Review of National Reporting and Learning System (NRLS) incident data relating to discharge from acute and mental health trusts – August 2014
A National Reporting and Learning System (NRLS) search was performed of incidents reported between 1 October 2012 and 30 September 2013. The aim of the search was to identify the nature and scale of the problems associated with the process of handover from secondary care at the time of discharge.
Review of National Reporting and Learning System (NRLS) incident data relating to discharge from acute and mental health trusts – August 2014

Supporting information for Stage 1 Patient Safety Alert on risks arising from breakdown and failure to act on communication during handover at the time of discharge from secondary care

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NRLS analysis undertaken by Fran Wood, Patient Safety Lead (Clinical Review) and Leann Johnson, Clinical Fellow to Director of Patient Safety with support from Joan Russell, Head of Patient Safety and Frances Healey, Senior Head of Patient Safety Intelligence, Research and Evaluation.
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2 Introduction

NHS England’s Patient Safety Domain is leading a programme of work aimed at improving handover at the time of discharge. To inform this programme a National Reporting and Learning System (NRLS) search was performed of incidents reported between 1 October 2012 and 30 September 2013. The aim of the search was to identify the nature and scale of the problems associated with the process of handover from secondary care at the time of discharge.

3 Method

The NRLS was searched for all incidents reported as death and severe harm, themed as transfer/discharge incidents. All moderate, low harm and no harm incidents coded as transfer/discharge and/or discharge delay/failure, discharge inappropriate and discharge planning failure were also identified.

Two separate reviews of data were subsequently undertaken for:

- all care settings other than mental health; and
- mental health.

3.1 All care settings other than mental health

For ‘all care settings other than mental health’ all death and severe harm incidents were reviewed as well as randomly generated samples of 100 no harm, 100 low harm, and 100 moderate harm incidents. The text of the incident reports was reviewed to identify those that were referring to a discharge from acute care to either a primary or social care setting (including the patient’s home). The number of applicable incidents related to the reported degree of harm is demonstrated below (Table 1):

**TABLE 1: NRLS reports relevant to discharge from acute care in one year period**

<table>
<thead>
<tr>
<th>Degree of harm</th>
<th>Incidents reviewed</th>
<th>Number of incidents related to discharge from acute care in samples reviewed</th>
<th>Estimated total number of incidents relevant to discharge from acute care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>All</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Severe</td>
<td>All</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Moderate</td>
<td>100/541</td>
<td>45/100</td>
<td>c.250</td>
</tr>
<tr>
<td>Low</td>
<td>100/2,069</td>
<td>76/100</td>
<td>c.1,500</td>
</tr>
<tr>
<td>No harm</td>
<td>100/11,750</td>
<td>71/100</td>
<td>c.8,300</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>c.10,000</td>
</tr>
</tbody>
</table>
3.2 Mental health

The ‘mental health’ incident reports were reviewed to identify those that were referring to the discharge of a mental health patient from mental health acute care or general acute care to either a primary or social care setting (including the patient’s home). The number of applicable incidents related to the reported degree of harm is demonstrated below (Table 2):

TABLE 2: NRLS reports relevant to discharge from mental health care in one year period

<table>
<thead>
<tr>
<th>Degree of harm</th>
<th>Incidents reviewed</th>
<th>Number of incidents related to discharge of mental health patients</th>
<th>Number of incidents in whole sample relevant to discharge of mental health patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>All</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Severe</td>
<td>All</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>All</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Low</td>
<td>All</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>No Harm</td>
<td>100/216</td>
<td>59</td>
<td>c.120</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>-</td>
<td><strong>c. 150</strong></td>
</tr>
</tbody>
</table>

The NRLS was established to provide a national database of incidents relating to patient risks and harm. Interpretation of data from the NRLS should be undertaken with caution. As with any voluntary reporting system, the data are subject to bias. Many incidents are not reported, and those which are may be incomplete, having been reported before the patient outcome is known. Potential harm is often confused with actual harm. A clinical review of reported deaths and severe harm incidents was undertaken to assess if harm was correctly reported. Where incident details provide sufficient evidence, the degree of harm was regraded.

