The Manchester Self-Harm Project

Self-Harm in Manchester

1st September 2005 to 31st August 2007

Stella Dickson, Sarah Steeg, Iain Donaldson, Victoria Matthews, Maria Healey, Jayne Cooper, Navneet Kapur, Elizabeth Murphy
Funding Bodies
Manchester Mental Health and Social Care Trust and the Department of Health

Acknowledgements
We wish to thank staff in the Emergency Departments, mental health liaison teams and other psychiatric staff for their contributions to the project. We would specifically like to thank Dr Jim Butler (at North Manchester General Hospital), Prof Kevin Mackway-Jones (Manchester Royal Infirmary), Mr Nick Payne (Wythenshawe Hospital), Clive Turpin (the SAFE Team) and Dr Damien Longson (Manchester Mental Health and Social Care Trust) for their continued support.

Contact
Iain Donaldson
Research Secretary for MaSH Email: mash@manchester.ac.uk

Note: This report is based on combined data from three Emergency Departments (EDs): Manchester Royal Infirmary at Central Manchester and Manchester Children’s University Hospitals NHS Trust, North Manchester General Hospital at Pennine Acute Hospitals NHS Trust, Wythenshawe Hospital at University Hospital of South Manchester NHS Foundation Trust, and data from the Manchester Mental Health and Social Care Trust. Data on ED presentations at each individual NHS Trust are available on request.

Publication date: September 2009
© The University of Manchester. All rights reserved. Not to be reproduced in whole or in part without the permission of the copyright owner.
**The MaSH Project**

**Introduction**

Self-harm, defined as intentional self-poisoning or self-injury irrespective of motivation (Hawton et al., 2003) greatly increases the risk of subsequent suicide. The monitoring of self-harm is part of the National Suicide Prevention Strategy in England (Department of Health, 2002). Local monitoring enables us to measure the effectiveness of changes within the service and other interventions that impact on this group of patients.

The Manchester Self-Harm (MaSH) Project is a city-wide collaboration between the University of Manchester and local NHS Trusts. It began in April 1997, and data collection commenced in September 1997. The project was funded by the Manchester Mental Health and Social Care Trust (MMH&SCT) until 2008 and is now funded by the Department of Health.

**Achievements**

The MaSH Project has positively influenced self-harm services:

- The MaSH form is a proforma-based assessment tool for the initial assessment of self-harm patients. The form has been cited as an example of good clinical practice by RCPsych (2004) guidelines and has informed the MMH&SCT generic risk assessment form. Staff within the project also provide training sessions to local clinicians and e-learning modules in initial psychosocial assessment based on current research findings.

- Our research informs clinical services. The MaSH Project audits have highlighted gaps in service provision for high risk groups, such as older adults and adolescents, to clinicians. We developed the MaSH Rule, a brief four-question screening tool that informs clinical prioritisation in the Emergency Department (ED) (Cooper et al, 2006). Recently we examined the communication from the ED to the patient’s GP following self-harm and presented recommendations for improvement (Cooper, 2008). We are currently involving service-users in informing services by interviewing them about their experiences of psychosocial assessment.

- The MaSH Project has influenced national policy by informing the NICE guidelines on the management of self-harm (National Collaborating Centre for Mental Health, 2004). We have also identified key risk factors for repetition (Kapur et al, 2006) and for suicide following harm (Cooper et al, 2005), and made service recommendations for ethnic minority groups (Cooper et al, 2006). Our continuing work programme involves further investigation of self-harm amongst ethnic minority groups; the effect of clinical management on patient outcomes; refinement of the risk screening tool; and research into suicide and other causes of mortality following self-harm as part of a collaborative project, the Multicentre Investigation of Self-Harm (see p. 33). These findings will make a substantial contribution to informing suicide prevention.
The overall aims and methods used by the MaSH Project are outlined as follows:

**Aims**
- To monitor patterns of self-harm following presentation at three Emergency Departments (EDs) within the participating Trusts of:
  - Central Manchester and Manchester Children’s University Hospitals NHS Trust (at Manchester Royal Infirmary - MRI)
  - Pennine Acute Hospitals NHS Trust (at North Manchester General Hospital - NMGH)
  - University Hospital of South Manchester NHS Foundation Trust (at Wythenshawe Hospital)
  - Manchester Mental Health and Social Care Trust (including psychiatric services covering three Emergency Departments - MMH&SCT)
- To evaluate self-harm services
- To provide evidence on which service development and training may be based
- To provide an infrastructure for further research on patterns of self-harm and their clinical management.

**Method**
In each participating hospital, data collected includes:
- Patient data - e.g. demographic characteristics, psychiatric history, details of the self-harm episode, precipitating events, method of self-harm, mental state and suicidal intent
- Service data - e.g. risk assessment, communication with GP, follow-up arrangements.

When each patient presents at an ED with self-harm, a standard brief assessment form containing the above items is completed. For cases where no ED form is received, information relating to the episode is obtained from electronic records and notes held at the three hospitals. In addition, patients who are seen by a mental health specialist receive a full psychiatric assessment using a more detailed assessment form. Where no psychiatric form is received, electronic mental health systems are searched for a record of a specialist psychosocial assessment.

**The Two Year Report**
As this is a two year report, some further explanation of a number of points is necessary to make the findings easier to interpret.

1. The first episode for each individual during the latest year of data (September 2006 – August 2007) was used to calculate age and sex standardised annual rates of self-harm
per 100,000 of the Manchester population (based on midyear population estimates from the Office for National Statistics (ONS)).

2. All clinical data are necessarily based on individuals who had an assessment completed. Therefore, ‘individual’ in this context refers to the first episode where an individual had an assessment form completed in preference to no form or ‘Did Not Wait’ (DNW) across the 2 year study period.

3. Date of birth and gender have been recorded on all episodes regardless of treatment status including patients that DNW since 1st September 2002. Therefore ‘individual’ in this context refers to index episode (first chronological episode).

4. Additional demographic data (e.g. ethnicity, marital status) were obtained from assessment forms. For non-assessed cases demographic data were extracted from ED notes and electronic records where available. Therefore ‘individual’ in this context refers to the first episode where demographic data were available.

5. ‘All Participating Trusts’ refers to combined data from three Emergency Departments (EDs) in Manchester: Manchester Royal Infirmary (MRI), North Manchester General Hospital (NMGH), Wythenshawe Hospital and data from the Manchester Mental Health and Social Care Trust. Reports on individual Emergency Departments at the three Trusts are available on request.

