Multidisciplinary assessment and delivering individual post fall protocols to care for any older person who has fallen during their stay

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Introduction

• Identifying the root cause and contributing factors to a fall
• A step-by-step guide to effective individual multidisciplinary assessment
• Reducing future falls risks: education and training of frontline staff
• Implementing an individual post fall protocol in practice
• How can we learn from falls incidents
Task given to us by Trust Safety Board

- Inpatient falls was one of the Key Performance Indicators (KPI) of the Croydon Health Services NHS Trust
- 2011: decreased general falls incidence by 25% within a 12-month period and injurious falls by 50%
- 2016: decreasing falls by a further 25%
- Is it achievable?
Challenges

- Cerner Millennium - electronic system incorporating falls care plan into daily documentation
- High staff turnover and new nursing staff employed (to achieve safer staff levels in ward)
- Dementia friendly zone - larger number of higher risk fallers in the same ward
NICE Guidelines
Falls (in Hospital) June 2013

- Cognitive impairment
- Continence problems
- Falls history, including causes and consequences (such as injury and fear of falling)
- Footwear that is unsuitable or missing
- Health problems that may increase their risk of falling
- Medication
- Postural instability, mobility problems and/or balance problems
- Syncope syndrome
- Visual impairment
FallSafe Project 2011

• Multi-professional
• > Five components
• Post-fall review
• Toileting plans
• Medication review
• Staff education
• Urine screening
General Falls Prevention

- To stop patients from falling around bedside
- Toileting plan; improved use of equipment in ward bathrooms such as toilet frames and raised seats
- MDT approach
- Prevention of bedsores in high risk patients
  - Regular turn chart
  - Pressure relieving mattress
  - Dietician review
- Early recognition and management of delirium
Multidisciplinary Team Falls Ward Round

- Bi-weekly WR
- Falls consultant, head of nursing, patients safety, and senior therapists
- Identification of patients on Datix system over 7 days
- Identify recurrent fallers and ward requiring special attention
- Joined by senior ward nurses/matrons
- Encourages ward based staff to analyse their own patients’ experiences to raise awareness and enable staff to think of falls as preventable and avoidable
- Action plan in place and re-checked in a few days
**Multidisciplinary Team Falls Ward Round Proforma**

<table>
<thead>
<tr>
<th>Falls Ward Round</th>
<th>✓ / x</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time reviewed by medical team</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Patient medical risk factors identified?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Neuro Observations completed?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Falls risk assessment completed on admission and care plan in place</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Level of risk identified</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Repeat falls risk assessment completed after fall</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Appropriate location on ward e.g. patient in a bay rather than in side room/close to nursing station</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Urine dipstick completed after fall (if appropriate) NB: Patient may already be receiving RX for UTI/had a urine dipstick &lt;24hrs prior to fall</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Non-slip socks in use</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bedrail risk assessment completed prior to use of bedrails (if appropriate)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Dementia screen completed</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Nurse special in use (if appropriate)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Therapy plan in use</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Walking aid close to bedside with name label (if appropriate)</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Confused patient!

- No one size fit all management plan
- Need to treat the underlying cause
- Precipitating factors:
  - Environmental change – home/staff/glasses/hearing aide
  - Hypoxia
  - Medications
  - Infections
  - Pain
  - Urinary retention and constipation
- Pharmacological – consider only when harm at risk eg wandering, patient in distress
- Hourly nursing round
- Need to be identified as early as possible in the shift
Metal bed rails banned

High low bed available
Non Slippery Socks

Banned from the wards

Freely available in wards
Colour coded according to falls risk
# Post Falls Assessment

