With safety in mind: mental health services and patient safety

Patient Safety Observatory Report 2 | July 2006
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- NHS staff who have reported incidents, both to their local risk management systems and to the NPSA directly;
- patients and patient groups who have shared their experiences and helped with the development of solutions;
- NHS risk managers and others who have worked hard to enable the NPSA to link local risk management systems with the National Reporting and Learning System, and to promote patient safety within their organisations;
- leaders of individual NHS organisations and professional bodies who have championed work to improve patient safety in their own organisations and across the NHS;
- organisations who have contributed to the development of the Patient Safety Observatory;
- the vendors of commercial risk management systems who have collaborated with the NPSA.
Foreword

This is the second report from the NPSA’s Patient Safety Observatory and National Reporting and Learning System (NRLS), and the first report from any national reporting system, worldwide, on patient safety incidents in mental health. It brings together information from patient safety incidents reported to the NRLS from mental health services, along with information from other sources, enabling us to assess what measures need to be implemented to help prevent incidents reoccurring.

The themes that analysis of the NRLS data bring to light may already be known to NHS staff working in mental health services. However, these data allow us to quantify these issues for the first time and help us to identify, from a national viewpoint, where we need to find out more, and what action needs to be taken.

The NPSA is working collaboratively with other organisations to address the patient safety issues in mental health that are highlighted here and we hope this report will also spur local action to tackle the issues raised.

Lord Naren Patel of Dunkfeld
Chairman, NPSA
Executive summary

This report provides the first detailed analysis of patient safety incidents relating to mental health from any national incident reporting system, worldwide.

Each year, over a million people receive care from specialist mental health services,¹ and there are approximately 160,000 admissions to hospital for mental illness³. Mental health service users, especially when acutely ill, are vulnerable to a number of potential risks. Often these risks are related to their own behaviour or to the behaviour of other patients (such as self-harm, aggression and violence, and sexually disinhibited behaviour), or are a direct result of their mental illness. Others relate to safety risks from their care or treatment. This makes mental health service users a particularly vulnerable group of patients within the NHS.

The National Patient Safety Agency (NPSA) was set up in 2001 to lead work on improving patient safety. One of the NPSA’s core functions has been the development of the National Reporting and Learning System (NRLS) to collect reports of patient safety incidents and their root causes, to learn from them, and to develop solutions to improve safety. Incident reporting enables the types and causes of safety problems to be identified and supports efforts to prevent harm to patients.

In order to achieve a more comprehensive understanding of patient safety and to help reduce risk across all healthcare sectors, the NPSA has set up the Patient Safety Observatory in collaboration with a number of partners from the NHS and elsewhere.⁴ The primary function of the Patient Safety Observatory is to quantify, characterise and prioritise patient safety issues in order to support the NHS in making healthcare safer. The Patient Safety Observatory enables us to draw upon a wide range of data and intelligence to identify and monitor patient safety incidents, and to highlight and prioritise areas for action.⁵

Who is this report for?

This report is aimed at all those working in, and using, the NHS and who have an interest in improving patient safety and the quality of mental health services. This includes clinical staff, managers, medical and nursing directors, non-executive directors and risk managers, as well as patients, their relatives, carers and health representatives.

For more information on how the NPSA can help you and your local NHS organisation to improve patient safety, visit our website at www.npsa.nhs.uk where there is a range of tools to help you investigate incidents locally and act on the findings, as well as information on how to report incidents to the NPSA, and details of our national alerts and safety solutions.

What does this report tell us about patient safety in mental health services?

This report, which is the second from the NPSA’s Patient Safety Observatory, brings together information from mental health incidents reported to the NRLS, along with information from other sources. The appendix details how the Patient Safety Observatory functions and how data is collected via the NRLS.

This report covers nearly 45,000 mental health incidents reported to the NRLS up to the end of September 2005, and includes incident reports received from 77 per cent of mental health trusts in England and 80 per cent of combined trusts in Wales. Although the NRLS is still growing, the report provides a more comprehensive picture of patient safety issues for mental health services.
than has been possible previously, on account of the information already reported to the NRLS, and the use of a range of other data sources.

The majority of mental health incidents reported to the NRLS were reported from mental health inpatient services, and a third of incidents were from older people’s mental health services. The four most common incident types account for over 84 per cent of mental health service reports. These are patient accidents, disruptive/aggressive behaviour, self-harming behaviour, and absconding or where a patient is missing. Most mental health incidents reported to the NRLS resulted in no or low harm, but two per cent were reported as resulting in severe harm or death. As with other sectors, it is likely that there is significant under-reporting of incidents. Comparison with clinical negligence and service activity data suggests that reports from community settings, and reports about medication, clinical assessment and treatment, may be particularly under-reported.

The analysis highlights recognised topics, such as the challenges to safety on acute wards and the risks associated with medication, and these issues are already reflected in national policy\textsuperscript{1,2}. Effective interventions to reduce risk, such as the implementation of collapsible curtain rails,\textsuperscript{4} are described, but the analysis emphasises the importance of implementing existing policies and guidance in order to improve safety in other areas such as sexual safety. The box overleaf lists resources that are currently available to address safety.
Improving patient safety in mental health settings: national resources, guidance and initiatives

The National Service Frameworks for Mental Health in England17 and Wales8 provide the policy framework for improving mental health services. Below are some guidance and resources that are available to help improve patient safety in mental health services:

**Falls**
- National Institute for Health and Clinical Excellence (NICE) guidance on assessment and prevention of falls in older people8

**Violence and aggression**
- Clinical practice guideline for the management of violence in inpatient settings, NICE9
- National Audit of Violence and Aggression (2006 wave), Healthcare Commission10
- Guidance for the NHS on ensuring a safe and therapeutic environment for services, National Institute for Mental Health in England (NIMHE)11
- Guidance on conflict resolution training, NHS Security Management Service (NHS SMS)12

**Suicide and self-harm**
- *National Suicide Prevention Strategy for England*, Department of Health6
- Recommendations for preventing suicide from the National Confidential Inquiry into Suicide and Homicide by people with mental illness (NCISH)13 and the NIMHE toolkit based on these recommendations and guidance14
- NICE guidance on self-harm15

**Medication**
- NICE guidance on the use of antipsychotic drugs16
- Audits and interventions being developed by the Prescribing Observatory for Mental Health-UK17

**Safety of inpatient services**
- Department of Health guidance on acute psychiatric inpatient services18
- Department of Health guidance on safety, privacy and dignity in mental health units19

**Sexual safety**
- The Department of Health, the NIMHE and the Home Office have developed *National Service Guidelines for Developing Sexual Assault Referral Centres (SARCs)*, published in October 200520, as part of the Victims of Violence and Abuse Prevention Programme
- Women’s mental health strategy, Department of Health21
This report also identifies where further work is needed, including where more needs to be known about underlying causes. Key messages and actions for local services are identified throughout the report. The box below summarises the actions for local services, and actions for the NPSA are included at the end of the executive summary (page 12).

### Summary for local services: key messages and recommendations

#### Patient accidents

- NHS organisations need to understand and acknowledge the high risk of falls in older people using mental health services and use local reports of falls to target and assess their falls prevention strategies.

- Falls prevention strategies should be introduced as a matter of routine into older people’s mental health facilities, in line with the National Service Frameworks for older people in England (Standard 6)\(^22\) and Wales\(^23\), recent systematic reviews of the evidence for falls prevention in older people with cognitive impairment or dementia\(^24\), and NICE guidance\(^8\).

- Patients vulnerable to falling should be offered multiple interventions to reduce their individual risk factors and create a safer environment. Patients who fall once need further intervention to reduce their likelihood of further falls.

- Staff, patients and their families need to discuss and agree the balance between supervision and privacy for patients at high risk of falls in areas such as toilets and bathrooms.

- Staff should encourage patients to discuss their experiences and anxieties following falls, to talk about what has happened and then develop strategies for preventing further falls.

#### Disruptive or aggressive behaviour

- Violence and aggression in mental health units is a complex issue with a variety of antecedents, behaviours and consequences. However, it is clear that violence is a major concern for staff and patients. In particular, service users often feel unsafe on wards, yet the purpose of inpatient care is to provide a safe, therapeutic environment.

- NRLS data revealed little information of how violent incidents were managed, and if and how they were reviewed, although this may reflect the timing of reports being before any investigation has taken place. NICE guidance requires inpatient units to conduct post-incident reviews to learn lessons, support staff and service users, and to manage future risks.\(^9\)

- National projects are underway to help staff prevent and manage violence safely and therapeutically (see page 36-37).

- Inpatient units should implement NICE guidance\(^8\), guidance from the NIMHE\(^11\) and NHS SMS\(^12\) on the management of violence and participate in the Healthcare Commission’s National Audit of Violence\(^10\).
Sexual safety

- There needs to be greater awareness of the risks of sexual vulnerability of mental health inpatients and greater protection for patients, in line with existing guidance. This should cover both patients' own behaviour when distressed, and their exposure to the sexual advances of other patients.

- Risks of inappropriate sexual behaviour, or vulnerability to sexual harassment, should be considered as part of each patient's initial assessment and be re-assessed on a regular basis, including histories of rape, childhood sexual abuse, and sexual offences. This assessment should take into account that men, as well as women, are at risk.

- Patients' reports of sexual harassment or inappropriate sexual behaviour must always be taken seriously. Allegations of rape in particular should be appropriately investigated.

- There should be clear information available within the service to staff and patients that rape and sexual assault are crimes that will be reported to the police.

- All mental health units in England providing services for men and women should audit and review inpatient facilities to ensure that they are fully compliant with Department of Health requirements in relation to the physical environment. Local policies and procedures and staff vigilance should help to maximise patient safety. Wherever possible, mental health units should be reconfigured to provide either a self-contained women-only ward or solely single-sex wards, as an increasing number have already done. Toilets and bathing facilities must be single-sex.

- When there is high demand for beds, wards must not be pressurised into admitting patients of the opposite sex into single-sex areas.

- Inpatient units should provide access to appropriate advice and services to deal with contraception, pregnancy and sexual health. Care plans should include discussion, advice, signposting and referral (as appropriate) for family planning and sexual health.
Self-harm and suicide

• Mental health services should have suicide prevention strategies in place and monitor their implementation.

• Mental health services should audit inpatient units annually for environmental suicide risks and take remedial and preventative action where possible.

• Although collapsible curtain rails have been installed, one suicide and one near miss have been reported to the NRLS that involved rails not collapsing.

• People who attempt to kill or seriously harm themselves often show a great deal of determination to do so. However, even with limited information, it is clear that some incidents are signalled in advance.

• Staff must develop trusting therapeutic relationships with service users, in which service users who feel suicidal or wish to self-harm can talk openly about how they feel and develop strategies together with staff about how to manage self-harm feelings and behaviours.

• Individual assessment of suicide risk needs to be undertaken for all admitted patients, particularly those who have attempted suicide or who have self-harmed in the past and/or are currently expressing suicidal feelings.

• Non-suicidal self-harm, although not likely to be fatal, signals distress on the part of the service user, accounts for a very large proportion of patient safety incidents and is of serious concern. Managing non-suicidal self-harm needs to be considered as part of a patient safety strategy in mental health.

Absconding and missing patients

• Incidents in which service users have absconded or are missing are considered by staff to be patient safety incidents because of the patients’ vulnerability and the risk to themselves or others. Patients may go missing even when under observation or accompanied.

• An environmental audit should be conducted by inpatient units to assess the risk of service users leaving the ward without staff knowledge. However, it is important to balance this risk against the need for fire safety and patients’ rights for access and exiting.

• Individual patient care plans should include an assessment of the risk of them leaving the ward and a plan developed with service users, and known by all staff including non-nursing staff, about how to manage that risk. Carers, where appropriate, and service users should be part of the discussion and planning, and be aware of how to manage the risks.

• Root cause analysis of absconding or missing patient incidents can inform local practice around vulnerable patients.
The NPSA’s work on mental health (see box below) addresses many of the issues identified in this report. The NPSA is in the process of prioritising future safety solutions projects, and a number of mental health-related projects are under consideration.

**Summary of NPSA initiatives and collaborative work relating to mental health**

**Safer Wards for Acute Psychiatry (SWAP):** a two-year project, which began in 2004, aimed at understanding the patient safety issues for acute psychiatric inpatient services and developing interventions to address these. Interventions relating to the environment, the visible presence of staff, and the involvement of users in their own safety are being developed (see page 30).

**NIMHE/NPSA management of violence and aggression project:** this project provides a national advisory and consultancy service for the Department of Health, Regional Development Centres, NHS trusts and individuals on issues relating to service delivery, training and practice to ensure the safe and therapeutic management of violence and aggression in acute psychiatric care settings (see page 36).

**Psychotropic medication project:** development of a patient safety alert or safer practice notice about safe and appropriate monitoring of side effects of atypical antipsychotics in community mental health settings.

**National Treatment Agency, Royal Pharmaceutical Society of Great Britain and NPSA methadone project:** an investigation into the role of supervised consumption of methadone in reducing the prevalence of drug-related overdoses.

**Aggregate root cause analysis of suicides:** the NPSA is establishing a project to use aggregate root cause analysis of suicides to identify common underlying causes of suicide.

**Medication**

- Incidents involving medication are particularly important in mental health services because of the inherent risks psychotropic medication poses.
- Drugs prescribed for the treatment of mental illness are a factor in a substantial number of deaths from poisoning.
- Patients prescribed psychotropic medication are often not adequately screened or monitored for adverse effects. There are examples of good practice to improve this (page 56).
- Less toxic drugs should be prescribed for people at risk of suicide and NICE guidance on the use of antipsychotic drugs should be followed.

