Search terms: An initial search of the NICE Evidence database revealed that there were 164 results using the search term ‘self-harm’, filtered by systematic reviews, since 1st July 2013. Those with ‘self-harm’ in the title were checked and relevant articles selected for more detailed checking. The same process was carried out for each database. Additional searches involved filtering by adding the search terms child*, ‘intervention*’, ‘protective’, and ‘barrier*’, within the same parameters of date and systematic review/secondary evidence. The same procedure was used for searches of the other databases (full details available on request). Early searches revealed that the Multicentre Study of Self-Harm focuses on those aged 18 and over, so their database was excluded from the review.

3.1 What works
Protective factors
A recent PHE report on intentional self-harm in adolescence (Brooks et al., 2017) highlights a range of factors operating in young people’s family, peer, school and community environments that potentially buffer against poor mental wellbeing. The report also signposts to useful sources of support and further information.

The PHE report concludes that there are factors operating in the context of children and young people’s family, school and wider community that can offer a protective buffer in promoting young people’s mental wellbeing and reducing self-harm. These include:

- within the context of family life “important issues being regularly spoken about in my family”, and that “someone listens to me”
- at a school level: personal and social skills being covered well in PSHE, feelings of belonging, feeling safe within school and the quality of relationships with their teachers and peers
- at a **community** level “feeling safe in the area in which I live”, “having good places to spend your free time” and “being able to trust people around here”.

The interaction of protective factors across these domains of young people’s lives should be considered and reflected in local strategies to prevent self-harming behaviour among adolescents (Brooks et al., 2017).

The Scottish Institute for Research and Innovation in Social Services (IRISS) reported that for those children and adolescents who engage in self-harm, it is important that professionals and family carers **respond to any underlying distress**, rather than focusing on stopping the self-harm. Excessive control and the removal of implements may make things worse (IRISS, 2013). Support to deal with the underlying difficulties is essential but distraction techniques and cognitive behavioural methods may help young people control the immediate urge to self-harm. IRISS report that in Scotland, many services are now adopting a harm minimisation approach which recognises that self-harm may be an effective coping mechanism for distress and focuses on reducing damage and avoiding unintended lethal outcomes. Individual practitioners need to be supported in this approach by clear organisational policies and guidelines and robust recording mechanisms (IRISS, 2013).

McAndrew and Warne noted that while many research studies have focused on those who attend emergency departments following acts of self-harm, community studies show that many adolescents who self-harm do not receive or seek medical attention (McAndrew and Warne, 2014).

**Support within schools**

A 2014 House of Commons Health Committee report on children’s and adolescents’ mental health and CAMHS described a model in Derbyshire for supporting young people with mental health problems within schools (House of Commons, 2014):

’in Derbyshire, we are trying to roll out a model whereby networking of those services within the school provides a platform whereby the school can monitor what is happening, who needs help, who might be in trouble, who might be being bullied and who might be at risk of self-harm. They can respond and they can draw down help from specialist services like CAMHS, rather than exporting the problem and making a referral for somebody else to deal with—they can bring the services into the school and provide the help within the school’.

This is in keeping with other research, suggesting that an independent counselling service, readily available to all children and young people in the educational system, would be of great benefit (McAndrew and Warne, 2014). However, due to funding constraints, the Health Committee noted that the school nursing resource was “very thinly spread”, and there were reports of other helpful services being removed or restricted. There is a clear recommendation for prevention and early intervention to
ensure mental health and emotional wellbeing is a key component of teacher training and built into continual professional development (House of Commons, 2014): In 2016, a systematic review of qualitative research was carried out into the role of schools in children and young people’s self-harm (Evans and Hurrell, 2016). The review supported the idea of training teachers and bringing services into schools. One of the main findings was that schools’ informal management strategy of escalating incidents of self-harm to external ‘experts’ serves to contribute to non-help seeking behaviour amongst students who desire confidential support from teachers. The study also confirmed that bullying, and anxiety and stress associated with school performance can contribute to self-harm.

In 2014, the Royal College of Psychiatrists (RCP) published a report on ‘Managing self-harm in young people’ (RCP, 2014). The RCP called for all schools to have a policy on self-harm and related confidentiality. They noted that many school staff feel unskilled and unsupported in dealing with pupils’ self-harm, so it is important that schools prioritise the self-harm training needs of their staff along with other mandatory training. They quoted research that found teachers felt ‘helpless’ and unsure of what they can say, with 80% wanting clear practical advice and materials that they can share directly with young people (YoungMinds, 2012).