Trends over time and five year analyses
Since September 2002, the MaSH Project has been collecting data on all episodes of self-harm (including non-assessed episodes). In this report we present 5 year trends and subgroup analyses of rates and self-harm repetition from 2002 to 2007.
Summary of Findings across All Participating Trusts

MaSH Year referred to in the report and corresponding report period
Year 9: 1st September 2005 until 31st August 2006
Year 10: 1st September 2006 until 31st August 2007

Numbers of episodes and individuals
There were a total of 3108 episodes by 2482 individuals in the three EDs in Year 9, and there were 3351 episodes by 2574 individuals in Year 10.

Characteristics of individuals in the self-harm cohort

Rates
The annual rate of self-harm (based on midyear ONS population estimates for each year) for individuals resident within Manchester was 448 per 100,000 population in Year 9 (545 for females and 350 for males). In Year 10, the annual rate was 447 per 100,000 population (539 for females and 354 for males). As in previous reports, the group with the highest rate of self-harm was young women aged 15 to 19 years with a rate of 1211 per 100,000 (in Year 10).

Repetition
12 month repetition:
Based on individuals who re-presented to hospital within a year of their initial presentation in Year 9, the 12 month repetition rate was 18% (allowing a 12 month follow-up period into Year 10).
Self-reported previous self-harm:
57% reported previous self-harm in their lifetime with or without medical treatment and 32% reported self-harm within the past year.

Sociodemographic characteristics
59% of the self-harm cohort was female; 60% of individuals were single; 21% lived alone; 35% were unemployed and 14% were from non-white ethnic backgrounds.

Analysis of rates of self-harm by ethnic group revealed that Black women (African-Caribbean and other Black ethnicity) had a higher rate of self-harm than any other group (535 per 100,000 Black women vs. 433 per 100,000 White (all Caucasian) women).

Alcohol and substance misuse
Assessors identified 33% of individuals as abusing alcohol (43% of males and 25% of females). Alcohol was also involved at the time of self-harm in 56% of episodes (61% of male and 52% of female episodes).

Substance abuse was identified in 16% of assessed individuals (22% of males and 12% of females). Misuse of drugs was particularly common in males under 35 years (33%).
**Characteristics of episodes of self-harm**

**Method of harm**

The most common method of self-harm was self-poisoning by drugs (78%). The second most frequent method was self-injury by cutting or piercing (17%). 4% of episodes involved other methods of self-injury such as hanging and asphyxiation, and 1% involved poisoning with non-ingestible substances.

Drugs used in self-poisoning episodes:

52% of self-poisoning episodes involved the use of paracetamol compounds, of which 69% were pure paracetamol. The next most commonly used drugs were antidepressants (24%) and other analgesics including NSAIDs (non-steroidal anti-inflammatory drugs) (22%). Benzodiazepines were involved in 13% of episodes.

**Time of presentation**

Presentations peaked between the hours of 8pm and 2am (38% of presentations occurred during this six-hour period) and declined throughout the morning. The number of presentations tended to reach its peak over the weekend through to Monday and was lowest on Tuesdays.

**Management of self-harm episodes**

In total, patients were admitted to a medical bed in 58% of self-harm episodes, although this varied by Trust and method of harm. Those who used self-cutting or other forms of self-injury were most likely to be discharged directly from the ED. Following assessment by a mental health specialist, the most common referrals were to the patient’s GP only (45%), followed by outpatient referrals (including urgent referrals) (29%). 5% were admitted to a psychiatric inpatient unit.

**Trends over time and five year analyses** (based on the MaSH Project data on individuals presenting between 2002 and 2007)

Repetition by method of harm:

Based on five years of data (2002 to 2007), the 12 month repetition rate was higher following an episode of self-injury such as cutting (24% repeated), followed by other forms of self-injury (including hanging) (21%), and self-poisoning (17%).

Trends in rates:

Early indications are that rates of self-harm in Manchester have declined over a recent 5 year period. From 2002 to 2007, the male rate of self-harm declined from 431 to 354 per 100,000 population (an 18% reduction, with a significant linear trend (p < .001)). Self-harm rates in women have also declined between 2002 and 2007, from 585 to 539 per 100,000 population (a decline of 8%, p < .001). Data from the ONS that was available for an earlier period of 1997 to 2005 shows that the male suicide rate in Manchester has declined from 33 to 25 per 100,000 population (a decline of 24%, p = .001).
Implications

Population based rates of self-harm have declined in Manchester from 2002 to 2007 (when data were available on all episodes), particularly amongst men. Manchester has also seen a decline in the local male suicide rate from the earlier period of 1997 to 2005. These data might suggest that suicide prevention initiatives have been effective, including efforts by local medical and mental health staff.

Clinical implication: The decline in the local suicide rate and rates of self-harm in Manchester may reflect service improvement. Self-harm is a major risk factor for subsequent fatality. It is essential that emergency departments provide a psychosocial assessment of needs and risk for all individuals presenting with self-harm as consistent with the NICE (2004) guidelines.

Although population based rates have declined (based on individuals), the total number of episodes and, therefore, the workload for emergency services remain high. One reason for this might be an increase in the number of repeat presentations. This report has highlighted high repetition rates, particularly following self-injury. However, those patients who self-injure were the group most likely to be discharged directly from the ED.

Clinical implication: Clinicians should be aware of the high risk of repetition associated with self-injury. In addition, ED staff must conduct an initial psychosocial assessment for all patients before making the decision either to discharge the patient from the ED or to refer to psychiatric or other services. The assessment information should be communicated to the patient’s GP as recommended by NICE (2004). We encourage ED clinicians to fax the MaSH form to the patient’s GP (Cooper et al, 2008 (pg. 32)). For those assessed by mental health staff, the GP should also be informed in all cases.

Black women had higher rates of self-harm than any other group. In collaboration with the Multicentre Investigation of Self-Harm which includes Oxford and Derby, the MaSH Project will be conducting further research into this finding.

Clinical implication: When conducting psychosocial assessments and deciding on clinical management, clinicians must be sensitive to the specific needs of those presenting with self-harm from ethnic minority groups.

Alcohol misuse remains a problem, and substance misuse is becoming increasingly common, particularly in young males. Both are risk factors for repetition of harm (Kapur, 2006), and alcohol use is an independent risk factor for suicide (Cooper et al, 2005).