<table>
<thead>
<tr>
<th>Date:</th>
<th>History/examination within 15 minutes of falls</th>
<th>Observation</th>
<th>Actions</th>
<th>Timeframe for doctor review</th>
<th>Actions Taken?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Head Injury</strong></td>
<td>Mental state and conscious level</td>
<td>Neuro obs – GCS, pupils, limb movement</td>
<td>Normal – continue neuro obs half hourly for two hours, then hourly for 4 hours, then 2 hourly thereafter for 18 hours</td>
<td>Within 24 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Below 13 – urgent review by doctors <strong>Inform Matron / Outreach</strong></td>
<td>Within 30 minutes</td>
<td></td>
</tr>
<tr>
<td><strong>Limbs</strong></td>
<td>New inability to move limb</td>
<td>Unable to move limb Pain</td>
<td>X ray within 2 hours</td>
<td>Medical review within 2 hours</td>
<td></td>
</tr>
<tr>
<td><strong>Laceration</strong></td>
<td>Laceration that may need suturing</td>
<td></td>
<td>Apply pressure to wound. Dress with sterile dressing</td>
<td>Medical review within 60 minutes</td>
<td></td>
</tr>
<tr>
<td><strong>Change in general observations</strong></td>
<td>New agitation and/or new confusion</td>
<td>2 of the 5</td>
<td>Observation hourly and inform senior nurse in charge <strong>Matron / Outreach</strong> <strong>VitalPac / PAR Score</strong></td>
<td>Medical review within 4 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Temp &gt; 37.4 Pulse &gt;100 Resp rate &gt;25 O2 sat &lt;95%</td>
<td><strong>VitalPac / PAR score</strong></td>
<td>3 or more of the 5</td>
<td>Call for medical review urgently</td>
<td>Medical review within 1 hours</td>
</tr>
</tbody>
</table>
Head injury -> neuro obs and GCS
  ◦ Medical review within 30 min for GCS <13 or decrease GCS

Limb injury -> neuro obs and GCS
  ◦ Medical review + X-ray
  ◦ Analgesia
  ◦ Need special manual handling

Laceration in wound -> sterile dressing
  ◦ Wound cleaning
  ◦ Analgesia
  ◦ Medical review within 4 hours if no major bleeding
<table>
<thead>
<tr>
<th>PAR</th>
<th>ViEWS</th>
<th>Risk Category</th>
<th>Observation interval</th>
<th>Action on 1st occurrence &amp; each rise in score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>0-2</td>
<td>Low</td>
<td>6 hours</td>
<td>Ordinary Vigilance</td>
</tr>
<tr>
<td>2</td>
<td>3-4</td>
<td>Medium</td>
<td>4 hours</td>
<td>Inform nurse in charge</td>
</tr>
<tr>
<td>3</td>
<td>5-6</td>
<td>High</td>
<td>2 hours</td>
<td>Inform nurse in charge &amp; Dr., &amp; consider Outreach.</td>
</tr>
<tr>
<td>4+</td>
<td>7+</td>
<td>Critical</td>
<td>1 hours</td>
<td>Inform nurse in charge &amp; Dr. &amp; Outreach.</td>
</tr>
</tbody>
</table>
Subdural haemorrhage following a fall

NICE guidance for observations for patients with a head injury

- Half-hourly for 2 hours
- Then 1-hourly for 4 hours
- Then 2-hourly thereafter for the next 18 hours
- Should a patient with GCS equal to 15 deteriorate at any time after the initial 2-hour period, observations **MUST** revert to half-hourly and follow the original frequency schedule.
Fracture neck of femur
The affected side is shortened and externally rotated
Scooper Stretcher

Manual handling tool for anyone suspected of fractures or intracranial bleed i.e. anyone not moving limb or neck or not arousable
Mandatory Training in Falls Prevention

- NHSLA Risk management standard of training regarding risks and falls involving patients and staff (NPSA 2007)
- Trust induction programme
- Update sessions yearly for all clinical staff working in the trust including medical doctors, registered nurses, healthcare assistants and therapists
- Pay rise withheld before completion of MAST training
Dear Dr Tan

Your request for de-escalation of the above SI was discussed at our PSARG/SIRM meeting yesterday and again declined.