The IPPR noted the growing problem of self-harm amongst secondary schoolchildren. They identified barriers to the availability and quality of school-based early intervention provision. These include schools’ inability to access sufficient funding and resources. The IPPR also noted the inconsistent quality of mental health support available to schools to buy in directly, and the lack of external checks on the appropriateness and quality of the approaches taken by individual schools.

The Institute for Public Policy Research (IPPR) made several recommendations, including:

- All secondary schools should be guaranteed access to at least one day per week of on-site support from a CAMHS professional who is able to provide targeted mental health interventions to pupils.
- CCG funding for children and young people’s mental health services should be ring-fenced.
- All CCGs should be required to convene a headteachers’ mental health forum for the local area, to sit at regular intervals each year. This would ensure that secondary schools are able to influence funding decisions in a more systematic and meaningful way.
- A recruitment drive and improved training for school counsellors.
- Adequate Ofsted inspection to assess schools’ mental health provision. (IPPR, 2014).

A new model for CAMHS, the THRIVE model (Wolpert et al, 2014), also places an increased focus on providing support for young people within schools and colleges.
Earlier this year, the government announced new support for schools, with every secondary school in the country to be offered mental health first aid training and new trials to look at how to strengthen the links between schools and local NHS mental health staff (House of Commons, 2017). The House of Commons report that supported the announcement noted the 2014 guidance by the Department of Health on ‘Mental Health and Behaviour in Schools’. This guidance advises schools on identifying and supporting pupils who may have unmet needs, including those who may self-harm. In addition, they noted that in 2015, the government published a blueprint for school counselling services. Also in 2015, 22 pilot areas introduced a scheme in schools where a named single point of contact was introduced, to enable more joined up working between schools and health services (IPPR, 2014). The pilot sites included Halton and South Cheshire 8.

An evaluation of the pilots in 2017 was positive about their impact but raised concerns about the resources available for a nationwide rollout (House of Commons, 2017). Quigley et al noted the importance of designing school-based programs which focus on increasing appropriate peer norms and improving attitudes towards life and help-seeking. Schools, families and professionals working with young people should risk assess and monitor the well-being of their young people. Young people reporting knowing others who have engaged self-harming behaviours are more likely to be at risk of engaging in similar behaviours themselves (Quigley et al., 2017).

All the young people in the qualitative study by McAndrew and Warne wanted more knowledge about self-harm via informative assemblies and posters being placed around school that are integral to other public health alerts, such as smoking and drinking (McAndrew and Warne, 2014).

Risk management and secondary prevention
The NICE quality standard covers the management of self-harm and the provision of longer-term support for children and young people (aged 8 years and older) and adults who self-harm (NICE, 2013). The focus is on risk management and secondary prevention:

- NICE stress the importance of staff training, including ensuring that all staff treat people who have self-harmed with compassion and the same respect and dignity as any service user. This will help to help to address the stigma and discrimination associated with self-harm.
- Those involved in assessing, caring for and treating people who self-harm should be sufficiently and appropriately trained and competent to deliver the actions and interventions detailed by NICE.
- People continuing to receive support for self-harm should have a collaboratively developed risk management plan.

8 https://www.england.nhs.uk/expo/2016/09/08/school-mh-link-pilots/
• There is some evidence that psychological therapies specifically structured for people who self-harm can be effective in reducing repetition of self-harm. The decision to refer for psychological therapy should be based on a discussion between the service user and healthcare professional.

• For people who have self-harmed and move between mental health services, it is important for providers to collaboratively plan in advance and coordinate effectively, so that individuals know how they will be supported while they move from one service to another (NICE, 2013).

The RCP report (RCP, 2014) similarly highlighted the importance of reduction of stigma and the importance of treating young people who have self-harmed in a non-judgemental and respectful manner. The RCP also called for courage and compassion in asking about self-harm, in community and hospital settings and high-quality assessment at all levels of service. They note that there is evidence that asking about self-harm does not increase the behaviour.

Adolescents who self-harm commonly conceal their self-harming behaviour (Tormoen et al., 2014). Interventions should include systematic screening for early recognition of self-harming behaviours, and treatment programmes tailored to the needs of teenagers with a positive screen (Tormoen et al., 2014).