The NPSA’s work on mental health (see box below) addresses many of the issues identified in this report. The NPSA is in the process of prioritising future safety solutions projects, and a number of mental health-related projects are under consideration.
Summary of actions for the NPSA

The NPSA will continue to work to improve patient safety in mental health by:

- reviewing and analysing NRLS and other data on patient safety incidents;
- working with organisations to improve the reporting of incidents;
- feeding back findings from the NRLS to share learning across the NHS;
- developing and disseminating national solutions;
- working collaboratively with national organisations to improve our understanding of patient safety issues and support improvements in services.

As a result of the incidents reported to the NRLS, the NPSA will establish a programme of aggregate root cause analysis of sexual safety incidents, and work with the NIMHE on further actions to improve sexual safety.

The NPSA has an active programme of work to improve the quality of data reported to the NRLS. We know from international research on incident reporting that feedback is critical to improving data quality, and we hope that the publication of this report will provide a basis for further improvements in data quality and reporting.

The NPSA will also review guidance to reporters on classifying degree of harm in reporting patient safety incidents and provide examples relevant to mental health settings and, in particular, psychological impact. Issues on data completeness will also inform the planned review of the NRLS data set.
Part one

Incident reporting and the Patient Safety Observatory

This is the second report from the National Patient Safety Agency’s (NPSA) Patient Safety Observatory. The first report – *Building a memory: preventing harm, reducing risk and improving patient safety* – was published in July 2005. It provided analysis of incidents reported to the National Reporting and Learning System (NRLS) and described the role of the Patient Safety Observatory in drawing together information about patient safety from a range of sources in order to enhance our understanding of, and ability to improve, patient safety. This second report presents in-depth analysis of patient safety issues that are relevant to mental health services.

The role of the NPSA

The NPSA was set up in 2001 to make changes at a national level that will improve patient safety in the NHS. The NPSA:

- identifies trends and patterns in patient safety incidents using its NRLS and data from other sources;
- provides tools for staff locally to understand underlying causes of incidents and then be able to act on them, for example the root cause analysis toolkit and the Incident Decision Tree;
- develops solutions at a national level, for example our national campaign to improve hand hygiene in hospitals (clean your hands).

The NPSA is currently working on 47 projects to develop solutions to safety problems.

In 2005 the NPSA took on new roles and is now also responsible for supporting local organisations in addressing their concerns about the performance of individual doctors and dentists; ensuring research is carried out safely; looking after the safety aspects of hospital design, cleanliness and food; and managing the contracts with the three Confidential Enquiries.

The reporting of patient safety incidents is essential to improving safety. One of the NPSA’s core functions has been the development of the NRLS to collect reports of patient safety incidents and their root causes. Incident reporting enables the types and causes of safety problems to be identified so that practical solutions can be developed to prevent harm to patients.

Further information about the NPSA can be found on our website at [www.npsa.nhs.uk](http://www.npsa.nhs.uk)

The Patient Safety Observatory

Although incident reports are fundamental to understanding patient safety, on their own they cannot tell us all that we need to know. There are a number of reasons for this. Firstly, incident reporting systems are not comprehensive due to under-reporting, biases in what types of incident are reported, and the existence of several reporting systems. For example, in the UK, in addition to the NRLS there are separate reporting systems for medical device incidents, adverse drug reactions, healthcare associated infections and suicide and homicide by people with mental illness. Serious incidents are rare, and information on them is often distributed across the healthcare system.
In order to achieve a more comprehensive understanding of patient safety and to help reduce risk across all healthcare sectors, the NPSA has developed the Patient Safety Observatory in collaboration with a number of partners from both the NHS and elsewhere. The primary function of the Patient Safety Observatory is to quantify, characterise and prioritise patient safety issues in order to support the NHS in making healthcare safer. The Patient Safety Observatory enables us to draw upon a wide range of data and intelligence so that we can identify and monitor trends in patient safety incidents and prioritise areas for action. Further information about the Patient Safety Observatory is in the appendix to this report.

The National Reporting and Learning System

The NRLS is the primary mechanism for the NPSA to collect information on patient safety incidents from across England and Wales. The NRLS data set is designed to collect a notification report of a single patient safety incident soon after it occurs. It focuses on what happened, when and where it happened, the characteristics of the patient(s) involved (such as age, gender and ethnicity), and the outcome for the patient(s) and the staff involved in the incident and/or making the report. Additional data are collected on incidents that involve medicines and medical devices. The data set also includes contributory factors and factors that might have prevented harm. Reports also contain free text that explains what happened in varying degrees of detail. Further information about the NRLS, including how incidents are reported, is in the appendix to this report. The first report of the Patient Safety Observatory presented an analysis of data reported to the NRLS across all care settings up to the end of March 2005. This analysis has been updated to include data up to the end of March 2006. This update can be found on the NPSA website.

About this report

The NRLS is the first national reporting system of its kind in the world. It collects data from across all healthcare settings and provides a springboard for developing national solutions to patient safety problems and for identifying priorities for the NPSA and the wider health service. This report is part of a programme of work to exploit the data within the NRLS, and to provide feedback to those who report. The NPSA is committed to undertaking thematic analyses of incidents from different sectors or topics. This report is the first to take this thematic approach and focuses on mental health.

This report also includes information from other sources and organisations; the Patient Safety Observatory uses NRLS data alongside other data and intelligence to maximise their value. By taking this approach we can be confident of building an accurate understanding of key patient safety issues which will lead to robust, sustainable solutions.

Findings relating to mental health incidents from the roll-out of the NRLS in November 2003 up to and including 30 September 2005 are included in this report. Incidents are included if the care setting, specialty or location was stated as mental health.

Part two of the report provides an overview of patient safety incidents reported to the NRLS from mental health services. Part three focuses in more detail on specific types of incidents, and provides examples of how the NRLS data are being used to improve patient safety. Where appropriate, throughout this report, findings from the NRLS are set alongside other information sources and the published literature, in line with the Patient Safety Observatory model (page 61).
Part two

An overview of mental health patient safety incidents

Understanding the data

This section outlines the approach to defining and categorising mental health incidents and how to interpret the data.

What is a mental health patient safety incident?

The NPSA defines a patient safety incident as ‘any unintended or unexpected incident that could have or did lead to harm for one or more patients receiving NHS-funded healthcare.’ This definition includes errors in treatment or care which did not harm patients. These include incidents where the problem was identified and then rectified such that any effect on the patient was avoided. In other cases the incident may not have been noticed until some time after treatment and, although the patient was at risk, no harm occurred.

As with all patient safety incidents reported to the NRLS, incidents reported from mental health settings may vary in terms of predictability and preventability. For example, while an event may be adverse, it may not be unexpected. Self-harm, for some people with mental illness, is an example of this. Similarly, some reports of patient safety incidents, such as aggressive behaviour, might actually be incidents related primarily to the safety of staff rather than other patients. The analysis in this report is based on what has been reported to the NPSA to the end of September 2005. It is vital that we make best use of the information available, while also recognising the limitations caused by variable data quality. We have an active programme of work with NHS organisations to improve the quality and completeness of incident reporting.

How is the severity of patient safety incidents rated?

It is clear from the above definition that a broad spectrum of incidents, in terms of type and severity, may be reported. Incidents reported to the NRLS are classified according to the degree of harm to patients (see box overleaf).
How to interpret NRLS data

There are a number of notes of caution in interpreting the data from the NRLS:

• NHS organisations have been providing data to the NRLS for varying lengths of time, so data included within this report may not be representative of the rate of incidents across all of England and Wales.

• International research suggests that there is significant under-reporting of incidents that occur in acute general hospitals: directly comparable data for mental health services is not available, but it would be reasonable to expect that reports to the NRLS are likely to represent an underestimate of the actual number of incidents that occur in this setting.

• Reports made to local risk management systems may not capture all types of incidents that occur, particularly when care is provided outside of a hospital. In mental health services by far the highest numbers of incidents are reported from inpatient settings, despite most care being delivered through community mental health services. In addition, there may be a bias towards reporting more serious incidents.

• The data are confidential. The NPSA does not seek to hold information on the identities of individual staff or patients, and this means that the data are not routinely checked with the reporter. However, steps are usually taken to maximise the quality of the data held by, for example, checking for duplicate reports and feeding back to individual trusts if there are problems with their reports.

• Incident reports are often made soon after the incident, but before the incident has been investigated locally: hence the reports to the NRLS may not contain complete information about the incident, especially findings of more detailed investigations such as root cause analysis.

• There are no reports from the public or patients included in this analysis. From April 2006, the public and patients have been able to report incidents via a dedicated online reporting form.

Definitions of degree of harm

No harm
• Impact prevented: any patient safety incident that had the potential to cause harm but was prevented, resulting in no harm to the person(s) receiving NHS-funded care.
• Impact not prevented: any patient safety incident that ran to completion but no harm occurred to the person(s) receiving NHS-funded care.

Low harm
Any patient safety incident that required extra observation or minor treatment, and caused minimal harm to the person(s) receiving NHS-funded care.

Moderate harm
Any patient safety incident that resulted in a moderate increase in treatment, and which caused significant but not permanent harm to the person(s) receiving NHS-funded care.

Severe harm
Any patient safety incident that resulted in permanent harm to the person(s) receiving NHS-funded care.

Death
Any patient safety incident that directly resulted in the death of the person(s) receiving NHS-funded care.

With safety in mind: mental health services and patient safety
Part two: an overview of mental health patient safety incidents
• A higher number of reported incidents from a trust, specialty or location does not necessarily mean that the trust, specialty or location has a higher number of incidents; it may instead reflect greater levels of reporting. Organisations reporting higher numbers of patient safety incidents may have a better developed safety culture, resulting in greater reporting and learning from reports.

• Some incidents recorded in local risk management systems, and subsequently forwarded to the NRLS, may not technically be patient safety incidents. For example, deaths from natural causes which occurred in hospital, and also deaths where patients died unexpectedly, are sometimes reported to local risk management systems, for local audit purposes, and hence reported to the NRLS.

• The data are likely to include incidents where the impact on the patient, or whether the incident could have been avoided, is not clear. For example, suicides are often reported to local risk management systems in cases where the event could not have been prevented by mental health services.

• The level of detail collected locally varies. For example, some organisations and local data collection systems do not currently collect contributing factors or the ethnicity of the patient(s) involved. At the present time there is insufficient information on the age and gender of patients involved in incidents to allow analysis of this information, but the quality of demographic data is improving.

The context: mental health services

Mental health services are provided through primary care services, and by a range of secondary mental health services. In England, most services are provided through the 65 specialist mental health trusts. In some areas, primary care trusts are the main providers of adult mental health services, and in others, primary care trusts provide some mental health services, for example for older people. In Wales, mental health services are provided by 10 combined trusts that also provide acute and community services, and by one primary care organisation. Major changes in mental health services in recent years have seen the development of more community-based services and, more recently, the integration of health and social care services for people with long term mental health problems. Inpatient services remain an important component of mental health service provision for people with acute care needs which cannot be met in community or residential settings.
Patient safety issues reported from mental health services

This report includes analysis of patient safety incidents reported to the NRLS where the care setting, specialty or location of the incident was reported as mental health. This strategy for identifying which incidents to include was designed so that the report covers incidents related to mental healthcare, whether this was provided by mental health trusts or mental health services within other types of trust. The criteria for inclusion mean that a small proportion of incidents relate to acute, learning disabilities or other services, for example where the specialty was reported as mental health. In trusts which provide both mental health and learning disabilities services, incidents would only be included where the specialty, location or care setting was mental health. Throughout this report, the incidents which meet the inclusion criteria are referred to as mental health incidents.

In all, 116 organisations have reported incidents which meet these criteria, up to the end of September 2005. Table 1 shows the number of incidents reported by each type of trust, the number of trusts of each type which reported incidents, and the proportion of trusts of each type which have reported some mental health incidents. The number of reports from mental health settings, and the number of trusts reporting, increased rapidly during 2005. This is in line with reporting across the NHS.

Table 1: mental health incidents reported to the NRLS by type of trust

<table>
<thead>
<tr>
<th>Trust type</th>
<th>Number of trusts</th>
<th>Incidents reported to the NRLS</th>
<th>Trusts reporting to the NRLS</th>
<th>Trusts reporting mental health incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health trusts (England)</td>
<td>65</td>
<td>36,018</td>
<td>81.1</td>
<td>50</td>
</tr>
<tr>
<td>Primary care organisations (England and Wales)</td>
<td>322</td>
<td>5,679</td>
<td>12.8</td>
<td>48</td>
</tr>
<tr>
<td>Combined acute, mental health and community trusts (Wales)</td>
<td>10</td>
<td>1,282</td>
<td>2.9</td>
<td>8</td>
</tr>
<tr>
<td>Learning disabilities trusts (England)</td>
<td>3</td>
<td>1,245</td>
<td>2.8</td>
<td>3</td>
</tr>
<tr>
<td>Other trusts</td>
<td>207</td>
<td>202</td>
<td>0.5</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.

The four most common types of mental health incidents reported to the NRLS are:

- patient accidents (for example, slips, trips and falls);
- disruptive, aggressive behaviour;
- self-harming behaviour;
- absconding or incidents where a patient is missing.