Clinical implication: Those who are intoxicated on arrival must still be offered a psychosocial assessment once they have been allowed time to recover from their intoxicated state. Clinical management plans by mental health specialists should include referral to drug and alcohol services. For those not seen by a specialist, the provision of educational material in the ED and sources of advice e.g. self-help groups, may be of benefit.
**ALL PARTICIPATING TRUSTS**

**Presentations to Emergency Departments at All Participating Trusts**

Table 1: Numbers of episodes and individuals

<table>
<thead>
<tr>
<th></th>
<th>All Emergency Departments</th>
<th>Sept 05 – Aug 06</th>
<th>Sept 06 – Aug 07</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Episodes</strong></td>
<td></td>
<td>3108 (F:M 1838:1270)</td>
<td>3351 (F:M 1957:1394)</td>
</tr>
<tr>
<td><strong>Individuals</strong></td>
<td></td>
<td>2482 (F:M 1472:1010)</td>
<td>2574 (F:M 1509:1065)</td>
</tr>
<tr>
<td><strong>Manchester Royal Infirmary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Episodes</strong></td>
<td></td>
<td>1267</td>
<td>1435</td>
</tr>
<tr>
<td><strong>Individuals</strong></td>
<td></td>
<td>1039</td>
<td>1114</td>
</tr>
<tr>
<td><strong>North Manchester General Hospital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Episodes</strong></td>
<td></td>
<td>904</td>
<td>878</td>
</tr>
<tr>
<td><strong>Individuals</strong></td>
<td></td>
<td>702</td>
<td>690</td>
</tr>
<tr>
<td><strong>Wythenshawe Hospital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Episodes</strong></td>
<td></td>
<td>937</td>
<td>1038</td>
</tr>
<tr>
<td><strong>Individuals</strong></td>
<td></td>
<td>741</td>
<td>770</td>
</tr>
</tbody>
</table>

Table 2: Episodes and individuals presenting to all emergency departments, 2002 - 2007

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of episodes</th>
<th>n (%) difference*</th>
<th>No. of individuals</th>
<th>n (%) difference*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 02 - Aug 03</td>
<td>3283</td>
<td></td>
<td>2667</td>
<td></td>
</tr>
<tr>
<td>Sep 03 - Aug 04</td>
<td>3488</td>
<td>205 (6%)</td>
<td>2679</td>
<td>12 (0.4%)</td>
</tr>
<tr>
<td>Sep 04 - Aug 05</td>
<td>3149</td>
<td>-339 (-10%)</td>
<td>2459</td>
<td>-220 (-8%)</td>
</tr>
<tr>
<td>Sep 05 - Aug 06</td>
<td>3108</td>
<td>-41 (-1%)</td>
<td>2482</td>
<td>23 (1%)</td>
</tr>
<tr>
<td>Sep 06 - Aug 07</td>
<td>3351</td>
<td>243 (8%)</td>
<td>2574</td>
<td>92 (4%)</td>
</tr>
</tbody>
</table>

* Percentage difference from previous year

The number of episodes presenting to Emergency Departments (EDs) over the past 5 years has remained high (Table 2). In the most recent year 2006/7, there were a total of 3351 episodes of self-harm by 2574 individuals in EDs at all participating trusts. This represents an increase of 8% in the number of episodes and 4% in the number of individuals compared to the previous year 2005/6. The discrepancy between the recent rise in episodes compared to individuals can be accounted for by repetition of self-harm.

As in previous years, the largest number of self-harm episodes presented at Manchester Royal Infirmary (MRI) (Table 1). Over the two year 2005/7 report period, the number of self-harm presentations to MRI was 52% and 37% higher than at North Manchester General Hospital (NMGH) and at Wythenshawe Hospital respectively.
### Annual Rates of Self-Harm

**Table 3: Annual rates of self-harm per 100,000 population aged 15 years and over**

<table>
<thead>
<tr>
<th></th>
<th>MaSH Year 8 Sept 04 – Aug 05</th>
<th>MaSH Year 9 Sept 05 – Aug 06</th>
<th>MaSH Year 10 Sept 06 – Aug 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall rate</td>
<td>450</td>
<td>448</td>
<td>447</td>
</tr>
<tr>
<td>Females</td>
<td>539</td>
<td>545</td>
<td>539</td>
</tr>
<tr>
<td>Males</td>
<td>362</td>
<td>350</td>
<td>354</td>
</tr>
</tbody>
</table>

Rates per 100,000 population are based on the index (first chronological) episode for each individual presenting to any of the three EDs in Manchester following self-harm (including patients who did not wait), who resided within the Manchester postcode area. Previous years’ rates have been adjusted in line with revised ONS population estimates.

**Figure 1: Average rates of self-harm in Manchester per 100,000 population aged 15 years and over between September 2006 and August 2007 (n=1673)**

Overall rates of self-harm based on individuals resident within Manchester have continued to show a slight decrease over recent years (Table 3). Female rates were highest overall, with self-harm rates being greatest in women aged 15-19 years (Figure 1). In men the highest rates were seen in the 35-39 years age group.
Suicide and Self-Harm in Manchester
Although rates appear to have declined recently, Manchester continues to have high rates of self-harm and suicide per head of population in comparison to other regions. The Multicentre Investigation of Self-Harm (see p. 31), involving data from the MaSH Project, reported female self-harm rates of 587 per 100,000 population in Manchester compared to 374 in Leeds and 342 in Oxford; and male rates of 460 in Manchester compared to 291 in Leeds and 285 in Oxford (Hawton et al, 2007).

With respect to suicide, in 2005 the suicide rates in Manchester were 25 per 100,000 in men aged 15 years and over, and 9 per 100,000 in women aged 15 years and over. These compare to UK suicide rates in 2005 of 17.5 per 100,000 in males and 5.3 per 100,000 in females aged at least 15 (Source: ONS).

The increased prevalence of suicidal behaviour in Manchester compared to other regions may be associated with the city’s high level of socio-economic deprivation. Manchester is ranked the 4th most deprived local authority area out of 354 in England based on the Index of Multiple Deprivation (2007). Previous research has shown that suicidal behaviour is associated with socio-economic deprivation, both at the individual and area level (e.g. Hawton et al, 2001; Johnston et al, 2006; Corcoran et al, 2007). Changes in socio-economic conditions have also been associated with increased self-harm rates (Gunnell et al, 2000). In the context of the current economic recession, this emphasises the importance of sufficient resources and appropriate clinical management of self-harm by services that may see increased demands.
Social and Demographic Characteristics of Self-Harming Individuals

Based on index episode across the two-year study period, 4738 individuals presented with self-harm. 328 individuals (7%) did not wait (DNW) and did not return to be treated.

Table 4: Age and Gender (n = 4723)

<table>
<thead>
<tr>
<th>N (Valid cases) 4723</th>
<th>59% female</th>
<th>Median age = 30 years, ranging from 9 to 93 years.</th>
</tr>
</thead>
</table>

The group of patients with the highest frequency of self-harm were aged 15-19 years for females and 20-24 years for males although frequency was high in males from aged 20-39 years and females aged 15-24 years (based on frequency of presentation alone, and not per local population).