As outlined in the SI Framework 2013 and in relation to this particular matter, a serious incident is an incident that occurred during NHS funded care which resulted in severe harm and results in prolonged pain.

This patient sustained a **pubic ramus fracture** following **the fall** and whilst it was **accidental, it should not have occurred**. An RCA will therefore need to be completed in line with the SI Framework, which we should have received by 06/02/2015.

This SI will be recorded as Overdue until we receive the final report.

Kind regards

Axxxxx
Quality and Clinical Governance Manager
South East Commission Support Unit
75% patients
ASA ≥3 c.f.
61% nationally
National hip fracture Database

Place of Admission (CUH)

Much greater proportion admitted from long-term care than nationally
Prof Don Berwick on Mid-Staff

- Hospital staff became blind to what was going on around them, assuming that the standards which were being tolerated were normal.
- Even as statistics showed alarmingly high death rates, the warnings were dismissed. He said: “This is the normalisation of deviance - the alarms were ringing but they went unanswered.“
- “Fear is toxic to both safety and improvement.”
- “Abandon blame as a tool and trust the goodwill and good intentions of the staff.”
- “Make sure pride and joy in work, not fear, infuse the NHS.”
Prescriber writes order for medication to which patient is allergic

Nurse gives patient a drug to which s/he is allergic

Patient's allergy history is not obtained

Pharmacist fails to check patient allergy status

Patient arrests and dies
Case 1: Mrs Smith

• Admission from home after sustaining a fall
• Mobilised to the ambulance herself and brought to hospital for assessment
• Reviewed in the post take ward round; admission to the EC ward for therapy team input
• No apparent medical cause of fall found; from collateral history from neighbours patient lives alone; increasingly confused; no immediate family
Case 1: Mrs Smith

- Fall in the ward early hours
- Patient continued to receive physiotherapy, but not making progress
- Developed hospital acquired pneumonia
- When recovered, physiotherapists attempted therapy again, but noticed patient had painful hip
- Hip x-ray arranged
Case 1: Mrs Smith

- Non displaced intracapsular right fracture neck of femur
- Diagnosed 5 weeks post fall
- Hemi-arthroplasty carried out
- Decreased mobility post op; bedbound
- Complications: pneumonia and pressure ulcer
- Passed away 6 weeks post operation
RCA

- Datix form done by staff nurse but not saved/sent
- Post fall protocol partially completed - not handed over to the medical team
- Not mentioned in nursing morning handover; medical and physio team not informed
- Interviews with individual nurses - little information as they could not recall the circumstances of the patient’s fall; only 1 sentence of documentation in the nursing notes
- Reflective learning from individuals; case presented in clinical governance and Safety Board Meetings
Case 2: Mr JD

- Mrs JD
- 84 years old
- Known dementia, but worsening
- Fell and sustained R Colles fracture
- NH no longer able to cope and will need EMI NH
- Recurrent falls and previous Fracture NOF
• Orthopedics team reduced fracture and put backslap on
• Admitted to dementia friendly ward
Ward Management

• Patient centred care - early nursing and physio assessment
• MDT approach - Pharmacists, medical, family and friends
• Build patients’ rapport with medical and nursing staff
• Wandering in the ward - door remains open
• Special nursing; DOLS
• Remove restraints (including catheters)
• Communal area - interaction with patients; photos and books
• Allow patient to sit in nursing office and doctors office - provided that the chair is secure!
• Regular nursing round
• No falls over 2 months!
• Bone Protection treatment started
• Moved into EMI NH
• Unfortunately sustained a fall in NH and fracture left wrist
Common Themes from Root Cause Analysis

- No case identified so far related to lack of care (apart from Case 1)
- A lack of application of Deprivation of Liberty for patients requiring 1:1 nursing
- Dementia care plan not integrated to Falls care plan
- Serious injuries more likely in the first fall in the ward
- Delay in diagnosis of fracture NOF
### Fracture NOF between Oct 11 to Sep 12