Between them, these incidents account for over 84 per cent of all reported incidents (Table 2).
Table 2: incident types reported to the NRLS

<table>
<thead>
<tr>
<th>Incident type</th>
<th>Number</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient accident</td>
<td>15,517</td>
<td>34.7</td>
</tr>
<tr>
<td>Disruptive, aggressive behaviour</td>
<td>10,467</td>
<td>23.4</td>
</tr>
<tr>
<td>Self-harming behaviour</td>
<td>7,726</td>
<td>17.3</td>
</tr>
<tr>
<td>Absconder/missing patient</td>
<td>3,827</td>
<td>8.6</td>
</tr>
<tr>
<td>Medication</td>
<td>1,648</td>
<td>3.7</td>
</tr>
<tr>
<td>Infrastructure (including staffing, facilities, environment)</td>
<td>1,034</td>
<td>2.3</td>
</tr>
<tr>
<td>Access, admission, transfer, discharge (excluding missing patient)</td>
<td>947</td>
<td>2.1</td>
</tr>
<tr>
<td>Patient abuse (by third party)*</td>
<td>558</td>
<td>1.2</td>
</tr>
<tr>
<td>Consent, communication, confidentiality</td>
<td>316</td>
<td>0.7</td>
</tr>
<tr>
<td>Treatment, procedure</td>
<td>224</td>
<td>0.5</td>
</tr>
<tr>
<td>Implementation of care and ongoing monitoring/review</td>
<td>160</td>
<td>0.4</td>
</tr>
<tr>
<td>Documentation (including records, identification)</td>
<td>118</td>
<td>0.3</td>
</tr>
<tr>
<td>Clinical assessment (including diagnosis, scans, tests, assessments)</td>
<td>74</td>
<td>0.2</td>
</tr>
<tr>
<td>Medical device/equipment</td>
<td>66</td>
<td>0.1</td>
</tr>
<tr>
<td>Infection control</td>
<td>32</td>
<td>0.1</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>1,942</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>44,656</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.

* This category covers a wide range of incidents, from verbal remarks to physical contact.
Where do reports to the NRLS come from?

The pattern of incident types reported reflects the fact that more than 83 per cent of mental health patient safety incidents are reported from mental health inpatient areas.

Table 3: location of mental health incidents reported to the NRLS

<table>
<thead>
<tr>
<th>Incident location</th>
<th>Number</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health inpatient areas</td>
<td>37,197</td>
<td>83.3</td>
</tr>
<tr>
<td>Mental health unit, general areas (e.g. hospital grounds)</td>
<td>1,414</td>
<td>3.2</td>
</tr>
<tr>
<td>Community mental health facility</td>
<td>1,411</td>
<td>3.2</td>
</tr>
<tr>
<td>Residential care home</td>
<td>968</td>
<td>2.2</td>
</tr>
<tr>
<td>Mental health day care services</td>
<td>800</td>
<td>1.8</td>
</tr>
<tr>
<td>Private house/flat</td>
<td>579</td>
<td>1.3</td>
</tr>
<tr>
<td>Public place</td>
<td>533</td>
<td>1.2</td>
</tr>
<tr>
<td>Nursing home</td>
<td>496</td>
<td>1.1</td>
</tr>
<tr>
<td>Mental health outpatient departments</td>
<td>168</td>
<td>0.4</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>1,090</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44,656</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.

Through the Patient Safety Observatory we have made use of a range of data sources to enable us to place the reporting of incidents in the context of the services provided. During 2003-04, there were 162,250 admissions to hospital for mental illness in England. The number of individuals admitted is less because some people are admitted more than once. In contrast, 1,044,340 people received care from the full range of mental health services. In light of this, there is a disproportionate number of incidents being reported from inpatient settings. A number of factors may contribute to this.

Firstly, incidents may occur more often in inpatient facilities as they provide care for patients with the most severe forms of mental illness at a time when they require emergency care. Inpatient wards accommodate many people who are suicidal or at risk of self-harm; who may be disturbed and potentially aggressive; or who may have been admitted and detained under the Mental Health Act against their will and so are prone to leaving the ward without notifying staff. Another factor that may contribute to a comparatively high number of incidents reported from inpatient settings is the high level of co-existing alcohol and substance misuse among mental health inpatients (see page 35).
There may also be biases in reporting as staff within inpatient settings may have easier access to reporting systems, and may therefore be more likely to report relatively minor incidents. Staff will also be more aware of incidents that occur in inpatient settings, whereas in the community, where service users are not in contact with staff all of the time, incidents such as self-harm may occur without the knowledge of mental health staff.

National survey data are an important source of information for the Patient Safety Observatory. The 2004 NHS staff survey indicated that there are considerable differences in the reporting culture between different staff groups (Table 4). Nurses are the most likely to report having seen an error or near miss; are most likely to know how to report it; and are most likely to believe that their employer encourages reporting, treats reports confidentially, and acts to prevent recurrence. Allied health professionals appear to have a much lower awareness of incidents, and less knowledge of systems for reporting incidents. Medical staff show a similar level of awareness of incidents to nurses, but are least likely to believe that their employer encourages reporting of incidents.

Table 4: differences in awareness of errors, near misses or incidents and reporting culture between staff groups in mental health trusts

<table>
<thead>
<tr>
<th></th>
<th>Nurses</th>
<th>Allied health professionals</th>
<th>Medical staff</th>
<th>All staff groups (including non-clinical staff)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per cent of staff seeing at least one error, near miss or incident in the last month which could harm patients</td>
<td>33</td>
<td>21</td>
<td>37</td>
<td>27,377</td>
</tr>
<tr>
<td>Per cent of staff who know how to report errors, near misses and incidents</td>
<td>98</td>
<td>88</td>
<td>85</td>
<td>93,753</td>
</tr>
<tr>
<td>Per cent of staff who believe that their employer encourages them to report errors, near misses and incidents</td>
<td>89</td>
<td>76</td>
<td>70</td>
<td>83,7802</td>
</tr>
<tr>
<td>Per cent of staff who believe that their employer treats reports of errors, near misses and incidents confidentially</td>
<td>64</td>
<td>45</td>
<td>45</td>
<td>59,694</td>
</tr>
<tr>
<td>Per cent of staff who believe that their employer takes action to ensure that errors, near misses and incidents do not happen again</td>
<td>67</td>
<td>47</td>
<td>47</td>
<td>61,615</td>
</tr>
</tbody>
</table>

The number of patients affected by an incident is shown by specialty in Table 5. Over 41 per cent were receiving care from mental health services for adults of working age, and over 33 per cent from services for older adults. Hospital admissions for people aged 65 and over account for 28 per cent of all mental illness admissions, so older people’s services account for a slightly higher proportion of incidents.

**Table 5: specialty in which reported incidents took place**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult mental health</td>
<td>18,615</td>
<td>41.3</td>
</tr>
<tr>
<td>Older adult mental health</td>
<td>14,947</td>
<td>33.1</td>
</tr>
<tr>
<td>Forensic mental health</td>
<td>2,056</td>
<td>4.6</td>
</tr>
<tr>
<td>Child and adolescent mental health</td>
<td>1,618</td>
<td>3.6</td>
</tr>
<tr>
<td>Other inpatient assessment and treatment</td>
<td>1,082</td>
<td>2.4</td>
</tr>
<tr>
<td>Mental health rehabilitation</td>
<td>996</td>
<td>2.2</td>
</tr>
<tr>
<td>Drug and alcohol service</td>
<td>645</td>
<td>1.4</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>5,157</td>
<td>11.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45,116</strong>*</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.

* The total shown in this table is higher than in previous tables because more than one patient is sometimes affected by a single incident.

**What is the rate of reporting and how does it vary across the NHS?**

The rate of reporting, and the number of trusts reporting, has increased over time. Therefore, to more accurately examine the reporting rate, the data submitted by ten mental health trusts who had reported incidents to the NRLS consistently over a period of five months were examined. The analysis only included incidents occurring in inpatient units because these constitute the great majority of reports. Inpatient bed days have been used as the denominator because of the long lengths of stay that are caused by many inpatient incidents.

Incident reporting rates are shown in Diagram 1 and range from 0.5 to 2.7 incidents per 100 bed days, with an average of 1.55 incidents.
Diagram 1: reported incident rate for consistently reporting trusts

Source: incidents that occurred between March and July 2005, as reported from mental health trusts that consistently report to the NRLS (Hospital Episodes Statistics 2003). This time-frame for incidents is used to allow for the time between an incident occurring and being held within the NRLS. Date of incident, rather than date of reporting, has been used so that the number of incidents relates to the correct time period for admissions data.
What types of incidents are reported from which locations?

Diagram 2 shows how incident types vary between settings. Incidents involving medication account for a higher proportion of incidents reported from outpatient and community settings, whereas self-harming behaviour accounts for most of the reported incidents that occur in private households. Patient accident rates appear to be highest in residential care settings, although this may reflect the physical and mental health conditions of older people cared for in these settings.

Diagram 2: incident type by location of incident

![Diagram showing incident type by location of incident](image_url)

Key:
- Patient accident
- Disruptive, aggressive behaviour
- Self-harming behaviour
- Absconder/missing patient
- Medication
- Infrastructure (including staffing, facilities, environment)
- Access, admission, transfer, discharge (excluding missing patient)
- Patient abuse (by third party)**
- Other or unknown

Source: mental health incidents reported to the NRLS database up to the end of September 2005.

* The order of incident types in the key reflects the order in the table.

** This category covers a wide range of incidents, from verbal remarks to physical contact.
What is the impact on patients?

Table 6 shows the reported outcome for patients involved in mental health incidents that are reported to the NRLS. Over 65 per cent of incidents resulted in no harm to patients, while 865 incidents (about two per cent) were reported as resulting in severe harm or death.

Table 6: reported degree of harm to patients

<table>
<thead>
<tr>
<th>Degree of harm</th>
<th>Number</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No harm</td>
<td>29,496</td>
<td>65.4</td>
</tr>
<tr>
<td>Low</td>
<td>12,477</td>
<td>27.7</td>
</tr>
<tr>
<td>Moderate</td>
<td>2,278</td>
<td>5.0</td>
</tr>
<tr>
<td>Severe</td>
<td>281</td>
<td>0.6</td>
</tr>
<tr>
<td>Death</td>
<td>584</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Total number of patients</strong></td>
<td><strong>45,116</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.
The proportion of incidents that resulted in severe harm or death varies according to the location in which they occurred (Diagram 3). This variation reflects the context of reporting: incident reporting outside hospital is less complete, and those incidents that are reported are more likely to be severe.

**Diagram 3: per cent of incidents by care setting reported as severe harm or death**

<table>
<thead>
<tr>
<th>Incident Location</th>
<th>Per cent of incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health inpatient areas n=37,197</td>
<td></td>
</tr>
<tr>
<td>Mental health unit general areas n=1,414</td>
<td></td>
</tr>
<tr>
<td>Community mental health facility n=1,411</td>
<td></td>
</tr>
<tr>
<td>Residential care home n=968</td>
<td></td>
</tr>
<tr>
<td>Other n=892</td>
<td></td>
</tr>
<tr>
<td>Mental health day care services n=800</td>
<td></td>
</tr>
<tr>
<td>Private house/flat n=579</td>
<td></td>
</tr>
<tr>
<td>Public place n=533</td>
<td></td>
</tr>
<tr>
<td>Nursing home n=496</td>
<td></td>
</tr>
<tr>
<td>Unknown n=198</td>
<td></td>
</tr>
<tr>
<td>Mental health outpatient departments n=168</td>
<td></td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.
The degree of harm to patients also varies according to incident type (Diagram 4). ‘Self-harm’ and ‘other’ incident types resulted in the highest proportion of reported severe harm and death.

**Diagram 4: incident type by degree of harm**

<table>
<thead>
<tr>
<th>Incident type</th>
<th>Per cent of incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient accident n=15,579</td>
<td></td>
</tr>
<tr>
<td>Disruptive, aggressive behaviour n=10,766</td>
<td></td>
</tr>
<tr>
<td>Self-harming behaviour n=7,760</td>
<td></td>
</tr>
<tr>
<td>Absconder/missing patient n=3,846</td>
<td></td>
</tr>
<tr>
<td>Other or unknown n=1,939</td>
<td></td>
</tr>
<tr>
<td>Medication n=1,663</td>
<td></td>
</tr>
<tr>
<td>Infrastructure (including staffing, facilities,</td>
<td></td>
</tr>
<tr>
<td>environment) n=1,047</td>
<td></td>
</tr>
<tr>
<td>Access, admission, transfer, discharge (excluding</td>
<td></td>
</tr>
<tr>
<td>missing patient) n=954</td>
<td></td>
</tr>
<tr>
<td>Patient abuse (by third party)* n=562</td>
<td></td>
</tr>
</tbody>
</table>

**Key:**

- **No harm**
- **Low harm**
- **Moderate harm**
- **Severe harm**
- **Death**

Source: mental health incidents reported to the NRLS database up to the end of September 2005.

* This category covers a wide range of incidents, from verbal remarks to physical contact.

** The order of incident types in the key reflects the order in the table.
Table 7 shows the incident type and specialty of deaths reported to the NRLS. The ‘other’ incident category accounts for more than half of deaths reported. This category includes reports of deaths from natural causes which occurred in hospital, and also deaths where a patient died unexpectedly. Mental health services provide care for patients over a long period of time, and some patients may die from natural causes while in hospital, or under the care of community mental health teams. These deaths are often recorded in local risk management systems, for local audit purposes, and hence reported to the NRLS. Deaths of patients who are users of drug and alcohol services are also often reported to local risk management systems: 82 of the 301 deaths in the ‘other’ incident type category relate to users of drug and alcohol services.