*Training for professionals:* The RCP supported the NICE call for improvements in training for professionals. They highlighted a survey that showed almost half of GPs did not understand the reasons why young people self-harm and three out of five were concerned that they did not know what language to use when talking to a young person about self-harm (YoungMinds, 2012). The authors of a recent UK study looking at electronic GP records (Morgan et al, 2017) recommend that looking into the reasons for the recent apparent increase in the incidence of selfharm among early-mid teenage girls, and coordinated initiatives to tackle health inequalities in the provision of services to distressed children and adolescents, represent urgent priorities for multiple public agencies.

*Psychosocial interventions:* Despite the scale of the problem of self-harm in children and adolescents there is a paucity of evidence of effective interventions (Centre for Mental Health, 2016; Hawton, 2015). A 2015 Cochrane review of psychosocial and pharmacological interventions for self-harm in children and adolescents found little support for the effectiveness of group-based psychotherapy (Hawton, 2015). However, this was due to the fact that there were relatively few trials and those that were included in the review were of low quality. The authors recommend further investigation and that the development of new interventions should be done in collaboration with patients, with agreed outcome measures, to ensure that these are likely to meet their needs (Hawton, 2015).

A follow-up Cochrane publication (Hawton et al., 2016) noted that, given the evidence for its benefit in adults who engage in self-harm (NICE, 2011), individual Cognitive Based psychotherapy needs to be further developed and evaluated in children and
adolescents. They suggest that the development of this type of treatment could benefit from being based on detailed investigation of the psychological factors contributing to self-harm in children and adolescents, including factors that might enhance resilience and thereby reduce the risk of further self-harm, as well as having benefits for other outcomes (Hawton et al., 2016).

A literature review by Fortune et al in 2016 focused on family factors that might be amenable to intervention using family therapy (Fortune et al., 2016). The authors concluded that treatment should focus on maximizing cohesion, attachment, adaptability, family support, parental warmth while reducing maltreatment, scapegoating and moderating parental control. They also noted that close working relationships with child protection services and schools represent additional opportunities.

Hospital care
The House of Commons Health Committee noted the importance of bridging the gap between inpatient and community services. Paediatric Liaison teams, which consist of mental health professionals based within the paediatric teams of acute hospitals, can make a valuable contribution. Their main focus is on: the acute management of psychiatric emergencies, including self-harm, and the overall promotion of positive mental health in the acute hospital setting (House of Commons, 2014). They can also provide out-reach and preventive interventions (RCP, 2014). It is important for liaison provision for assessments to be available on all days of the year, including weekends and Bank Holidays (RCP, 2014). The RCP noted that only around two-thirds of CAMHS surveyed in 2011 reported providing such a paediatric liaison service (P. Hindley & F. Mohamed, personal Communication to RCP, 2012).

Hospital admissions:
Aged under 16: In line with NICE guidance, young people under the age of 16 seen in the emergency department following acute self-harm presentations should be admitted (RCP, 2014). The RCP note that the purpose of hospital admission following an acute presentation of self-harm is to allow mental health assessments to be undertaken in a calm and considered manner, by staff experienced in assessing young people and their families.

Ages 16- and 17: For those aged 16-17, the RCP note that guidance has been less clear. The RCP recommend that there should be high-quality mental health assessment, with safe discharge planned. If this is possible, then it is suggested that a young person aged 16–17 seen in the emergency department following an acute self-harm presentation does not always need to stay overnight. However, if in any doubt, admission should follow.

Adequate in-patient psychiatric beds for children and adolescents need to be commissioned. These beds need to be readily accessible to prevent young people
staying on acute medical wards for long periods, and pathways promoting strong community links and facilitating early return to the community should be set down.

**Joint working**
The RCP noted that commissioners need to stress the importance of **collaborative working** between the acute hospital, mental health services and the local authority in responding to a young person’s self-harm (RCP, 2014). They also emphasise that young people should be involved in the planning and monitoring of self-harm services.

**Self-help and internet support**
The House of Commons Health Committee (House of Commons, 2014) noted that the internet can be a positive source of support for young people, with reports that the help they have found from others online has often been far more supportive than specialist services in the community. The RCP report gives details of some of the more helpful websites RCP, 2014, p23).