Table 5: Marital Status (n=4176) and Living Circumstances (n = 3202)

<table>
<thead>
<tr>
<th>Marital Status and Living Circumstances</th>
<th>N (Valid cases) 4176</th>
<th>Most patients were single (60%), 11% were separated or divorced, 2% were widowed and 27% were married or partnered.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (valid cases) 3202</td>
<td>21% lived alone, 21% with a parent/sibling and 10% with friends or other relatives. 7% were homeless or lived in hostels/lodgings.</td>
</tr>
</tbody>
</table>

Figure 2: Ethnicity of individuals presenting to all participating Trusts between September 2005 and August 2007 (n=3722)

Ethnic groups other than White formed 14% of the Manchester self-harm population, the largest group being those of South Asian origin (Indian, Pakistani or Bangladeshi) who made up 6% of the sample. This compares to 19% of the general population of Manchester being from non-white ethnic groups, with 8% being South Asian (6% in the self-harm cohort), 5% Black/Black British (4%) and 1% Chinese (0.5%) (Source: ONS Census data 2001).
The most frequently reported employment status by self-harming individuals was being registered unemployed (35%), and 77% of these reported being unemployed for over 26 weeks. This compares to an unemployment rate of 7% in the general population of Manchester between 2006 and 2007 (ONS). The proportion of self-harming individuals registered as sick (13%) was slightly higher than the proportion claiming incapacity benefit/severe disablement allowance in Manchester as a whole (8%) (ONS).

Unemployment is therefore highly overrepresented in the Manchester self-harm cohort. Research suggests that individual level factors, such as unemployment, are stronger risk factors for the incidence of suicidal behaviour than area level measures of deprivation (O'Reilly et al, 2008). However, the mechanisms of area level risk and their interaction with individual level factors need to be understood in more detail (Johnston et al, 2006). Of note, unemployment at the individual level is an independent risk factor for a repetition of self-harm (Kapur et al, 2006), although deprivation was not a predictor of repetition at the area level (Johnston et al, 2006).
Clinical Characteristics of Self-Harming Individuals (data on individuals by index episode with completed forms, September 2005 - August 2007) (n = 3332).

Current and previous psychiatric treatment
3072 individuals (92% of those with forms) were assessed for their psychiatric history. 44% of these were receiving current psychiatric treatment (including treatment by a GP) and a further 15% had received psychiatric treatment in the past (but were not currently receiving treatment).

Alcohol Misuse
3078 individuals (92% of those with forms) were assessed for their use of alcohol, and 33% of these (43% of males and 25% of females) were classified as abusing alcohol, i.e. current harmful alcohol use or drinking 7 or more units a day. Analysis by age group revealed alcohol misuse to be more common in those aged over 35 years (45% vs. 25% under the age of 35). Males over 35 years were the group who were most likely to be classified as misusing alcohol (55%).

Alcohol use in conjunction with an act of self-harm was also common. Analysis of all episodes revealed alcohol to be used at time of self-harm in 56% of cases (61% for male episodes, 52% for females). The use of alcohol at the time of self-harm was also more common in episodes involving individuals aged 35 or over (67% vs. 48% under the age of 35). Of note, for those over 35 years there was no gender difference in the proportion of episodes involving alcohol (68% of male vs. 66% of female episodes).

Substance Misuse
3098 individuals (95% of those with forms) were assessed for their use of street drugs, and 16% of these (22% of males and 12% of females) were classified as misusing drugs (use on a regular basis or classified as harmful use by a clinician). In contrast to alcohol misuse, drug misuse was more common in those under 35 years (20% vs. 10% of those aged 35 or over).

The group most likely to misuse drugs were males under the age of 35 years, of whom a third were using street drugs on a regular basis in 2006/7.
Precipitants of Self-Harm:

Figure 4: Precipitants of self-harm by individuals at all participating Trusts (n=3023)

A precipitant to the act of self-harm was known for 3023 individuals (91% of those assessed). 46% of these individuals reported more than one precipitant. The most frequent reasons given as precipitating factors in both sexes were interpersonal problems. In line with previous years, relationship problems with a partner was the most frequently reported precipitant of self-harm. There were some gender differences: females reported more relationship problems with family and others, and problems with abuse. Males reported more problems with alcohol and substance abuse, and financial, housing, employment and legal problems.

Evidence of mental disorder: clinical impression at time of assessment
Information on the presence or absence of psychiatric disorder was available for 1108 individuals (33% of individuals assessed by mental health specialists). Probable depression was identified in 29% of these. Alcohol or drug misuse was evident in 32% and a further 9% were assessed as being alcohol dependent. 13% had probable anxiety/stress related disorders, 7% percent of individuals were likely to have had a severe mental illness (schizophrenia, bipolar disorder or psychotic depression) and a further 4% were diagnosed with personality disorders. 4% had no psychiatric disorder evident at time of assessment.
Repetition of Self-Harm

Self-reported previous self-harm:
3332 individuals were assessed for self-reported previous self-harm. 1892 individuals (57%) reported previous self-harm with or without medical treatment. Of the 3332 assessed, 1050 (32%) reported self-harming within the last year.

Percentage of repeat episodes:
From September 2005 to end of August 2007 a total of 4738 individuals presented with 6459 episodes, which means that approximately 1 in 4 episodes over the two-year report period were repeat presentations of self-harm (1731, 27%). There was no gender difference in the percentage of repeat episodes.

Percentage of individuals repeating:
6 month repetition rate
The 6 month repetition rate could be calculated on all individuals who presented before 1st March 2007 during Year 10 (allowing all individuals a six month follow-up period). There were 3602 individuals who presented during this time; amongst these 14% (459) re-presented with an episode of self-harm within 6 months of their first episode.

12 month repetition rate
The repetition rate within 12 months of the index episode could be calculated for individuals who presented during Year 9 (allowing a full 12 months follow-up period during Year 10). There were 2482 individuals who presented during Year 9 of which 18% (451) re-presented with an episode of self-harm within 12 months of their first episode.
Characteristics of self-harm episodes

Method of Self-Harm

Figure 5: Method of Self-Harm by all episodes at all participating Trusts between September 2005 and August 2007 (n=6443)

A method of self-harm was recorded for 6443 of 6459 episodes (99.8% of all episodes on the MaSH Project database). The most common method of self-harm was self-poisoning with drugs (78%) followed by self-injury, for example cutting or piercing, (17%). Other methods such as drowning and asphyxiation were used in 4% of episodes.

Further analysis of those 284 episodes involving ‘other’ methods of self-harm revealed the most common method to be hanging or strangulation (23%), followed by jumping from a height (13%), traffic related incidents (8%), burning self (8%), swallowing a foreign body (7%) and hitting (7%).