**Table 7: incident type and specialty of incidents reported as deaths**

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Adult mental health</th>
<th>Drug and alcohol service</th>
<th>Older adult mental health</th>
<th>Other specialties</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>142</td>
<td>82</td>
<td>50</td>
<td>27</td>
<td>301</td>
</tr>
<tr>
<td>Self-harming behaviour</td>
<td>175</td>
<td>24</td>
<td>15</td>
<td>37</td>
<td>251</td>
</tr>
<tr>
<td>Patient accident</td>
<td>8</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Any other incident type</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>All</td>
<td>330</td>
<td>114</td>
<td>72</td>
<td>68</td>
<td>584</td>
</tr>
</tbody>
</table>

Source: reports of deaths from mental health services to the NRLS database up to the end of September 2005.

**Clinical negligence claims**

A key role of the Patient Safety Observatory is to bring information together from a range of sources to enable a more robust understanding of patient safety. It has been recognised for some time that clinical negligence cases can provide information about harm to patients. Comparisons between clinical negligence data and NRLS data, however, must be treated with caution. The primary purpose of clinical negligence databases is to support claims management, and therefore information relevant to improving patient safety is sometimes missing. Furthermore, the data from clinical negligence cases come from claims made by or on behalf of patients, whereas patient safety incidents are reported by staff.

Nevertheless, analysis of information from claims alongside NRLS reports and other data may help build a more complete picture of patient safety issues. Information provided by the NHS Litigation Authority (NHSLA) on clinical negligence claims to mental health trusts has been analysed.

An initial set of 856 claims dating from 1995 to August 2005 were provided by the NHSLA. Claims were excluded from detailed analysis if: the case had been settled or closed without compensation or costs being paid; the case did not relate to mental health services; or the claim related to harm to a third party or staff. As a result, 514 cases were included in the analysis. Incidents were classified according to the NPSA incident types, on the basis of the description of the incident and the other fields available (Table 8).
Table 8: clinical negligence claims relating to mental health services, mapped to NPSA incident types and incidents reported to the NRLS

<table>
<thead>
<tr>
<th>Incident type</th>
<th>Claims to NHSLA</th>
<th>NRLS incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent of all claims</td>
</tr>
<tr>
<td>Self-harming behaviour</td>
<td>211</td>
<td>41.1</td>
</tr>
<tr>
<td>Clinical assessment (including diagnosis, scans, tests, assessments)</td>
<td>57</td>
<td>11.1</td>
</tr>
<tr>
<td>Medication</td>
<td>53</td>
<td>10.3</td>
</tr>
<tr>
<td>Patient abuse (by third party)*</td>
<td>44</td>
<td>8.6</td>
</tr>
<tr>
<td>Disruptive, aggressive behaviour</td>
<td>41</td>
<td>7.9</td>
</tr>
<tr>
<td>Access, admission, transfer, discharge</td>
<td>27</td>
<td>5.3</td>
</tr>
<tr>
<td>Patient accident</td>
<td>25</td>
<td>4.9</td>
</tr>
<tr>
<td>Treatment, procedure</td>
<td>24</td>
<td>4.7</td>
</tr>
<tr>
<td>Implementation of care and ongoing monitoring/review</td>
<td>22</td>
<td>4.3</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>10</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>514</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Clinical Negligence Scheme for Trusts claims from 1995 up to 31 August 2005, NHS Litigation Authority; mental health incidents reported to the NRLS database up to the end of September 2005.

* This category covers a wide range of incidents, from verbal remarks to physical contact.

The profile of incident types from clinical negligence claims differs from the profile produced for incident reports to the NRLS. In particular:

- there is a higher proportion of claims relating to self-harming behaviour. These claims generally relate to the alleged failure to prevent harm or suicide;
- there are substantially more claims relating to clinical assessment, abuse of patients and medication;
- two-fifths of clinical assessment cases (22 out of 57) relate to alleged failure to diagnose or treat physical health problems;
- the nature of abuse is unclear in many of the patient abuse cases (25), but they include allegations of inappropriate relationships (11 cases) and sexual assault (seven cases);
- there are relatively few claims relating to patient accidents, and a lower proportion relating to disruptive/aggressive behaviour;
- 44 of the claims relating to self-harming behaviour involved patients who had absconded or who were missing from the ward at the time of the incident.

Further details of negligence claims within each category are discussed later in this report.
This section has provided an overview of mental health patient safety incidents reported to the NRLS, along with other relevant information about patient safety. The findings from the NRLS data support evidence from other sources that staff face major challenges in ensuring that acute psychiatric wards provide a safe and therapeutic setting for care. The NPSA has established the Safer Wards for Acute Psychiatry (SWAP) project to address patient safety issues in inpatient settings (see box below).

**Safer Wards for Acute Psychiatry (SWAP) project**

The SWAP project is a major strand of the NPSA’s mental health programme. The aim of this two-year project is to understand the patient safety issues for acute psychiatric inpatient services and to develop interventions to address the issues. Interventions are being developed in the following three areas, with solutions being implemented in three pilot sites:

**Improving the physical environment**

The project is developing interventions that will impact on ward design, ambience, use of space and cleanliness. These include:

- developing relationships with the ward housekeeper and estates/facilities staff to ensure a clean environment and speedy attention to repairs and maintenance;
- looking at the way space is used and how it can be improved to remove blind spots and create a more homely feel;
- working with service users to maintain a pleasant and calm environment.

**Creating a visible presence of staff**

The project is examining the use of staff time and how this can be altered to enable staff to spend more time in direct patient care by:

- providing ‘protected’ time with service users;
- looking at how to minimise bureaucracy;
- reducing the impact of unexpected visitors to the ward;
- working out how best to use the ward clerk to reduce the burden of administrative tasks on clinical staff;
- engaging service users in care planning.

**Involving patients in their ward safety**

The project:

- is producing a patient safety handbook;
- will be introducing a buddy system whereby recently discharged service users visit the ward to provide support to recently admitted patients;
- is examining how advance directives can be used to improve ward safety.

The SWAP project is working with the Security Management Service, the Royal College of Nursing and the Royal College of Psychiatrists to develop a ward safety audit toolkit.
Key messages

• The majority of mental health patient safety incidents reported to the NRLS are reported from mental health inpatient services.

• The four most common incident types account for 84 per cent of mental health service reports: patient accidents, disruptive/aggressive behaviour, self-harming behaviour, and absconding or where a patient is missing.

• Most incidents in the NRLS from mental health settings are reported as no or low harm events, but two per cent were reported to have resulted in severe harm or death.

• A third of incidents were reported from older people’s mental health services; these services account for 28 per cent of admissions.

• As with other sectors, it is likely that there is significant under-reporting of incidents: comparison with clinical negligence and service activity data suggests that reports from community settings, and reports about medication, clinical assessment and treatment may be under-reported.
Part three

Mental health patient safety incidents in detail

This section explores mental health patient safety incidents in more detail, concentrating on the most common or important topics from the high level analysis in Part two. It includes reviews of the free text information of subsets of incidents, with anonymised extracts from reports (the NRLS does not collect patient or staff identifiers and therefore all names used in these extracts are fictional). Information from a range of other sources has been used alongside NRLS data.

The primary focus is on inpatients as this setting is where most reports come from. The purpose of acute psychiatric inpatient services is to provide a safe, therapeutic setting for service users who are at the most acute and vulnerable stage of their illness. Over the past three decades, the emphasis of mental health service policy has been to treat people at home and within their communities: the number of admissions to hospital for mental illness in England has declined from 203,760 in 1997-98 to 162,250 in 2003-04. One consequence of this is that the threshold for admission to an acute psychiatric ward is such that most people on acute wards have severe mental illness and/or comorbid problems of substance misuse or personality disorder. In some cases patients may pose a risk to themselves and possibly to others.

Detailed in each section is how the NPSA is working with a range of organisations to address identified problems and how national and local services can take further action to improve the safety of this group of patients.

Patient accidents

Patient accidents are the most common type of incident reported to the NRLS: accounting for 15,517 of the 44,656 incidents (34.7 per cent). Table 9 shows a breakdown of the kind of accidents reported.

<table>
<thead>
<tr>
<th>Type of accident</th>
<th>Number</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slips, trips, falls</td>
<td>12,550</td>
<td>80.9</td>
</tr>
<tr>
<td>Collision/contact with an object</td>
<td>1,441</td>
<td>9.3</td>
</tr>
<tr>
<td>Exposure to cold/heat (includes fire)</td>
<td>658</td>
<td>4.2</td>
</tr>
<tr>
<td>Contact with sharps (includes needles)</td>
<td>247</td>
<td>1.6</td>
</tr>
<tr>
<td>Ambulance/patient in road traffic accident</td>
<td>12</td>
<td>0.1</td>
</tr>
<tr>
<td>Exposure to hazardous substance</td>
<td>83</td>
<td>0.5</td>
</tr>
<tr>
<td>Inappropriate patient handling/positioning</td>
<td>58</td>
<td>0.4</td>
</tr>
<tr>
<td>Other</td>
<td>468</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>15,517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.
Nearly 95 per cent (14,744) of patient accidents resulted in low or no harm.

In many of these incident reports, only limited free text details were provided, and some of the accidents took place when no staff member was present and so it is unclear what actually happened. Consequently, the analysis only provides information on a subset of incidents (those that included detailed descriptions) which may not be representative of the total. However, a number of themes did emerge from the subset.

Firstly, several falls that took place in services for older people or in residential services were linked with use of the toilet, often when no staff member was present:

“Mr Williams was found sitting on the floor, at the side of the toilet. “

“Mary was heard to call out. When checked, she was sitting on the floor in a puddle of urine, in her bedroom.”

“Lawrence was using the toilet. Shortly after, the toilet door was heard to bang against the wall. Lawrence possibly lost his balance. Lawrence was immediately examined for injuries. Blood was noticed to the crown of his head. “

Among a random sample of 200 incidents classified as patient accidents, 26 incidents (13 per cent) were linked to the use of the toilet or bathroom, which would suggest that falls associated with the toilet or bathroom could be a focus for local work to review falls.

Patients with dementia are particularly vulnerable to falls, not just because of cognitive problems but because dementia impairs gait and balance. However, risk is an essential element of rehabilitation, and patients, their families and NHS organisations have to balance measures that might reduce the risk of falls with their impact on the patients’ rights, wishes and quality of life.

Evidence suggests multiple interventions aimed at reducing individual and environmental risk factors are likely to be effective in reducing falls for older people in hospital settings, including those with dementia.

NRLS data from all settings suggest around 89 per cent of falls are not witnessed by staff or others. Regular local analysis of reports of patient falls can help teams to understand which patients are most vulnerable, and when and where they are falling. Examining trends over time can help NHS organisations understand whether local falls prevention programmes are effective. Falls strategies should already be developed as part of the older people’s National Service Frameworks.

Older people who have fallen often describe how they are left anxious and worried about falling again, and concerned about injuries they might sustain. One fall is a strong predictor of the risk of future falls. ‘After the fall’ is therefore an important time to intervene to reduce the risk of future falls.
Disruptive or aggressive behaviour

Patient safety incidents involving disruptive and/or aggressive behaviour are the second most frequently reported incident. They account for almost a quarter of incidents (10,467; 23.4 per cent). Nearly all of these (9,591; 91.6 per cent) were reported from inpatient settings.

Disruptive or aggressive behaviour is a patient safety issue because of the risk of harm it poses either to the patient concerned or to other patients. Disruptive and aggressive behaviour adversely affects ward atmosphere and is a major concern for patients and staff. The challenge for staff is to manage disruptive behaviour in a way that optimises patient and staff safety, while protecting patients’ human rights. These issues have been brought to national attention by a small number of high profile investigations into deaths of patients who have been restrained because of violent behaviour.

A sample of 200 incidents reported to the NRLS were reviewed in detail. The majority of these incidents resulted in no or low harm. There was little detailed information included on how these incidents were managed. Where details were provided, management included using restraint techniques (23 incidents), medication (seven incidents), police involvement (five incidents) and use of seclusion (four incidents).

“Mark and George had a verbal altercation with each other. George sustained a slap on the right cheek, redness observed.”

“Nico suddenly became agitated and aggressive, attempting to hit staff.”

“Lee became angry, shouting and swearing for no apparent reason at patients and staff. The alarm was activated and the emergency team called. Lee remained angry, shouting and abusive. He was offered medication, which he accepted. He was transferred to seclusion without needing restraint, but remained angry and aroused, shouting and banging seclusion room door.”

Key messages and recommendations

- NHS organisations need to understand and acknowledge the high risk of falls in older people using mental health services and use local reports of falls to target and assess their falls prevention strategies.

- Falls prevention strategies should be introduced as a matter of routine into older people’s mental health facilities in line with the National Service Frameworks for older people in England (Standard 6) and Wales; recent systematic reviews of the evidence for falls prevention in older people with cognitive impairment or dementia; and National Institute for Health and Clinical Excellence (NICE) guidance.

- Patients vulnerable to falling should be offered multiple interventions to reduce their individual risk factors and create a safer environment. Patients who fall once need further intervention to reduce the likelihood of further falls.

- Staff, patients and their families need to discuss and agree the balance between supervision and privacy for patients at high risk of falls in areas such as toilets and bathrooms.

- Staff should encourage patients to discuss their experiences and anxieties following falls, to talk about what has happened and then develop strategies for preventing further falls.
Drug and/or alcohol misuse have been identified as underlying causes of violent and aggressive behaviour, and these can also have adverse interactions with psychotropic medication. A search of the free text descriptions of incidents reported to the NRLS, including all incident types, up to the end of September 2005, identified 1,662 incidents involving illicit drugs or alcohol:

“There was a strong smell of cannabis from the female toilet which Anita, an inpatient, had just used. Anita admitted to having smoked a joint that she had purchased from another patient.”