However, the internet may also exert a negative influence, normalising self-harm, creating channels for cyber-bullying, and exposing individuals to violent methods of self-harm (Daine et al., 2013). It was highlighted that there is a need for more research into the effects of pro self-harm websites, and more control should be exerted over their availability online (House of Commons, 2014). For parents, it is important that they take an interest and engage in their children’s digital lives as early as possible (RCP, 2014). Careful high quality research is needed to better understand how internet media may exert negative influences and should also focus on how the internet might be utilised to intervene with vulnerable young people (Daine et al., 2013).

The RCP recommend that it is critical for professionals to include an assessment of a young person’s digital life as part of clinical assessments, especially when there are concerns about self-harm (RCP, 2014).

**3.2 Barriers to help-seeking**
Two recent studies have reviewed the literature on barriers to help-seeking amongst young people who self-harm (McAndrew and Warne, 2014; Sayal et al., 2014). Barriers included young people seeing their self-harm as a spontaneous act, and not important enough to warrant serious consideration; the belief that they should be able to cope on their own, and fear that seeking outside help might create more problems; being labelled as ‘attention seekers’; not knowing whom to ask for help; and exposure to self-harm in their peer group and among their sex (Fortune et al., 2008). Counsellors/clinicians were perceived as not understanding or not prepared to listen to the participants’ perspectives, and the use of medication with no other interventions was seen as being ‘fobbed off’ (Storey et al., 2005).

McAndrew and Warne noted several barriers to sharing problems with family members, including not being able to be open with them and not wanting to worry them, while others identified existing family problems, which they did not want to add to. Their study found that often shame, due to perceived stigma, might inhibit people from seeking help. Also not knowing who to turn to, and more importantly, who they can trust in terms of confidentiality. Young people found that helpful characteristics
included being listened to; not being judged; confidentiality; trust; being given an opportunity to talk to somebody independent of family, friends, or the school, understanding; and professional expertise (McAndrew and Warne, 2014). All but one of the young people indicated that face-to-face support was their preferred option for receiving help.

Other studies have confirmed the importance of stigma as a barrier to help seeking (Plaistow et al., 2014; Sayal et al., 2014). In a systematic review of all available studies exploring the views of young people of mental health services in the UK, Plaistow et al (2014) noted that other factors included a lack of information on where to turn to, especially for those from ethnic minorities. For some, a lack of awareness of mental health was a barrier to help-seeking, for example, one individual who had presented to A&E following an episode of self-harm stated: ‘It had in no way occurred to me that I might be ill’ (Plaistow et al., 2014). Others may not be aware that primary healthcare services are a place where they can attend for mental health issues as well as physical health (Sayal et al., 2014).

It is important that the voices of young people who self-harm are heard and appropriate changes in practice are made (McAndrew and Warne, 2014). In assessing the impact of service redesign on any barriers to engagement, it is especially important to actively seek the views of those young people who have disengaged from services, whose views are not currently known, and who are the most vulnerable (Plaistow et al., 2014). Of particular importance is the study of possible barriers to receiving treatment amongst youths from ethnic minorities (Tormoen et al., 2014).

Links between self-harm and adverse childhood experiences
According to a recent report by PHE (Hughes et al, 2015), adverse childhood experiences (ACES) are stressful events occurring in childhood that either directly affect a child, such as maltreatment, or affect the environment in which they live, such as domestic violence, substance misuse or mental illness in their families. A full list of ACES is provided in Appendix 2. ACEs can have a lasting influence on children’s development and mean they are more likely to have poorer outcomes later in life (Bellis et al, 2014). A US study found that the more ACEs adolescents had the greater their risks of self-harm and suicide (Duke et al, 2010).

In England, half of adults are estimated to have suffered at least one ACE and 9% to have suffered four or more (Bellis et al, 2014). The NSPCC estimates that nearly a fifth of 11 to 17 year olds in the UK have experienced some form of severe maltreatment in childhood (Radford et al, 2011). This can lead to harmful outcomes, including risks of substance use, unintended teenage pregnancy, involvement in violence and incarceration, increasing with the number of ACEs suffered (Bellis et al, 2014, 2017). ACEs are also strongly related to poor mental wellbeing (Bellis et al, 2013; 2017 Hughes et al, 2015) and conditions including depression, anxiety, post-traumatic stress disorder (PTSD), eating disorders and drug and alcohol dependence (Andra et al, 2006), although this may be mitigated by children having constant support from a trusted adult (Bellis et al, 2017). 11% of common mental disorders and 17% of PTSDs in England are thought to be caused by childhood sexual abuse (Jonas et al, 2011). In order to promote mental wellbeing and reduce self-harm, mental health strategies should include interventions to develop resilience in children.
(Bellis et al, 2017), to prevent ACES and to moderate their impacts (Hughes et al, 2016).