Analysis of all episodes revealed little gender difference in method of self-harm, although males were more likely to use other methods of self-injury such as hanging and asphyxiation than females (6% vs. 4%). With respect to gender difference in the specific type of method used within this subgroup, men were more likely to use hanging/strangulation (27% vs. 18% of women) and women were more likely to swallow a foreign body (14% vs. 1% of men).

Analysis at the individual level, based on a person’s index episode, revealed that men were more likely to cut (16% vs. 12%), and women were more likely to self-poison (85% vs. 77%). This discrepancy between individuals and episodes might be due to subsequent repetition; for example, although the incidence of poisoning based on individuals was more common amongst women, more repeat episodes of poisoning occurred by men. Similarly, although
individual men were more likely to initially present with cutting, there were more repeat episodes of cutting by women.

Drugs used in self-poisoning episodes

Of the 5011 episodes that involved self-poisoning with drugs as a method of harm (78% of all episodes), the type of drug was known in (4614) 92% of episodes.

Figure 6: Substances used in self-poisoning episodes at all participating Trusts
September 2005 – August 2007 (n = 4614)

The most commonly used drugs were those containing paracetamol (52% of all episodes involving self-poisoning); drugs containing paracetamol were more than twice as likely to be used as any other substance. With regard to the type of paracetamol compound used, the majority (69%) used pure paracetamol.

Anti-depressants were taken in 24% of all episodes (with the most common type being selective serotonin reuptake inhibitors (SSRIs), 14%). A further 22% of episode involved other forms of analgesics, and benzodiazepines were taken in 13% of episodes.

There was little overall gender difference in the type of drug taken, although females were more likely to take a paracetamol substance than males (56% vs. 48%).
Table 6: Type of paracetamol taken where self-poisoning involved the use of a paracetamol product (n=2462)

<table>
<thead>
<tr>
<th></th>
<th>Pure paracetamol (n=1700)</th>
<th>Co-proxamol (n=31)</th>
<th>Paracetamol and salicylate (n=15)</th>
<th>Other paracetamol compound (n=716)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td>70%</td>
<td>1%</td>
<td>0.9%</td>
<td>28%</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>68%</td>
<td>1%</td>
<td>0.4%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Of self-poisoning episodes with paracetamol compounds, pure paracetamol was the product most commonly used (69% of all paracetamol poisonings). There were minimal gender differences in the subtype of paracetamol compounds used.

Table 7: Type of analgesic taken where self-poisoning involved the use of an analgesic product (not paracetamol) (n=1268)

<table>
<thead>
<tr>
<th></th>
<th>Pure salicylate (n=142)</th>
<th>Salicylate compound (n=83)</th>
<th>NSAIDs (n=714)</th>
<th>Opiate analgesic (n=329)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td>13%</td>
<td>6%</td>
<td>52%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>10%</td>
<td>7%</td>
<td>59%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Amongst those episodes involving other types of analgesics, non-steroidal anti-inflammatory drugs (NSAIDs) (e.g. ibuprofen) were the most commonly used subtype (used in 56% of all other analgesic self-poisonings) followed by opiate analgesics (26%). With regards to gender differences, women were more likely than men to use NSAIDs (59% vs. 52%) whilst a higher proportion of males used opiate analgesics (30% vs. 24%).

Table 8: Type of antidepressant taken where self-poisoning involved the use of an antidepressant product (n=1137)

<table>
<thead>
<tr>
<th></th>
<th>Tricylics (n=282)</th>
<th>SSRIs (n=722)</th>
<th>MAOIs (n=4)</th>
<th>Other antidepressants (n=129)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td>29%</td>
<td>59%</td>
<td>0.5%</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>22%</td>
<td>67%</td>
<td>0.3%</td>
<td>11%</td>
</tr>
</tbody>
</table>

As shown in Table 8 the most commonly used antidepressants were SSRIs (used in 64% of all antidepressant self-poisoning episodes). Women were most likely to use SSRIs (67% vs. 59%) whilst men were more likely to use tricyclics (29% vs. 22%). Monoamine oxidase inhibitors (MAOIs) were only used in a minority of episodes (0.4%).
Drugs, Age and Gender

Paracetamol and other analgesics:
Data from all participating Trusts showed that the use of paracetamol and other analgesics was most common in self-poisoning episodes in those aged under 25. Females under 25 years of age were the group most likely to use analgesic substances in self-poisoning episodes.

Figure 7: Percentage of self-poisoning episodes using analgesics (all participating Trusts) (September 2005 – August 2007 n=2906)

Antidepressants:
The use of antidepressants in self-poisoning episodes was most frequent amongst those aged between 20 and 44 years. Antidepressant poisoning peaked in those aged 20-24 years (16%) and 40-44 years (also 15%). Up to the age of 24, antidepressant overdose was more common in females than males. Between the ages of 25 to 39, however, males were more likely to overdose with antidepressants.

Benzodiazepines:
The use of benzodiazepines in overdose was most common in those aged between 30 and 54 years. Benzodiazepine use peaked in males aged 35-39 years, who accounted for 22% of all benzodiazepine overdose episodes compared to 15% amongst women. Female use of benzodiazepines was highest in the 40 to 44 years age group (18%).
Number of tablets taken in overdoses containing paracetamol compounds

Data were available on the number of tablets taken in 69% of all self-poisoning episodes with paracetamol compounds. Overall, the mean number of paracetamol-containing tablets taken was 24 (range = 1 to 200 tablets). The mean was higher for males (27 tablets compared to 22 for females).

Since legislation was introduced in September 1998 to limit the pack size of analgesics sold over the counter, the mean number of tablets taken in overdose has decreased (e.g. Hawton et al, 2005). During the year prior to the legislation, the MaSH Project data shows that the mean number of paracetamol containing tablets taken was 28 (35 for males, 24 for females).

Figure 8 shows that those aged over 60 years took a higher number of tablets in paracetamol poisoning episodes than younger age groups (mean = 33 tablets, range = 4 to 188 tablets).

The gender difference in the number of tablets taken was even greater in those over 60 years, with males over 60 taking an average of 40 paracetamol-containing tablets per episode compared to 27 tablets amongst older females.

Figure 8: Mean number of tablets taken in self-poisoning episodes with paracetamol compounds by age group and gender (all participating Trusts) (September 2005 – August 2007 n=1996)
Time of presentation

Amongst the 6242 episodes (97%) where time of presentation at the ED was recorded, the majority of patients presented during the evening and night (58% between the hours of 6pm and 4am). Presentations peaked between the hours of 8pm and 2am (38%) and declined during the early hours of the morning (Figure 9).