4 Review Process

The death and severe harm incidents reviewed were subsequently categorised into the following emerging themes:

1. Apparent breakdown or failure with communication was a:
   • key factor; or
   • additional factor.
2. Problem related to medication was a:
   • key factor; or
   • additional factor.
3. Apparent inappropriate discharge (e.g. discharged late/ incomplete treatment/ incomplete assessment) was a:
   • key factor; or
   • additional factor.
4. Apparent unexpected deterioration post discharge was a:
   - key factor; or
   - additional factor.
5. Other issues (including equipment problems, cannula left in situ, discharge delays) were a:
   - key factor; or
   - additional factor.

The “key factor” relating to the moderate, low and no harm incidents was reviewed according to the categories above.

5 Results

5.1 Deaths and severe harms reviewed relating to acute and mental health trusts

Of the 39 deaths and severe harms related to discharge that were reviewed:

*Apparent breakdown or failure with communication was a key factor in 12 incidents and an additional factor in 7 incidents. Subthemes included:*

- Problem relating to the quality of discharge information.
  These incidents usually demonstrated problems associated with the availability, quantity, quality or accuracy of information provided to receiving personnel (e.g. GPs, continuing care teams and district nurses) once the patient was discharged.
- District nurse care required but patient not referred by hospital.
- Inadequate package of care.

*Problem related to medication was a key factor in one incident and an additional factor in four incidents*

Although the number of severe harm and death incidents related to discharge medication as a primary theme was low, it was an issue sometimes mentioned in the free text (reported as an additional problem) and it also featured strongly in the moderate, low and no harm incidents described below.

*Apparent inappropriate discharge (e.g. discharged late/ incomplete treatment/ incomplete assessment) was a key factor in nine incidents and an additional factor in six incidents*

- Discharge needs not assessed or appreciated.

- Patient unwell: outcome not clear.

- Pre discharge plan not followed.
  These incidents demonstrated occasions where there was a plan in place pre-discharge from acute care but for some reason the discharge went ahead without this plan being followed/executed. Reasons included difference of professional opinion and lack of available funding for continuing care in the community.
Apparent unexpected deterioration post discharge was a key factor in 17 incidents and an additional factor in 6 incidents. Subthemes included:

- **Patient unwell: died soon after discharge.**
  The prevalent theme in the most serious category of incidents described situations whereby the patient has died following discharge from acute care to home or community facilities and the death appears to have been unexpected or far sooner than expected. From the reports where the time interval between discharge and death discerned, this ranged from 2 to 48 hours, but was most commonly within 24 hours. Some reports describe the patient being readmitted to acute care but despite readmission the patient dies.

- **Patient unwell: required readmission.**
  These related to situations where the patient was found to be unwell upon discharge and required swift readmission back to acute care. In four of these cases there were clinical indicators or ‘flags’ present pre-discharge such as new/unexpected confusion or abnormal observations but this did not prevent discharge.

5.2 Moderate, low and no harm incidents relating discharge from acute trusts

Of the 300 moderate, low and no harm incidents reviewed, 192 related to discharge from an acute trust. Incident categories included the following:

Apparent breakdown or failure with communication was key factor in c33% of all moderate, low and no harm incidents. Subthemes included:

- **Problems with discharge information.**
  These reports demonstrated there are issues with the provision of information to either the patient or community teams when the patient leaves the acute setting. Examples included:
  - Patients were discharged without adequate information to provide a helpful account of the inpatient episode or support continuity of care beyond the acute environment. Examples included:
    - No or limited information regarding skin condition, e.g. pressure ulcers or skin damage was identified by chance once inspected in the community.
    - Limited or no information on types of dressings being used on pressure ulcers or wounds.
    - Poor handover of information regarding the management of patients who had developed Health Care Associated Infections in hospital.
  - Patients who required continued anticoagulation therapy post discharge had no referral for ongoing surveillance or management when discharged from acute care.
  - No follow up arranged.
  - No discharge letter.
Patient requires care of district nursing but not referred.
These incidents were difficult to sub theme as the reason for lack of referral was not always clear. Examples included:

- Patient required district nurse care, but referral not sent.
- Problems with referral system to district nurses and therefore referral not received.
- Referral sent to district nurse, but not picked up.
- District nurses not informed that existing patients had been discharged, and therefore care not recommenced.