NICE has recently published clinical practice guidelines on the management of violence in inpatient settings, focusing on a range of solutions including training, prediction, de-escalation techniques, observation and engagement. Guidance has also been published by the National Institute for Mental Health in England (NIMHE). A national audit of this issue has also been undertaken on behalf of the Healthcare Commission. The audit involved 203 mental health units, and a further 63 learning disability units. Questionnaires were completed by a range of staff, service users and visitors, including 3,070 nurses and 1,560 service users. Key findings from the audit were that:

- thirty-six per cent of service users had experienced, and 47 per cent had witnessed, violence on their current ward/unit;
- nurses are more likely to be the victims of violent or aggressive behaviour than other clinical or non-clinical staff;
- service users and staff have similar perceptions of the most common factors triggering violent behaviour. They cited illicit drug or alcohol misuse, staff behaviour, space and overcrowding, medication and treatment, and frustration and boredom;
- proposed interventions to reduce violence include: changes to the ward environment; addressing client mix and overcrowding; controlling substance misuse on acute wards; staff training in the management of violence; and reducing boredom.

For service users, the experience of being in an environment in which violence and aggression takes place could hamper their recovery. A Sainsbury Centre survey found that many inpatients felt unsafe, and women in particular felt concerned about their own personal safety. This finding is supported by the NPSA’s SWAP project and the MIND Ward Watch report. The Department of Health’s women’s mental health strategy addresses some of the issues raised, taking into account the fact that many women using mental health services have a history of being abused.

The Healthcare Commission is conducting a national audit for 2006 and a number of other initiatives are ongoing to support the NHS in addressing the underlying factors that lead to violence, and managing violent behaviour when it occurs. The NHS Security Management Service (NHS SMS) has published guidance for the NHS on ensuring a safe and therapeutic environment for service users, including the use of de-escalation techniques. The NPSA works closely with the NHS SMS, which leads on security and safety of NHS staff. The NPSA is also working with the NIMHE to lead a range of cross-government initiatives to address violence and aggression (see box overleaf).

Guidance for managers and clinical practitioners on the management of substance use in mental health settings is due to be published by the Department of Health shortly.
NIMHE/NPSA management of violence and aggression project

This project, which is led and funded by the NIMHE, was established in January 2004 as a response to the David Bennett Inquiry. It provides a national advisory and consultancy service for the Department of Health, Regional Development Centres, NHS trusts and individuals on issues relating to service delivery, training and practice to ensure the safe and therapeutic management of violence and aggression in acute psychiatric care settings. Work to date has resulted in the preparation and publication of an implementation guide on the safe and therapeutic management of violence and aggression.

There is work in progress to:

- review existing restraint techniques used in mental health settings;
- develop a code of conduct for trainers and a framework for a Continuing Professional Development portfolio of evidence;
- update the relevant sections of the Mental Health Code of Practice relating to handling difficult behaviour;
- develop a joint code of practice relating to Section 136 of the Mental Health Act and the police;
- develop a traffic light system for mental health trusts to benchmark positive practice;
- ensure accreditation and regulation of training proposals;
- review the use of CCTV systems;
- review the use of mechanical restraint.

The project was completed in May 2006 and further details can be found at: www.nimhe.org.uk
Key messages and recommendations

• Violence and aggression in mental health units is a complex issue with a variety of antecedents, behaviours and consequences. However, it is clear that violence is a major concern for staff and patients. In particular, service users often feel unsafe on wards, yet the purpose of inpatient care is to provide a safe, therapeutic environment.

• NRLS data revealed little information of how violent incidents were managed, and if and how they were reviewed; although this may reflect the timing of reports often being before any investigation has taken place. NICE guidance requires inpatient units to conduct post-incident reviews to learn lessons, support staff and service users, and to manage future risks.9

• National projects are underway to help staff prevent and manage violence safely and therapeutically.

• Inpatient units should implement NICE guidance,9 guidance from the NIMHE11 and NHS SMS12 on the management of violence and participate in the Healthcare Commission’s National Audit of Violence10.

NHS Security Management Service and local security management specialists

The NHS SMS was established in December 2003. It has responsibility for policy and operational matters relating to the management of security in the NHS, and a remit to protect people and property to enable the highest standards of clinical care for patients. A key part of the strategy is the introduction of local security management specialists (LSMS), to provide specialist skills and expertise.

The mental health work of the LSMS focuses particularly on the wider environment, taking into account policies, procedures, customs, practice and the overall way that clinical decisions are made and communicated. A key preventative measure is the development of a national syllabus for Conflict Resolution Training (CRT) for all frontline staff and professionals working in the NHS. The NHS SMS has also introduced Promoting Safer and Therapeutic Services; a specific, additional syllabus for mental health and learning disability services.12 The key principles include an emphasis on prevention strategies and a commitment to service user involvement in training.

Incident reporting

Building on local incident reporting systems, the NHS SMS is currently developing a national security incident management system for use by LSMSs and healthcare organisations to enable them to gain accurate information on the nature and scale of their security-related problems.

Further information can be found at: www.cfsms.nhs.uk
Sexual safety

NRLS incidents

The analysis of a sample of 200 disruptive and/or aggressive behaviour incidents included five concerning sexual safety. As a result, a search of the whole data set was undertaken to identify other incidents of this type.

This extended search identified 122 incidents; these were classified as allegations of rape (19 cases), consensual sex (20 cases), exposure (13 cases), sexual advances (18 cases), touching (26 cases), and other incidents (26 cases). In the majority of incidents (114 cases) the degree of harm was categorised as no harm.

It is not possible to make firm judgments on the veracity of the reported allegations from the data. Reports submitted to the NRLS are often sent soon after the event, and therefore full details of further investigation and actions taken are often not included. Furthermore, whilst action taken by the service, such as physical examination of the patient or the involvement of the police, is described in some reports, the level of detail is variable.

Whilst it is not the role of the NPSA to investigate individual incidents, as a result of the limitations of the incident report data, and the seriousness of the issues, all of the reported cases that involved physical contact were followed up by telephone contact with the individual trusts. This was in order to identify how they had dealt with the incidents and to explore their coding of the degree of harm.

Follow-up with trusts indicated that all these allegations were taken seriously and had been further investigated locally, with trusts maintaining records of the investigations. Although each case will need to be considered on its individual circumstances, it seemed that the approach adopted varied from trust to trust.

With regard to coding the degree of harm, it was clear that services largely classified harm in terms of physical injury, rather than an assessment of psychological harm. This may have been influenced by the interpretation of the NPSA guidance on degree of harm, which incorporates examples of physical rather than psychological harm.

Of the 19 reports of alleged rape, in eight cases the alleged perpetrator was another patient and in 11 cases a member of staff. The patient’s underlying diagnosis may be a factor in such allegations and, from an examination of the narrative of these incidents, it appears that the contribution of the patient’s underlying condition to the substance of the allegation was considered.

A number of incidents concerned reports of consensual sex. The impression given by the reports, and confirmed by follow-up with trusts, is that there is an acknowledgement that this does happen occasionally. Although such incidents may present as consensual at the time, they may be occurring during an acute phase of the patient’s illness which, when they have recovered, they may regret. Some psychiatric conditions can increase impulsivity and participation in risky behaviour, increasing the individual’s vulnerability during these times. Additionally, patients may be suffering considerable distress and be seeking solace, which can be exploited. As well as psychological harm, there is also the risk of sexually transmitted infections and/or pregnancy.

Data on longer term outcomes are limited in the NRLS. The NHS Litigation Authority data however include 13 clinical negligence claims between 1995 and August 2005 that involve allegations of harm to patients resulting from sexual activities with other patients, including three cases of unwanted pregnancies.
Follow-up with trusts indicated variations in their response to consensual sex and the actions which staff take. There were examples of good practice, such as guidance on reporting of incidents as part of a coordinated approach to managing risk of harm to patients (see box below).

**Good practice in sexual safety**

At Camden and Islington Mental Health and Social Care Trust, sexual harassment, assault and inappropriate conduct are included in a detailed trigger list for incident reporting. This list provides guidance which enables clinicians to grade incidents in terms of severity, hence picking up anything from sexual or amorous remarks with no intent, through to extremely serious incidents such as rape. Approximately 130 staff have already been trained in the use of the new trigger list and incident form since January 2006. The care trust’s Risk and Assurance Committee regularly considers themed reports of incidents, and sexually-related incidents will be reviewed in this forum. The care trust is in the final stages of developing a trust-wide policy relating to the response of staff to sexual assault allegations, taking into account reported incidents of this nature.

A number of incidents reported to the NRLS describe sexually disinhibited behaviour where patients have exposed themselves. The motives are often unclear. Many reports refer to the patient’s psychiatric condition at the time; others suggest the incidents were initiated to intimidate or upset fellow patients:

“Karl became very disturbed, restless and agitated. He stripped himself naked and was sexually disinhibited, intimidating other patients.”

“Miranda was found wandering around the male sleeping area wearing only a towel.”

There are also reports of patients complaining of being sexually propositioned or threatened with sexual assault. Other incidents relate to being touched sexually. These were reported as distressing events for the individuals involved:

“Stuart overheard on two occasions, on the same day, propositioning fellow patient to go to his room and have sexual intercourse with him.”

“Patient alleges that while left unattended in lounge with male peer, male peer touched her, indicating this touch was of a sexual nature, by referring to it being the same as previous past abuse and not being believed. Stated she felt afraid and did not want to be on the ward.”

Analysis of the incidents show that both men and women are vulnerable, for example men also reported unwanted sexual pressure. This comes mainly from other men but occasionally from women.
Relevant policy and other information

The sexual safety of mental health inpatients, particularly women, has been recognised as an important issue for mental health services and recommendations have been made about the management of allegations of sexual abuse by staff. The number and characteristics of incidents reported to the NRLS confirm that sexual safety is an important issue, particularly since it is likely that there is under-reporting. The reports and follow-up with trusts suggest that services may not have a consistent approach to dealing with such allegations and would welcome further guidance. Furthermore, reports to the NRLS and clinical negligence claims suggest that greater protection should be provided to patients to prevent them from being inappropriately drawn into sexual activity while they are inpatients. Follow-up with trusts identified examples of good practice (see box on previous page).

There are a number of recent policy initiatives and sources of guidance relevant to this area. The Department of Health, the NIMHE and the Home Office have developed National Service Guidelines for Developing Sexual Assault Referral Centres (SARCs), published in October 2005. This should be seen as a resource for local trusts. The guideline on SARCs is the first of a number of guidelines that will be published by the Victims of Violence and Abuse Prevention Programme for identifying and responding to victims of rape and sexual assault, including those in mental health settings. In addition, the NIMHE’s 2006-07 programme includes work to address the issue of sexual safety in acute mental health inpatient units.

In 2000, the Department of Health required mental health units in England providing services for men and women to provide totally separate single-sex sleeping, toilet and bathing accommodation, and recommended women-only lounges and activities. The 2004 single-sex accommodation data showed that 99 per cent of mental health trusts and primary care trusts that provide mental health services meet single-sex accommodation objectives. Incidents reported to the NRLS include examples where this guidance was breached or where there are concerns about mixed-sex inpatient accommodation. Examples include a female patient being admitted onto a male corridor, because of pressure on beds, and a number of incidents (included in the preceding examples) which occurred in mixed-sex leisure areas, unisex toilets, or where patients were in areas designated for the opposite sex.

The Mental Health Act Commission has also raised concerns about the provision of single-sex accommodation. MIND’s Ward Watch report found that 23 per cent of 335 recent and current inpatient service users who responded to a MIND survey had recently been accommodated in mixed-sex accommodation; 31 per cent of their respondents did not have access to single-sex bathroom facilities; and only 30 per cent had access to single-sex daytime facilities. The National Audit of Violence found that 23 per cent of inpatients reported they had to share space with members of the opposite sex when they did not want to.
Key messages and recommendations

• There needs to be greater awareness of the risks of sexual vulnerability of mental health inpatients and greater protection for patients, in line with existing guidance. This should cover both patients’ own behaviour when distressed and their exposure to the sexual advances of other patients.

• Risks of inappropriate sexual behaviour, or vulnerability to sexual harassment, should be considered as part of each patient’s initial assessment and be re-assessed on a regular basis, including histories of rape and childhood sexual abuse, and of sexual offences. This assessment should take into account that men, as well as women, are at risk.

• Patients’ reports of sexual harassment or inappropriate sexual behaviour should always be taken seriously. It would be useful for all trusts to reflect on their current arrangements for investigating sexual abuse allegations, particularly of alleged rape, to ensure that their arrangements draw upon available guidance.

• There should be clear information available within the service to staff and patients that rape and sexual assault are crimes that will be reported to the police.

• All mental health units in England providing services for men and women should audit and review inpatient facilities to ensure that they are fully compliant with Department of Health requirements in relation to the physical environment. Local policies and procedures and staff vigilance should help to maximise patient safety. Wherever possible, mental health units should be reconfigured to provide either a self-contained women-only ward or solely single sex wards, as an increasing number have already done. Toilets and bathing facilities must be single-sex.

• When there is high demand for beds, wards must not be pressurised into admitting patients of the opposite sex into single-sex areas.

• Inpatient units should provide access to appropriate advice and services to deal with contraception, pregnancy and sexual health. Care plans should include discussion, advice, signposting and referral (as appropriate) for family planning and sexual health.