**Figure 9: Number of episodes by time of presentation at all participating Trusts**

(September 2005 – August 2007 n=6242)
Presentations by day of the week

The number of presentations tended to reach its peak on Sundays and was lowest on Tuesdays. Female attendance tended to show greater variation by day of the week than male attendance; in particular, higher proportions presented on a Sunday.

Figure 10: Number of episodes by day of the week at all participating Trusts
(September 2005 – August 2007 n = 6459)
Clinical Management of Self-Harm Episodes

Management of Self-Harm Episodes by ED staff
The management in the ED was known for 5370 (90%) of the 5993 treated episodes of self-harm. Of the episodes treated in the Emergency Department: 58% were admitted to a medical bed; amongst these 26% were referred to medical or surgical services. 24% were referred directly to psychiatric services, 10% were referred to other services, 2% self-discharged and 14% were discharged home.

Of those that were admitted to a medical bed, 54% received a psychosocial assessment by a mental health specialist.

Figure 11: Management of episodes of self-harm in Emergency Department (all participating Trusts) (September 2005 – August 2007 n=5370)

NB: Each case may be referred to more than one service.
There were 2807 episodes assessed by mental health specialists, of which 70% were completed by nurses and 28% by Senior House Officers (SHOs). The management by mental health specialists was known for 2772 episodes (99%).

Figure 12: Management of self-harm episodes by mental health specialists (all participating Trusts) (September 2005 – August 2007 n=2773)

There were 126 (5%) admissions to a psychiatric unit, 15 of these made under the Mental Health Act, 2007. Of the 83 (3%) urgent referrals, 68 were made to out-patients, 10 to the crisis resolution team and 5 to the 24-hour community service team. Other mental health referrals constituted 709 (26%) of the episodes, which included referral to day hospital, community psychiatry, out-patient appointments, community drug and alcohol teams, and psychiatric review by the assessor. 562 (20%) episodes were referred to other services including social services and voluntary services (e.g. Relate, Cruse, 42nd Street, debt counselling, psychotherapy). Referral to GP (with no other formal referral) constituted 1247 (45%) of the episodes.
Comparisons across all participating Trusts

Comparisons of the characteristics of self-harm presentations at the three EDs are summarised below:

**MRI (Manchester Royal Infirmary)**
- MRI had the highest number of episodes and individuals presenting to the ED within the study period: 2153 individuals accounting for 2702 episodes. Wythenshawe had 1511 individuals making up 1975 episodes and NMGH had the least: 1392 individuals accounting for 1782 episodes.
- At MRI, the group most likely to present with self-harm were females aged 25-29, whilst the group most likely to present to NMGH and Wythenshawe were females aged 15-19.
- MRI had the highest proportion of individuals from ethnic minority groups (20%) with the most common being Indian/Pakistani/Bangladeshi (8%) and Black (7%). This compares to 12% at MRI and 7% at Wythenshawe being from ethnic minority groups.
- The rate of unemployment was highest amongst those presenting at MRI (40%) compared to 37% at NMGH and 35% at Wythenshawe. MRI also had the highest proportion of students (17%) compared to Wythenshawe (12%) and NMGH (9%).
- MRI had the highest proportion of specialist assessments carried out by Senior House Officers (SHOs) (55% compared to 42% carried out by nurses). In NMGH and Wythenshawe specialist assessments were more likely to be carried out by nurses (NMGH: 90% carried out by nurses vs. 9% by SHOs; Wythenshawe: 88% nurses vs. 11% SHOs).
- Admission to a psychiatric unit following assessment by a mental health specialist was most likely at MRI (7% compared to 3% at Wythenshawe and 2% at NMGH). Other psychiatric referrals (urgent and non-urgent outpatient) were also highest at MRI (33%) compared to 28% at Wythenshawe and 23% at NMGH.

**NMGH (North Manchester General Hospital)**
- NMGH had the lowest proportion of females presenting with self-harm (55% of all individuals vs. 62% at Wythenshawe and 60% at MRI).
- The mean age of individuals was highest at NMGH (35 years compared to 33 years at Wythenshawe and 31 years at MRI).
- NMGH had a higher proportion of individuals living alone (23% vs. 21% at Wythenshawe and 19% at MRI).
- The proportion of episodes where the patient did not wait for treatment was lowest at NMGH (3% compared to 6% at Wythenshawe and 11% at MRI).
- NMGH discharged the highest proportion of episodes from the ED (either to the GP or without referral) (35% compared to 16% at MRI and 9% at Wythenshawe).
MaSH All Participating Trusts

- Referrals to non-psychiatric ‘other’ services (e.g. voluntary, social services) following specialist assessment were highest at NMGH (34%) compared to 19% at MRI and 10% at Wythenshawe.
- NMGH had a higher proportion of people who used ‘other’ methods of self-injury (including hanging and asphyxiation) as a method of self-harm (6% compared to 4% at MRI and 4% at Wythenshawe).

Wythenshawe Hospital

- At Wythenshawe, self-harm presentations were highest for men aged 35-39, whilst self-harm amongst males was highest in the 20-24 age group for NMGH and MRI.
- The highest proportion of individuals living with their parents was at Wythenshawe (27% vs. 21% at NMGH and 16% at MRI).
- Wythenshawe had the highest proportion of episodes with a completed ED assessment form (72%) compared to 28% at MRI and 26% at NMGH.
- Wythenshawe admitted the highest proportion of episodes to a medical ward (69%) compared to 45% at NMGH and 57% at MRI.
- Wythenshawe had the highest proportion of episodes with a completed specialist (psychiatric) assessment (46%) compared to 43% at NMGH and 42% at MRI.
- The proportion of individuals who were currently receiving psychiatric treatment was higher in Wythenshawe (47%) compared to 44% at MRI and 40% at NMGH.
- Information on the presence or absence of mental disorder was available for fewer individuals at Wythenshawe (21% compared to 39% at NMGH and 42% at MRI).
- Repetition within 6 months was higher at Wythenshawe (15% compared to 12% at both NMGH and MRI). Repetition rate for a repeat presentation of self-harm within 12 months of the index episode was similar across the 3 hospitals (19% for both NMGH and Wythenshawe and 17% for MRI).
Since September 2002, the MaSH Project has been collecting data on all episodes of self-harm (including non-assessed episodes). In this report we present 5-year trends and subgroup analyses of rates and self-harm repetition from 2002 to 2007.

**Trends in Self-Harm Rates**

Figure 13: Rates of self-harm in Manchester per 100,000 population aged 15 years and over between September 2002 and August 2007 (3 year moving averages)

Rates are based on the index (first chronological) episode during each year for people who resided in the Manchester postcode area, per 100,000 population based on midyear gender and age specific ONS population estimates.