Community midwife needed but not referred.
Some reports cited issues where referrals had not been made from acute to community midwife care, which impacted upon babies undergoing postnatal checks.

Issues with packages of care.
Examples included:

- Inadequate for patient’s needs. These incidents describe cases where some care was arranged post discharge but when the patient returned (usually home) it was clear that the package of care did not support the patients’ needs. Transfer of accurate information between acute care and ICT’s also caused difficulties.
- Usual care package not restarted at discharge.
- Difficulties reinstating existing or prearranged packages of care occurred when discharge dates were changed at short notice.
- Lack of availability of staff to provide a package of care being due to a late in the day discharge from acute care.

Problems related to medication were a key factor in c13% of all moderate, low and no harm incidents

There were numerous problems reported with discharge medication such as:

Delay in providing medication to the patient pre-discharge. Reasons included:

- Delays in the pharmacy department.
- Lack of weekend pharmacy service.
- Discharge letters not being completed on time.
- Confusion when patients were transferred between departments as to whether the medication had been ordered.

Discharge medication incomplete.
These incidents described situations where key medications were found to be missing when the patient reached their discharge destination such as antibiotics or analgesia.

Other less frequently reported issues with discharge medication included:

Discharge medication not prescribed.
Incidents described situations where the patient had been discharged without having important medication prescribed such as analgesia and anti-emetics (for an end of life care patient), anticoagulant and anti-embolic stockings and insulin.

- **Discharge medication not supplied.**
  On these occasions patients should have had discharge medication but it was not supplied at all. In one of these cases, the ward manager visited the patient’s home after discharge to deliver medication.

- **Discharge medication dose not specified.**
  These reports referred to important medication such as insulin and warfarin where the patient could not take/receive them once discharged as the dose had not been specified.

- **Inaccurate medication.**
  Medication did not reflect up to date clinical care.

- **Inappropriate medication.**
  Patient admitted following serious self-harm (overdose) and discharged with full packs of medication rather than limited supply as documented, then represented with repeat overdose.

It is recognised that there are likely to be many more incidents related to problems with discharge medication reported under the medication category of the NRLS, but it was not feasible to review these for this analysis.

**Apparent inappropriate discharge (e.g. discharged late/ incomplete treatment/ incomplete assessment) was a key factor in c15% of all incidents. Subthemes included:**

- **Discharged before treatment complete.**
  The reports describe discharge before either the appropriate referrals to another team (such as renal specialists or SLT) have been made or before the necessary period of observation has taken place.

- **Out of hours discharge.**
  These reports describe cases where the patient has been discharged late in the day and this has caused problems such as lack of a clinician to clerk the patient (when patients are discharged to a community bed) or accessing the house. Some reporters describe issues whereby delays in commencing patient procedures (such as surgery lists over running) have resulted in late discharge from wards that close at a certain time (day wards).

- **Discharge needs not assessed.**
  Examples included:
  - Apparent lack of assessment of patient’s needs prior to discharge.
  - Apparent inadequate assessment of patient’s needs prior to discharge.
  - Discharge apparently unsafe.
Pre discharge plan not followed. These reports described incidents where a pre-discharge plan was not followed. Some cases described a plan being recommended by another team (e.g. mental health, safeguarding, allied health professionals) but the patient was discharged regardless of the recommendation.

Apparent unexpected deterioration post discharge was a key factor in c9% of all moderate, low and no harm incidents

Some patients were found to be unwell upon discharge and were returned to the acute care setting. These reports suggest that on occasions there were inappropriate decisions to discharge a patient who was too ill to leave hospital. In some cases, clinical indicators or ‘flags’ were present but this did not prevent discharge.

Other issue (including equipment problems, cannula left in situ, and discharge delays) were a key factor in c30% of all incidents. Subthemes included:

- Issues with equipment. These were reports whereby equipment the patient needed post discharge had not been ordered, supplied or delivered. Some reports described incidents of equipment being left on the ward.

- Cannula left in situ.