• As a result of the incidents reported to the NRLS, the NPSA will establish a programme of aggregate root cause analysis of sexual safety incidents, and work with the NIMHE on further actions to improve sexual safety.

• The NPSA will review guidance to reporters on classifying degree of harm in reporting patient safety incidents and provide examples relevant to mental health settings and psychological impact. Issues on data completeness will also inform the planned review of the NRLS data set.
Self-harm and suicide

Self-harming behaviour is the third most common type of incident reported to the NRLS; accounting for 17.3 per cent (7,726) of mental health incidents. Most of these (6,659) were reported from inpatient units.

Self-harm incidents

The suicide and self-harm category includes some incidents where the self-harm was attempted suicide, as well as non-suicidal acts of self-harm: it is not always possible to distinguish these two types of incident, even from the free text descriptions. Although self-harm was the most likely category of patient safety incident to result in severe harm or death, less than five per cent of self-harm incidents led to the death of the patient involved. However, there is likely to be considerable under-reporting of deliberate self-harm, particularly where this takes place outside hospital, and a bias towards reporting more serious incidents; the proportion of actual incidents which result in death is therefore likely to be lower than five per cent.

A detailed analysis of a sample of incidents from the NRLS was undertaken. Table 10 shows the method of self-harm for incidents reported from inpatient as well as other locations. In 13 of the 165 incidents the patient died: in one case the patient was an inpatient and a second death was of a patient who had gone missing while on leave from hospital. The remaining 11 deaths resulted from incidents that took place in the community.

Table 10: method and location of self-harm (sample of 165 incidents)

<table>
<thead>
<tr>
<th>Method of self-harm</th>
<th>Inpatient areas</th>
<th>Other locations</th>
<th>All</th>
<th>Examples of methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting</td>
<td>59</td>
<td>3</td>
<td>62</td>
<td>Includes a wide range of cutting weapons: 17 incidents of using a razor; 11 cases of using broken glass or crockery, including a broken light bulb; art materials; plastic objects (e.g. broken CD case); and in one case, peeling wall paint.</td>
</tr>
<tr>
<td>Ligature</td>
<td>25</td>
<td>5</td>
<td>30</td>
<td>Includes use of bedding, clothing and electrical cords.</td>
</tr>
<tr>
<td>Overdose</td>
<td>9</td>
<td>10</td>
<td>19</td>
<td>Includes seven cases involving paracetamol (sometimes with other substances) and five cases involving medication prescribed to the patient.</td>
</tr>
<tr>
<td>Burns</td>
<td>9</td>
<td>1</td>
<td>10</td>
<td>Includes six incidents of cigarette or lighter burns.</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>12</td>
<td>44</td>
<td>Includes nine cases of people hitting themselves or walls/furniture, and a range of other methods including swallowing batteries (two cases) and binding wrist with tape from a cassette. In a number of cases, no information is provided or the cause is unknown.</td>
</tr>
</tbody>
</table>

All 134 31 165

Source: sample of incidents reported from mental health services to the NRLS up to 31 August 2005.
Self-injury by cutting was the most common form of self-harm. Cutting is usually an expression of emotional suffering and is often perceived by the service user as a way of releasing painful feelings and relieving symptoms such as acute anxiety. Whilst some incidents did not suggest clear suicidal intent, many of the self-harm incidents indicate severe distress on the part of the patient, and many patients had apparently harmed themselves before:

“Jennifer activated the panic alarm in the bathroom. A nurse found Jennifer lying in the bath with a razor blade in her hand and numerous lacerations to her body. Crying and distressed, Jennifer gave the nurse the blade and allowed the wounds to be dressed.”

“Brian’s cheek was swollen. The nurse noticed and, after some prompting, Brian explained that he had punched himself in the face. He said that he felt unable to cope.”

**Inpatient suicide and incidents involving ligature**

Inpatients in mental health units are at high risk of suicide and this extends to those who have recently been discharged. During 2003 there were 179 suicides of inpatients (including patients who were on leave or who had absconded or were missing from care at the time of death) and a total of 4,860 suicides in England and Wales, of whom just over a quarter (1,320) involved people who had contact with mental health services during the year before their death. These suicides are reviewed in detail by the National Confidential Inquiry into Suicide and Homicide by people with mental illness (NCISH) who analyse the data in order to make recommendations for clinical practice and policy that will reduce the risk of suicide by people under mental healthcare. The National Suicide Prevention Strategy for England includes a range of public health measures to reduce suicide, as well as actions targeting the reduction of suicide among people who are known to mental health services.

There is general consensus that mental health services have a particular responsibility to prevent the suicide of people who have been admitted to hospital. Risk of suicide is often a factor in the admission of patients to an acute psychiatric ward, and a reason for detaining patients under the Mental Health Act. The NCISH reports that inpatient suicides are thought to be preventable by clinicians in 31 per cent of cases, compared with 22 per cent for all other suicides, and suicides within hospital are also often felt by families and carers to be preventable. Of 122 cases of clinical negligence relating to suicide, 78 involved patients who were inpatients at the time of the event (including 28 cases where the patient had absconded, and three where the patient was on agreed leave).

There have been 32 suicides reported to the NRLS where the patient was an inpatient. In 22 of these cases the patient was in hospital at the time of their death; nine inpatients who died were not on the ward, either because they had absconded (five people), or were on agreed leave at the time of the incident. The location of death was not reported in one case. In four cases the description of the incident includes details of suicidal intent on behalf of the patient, for example, a desire to leave, describing suicidal feelings and discussing methods of suicide.

Fourteen of the suicides that took place on hospital premises occurred on the ward: seven in the patient’s room or bed area, six in the bathroom, shower room or toilet, and one in a public room on the ward. Three suicides occurred in hospital grounds. In five cases, the exact location was not stated.

Hanging or strangulation was the most common method of suicide (21 out of the 32 suicides). There were 17 reported suicides from hanging in hospital premises, with a wide range of ligatures and ligature points. The ligature, in most instances where information was provided, was clothing of some
kind (10 instances). This included the use of shoe laces, scarves, belts and, in two cases, a ligature and a plastic bag. Ligature points include doorways (three), windows (three), the ceiling (two), and fence/railings (two). Where sufficient information was available, it seemed that the person had made a determined effort to commit suicide, for example by ensuring a curtain rail was moved so that it did not collapse.

The method of suicide in incidents reported to the NRLS is consistent with data from the NCISH, with hanging being the most common method of suicide for deaths occurring on the ward. A 2001 report from the NCISH found that the most common ligature point was a curtain rail, using a belt as a ligature. Following the Chief Medical Officer’s report, An organisation with a memory, all mental health services were required to remove non-collapsible bed and shower curtain rails in inpatient units by March 2002. An audit tool for trusts to assess services against the recommendations from the NCISH has been developed by the NIMHE, and provides further advice on auditing ligature points.

Of those suicides outside of hospital, the methods were hanging (three people), jumping (four people), fire (one person), and the method was not stated in one case. Very little information was available about other aspects of care, or events leading up to the death.

A further interrogation of the data from incidents reported up to 30 September 2005 was undertaken to identify all incidents involving ligature. A total of 1,932 incidents were identified. A random sample of one in four of these (483) was selected for detailed review. Of this sample, 233 incidents were found to involve ligature. The remaining incidents were unrelated issues that were usually included in the sample as a result of the free text words used for the search criteria.

Of the 233 incidents involving ligature, 182 did not apparently involve attempts at suspension from a ligature point; instead they appeared to involve the person tying a ligature around the neck in an attempt at self-strangulation. None of these events resulted in death. Clothing was the most common method of ligature (61 cases), followed by bedding (29 cases), cord, string or wire (21 cases), and cables from electrical equipment (16 cases). Bras and other underwear were also used. Many patients were clearly very disturbed and/or expressed strong suicidal intent:

“Ruth was low in mood, feeling angry without knowing why or with whom. Her mood appeared to improve. She was under close observation. She went to the toilet and Annie, the staff member observing her, moved away from the door to offer Ruth some privacy. Ruth tied a ligature around her neck in the shower cubicle. Annie raised the alarm. Ruth was struggling to breathe and the ligature had to be cut off.”

“Patrick, who was detained under the Mental Health Act, had been refusing medication for two days, saying that the voices had told him to. He became very agitated and distressed, experiencing persecutory hallucinations. He attempted to hang himself in the bathroom, using a carrying strap from a sports bag. The strap snapped.”

Fifty-one of these incidents involved hanging from a ligature point and one of these resulted in the patient’s death. Actions preventing suicide are described in 25 of the 50 non-fatal cases: the curtain rail used collapsed in three cases; staff or patients noticed something amiss and intervened in nine cases; and in 13 cases staff interrupted an attempted suicide during routine observation or checks. Eight cases referred to a report of a previous incident of self-harm, indicating an increased risk of the patient self-harming.

The level of detail is variable between incident reports and potentially relevant information is often missing, for example details of the events which led up to the incident. Details about methods of harm are generally included and so the analysis has tended to focus on this. Despite limitations of the
data, a number of issues can be identified:

- ligature is the main cause of suicide among inpatients: this is consistent with the findings of the NCISH; 50;
- there were two incidents reported where a curtain rail failed to collapse fully, leading to the death of a patient in one case; a further three incidents indicated that the collapse of curtain rails had prevented the suicide (the NPSA has alerted NHS Estates to these issues);
- there is evidence from reports of suicide attempts that observation, routine ward checks and vigilance by staff (and other patients) led to successful interventions by staff to prevent suicide;
- where detailed reports are available, it seems that patients who committed suicide had strong suicidal intentions and took steps to ensure their death;
- there are limited data on the levels of observation or risk assessment in the reports.

**Cases where curtain rails have not collapsed**

**Example 1:** A patient was found hanging from a curtain rail by a dressing gown belt. The patient was found before losing consciousness and lifted down. Subsequent investigation revealed that the curtain tracking had released but only dropped a couple of inches before lodging on a window curtain batten. The patient survived.

**Example 2:** A patient was found tied with a silk scarf, hanging from a curtain rail. Attempts to resuscitate the patient failed. Prior to the incident the patient had disconnected the rail and positioned it on the door, so that it would not collapse. The patient had been on a 15 minute observation programme, and had timed the suicide to be in between observation points, and also at the handover of care between shifts when fewer staff were circulating the ward.

This preliminary analysis of data from the NRLS indicates that while considerable strides have been made in addressing important risks, such as collapsible curtain rails, further work is needed to reduce inpatient suicides. Information from the NRLS can add to that available from the NCISH because it allows the NHS to learn from incidents which did not result in suicide. As emerging issues and risks are identified, the database can be searched for reports relating to these, to monitor trends over time and provide rapid feedback to the NHS.

The next report from the NCISH will be published in October 2006, and will report on trusts’ implementation of the recommendations of the 2001 report. The NCISH are currently undertaking work to assess the association between suicide rates and the uptake of recommendations, due to be published in 2007.

National guidance is available to support local services in preventing suicide, and the management of self-harm, including:

- National Suicide Prevention Strategy for England; 6
- recommendations for preventing suicide from the NCISH, 13 and the NIMHE toolkit based on these recommendations and guidance, 14;
- NICE guidance on self-harm. 15
Absconding and missing patients

Incidents of absconding and missing patients account for 3,474 incidents (nine per cent) in acute mental health inpatient settings. The term ‘absconding’ applies to a patient who is detained under the Mental Health Act, and who leaves the ward without permission or breaches terms of leave. In most cases of absconding, patients return to the ward unharmed, but these incidents are considered to be patient safety issues because of the patients’ vulnerability and the risk to themselves or others. Incidents may also be reported where a patient, although not detained under the Mental Health Act, is missing from the ward without the knowledge or agreement of staff and where staff are concerned about possible harm to the patient.

A detailed review of 200 incidents reported to the NRLS where the incident type was categorised as an absconding or missing patient was undertaken. This group of incidents did not involve any cases of severe harm or death; however, cases of severe harm or the death of absconding or missing patients were reported under the category of self-harm.

A number of points were identified from the review of these incidents:

- in 78 of the 200 incidents the patient had expressed a clear intent to leave; in a further 46 incidents there was an indication of likely intent;
- the most common exit route, where this was described, was the main door (35 out of 53 incidents where information was available);

Key messages and recommendations

- Mental health services should have suicide prevention strategies in place and monitor their implementation.
- Mental health services should audit inpatient units annually for environmental suicide risks and take remedial and preventative action where possible.
- Although collapsible curtain rails have been installed, one suicide and one near miss have been reported to the NRLS that involved rails not collapsing.
- People who attempt to kill or seriously harm themselves often show a great deal of determination to do so. However, even with limited information, it is clear that some incidents are signalled in advance.
- Staff must develop trusting therapeutic relationships with service users, in which service users who feel suicidal or wish to self-harm can talk openly about how they feel and develop strategies together with staff about how to manage self-harm feelings and behaviours.
- Individual assessment of suicide risk needs to be undertaken for all admitted patients, particularly those who have attempted suicide or who have self-harmed in the past and/or are currently expressing suicidal feelings.
- Non-suicidal self-harm, although not likely to be fatal, signals distress on the part of the service user, accounts for a very large proportion of patient safety incidents and is of serious concern. Managing non-suicidal self-harm needs to be considered as part of a patient safety strategy in mental health.
• some patients who showed clear intent to leave (18 incidents) used unsupervised exit routes, such as fire exits and windows;
• there were 31 incidents where the patient was on leave at the time of the incident; in 13 of 14 incidents where the patient was on escorted leave, they were still able to abscond or go missing;
• staff use a range of interventions to prevent absconding or to enable the patient’s return to the ward, and interventions were recorded most often where there was clear intent to abscond or go missing, and include police involvement (six incidents); control and restraint (eight incidents); other physical interventions (14 incidents); and counselling/verbal interventions (16 incidents).