Figure 13 shows trends in self-harm rates since from 2002 to 2007 (when data were available for all episodes). Early indications are that self-harm rates have declined over the recent 5 year period. Male rates of self-harm per 100,000 population declined from 431 to 354 (a decline of 18%, with a significant linear trend (p <.001)). Female rates have also shown a recent decline from 585 to 539 per 100,000 population (a decline of 8%, linear trend significant at p <.001).

Suicide data sourced from the Office for National Statistics for an earlier period of 1997 to 2005 showed that male suicide rates in Manchester have also declined from 33 to 25 per 100,000 population (24% decline with a significant linear trend, p =.001). There was no evidence of a significant decline in the female suicide rate (from 10 per 100,000 in 1997 to 9 per 100,000 in 2005).
Trends in Self-Harm Rates by Gender and Age

Figure 14: Male self-harm rates in Manchester by age group, 2002-2007 (3 year moving averages)

Source of denominator data: Office of National Statistics (ONS) midyear population estimates.

Figure 15: Female self-harm rates in Manchester by age group, 2002-2007 (3 year moving averages)

Source of denominator data: Office of National Statistics (ONS) midyear population estimates.
Figures 14 and 15 show the trend in rates of self-harm by gender and age group from 2002 to 2007. A decline in male rates of self-harm can be seen in young males between 25 and 44 years old. The linear trend was found to be significant for both the 25 to 34 years age group (decline of 31%, p <.001) and the 35 to 44 year age group (decline of 18%, p = .002).

Rates amongst females under 44 years have also declined significantly since 2002, although to a lesser degree than males (15 to 24 year olds: decline of 17%, p = .04; 25 to 34 year olds: decline of 18%, p = .007; 35 to 44 year olds: decline of 17%, p = .02). Females aged 45 to 64 are the only group where there is evidence of a significant linear increase in self-harm rates (increase of 22%, p = .04).

**Rates of Self-Harm by Ethnic Group**

**Table 9: Rates of self-harm in Manchester per 100,000 population aged 16 years and over between September 2002 and August 2007, by ethnic group (n=5909)**

<table>
<thead>
<tr>
<th></th>
<th>White n=5035</th>
<th>South Asian n=362</th>
<th>Black n=263</th>
<th>Other n=249</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall rate</td>
<td>389</td>
<td>296</td>
<td>394</td>
<td>208</td>
</tr>
<tr>
<td>Females</td>
<td>433</td>
<td>440</td>
<td>535</td>
<td>280</td>
</tr>
<tr>
<td>Males</td>
<td>341</td>
<td>157</td>
<td>246</td>
<td>135</td>
</tr>
</tbody>
</table>

Rates by ethnic group were calculated for the period 2002 to 2007, when data were collected for both non-assessed and assessed cases. Rates were calculated on individuals who were resident within the Manchester postcode area per 100,000 person years by ethnic group. Person-years counts were generated by multiplying the ethnic group, gender and age specific Manchester population estimates (sourced from ONS) by the five year study period.

Rates of self-harm by ethnic group were calculated for the period 2002 to 2007, to allow a larger sample for comparison by ethnicity. Black women had higher rates of self-harm than any other group; rates in Black women were 24% higher than those of White women aged 16 years and over. South Asian women also had slightly higher self-harm rates than White women. These findings are in contrast to male rates. White men had the highest incidence of self-harm, followed by Black and South Asian men. People from other ethnic groups (including Chinese, mixed and other ethnic groups) had the lowest self-harm rates overall. Chinese men in particular had very low rates of self-harm at 44 per 100,000 population. Rates in Chinese women, however, were over three times as high, at 154 per 100,000. The MaSH Project is currently undertaking further research to examine the elevated rates and characteristics of Black women who self-harm in more detail.
Trends in Annual Rate of Self-Harm Repetition by Gender

Figure 16: Percentage of all individuals repeating within 12 months between September 2002 and August 2006 (all participating Trusts) (n = 12812)

Annual repetition rates were based on a re-presentation of self-harm to hospital within 12 months of an individual’s index episode during that year, allowing all individuals a 12 month follow-up period.

Annual repetition rates were calculated for individuals presenting with self-harm from September 2002 to August 2006, allowing all individuals a 12 month follow-up period into 2007. In 02/03 and 03/04 the 12 month repetition rate was 17%; in 04/05 it was 19%; and in 05/06, 18% of individuals represented with self-harm. With respect to gender differences (Figure 16), in 02/03 repetition was marginally higher in women compared to men. In subsequent years the trend appears to have reversed. In 05/06, 20% of men repeated within 12 months compared to 17% of women.
Table 10: Repetition of self-harm within 12 months of index episode by method of harm, September 2002 to August 2006 (allowing follow up in 2007) (n = 10,246)

<table>
<thead>
<tr>
<th></th>
<th>Self-poisoning:</th>
<th></th>
<th>Self-injury:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>drugs</td>
<td>other</td>
<td>cutting</td>
<td>Other</td>
</tr>
<tr>
<td>Total N</td>
<td>8550</td>
<td>78</td>
<td>1346</td>
<td>272</td>
</tr>
<tr>
<td>Repeaters</td>
<td>1428</td>
<td>14</td>
<td>325</td>
<td>58</td>
</tr>
<tr>
<td>Total repetition rate</td>
<td>17%</td>
<td>18%</td>
<td>24%</td>
<td>21%</td>
</tr>
<tr>
<td>Male N</td>
<td>3431</td>
<td>38</td>
<td>664</td>
<td>171</td>
</tr>
<tr>
<td>Male repeaters</td>
<td>597</td>
<td>5</td>
<td>139</td>
<td>29</td>
</tr>
<tr>
<td>Male repetition rate</td>
<td>17%</td>
<td>13%</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>Female N</td>
<td>5119</td>
<td>40</td>
<td>682</td>
<td>101</td>
</tr>
<tr>
<td>Repeaters</td>
<td>831</td>
<td>9</td>
<td>186</td>
<td>29</td>
</tr>
<tr>
<td>Female repetition rate</td>
<td>16%</td>
<td>23%</td>
<td>27%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Repetition rates were calculated for a combined four year period (September 2002 to August 2006, allowing all individuals a 12 month follow-up period into 2007) to allow a large enough sample for comparison by method of harm.

Overall, 12 month repetition was most common following the use of cutting as a method (24%). As well as being a risk factor for non-fatal repetition, research by the MaSH Project has shown that cutting is associated with a two-fold increase in the relative risk of suicide following self-harm (Cooper et al, 2005).