- Discharge delays. Many patients experienced significant delays when being discharged from acute care. Causes evident from the reports were:
  - Problems with transport. Most commonly patients were waiting for ambulance transport or patient transfer services. Delays were sometimes due to errors in booking made by the ward or department, but most commonly due to capacity issues with the transport/ambulance service.
  - Waiting for other assessments before discharge.
  - No community bed.
  - No identified social worker.
  - Lack of occupational therapy (OT) resource.
  - Unavailability of VAC dressings.

Others included:
- Patient unwell, outcome not clear. Patient discharged without bloods being checked.
- Advice provided to patient not adequate. Information on how to self-care, information on arranging suitable transport home after elective treatment.
- Plan in place but discharge failed. In these instances despite plans for safe discharge having been made by acute care, the discharge failed. In two cases a plan was agreed with the patient but either the relative did not attend to take
the patient home or did not agree to the plan. In one case the nurse who was arranged to visit at home to help with oxygen did not attend and the patient was readmitted.

- **Inappropriate discharge location.** Patient sent to a residential home and needed a nursing home; or patient sent to their preadmission address not the address agreed as the discharge location.

- **Failed district nurse referral.** Despite a referral from acute care, the district nurse did not attend.

5.3 **Moderate, low and no harm incidents relating discharge from mental health trusts**

Of the moderate, low and no harm incidents reviewed, 90 were related to discharge from a mental health trust. Incident categories included the following:

**Apparent breakdown or failure with communication was a key factor in c33% of incidents. Subthemes included:**

- **Problems with discharge information.**
  These reports demonstrated there are issues with the provision of information, most commonly to community teams, when patients with mental health needs are discharged from the acute general or acute mental health setting.

Examples included:

  - **Information inadequate.**
    These incidents described situations where the level of information provided was inadequate to continue patient care beyond the acute setting. Incidents most commonly referred to a lack of communication with community mental health teams to inform them that the patient had been discharged from acute care and to recommence community visits. Additionally reports indicated an absence of useful information regarding the patients identified level of risk, often this was in relation to discharge summaries being poor or not provided at all.

  - **No follow up arranged.**
    These incidents illustrated problems with patients being referred for ongoing follow up once discharged. Commonly this was follow up with community mental health services, with one report suggesting this occurs very frequently. There was also a case whereby a mental health patient required anticoagulation follow-up and this was not arranged.

  - **Other issues with discharge information included delayed information, patient left before information could be provided and information sent to the wrong GP.**
**Problem related to medication was a key factor in 22% of incidents**

Various issues were evident in relation to the provision of medication at the point of discharge. Medication was reported as:

- **Not prescribed**, resulting in a delay in the patient receiving medication until it could be prescribed by the GP or community mental health staff.
- **Medication not provided for patients who had been on medications prior to discharge but they were not provided as a TTO.**
- **Medication not provided during a period of agreed leave.** These were incidents where medication was not prescribed for patients on approved leave.
- **Patient unsure about how to take medication once discharged.**
- **Incorrect dose.** Too much of a controlled drug was supplied to the patient at discharge.

Note: there are likely to be many more incidents related to problems with discharge medication reported under the medication category of the NRLS, but it was not feasible to review these for this analysis

**Patient considered too high risk for community care 8% of total incidents relevant**

There were incidents where it was clear the community mental health teams were unhappy that the patient was being discharged because they considered them to be too high risk, either to themselves or to others. At times this was expressed prior to discharge but the discharge went ahead regardless of the concern. On other occasions it was discovered once the patient was assessed by the mental health team in the community.

**Other issues (with less than ten reports) included:**

- **Discharge needs not assessed.**
- **Pre discharge plan not followed.**
- **Discharge delays.**
- **Discharged from general acute care but still physically unwell.**
- **Lack of beds at preferred discharge location.**
- Other rarely reported issues were:
  - Patient requiring a referral to another service (e.g. social worker) but this is not made.
• Concerns regarding the means by which the patient is transferred from one location to another.
• Funding issues with beds resulting in patients not being admitted to the required discharge location.
• Patient did not agree to be discharged.
• Package of care was not commenced in error.
• Patient self-harmed soon after discharge.
• Cannula left in situ.