“Richard attempted to abscond from the ward while another person was trying to get in. Was restrained after becoming violent and returned.”

“Jodie was informed that she was being placed on Mental Health Act 5/2 section. She then went off the ward and was reported AWOL.”

“Liam was found to be missing from the ward during 15 minute observation check. Staff found his bedroom window open which had been broken, client apparently jumped on to the roof and then into the garden where he was noticed by staff.”

“Peter was on his way to A&E with Ken, a member of staff, when he decided to run off.”

A further search of NRLS reports identified 98 incidents involving fire alarms in connection with patients who indicated intent to abscond or go missing from inpatient units. In most cases, patients set off fire alarms to open the exit doors, or triggered alarms as they opened fire exit doors. Within this subset there were nine incidents where the fire alarms did not work when patients absconded through fire exit doors. The misuse of fire alarms is a cause for concern in relation to patient safety, as it may result in staff and/or patient complacency in response to the sounding of an alarm when there is a real fire. However, it should be noted that key-operated doors are now standard in new buildings. The Department of Health is currently developing further policy on locked wards, taking account of the rights of patients and their safety.

Analysis of NRLS data has provided some information about the immediate circumstances of absconding and the contribution of environmental factors. However, the incident reports do not provide sufficient information about underlying causes of absconding. More detailed investigation methods are needed to identify underlying causes. The box overleaf describes an aggregate root cause analysis of missing patients to identify common root causes and potential solutions. Research into patient and service factors that can contribute to absconding has been used to develop interventions to reduce absconding. Interventions may include the development of trusting relationships between staff and patients, to prevent major problems, as well as addressing procedural and operational aspects of security.
Aggregate root cause analysis: missing patients

The NPSA and North and East Yorkshire and North Lincolnshire Strategic Health Authority jointly facilitated an aggregate root cause analysis of missing patients (vulnerable patients who are unexpectedly found to have left an inpatient setting). Forty delegates (clinical and managerial) from 13 local NHS organisations attended. Six incidents, originating from mental health, acute hospital and community hospital settings, were shared by the local organisations:

“A young man recently admitted to inpatient mental health services for the first time left the ward unseen and subsequently committed suicide.”

“A frail older man with alcohol dependence left a medical ward unseen; concerned staff put themselves at risk to find him and return him safely.”

“A woman who had had a long period of mental health inpatient treatment left the ward through an automatically opening fire exit and subsequently committed suicide.”

“A patient with delirium after cardiac surgery ran out of an acute hospital onto a busy road; a nurse was injured whilst trying to stop traffic to protect the patient.”

“A woman with a long history of self-harm left a mental health ward unseen and subsequently committed suicide.”

“An older man with a potentially life threatening lung condition went missing from two different acute hospitals in succession, and has been untraceable since.”

Using group work and root cause analysis tools and techniques, common root causes and potential solutions were identified. These include:

- the issues facing mental health and general settings were more similar than delegates originally expected, with opportunities for learning from different settings;
- the assessment of the risk of a patient leaving care, and subsequent observation of the patient, was found to be a factor in the incidents;
- missing patients were traditionally seen as a nursing issue, but it was recognised that a multidisciplinary approach would be more effective in preventing incidents;
- intermittent observations were often used for patients at risk of going missing, but did not in themselves provide any barrier; as one delegate phrased it: “checking every ten minutes means clients know they have nine minutes free”;
- respect for patient confidentiality meant that staff were unsure what information they could hand to the police about a vulnerable missing patient;
- the legal and ethical boundaries of NHS responsibility towards vulnerable missing patients were not clear.

The strategic health authority will develop potential solutions, including a best practice toolkit drawn from local resources; guidance on legal and ethical responsibilities; and pocket guidance for frontline NHS staff and police services on roles, responsibilities and information sharing around vulnerable missing patients.
Key messages and recommendations

- Incidents in which service users have absconded or are missing are considered by staff to be patient safety incidents because of the patients' vulnerability and the risk to themselves or others. Patients may go missing even when under observation or accompanied.

- An environmental audit should be conducted by inpatient units to assess the risk of service users leaving the ward without staff knowledge. However, it is important to balance this risk against the need for fire safety and patients' rights to access and exiting.

- Individual patient care plans should include an assessment of the risk of them leaving the ward and a plan developed with service users, and known by all staff including non-nursing staff, about how to manage that risk. Carers, where appropriate, and service users should be part of the discussion and planning, and be aware of how to manage the risks.

- Root cause analysis of absconding or missing patient incidents can inform local practice around vulnerable missing patients.

Medication

Background

The majority of patients under the care of mental health services are likely to be prescribed medication. Ninety-three per cent of respondents to a survey of users of mental health services (2005), which excludes inpatients, reported that they had taken prescribed medication in the last 12 months; 46 per cent had new medication prescribed during that time. Of those with new medication prescribed in the last 12 months, 62 per cent had had the purposes explained, 37 per cent had had side effects explained and 39 per cent felt they had a say in the medications prescribed to them.

Mental health services are likely to encounter the same type of medication-related patient safety issues as other healthcare settings. These include errors in prescribing, dispensing or administering of medicines resulting in patients getting the wrong drug or the wrong dose. In addition, there are a number of safety issues relating to medication that are a particular concern for mental health services because of the types of medication used and the vulnerability of patients.

A recent survey found that psychotropic medication was the class of drug most associated with medical admissions because of adverse consequences of prescribed medication. Yet the quality of prescribing practice in mental healthcare, as judged by indicators derived from evidence of best practice, varies greatly from practitioner to practitioner and from service to service.

Patients with schizophrenia are at risk of cardiovascular and respiratory disease and have reduced life expectancy. These risks are compounded by antipsychotic drugs, which can cause weight gain and adversely affect lipid profiles. Antipsychotic medication may also increase the risk of developing diabetes.

Off-label prescribing (prescribing a drug outside the parameters of its product licence) is common in mental healthcare. There are two particular circumstances in which this happens. The first is the use of a drug to treat a condition for which it is not licensed. For example, in one health district, 44 per cent of prescriptions of the antipsychotic drug olanzapine were of this type. The second circumstance is the
prescribing of a drug at a dose above the maximum recommended level. This is most common in inpatient settings. In one survey, 20 per cent of hospital patients were prescribed antipsychotic medication at high doses. Much of this was due either to the prescription of more than one antipsychotic drug at the same time or to the prescribing of ‘as required’ medication to be given at the discretion of nursing staff. Off-label prescribing increases the requirement to screen and monitor and, in the case of high dose prescribing, increases the risk of adverse effects.

Clinicians often fail to screen and monitor for the adverse effects of psychotropic medication. This is true both for hospitalised patients and for those in community settings. In one study, only just over 40 per cent of people prescribed antipsychotic medication had been tested for diabetes, despite them being at much higher risk of this condition than the general population. The authors concluded that a number of these patients would not have been diagnosed with diabetes and as a result were not being treated. This type of patient safety incident is likely to be under-reported both locally and via the NRLS because the responsibility to monitor lies with medical staff who make little use of these reporting systems. The potential seriousness is underlined by the fact that failure to adequately monitor antipsychotic medication is the single most common cause of claims relating to treatment by mental health services notified to the NHSLA; accounting for at least 11 of 53 claims.

The high rate of failure to screen and monitor antipsychotic medication is only partly explained by lack of knowledge and/or awareness. System problems are likely to play a more important role. Potential systems problems include:

- poor communication between primary and secondary care, and a lack of agreement about who is responsible for monitoring medication;
- difficulty in accessing phlebotomy and pathology laboratory services from mental health service sites that are remote from general hospitals;
- lack of availability of basic medical equipment to undertake simple monitoring, for example, weight, body mass index and blood pressure;
- findings from investigations failing to reach those responsible for acting on them;
- failure to act on results of investigations;
- failure to engage the service user in the process of monitoring.

In order to improve the quality of prescribing in mental health services, and improve patient safety and the quality of care, the Prescribing Observatory for Mental Health-UK (POM-UK) has been established with input from the NPSA (see box overleaf).
Prescribing Observatory for Mental Health-UK

Background
The Health Foundation has funded a programme to improve the quality of medicines practice in specialist mental health services as part of their national ‘Engaging with Quality’ initiative.

The partnership managing the POMH-UK includes service users as well as professional bodies involved in the prescribing, dispensing and administering of psychotropic medication by specialist mental health services, and Rethink, the largest severe mental illness charity in the UK.

Rationale
Most people who receive care from specialist mental health services will be prescribed one or more psychotropic drug. There is good evidence for the effectiveness of psychotropic medication and a body of authoritative guidance about its use. However, there is also plentiful evidence that prescribing practice frequently deviates from this guidance and that it varies greatly from practitioner to practitioner and from service to service (see pages 49-50).

Role and aims of the POMH-UK
The POMH-UK will collect and manage information about prescribing and administering psychotropic medication by specialist mental health services. Data will be collected from local mental health services and will be used to:

• identify and quantify aspects of prescribing practice;
• allow members to compare and benchmark their prescribing practice with others;
• inform the design and delivery of targeted interventions, for example information and training;
• allow for monitoring changes in prescribing practice over time and the measurement of the impact of interventions to improve the quality of prescribing practice.
What medication incidents are reported to the NRLS from mental health settings?

Over 64 per cent of the 1,648 medication incidents reported to the NRLS relate to the administration or supply of a medicine from a clinical area; 13 per cent relate to the preparation of medicines or dispensing; and 13 per cent to prescribing (Table 11). The high number of incidents at the administration stage reflects the fact that the majority of incidents are reported by nursing staff, and it is likely that there is under-reporting of medication incidents by doctors and pharmacists. This is consistent with the differences in reporting culture between staff groups (see Table 4, page 21).

Table 11: incidents at different stages of medication process

<table>
<thead>
<tr>
<th>Stage</th>
<th>Number</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration/supply of a medicine from a clinical area</td>
<td>1,065</td>
<td>64.6</td>
</tr>
<tr>
<td>Prescribing</td>
<td>208</td>
<td>12.6</td>
</tr>
<tr>
<td>Preparation of medicines in all locations/dispensing in a pharmacy</td>
<td>202</td>
<td>12.3</td>
</tr>
<tr>
<td>Monitoring/follow-up of medicine use</td>
<td>103</td>
<td>6.3</td>
</tr>
<tr>
<td>Supply or use of over-the-counter medicine</td>
<td>13</td>
<td>0.8</td>
</tr>
<tr>
<td>Advice</td>
<td>13</td>
<td>0.8</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>44</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,648</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.
The types of medication errors are shown in Table 12. Wrong or unclear dose accounts for 20 per cent of errors. Other commonly reported issues are wrong drug, wrong frequency and omitted medicine. In almost a fifth of cases the type of error was not recorded.

### Table 12: type of medication error

<table>
<thead>
<tr>
<th>Type of error</th>
<th>Number</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong/unclear dose or strength</td>
<td>332</td>
<td>20.1</td>
</tr>
<tr>
<td>Wrong drug/medicine</td>
<td>231</td>
<td>14.0</td>
</tr>
<tr>
<td>Wrong frequency</td>
<td>211</td>
<td>12.8</td>
</tr>
<tr>
<td>Omitted medicine/ingredient</td>
<td>170</td>
<td>10.3</td>
</tr>
<tr>
<td>Wrong quantity</td>
<td>122</td>
<td>7.4</td>
</tr>
<tr>
<td>Mismatching between patient and medicine</td>
<td>115</td>
<td>7.0</td>
</tr>
<tr>
<td>Wrong storage</td>
<td>32</td>
<td>1.9</td>
</tr>
<tr>
<td>Wrong method of preparation/supply</td>
<td>31</td>
<td>1.9</td>
</tr>
<tr>
<td>Wrong/transposed/omitted medicine label</td>
<td>27</td>
<td>1.6</td>
</tr>
<tr>
<td>Wrong/omitted/passed expiry date</td>
<td>26</td>
<td>1.6</td>
</tr>
<tr>
<td>Contra-indication to the use of the medicine in relation to drugs or conditions</td>
<td>20</td>
<td>1.2</td>
</tr>
<tr>
<td>Patient allergic to treatment</td>
<td>15</td>
<td>0.9</td>
</tr>
<tr>
<td>Adverse drug reaction (when used as intended)</td>
<td>14</td>
<td>0.8</td>
</tr>
<tr>
<td>Wrong formulation</td>
<td>13</td>
<td>0.8</td>
</tr>
<tr>
<td>Wrong route</td>
<td>8</td>
<td>0.5</td>
</tr>
<tr>
<td>Wrong/omitted verbal patient directions</td>
<td>6</td>
<td>0.4</td>
</tr>
<tr>
<td>Wrong/omitted patient information leaflet</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>273</td>
<td>16.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,648</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database up to the end of September 2005.
The NRLS has the facility to record details of drugs and dose involved in medication incidents. However, these fields are often not completed, although information on drug and dose may be included within the free text of the incident report:

“Martin complained of stiff facial features. Upon investigation, Martin admitted that he had received medication (Zuclopenthixol 10mg) from another patient.”

“During his interview it became apparent that Tom had not collected his medication on the correct date and had therefore not taken any medication for the past week. Tom said he had felt too unwell to collect his medication when scheduled. Neither the pharmacy nor day hospital staff had identified Tom’s failure to collect his medication.”