For women, repetition was most frequent following self-harm with ‘other’ methods of self-injury (29%) as well as cutting (27%) (Table 10). Of the 272 individuals that used other methods of injury, the subtype of injury was known in 198 cases (73%). The repetition rates associated with other injuries by gender are shown in Table 11.
Table 11: Repetition of self-harm within 12 months of index episode by other method of self-injury and gender, September 2002 to August 2006 (n = 198)

<table>
<thead>
<tr>
<th></th>
<th>Hanging and asphyxiation</th>
<th>Other violent method (e.g. jumping, drowning)</th>
<th>Other (e.g. foreign body, hitting)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male N</strong></td>
<td>38</td>
<td>41</td>
<td>46</td>
</tr>
<tr>
<td>Male repeaters</td>
<td>10</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Male repetition rate</td>
<td><strong>26%</strong></td>
<td><strong>20%</strong></td>
<td><strong>11%</strong></td>
</tr>
<tr>
<td><strong>Female N</strong></td>
<td>23</td>
<td>16</td>
<td>34</td>
</tr>
<tr>
<td>Female repeaters</td>
<td>6</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Female repetition rate</td>
<td><strong>26%</strong></td>
<td><strong>25%</strong></td>
<td><strong>32%</strong></td>
</tr>
</tbody>
</table>

Self-injury by women was associated with high repetition rates for all subtypes (Table 11). These include hanging (26%), other violent methods such as drowning (25%) and ‘other’ methods such as hitting or swallowing a foreign body (32%). For men, the method of harm associated with the highest repetition rate was hanging and asphyxiation (26%). Repetition was also common in men who used other violent methods (20%) but less so for other forms of injury (11%).

**Multicentre research:**

Hospital care and repetition following self-harm: Multicentre comparison of self-poisoning and self-injury (Lilley, Owens and Horrocks et al, 2008)

The 12 month repetition rate following self-harm was found to be higher amongst individuals who cut themselves than amongst those who self-poisoned. People who cut themselves were also more likely to have self-harmed in the past and to have received (or be currently receiving) psychiatric treatment. With respect to clinical management, these individuals were less likely to have been admitted to hospital or to have received a psychosocial assessment following their episode of self-harm. However, method switching was also prevalent amongst those who repeated self-harm. A third of those who repeated switched method at least once. This, therefore, highlights the importance of offering an assessment to everyone who presents to hospital having used any method of self-harm.
Recent Research based on the MaSH Project

Data from the MaSH Project have been used to assist further research into self-harm. Brief summaries of recent projects are outlined below.

Communication between secondary and primary care following self-harm: Are National Institute of Clinical Excellence (NICE) guidelines being met? (Cooper et al, 2008)

Most patients contact their GP following presentation to an Emergency Department (ED) after a self-harm incident. The aim of this study was to assess the standard of documentation and communication to GPs from secondary care as recommended by the National Institute of Clinical Excellence (NICE) guidelines on the short-term management of people who self-harm. NICE guidelines recommend that all patients presenting with self-harm should receive a psychosocial assessment of social, psychological and motivational factors, mood and risk and that this information should be passed on to the patient’s GP.

Data were collected on 93 consecutive episodes of self-harm presenting at the Manchester Royal Infirmary over a four week period. 62% of episodes were communicated to the patient’s GP, 58% of these communications were within 24 hours and most within 3 days. Communication via psychiatric staff was most detailed. ED clinicians provided few communications, and they were of limited content. Communication with the patient’s GP was not made in half of those cases seen by a mental health specialist.

The results suggest that government guidelines are only partially being met. Reliance on communication by ED staff would leave a substantial proportion of patients discharged from the ED with no or minimal communication to primary care. Psychiatric services also need to improve the rate of communication to the patient’s GP following assessment.

Psychosocial assessment following self-harm: Results from the Multi-Centre Monitoring of Self-Harm Project (Kapur et al, 2008)

Psychosocial assessment is central to the management of self-harm, but not all individuals receive an assessment following presentation to hospital. Episodes of self-harm presenting to six hospitals in the UK cities of Oxford, Leeds, and Manchester over an 18-month period (1st March 2000 to 31st August 2001) were identified. A total of 7,344 individuals presented with 10,498 episodes of self-harm during the study period. Overall, 60% of episodes resulted in a specialist psychosocial assessment.

Factors associated with an increased likelihood of assessment included age over 55 years, current psychiatric treatment, admission to a medical ward, and ingestion of antidepressants. Factors associated with a decreased likelihood of assessment included unemployment, self-cutting, attending outside normal working hours, and self-discharge.

The study concluded that many people who harm themselves, including potentially vulnerable individuals, do not receive an adequate assessment while at hospital. Staff should be aware of the organisational and clinical factors associated with non-assessment.
The effect of using NHS number as the unique identifier for patients who self-harm: A multi-centre descriptive study (Cooper et al. 2007)

The aims of this research were to determine the proportion of individuals who presented to Emergency Departments with self-harm where an NHS number had been successfully traced and to investigate the characteristics of patients associated with non-capture. Data from the Multi-centre Monitoring of Self-Harm Project were used to identify consecutive patients (N = 3000) who were treated in six Emergency Departments in Oxford, Manchester and Leeds in 2004 and 2005 following self-harm.

NHS number was available for 55% to 73% of individuals across centres. Characteristics associated with non-recording of NHS number in more than one centre included ethnic minority groups and the homeless or those living in a hostel or other institution. Individual centre characteristics included being of male gender, not being admitted to general hospital and using self-injury as a method of harm. Being aged less than 25 years was also associated with non-recording of NHS number in another centre.

The study concluded that basing research studies on NHS number as the unique identifier, as suggested by the Data Protection Act 1998 and the Patient Information Advisory Group, would exclude some of the most vulnerable groups for further self-harm or suicide. This bias may also affect other research registers.

The Multi-centre Investigation of Self-Harm

Projects based upon collection of data on self-harm in multiple centres are an integral component of the National Suicide Prevention Strategy for England (2002). The MaSH Project is part of a Department of Health funded multi-centre collaboration with Oxford and Derby. The benefits of multi-centre monitoring include:

- the provision of data on national trends to inform suicide prevention strategies
- the ability to compare differences between centres and detect changing patterns of mortality following self-harm
- the ability to study sub-groups within the self-harming population, and
- the establishment of a network that can conduct studies to inform the development of clinical services and evaluate specific prevention initiatives.

Resource for research experience during medical training

We also provide a resource for psychiatrists and medics in training who want to get involved in research and audit. Projects currently being undertaken include an investigation of patient outcomes according to the type of service model in place, including specialist self-harm teams. Previous projects that medical trainees have been involved in include the audit of communication between primary and secondary care (Cooper et al., 2008), a study of risk assessment and management of heavy drinkers (Taylor et al., 1999), and a dissertation on gender and self-harm repetition.
References