4. Next steps and recommendations

Recommendations
In addition to the **general recommendations** below, recommendation of the report are that:
- Local areas, including partners, will be asked to conduct an audit in their area, to benchmark current practice against national guidelines, including NICE Guidance (NICE, 2013\(^9\)), and an associated service improvement template (NICE, 2017\(^10\)) and the report recommendations
- HES data on A&E attendances for self-harm to be requested, in order to inform future actions on self-harm

The evidence review recommends the following interventions are also implemented;

**Prevention**
- Parents are encouraged to engage in their children’s digital lives as early as possible (RCP, 2014)
- Develop neighbourhoods where young people feel safe
- Improve mental health literacy in parents, children, teachers and other professionals
- CCGs should ring-fence funding for children and young people’s mental health services
- There should be a recruitment drive for school counsellors.

**Prevention in schools and colleges**
- There should be adequate Ofsted inspection of schools’ mental health provision
- Promote whole school & college approach to emotional & mental wellbeing, including social norms and peer behaviour, services in schools & colleges and single-point of access
- There should also be screening for self-harm behaviour.

**Early detection**
- Improve young people’s, parents and carers of what help is available and where they can access it
- Advice and guidance for young people and families should be available in online, digital and printed formats
- Address the perception that services may be frightening
- Move towards the THRIVE model for mental wellbeing

---

\(^9\) [https://www.nice.org.uk/guidance/qs34](https://www.nice.org.uk/guidance/qs34).
\(^10\) [https://www.nice.org.uk/guidance/QS34/resources](https://www.nice.org.uk/guidance/QS34/resources).
Interventions should include screening for early recognition of self-harming behaviours (Tormoen et al., 2014)
All secondary schools and colleges should have regular access to on-site support from a CAMHS professional.

Treatment

Primary care
- There is some evidence that psychological therapies specifically structured for people who self-harm can be effective in reducing repetition of self-harm (NICE, 2013)
- Further research on which interventions are effective for self-harm is needed (e.g. Hawton, 2015)
- Assessment of a young person’s digital life should form part of clinical assessments, when there are concerns about self-harm (RCP, 2014)
- Professionals and family carers should respond to any underlying distress, rather than focusing on stopping the self-harm. Excessive control and the removal of implements may make things worse, although distraction techniques and cognitive behavioural methods may help control the immediate urge to self-harm.

Secondary care
- Ensure Liaison Mental Health and Paediatric Liaison Mental Health teams are in place and meet required CORE 24 standards
- Positive mental health should be promoted in the acute hospital setting (House of Commons, 2014)
- Mental health assessments should be available every day of the year where necessary, including weekends and Bank Holidays (RCP, 2014)
- Young people under the age of 16 seen in the emergency department following acute self-harm presentations should be admitted (RCP, 2014). Safe discharge should be planned for 16-17 year olds.

Primary and secondary care
- Implement NICE Guidance, including compassionate and non-judgemental care
- Promote joint working across the interface of NHS, community, local authorities with involvement of young people, such as a self-harm pathway
- In assessing the impact of service redesign on any barriers to engagement, actively seek the views of those young people who have disengaged from services, whose views are not currently known, and who are the most vulnerable (Plaistow et al., 2014). Of particular importance is the study of possible barriers to receiving treatment amongst youths from ethnic minorities (Tormoen et al., 2014)
- Look at standardising data collection on hospital and community care attendances for self-harm across Cheshire and Merseyside in order to facilitate comparisons across local authority areas.
Priority recommendations for Cheshire and Merseyside

The following recommendations are a top priority in Cheshire and Merseyside;

Prevention
- Encourage parents to engage in their children’s digital lives as early as possible
- Improve mental health literacy in parents, children, teachers and other professionals
- Promote a whole school & college approach to emotional & mental wellbeing, including resilience skills, social norms, services in schools & colleges, single-point of access
- Screening for self-harm behaviour
- Implement appropriate interventions to mitigate ACEs where identified