“Jemma, a ward nurse, realised that she had mistakenly given a patient a dose of thyroxine 100mg instead of thiamine 100mg. The prescription when looked at after the incident could mistakenly read thyroxine. The ward was busy because of a patient’s party. There was distraction.”

A detailed analysis of medication incidents in mental health settings has been undertaken for reports received from September 2004 to August 2005, to identify common drug types and drugs associated with incidents (Table 13). By using information from the free text section, the drug class was identified in just under half of medication incidents. The largest single drug class involved in medication errors was antipsychotic drugs, accounting for 19 per cent of all medication incidents, and 42 per cent of total errors where the drug class was known.

Table 13: common drug groups associated with medication errors

<table>
<thead>
<tr>
<th>Class of drug</th>
<th>BNF</th>
<th>Number</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipsychotics</td>
<td>4.2</td>
<td>236</td>
<td>19.0</td>
</tr>
<tr>
<td>Anxiolytics</td>
<td>4.1</td>
<td>111</td>
<td>9.0</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>4.3</td>
<td>74</td>
<td>6.0</td>
</tr>
<tr>
<td>Analgesics</td>
<td>4.7</td>
<td>65</td>
<td>5.2</td>
</tr>
<tr>
<td>Antiepileptics</td>
<td>4.8</td>
<td>41</td>
<td>3.3</td>
</tr>
<tr>
<td>Antidiabetics</td>
<td>6.1</td>
<td>26</td>
<td>2.1</td>
</tr>
<tr>
<td>Other or unknown</td>
<td></td>
<td>687</td>
<td>55.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1,240</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: mental health incidents reported to the NRLS database from September 2004 to August 2005.
What do we know from other sources?

Drugs prescribed for the treatment of mental illness are a factor in a substantial number of deaths. Between 1993 and 2002 there was an average of 55 deaths per year associated with antipsychotic drugs. For a quarter of these, the death was considered accidental, while in 60 per cent an open verdict or suicide was recorded. Between 1993 and 2002 there was also an average of 392 deaths per year associated with antidepressant drugs, of which an estimated 78 per cent were intentional, 20 per cent accidental poisoning and two per cent attributed to mental and behavioural disorders due to drug use. There is great variation in the relative toxicity of individual drugs. For example, tricyclic antidepressants are 10 times more toxic than selective serotonin reuptake inhibitors.

These findings suggest two ways in which harm linked to prescribed medication can be reduced. The first is by prescribing less toxic medication to people at high risk of suicide. Between 1993 and 2002, prescribing patterns for antidepressants changed, with increasing prescribing of selective serotonin reuptake inhibitors. During the same period, deaths associated with antidepressants declined from nine to seven per million of the population. The second way in which harm can be reduced is by improving the monitoring of patients for the harmful effects of prescribed psychotropic drugs. The importance of the latter is underlined by an analysis of clinical negligence claims relating to mental health services. This found that 10 per cent relate to medication (53 claims up to the end of August 2005) and a third of these were due to a failure to monitor the physical adverse effects of prescribed medication. The most common drugs implicated in the failure to monitor are antipsychotics (11 cases) and lithium (five cases). There are also two cases of alleged failure to monitor anticonvulsants (phenytoin and carbamazepine). NICE has produced guidance on the use of antipsychotics medication.
The box below describes an example of good practice in monitoring service users receiving clozapine.

Physical monitoring of patients receiving treatment with clozapine: example of good practice from County Durham and Darlington Priority Services NHS Trust

Background
Clozapine is an atypical antipsychotic medication proven to be effective in otherwise treatment-resistant schizophrenia. It was introduced in the mid-1960s but then withdrawn following a number of deaths from agranulocytosis with subsequent neutropenia (conditions affecting the body’s ability to combat infections). Clozapine was re-launched in autumn 1989 with a prescriptive monitoring programme for all patients. Clozapine causes other adverse effects including weight gain, excess salivation, severe constipation, paralytic ileus (intestinal blockage), tachycardia, dyspepsia, hypertension and hypotension.

The monitoring programme
All patients prescribed clozapine are required to adhere to a strict but limited clinical monitoring programme. This consists of blood tests to check for neutropenia: weekly for the first 18 weeks of treatment, fortnightly for the remainder of the first year, and monthly after that.

Due to the wide range of side effects associated with the drug, ten years ago County Durham and Darlington Priority Services NHS Trust implemented a wider ranging physical health monitoring programme to ensure a standardised trust-wide approach to the care of people who are prescribed clozapine. Blood pressure, pulse, temperature and weight were checked at each visit to the clinic. In 2000, practitioners noticed that some patients, particularly young men, had developed symptoms of cardiac disease. From this time, electrocardiograms were performed on all patients and monitoring was extended to include liver function, urea and electrolytes, triglycerides, thyroid function test, body mass index and haemoglobin A1c.

Clinical audit
A trust-wide audit was conducted to ensure that the clinical monitoring programme was being applied consistently to all patients across all services. This identified some variation in clinical practices. Nurses from the clozapine clinics and a clinical pharmacist at the trust met and formulated a clinical monitoring tool which was subsequently implemented across the trust to rectify these variations. This is now in routine use for all patients.

The audit tool was revised and the audit repeated to assess compliance with the NICE clinical guidance for schizophrenia and the Maudsley guidance. This led to new electrocardiogram (ECG) machines being purchased to ensure that every clinical area had direct access to one. Clinical staff were also given specialist training in how to read ECGs.

Local healthy eating programmes and lifestyle advice regarding exercise and smoking cessation also proved popular with patients at the trust. Specialist dietetics input is also made available for those patients that require more intensive interventions to address weight gain resulting from the drug’s side effects. A re-audit of clozapine monitoring is planned for 2006.
The NPSA has approved a project to prevent adverse events from psychotropic medication following the prioritisation process which took place in 2004 (see box below). The NPSA is also a contributor to the POMH-UK (see box on page 51).

**NPSA project on psychotropic medication**

The project is intended to promote safe medication practice in specialist mental health services.

**Objectives**

- To identify the barriers in the routine monitoring of side effects for mental health service users taking antipsychotic medication.
- To develop and promulgate solutions to the barriers identified.
- To work closely with the POMH-UK to ensure that patient safety issues are fully incorporated into all aspects of its work. This will include:
  - highlighting and promoting the safety aspects of work undertaken;
  - ensuring that future topics take full account of issues of safety;
  - working actively with the POMH-UK partner organisations to develop and deliver interventions that emphasise safe medicines practice such as feedback, benchmarking, education, training and patient safety information.
- To promote safe medicines practice in specialist mental health services.
- To link the initiative with the wider NPSA programme of work on safe medication practice.

The project is expected to begin this year and will continue for one year.

**Key messages and recommendations**

- Incidents involving medication are particularly important in mental health services because of the inherent risks psychotropic medication poses.
- Drugs prescribed for the treatment of mental illness are a factor in a substantial number of deaths from poisoning.
- Patients prescribed psychotropic medication are often not adequately screened or monitored for adverse effects.
- Less toxic drugs should be prescribed for people at risk of suicide and NICE guidance on the use of antipsychotic drugs should be followed.
Part four

Concluding remarks

This report provides the first detailed analysis of mental health related patient safety incidents from any national incident reporting system, worldwide. It is the second report from the NPSA’s Patient Safety Observatory and brings together information from the NRLS and other sources. It demonstrates the value of setting incident reports alongside other data to provide a richer picture of safety and what can be done to improve it.

This second report from the NPSA’s Patient Safety Observatory:

• Includes analysis of nearly 45,000 incidents reported to the NRLS up to the end of September 2005, and includes data received from three-quarters of specialist mental health service providers in England and Wales.

• Provides a more comprehensive picture of patient safety in mental health than has previously been possible, on account of the information reported to the NRLS, and the use of a range of other data sources.

• Shows where existing interventions have been effective. For example, since March 2002 mental health services have been required to ensure that curtain rails are collapsible. The NCISH had identified these as a ligature point used in a substantial proportion of suicides. The data reported to the NRLS indicate that this policy has been largely effective in preventing deaths caused by hanging from curtain rails.

• Highlights recognised topics, such as the challenges to safety on acute wards and the risks posed by medication; these issues are already reflected in national policy, but more work is needed to implement change.

• Flags existing guidance and resources that can support safety improvement in mental health services.

• Identifies a number of topics where further work may be required by the NHS to better understand the underlying causes of incidents and how it can address them.

• Raises the particular issue of sexual safety which requires concerted action across the service.

• Lists actions that should be taken at both national and local levels to further improve safety, including actions to be led by the NPSA.

Mental health service users, particularly when acutely ill, are vulnerable to a range of risks. Often these risks are related to their own behaviour or to the behaviour of other patients such as self-harm, aggression and violence, and sexually disinhibited behaviour, or are a direct result of their mental illness. This makes mental health service users a particularly vulnerable group of patients within the NHS. On other occasions, patients are vulnerable because of weaknesses in the systems within which they receive care. Mental health services have a responsibility to protect patients against inadvertent harm. This report seeks to raise the profile of safety in mental health services and to stimulate a wide body of action across the NHS to make care safer for all patients with mental illness.
The NPSA will continue to work to improve patient safety in mental health services by:

- reviewing and analysing NRLS and other data on safety incidents;
- working with organisations to improve the reporting of incidents;
- feeding back findings from the NRLS to share learning across the NHS;
- developing and disseminating national solutions;
- working collaboratively with national organisations to support improvements in services.

We welcome any comments and feedback on this report. Email pso@npsa.nhs.uk or write to Sarah Scobie, Head of Observatory, National Patient Safety Agency, 4 - 8 Maple Street, London W1T 5HD.
Appendix

The Patient Safety Observatory and the National Reporting and Learning System

The primary function of the Patient Safety Observatory is to quantify, characterise and prioritise patient safety issues in order to support the NHS in making healthcare safer. Figure 1 outlines the inputs and outputs of the Patient Safety Observatory with examples of the possible sources of information feeding into it.\(^4\)\(^5\)

The NPSA is working with a stakeholder group to identify and summarise the key data sets to better understand and improve patient safety. The stakeholder group includes the following key national organisations:

- Healthcare Commission – the independent regulator of health services in England;
- Office for National Statistics;
- Medicines and Healthcare products Regulatory Agency – which regulates medicines and medical devices in the UK;
- patient organisations such as Action against Medical Accidents;
- NHS Litigation Authority;
- medical defence organisations.

Incident reporting needs to be part of a broader approach to surveillance and monitoring such as that taken for the surveillance of communicable and other diseases. The findings from incident reports must be considered alongside a range of data and intelligence, including published literature, clinical expert opinion, medical record reviews, hospital episode statistics, death certification data, complaints, prospective risk assessments, patient safety indicator studies, observational research, confidential enquiries, and audits and reviews of healthcare organisations. Triangulating information from different data sources produces a more complete picture of the nature and severity of patient safety incidents. The NPSA wants to strengthen the availability, use and usefulness of information about patient safety at a national level in order to help make patient care safer.
Figure 1: the Patient Safety Observatory

- NHS staff and patients
- Other reporting systems, professional and expert groups, other organisations, patient and public, and research and evaluation, for example:
  - Health and Social Care Information Centre
  - Medicines and Healthcare products Regulatory Agency
  - Complaints
  - NHS Litigation Authority, Welsh risk pool and medical defence organisations
  - Office for National Statistics
- Professional and expert groups
  - Royal colleges
  - Confidential enquiries*
  - Investigations and inquiries
- Other organisations
  - Healthcare Commission
  - National Institute for Health and Clinical Excellence
  - Chief Medical Officers for England and Wales
  - Department of Health/Welsh Assembly Government
- Patients and public
  - Patient forums
  - Voluntary organisations
- Research and evaluation
  - Patient Safety Research Programme
  - International literature

- OBSERVATORY
  - Analysis and surveillance
  - Prioritisation and safety solutions
  - Feedback and learning

* National Confidential Enquiry into Patient Outcome and Death (NCEPOD); Confidential Enquiry into Maternal and Child Health (CEMACH); National Confidential Inquiry into Suicide and Homicide by people with mental illness (NCISH).
The National Reporting and Learning System

Patient safety incidents are reported electronically to the NPSA (Figure 2). In most cases, information is taken directly from local risk management systems (LRMS). This reduces the need for staff to report incidents both locally and to the NRLS. An electronic reporting form is also available for trusts which do not have a LRMS and for staff who wish to report without going via their trust. Individual healthcare organisations have primary responsibility for investigating incidents and ensuring that action is taken to prevent their recurrence. The NRLS records information about the incident, care setting, specialty, location and patient characteristics, although no clinical data about the patient, such as diagnosis, is recorded.

Figure 2: the National Reporting and Learning System

Incidents reported to the NRLS are held in a secure and confidential database. Reports are reviewed and analysed in a number of ways, including by:

- incident type and trends, within the coded categorical data fields, using analytical software;
- identifying themes and patterns from free text information. The NPSA uses specialised software to do this and is developing innovative methods for mining data;
- the review of particular types of incidents by NPSA specialist staff and clinical advisors on a regular and ad hoc basis.
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67 Reporting an incident to the National Patient Safety Agency. www.npsa.nhs.uk/health/reporting/reportanincident
The National Patient Safety Agency

We recognise that healthcare will always involve risks, but that these risks can be reduced by analysing and tackling the root causes of patient safety incidents. We are working with NHS staff and organisations to promote an open and fair culture, and to encourage staff to inform their local organisations and the NPSA when things have gone wrong. In this way, we can build a better picture of the patient safety issues that need to be addressed.