6 Examples of incidents reported to the NRLS

<table>
<thead>
<tr>
<th>Theme</th>
<th>Incident</th>
<th>Degree of harm as reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparent breakdown or failure with communication</td>
<td>Patient was discharged home six days before we found out that the patient was discharged home. Patient had a right leg angioplasty on (date) with clips to be removed on (+ 6 days). Patient has ulceration of both heels which not dressed since date of discharged. Patient was also on Enoxaparin injection which she missed for six days. (reported as severe but unclear if actual severe harm occurred)</td>
<td>Severe harm</td>
</tr>
<tr>
<td></td>
<td>Despite being discharge 2 weeks ago, the case notes for a man who is considered high risk of violence and harm to self and others, who has a forensic history of prison sentences for violence are not yet available to CMHT. On enquiry why this is the case it appears that the discharge summary has yet to be even passed to the secretary to type up. They cannot routinely be released until the discharge summary has been dictated, and I have been told that the RMO cannot dictate the discharge summary without the case notes. CMHT and the Care Co-ordinator who has no previous knowledge / relationship with this gentleman do not have access to risk history or clinical assessment data. They are in effect working blind, with a gentleman who represents high risk of violence to self and others.</td>
<td>No harm</td>
</tr>
<tr>
<td>Problem related to medication</td>
<td>I was informed by Domiciliary Physio that patient had been discharged home on Sunday, following elective Total Hip Replacement. According to discharge summary letter patient should have been having receiving 14 days of Dalterparin Injections. When she visited today she found patient had not yet received any. Upon investigation I found: 1. Patient had not been referred to district nurse. 2. Patient had been discharged home without being provided with any of his discharge medication. 3. Discharging Doctor acknowledged that when he wrote TTO, he ticked that no medications were required. Additionally Ward Sister highlighted to me that local policy indicates patients having elective surgery should be commenced on Dabigatran tablets as opposed to Dalterparin Injections. Pharmacy informed and correct medication dispensed and delivered to patient. Patient and NOK informed.</td>
<td>Severe harm</td>
</tr>
<tr>
<td>Patient discharged from ward with medication omitted from discharge summary and not issued as part of his 7 days discharge medication. Discharge summary was late. GP phoned with concerns about this occurrence and wanted reassurance this would not happen again.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparent inappropriate discharge</td>
<td>Patient was discharged from [ward] to care home. Pt arrived at care home staff unhappy that patient appeared very unwell. 999 patient back to hospital pt died on route to hospital.</td>
<td>No harm</td>
</tr>
<tr>
<td>Apparent unexpected deterioration post discharge</td>
<td>Patient attended A&amp;E with SOB and ? chest infection. Diagnosed as PE and discharged home with dalatparin to be given by district nurse. Readmitted following morning as condition had deteriorated, assessed and admitted to [ward] where he deteriorated and despite involvement of [team] died around midday. Case subject to a Coroner’s Inquest</td>
<td>Death</td>
</tr>
<tr>
<td>Service user (name) was transferred to (unit) from (org name). On return to the ward (name) stated that she continued to feel physically and mentally unwell. She was unable to keep fluids down. Later began convulsing.</td>
<td>Moderate harm</td>
<td></td>
</tr>
</tbody>
</table>
Appendix – NRLS search strategy

NRLS analysis undertaken by Fran Wood, Patient Safety Lead (Clinical Review) and Leann Johnson, Clinical Fellow to Director of Patient Safety with support from Joan Russell, Head of Patient Safety and Frances Healey, Senior Head of Patient Safety Intelligence, Research and Evaluation.

**NRLS search strategy**
All incidents occurring between 1 October 2012 and 30 September 2013; and reported by 14 January 2014.

The NRLS was searched for:

- all incidents reported as death and severe harm themed as transfer/discharge incidents during NHS England clinical review process (n=90);
- no harm low harm and moderate harm incidents coded as:
  - IN0 5 Level 1: transfer/discharge incidents
  - IN0 5 Level2:
    - discharge delay/failure
    - discharge inappropriate
    - discharge planning failure; and
- all other care settings (apart from mental health-separate report)

All death and severe harm incidents were reviewed, and randomly generated samples of 100 no harm, 100 low harm, and 100 moderate harm incidents were reviewed.