Early detection
- Improve awareness of young people, parents and carers of what help is available and where they can access it
- Advice and guidance for young people and families should be available in online, digital and printed formats
- Move towards the THRIVE model of mental wellbeing
- All secondary schools and colleges should have regular access to on-site support from a CAMHS professional
- Improve training for professionals working with children and young people as above
- Establish clear self-harm pathways

Treatment
- Use psychological therapies specifically structured for people who self-harm to reduce repetition of self-harm
- Assessment of a young person’s digital life should form part of clinical assessments, when there are concerns about self-harm
- Positive mental health should be promoted in the acute hospital setting
- Mental health assessments should be available every day of the year where necessary, including weekends and Bank Holidays
- Young people under the age of 16 seen in A&E following acute self-harm should be admitted
- Promote joint working across the interface of NHS, community, Local Authorities with involvement of young people, such as a self-harm pathway
- In assessing the impact of service redesign on any barriers to engagement, actively seek the views of those young people who have disengaged from services, whose views are not currently known, and who are the most vulnerable
- Look at standardising data collection on hospital and community care attendances for self-harm across Cheshire and Merseyside in order to facilitate comparisons across local authority areas
- Development of a self-harm dataset

Local areas, including key partners, will be asked to conduct an audit in their area, where they would benchmark current practice against national guidelines, including NICE Guidance (NICE, 2013), and an associated service improvement template (NICE, 2017) and the report recommendations.
5. Conclusion

The report shows that self-harm is likely to be higher in Cheshire and Merseyside than nationally – hospital admissions for self-harm, for example, are significantly higher in 7 of the 9 Cheshire and Merseyside local authority areas than it is nationally, with only Cheshire West and Chester and Liverpool having lower levels of self-harm than the national average. Although self-harm has fallen in Cheshire and Merseyside – NWAS call outs for self-harm, for example, have fallen from 4709 in 2008 to 3688 in 2017, there is some evidence that rates are not falling as quickly as they are nationally. The report recommends that local areas will be asked to conduct an audit where they will benchmark current practice against national guidelines and the report recommendations.
6. References


Cheshire and Merseyside Joint Suicide Audit 2015.


https://publications.parliament.uk/pa/cm201415/cmselect/cmhealth/342/342.pdf

http://researchbriefings.parliament.uk/ResearchBriefing/Summary/CPB-7196#fullreport


Morgan et al, 2017 BMJ 2017;359:j4351. [http://www.bmj.com/content/359/bmj.4351](http://www.bmj.com/content/359/bmj.4351)


http://www.gmecscn.nhs.uk/attachments/article/196/Thrive%20model%20for%20CAMHS.pdf

https://www.celogroup.com/pdfs/talking_self_harm
7. Appendices
Appendix 1: Table 2: Children and young people in contact with CAMHS, June 2017, Cheshire and Merseyside

<table>
<thead>
<tr>
<th>Clinical Group</th>
<th>Number of children and young people in contact with CAMHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Eastern Cheshire CCG</td>
<td>1,450</td>
</tr>
<tr>
<td>NHS South Cheshire CCG</td>
<td>500</td>
</tr>
<tr>
<td>NHS West Cheshire CCG</td>
<td>1,035</td>
</tr>
<tr>
<td>NHS Halton CCG</td>
<td>375</td>
</tr>
<tr>
<td>NHS Knowsley CCG</td>
<td>400</td>
</tr>
<tr>
<td>NHS Liverpool CCG</td>
<td>1,075</td>
</tr>
<tr>
<td>NHS South Sefton CCG</td>
<td>405</td>
</tr>
<tr>
<td>NHS Sefton and Fornby CCG</td>
<td>470</td>
</tr>
<tr>
<td>NHS St.Helens CCG</td>
<td>500</td>
</tr>
<tr>
<td>NHS Warrington CCG</td>
<td>560</td>
</tr>
<tr>
<td>NHS Wirral CCG</td>
<td>1,045</td>
</tr>
<tr>
<td><strong>England</strong></td>
<td><strong>155,738</strong></td>
</tr>
</tbody>
</table>

Appendix 2: Table 3: Full list of ACES – Childhood exposure to abuse and household dysfunction

<table>
<thead>
<tr>
<th>Abuse by category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Psychological – Did a parent or other adult in the household</strong>…</td>
<td></td>
</tr>
<tr>
<td>Often or very often swear at, insult, or put you down?</td>
<td></td>
</tr>
<tr>
<td>Often or very often act in a way that made you afraid that you would be physically hurt?</td>
<td></td>
</tr>
<tr>
<td><strong>Physical - Did a parent or other adult in the household</strong>…</td>
<td></td>
</tr>
<tr>
<td>Often or very often push, grab, shove, or slap you</td>
<td></td>
</tr>
<tr>
<td>Often or very often hit you so hard that you had marks or were injured?</td>
<td></td>
</tr>
<tr>
<td><strong>Sexual – Did an adult or person at least 5 years older ever</strong>…</td>
<td></td>
</tr>
<tr>
<td>Touch or fondle you in a sexual way?</td>
<td></td>
</tr>
<tr>
<td>Have you touch their body in a sexual way?</td>
<td></td>
</tr>
<tr>
<td>Attempt oral, anal, or vaginal intercourse with you?</td>
<td></td>
</tr>
<tr>
<td>Actually have oral, anal, or vaginal intercourse with you?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Household dysfunction by category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Substance abuse – did you</strong>…</td>
<td></td>
</tr>
<tr>
<td>Live with anyone who was a problem drinker or alcoholic?</td>
<td></td>
</tr>
<tr>
<td>Live with anyone who used street drugs?</td>
<td></td>
</tr>
<tr>
<td><strong>Mental illness</strong></td>
<td></td>
</tr>
<tr>
<td>Was a household member depressed or mentally ill?</td>
<td></td>
</tr>
<tr>
<td>Did a household member attempt suicide?</td>
<td></td>
</tr>
<tr>
<td><strong>Mother treated violently – Was your mother (or stepmother)</strong></td>
<td></td>
</tr>
<tr>
<td>Sometimes, often, or very often pushed, grabbed, slapped, or had something thrown at her?</td>
<td></td>
</tr>
<tr>
<td>Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?</td>
<td></td>
</tr>
<tr>
<td>Ever repeatedly hit over at least a few minutes?</td>
<td></td>
</tr>
<tr>
<td>Ever threatened with, or hurt by, a knife or gun?</td>
<td></td>
</tr>
<tr>
<td><strong>Criminal behaviour in household</strong></td>
<td></td>
</tr>
<tr>
<td>Did a household member go to prison?</td>
<td></td>
</tr>
</tbody>
</table>

Source: Felitti et al, 1998
## Appendix 3: Table 4: Population aged 5-24 in Cheshire and Merseyside

<table>
<thead>
<tr>
<th></th>
<th>Ages 5 to 9</th>
<th>Ages 10-14</th>
<th>Ages 15-19</th>
<th>Ages 20-24</th>
<th>Total age 5-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheshire East</td>
<td>21,326</td>
<td>20,206</td>
<td>20,970</td>
<td>18,537</td>
<td>81,039</td>
</tr>
<tr>
<td>Cheshire West and Chester</td>
<td>18,621</td>
<td>17,592</td>
<td>19,247</td>
<td>20,140</td>
<td>75,600</td>
</tr>
<tr>
<td>Halton</td>
<td>8,445</td>
<td>7,273</td>
<td>7,369</td>
<td>7,524</td>
<td>30,610</td>
</tr>
<tr>
<td>Knowsley</td>
<td>8,970</td>
<td>8,235</td>
<td>9,302</td>
<td>9,599</td>
<td>36,106</td>
</tr>
<tr>
<td>Liverpool</td>
<td>25,361</td>
<td>22,078</td>
<td>30,378</td>
<td>52,343</td>
<td>130,160</td>
</tr>
<tr>
<td>Sefton</td>
<td>14,904</td>
<td>14,153</td>
<td>15,352</td>
<td>14,699</td>
<td>59,107</td>
</tr>
<tr>
<td>St.Helens</td>
<td>10,330</td>
<td>9,344</td>
<td>10,171</td>
<td>10,206</td>
<td>40,051</td>
</tr>
<tr>
<td>Warrington</td>
<td>12,574</td>
<td>11,834</td>
<td>12,015</td>
<td>11,437</td>
<td>47,861</td>
</tr>
<tr>
<td>Wirral</td>
<td>19,099</td>
<td>17,889</td>
<td>18,440</td>
<td>16,738</td>
<td>72,166</td>
</tr>
</tbody>
</table>

*Calculated from:*