<table>
<thead>
<tr>
<th>patient</th>
<th>Number of hours between falls and diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>7</td>
<td>144</td>
</tr>
<tr>
<td>8</td>
<td>48</td>
</tr>
<tr>
<td>9</td>
<td>5.5</td>
</tr>
<tr>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>1000+</td>
</tr>
<tr>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>

### Fracture NOF between Oct 12 to Sep 13

<table>
<thead>
<tr>
<th>patient</th>
<th>Number of hours between falls and diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>?4-9</td>
</tr>
<tr>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>25</td>
</tr>
</tbody>
</table>
Causes of Delay in Diagnosis

• On-call radiographers not notified that x-rays are urgent; x-ray booked as OPD by mistake; booking X-ray appears to be a ‘reflex action’ rather than an investigation after careful examination
• The on-call medical teams and night nurses did not hand over the episode of fall to the day team
• Many nursing staff (and doctors) did not notice signs of fractures (pain, externally rotated and shortened leg)
• Lack of porters
• The Datix forms filled in by the initial reporter often downgraded the severity of the harm, as the fracture was not yet diagnosed at the time of reporting
Result of the RCAs

• Message from the Safety Board: If fracture happens in the night, aim is for patient to go to theatre the next morning

• New measures on Datix reporting
  - New questions asked
  - Mandatory updating of report in 1 month
Mapping of When Patient Falls

- Redesigned Datix forms
  - Useful data gathered and analysis
- Questions added
  - Location of fall
  - Time of fall
  - Staff level
  - Patient info – dementia, risk of falls
  - Prompting of falls actions
    - neuro obs, hip examination
  - Night sedation
- Revalidation in 1 month
• The periods during the day with high incidence of falls include
  • 1 am to 3 am
  • 5 am to 6 am
  • 7 pm to 8 pm
  • Reflection of the sleeping patterns of some patients
  • Between 7 pm to 8 pm is usually the hour of the nursing handover
## Mapping of Where Patient Falls

<table>
<thead>
<tr>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Away from bed (Same Bay)</td>
<td>69</td>
</tr>
<tr>
<td>Away from bed (Away from Bay)</td>
<td>31</td>
</tr>
<tr>
<td>Bedside</td>
<td>302</td>
</tr>
<tr>
<td>Chair</td>
<td>11</td>
</tr>
<tr>
<td>Not appropriate as community patient</td>
<td>14</td>
</tr>
<tr>
<td>Toilet / bathroom</td>
<td>58</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>485</strong></td>
</tr>
</tbody>
</table>
Fall Risk Assessment Completed on Admission
January 2014 > December 2015
Arrangements for Shared Learning

• Feedback to individual staff involved
• Serious Incident Review Group (SIRG)
• Trust Clinical Governance sessions
• Falls Prevention Group Committee
• Safeguarding Adults & Children Governance Group
• Integrated Adult Care Directorate Safety/Quality Board
• Croydon Clinical Commissioning Group
• Patients and families
Inpatient Falls Prevention Committee

- Trust appointment of Consultants
- Geriatricians and Head of Nursing, Patient Safety
- Clear terms of reference
- Bi-monthly meetings
- Members include matrons, department of governance, senior physiotherapists, health and safety managers and service improvement/transformation manager
- Invitation to non-executive Board members
Reduce Falls by a Further 25% by 2016

TRUST WIDE PLAN

- Outcome measure – number of falls that deteriorate in severity
- Enabling Patient Safety
- Address clinical priorities
- Reduce Falls by a further 25% by April 2016
- Outcome measure – incident reports via data, harm free care monthly, prevalence data

THEMES

- Improved communication and behaviours
- Leadership focus on safety
- Standardise good practice
- Review of current systems and practices
- Improve evidence based care
- Improve transition of care between organisations
- Safe and appropriate discharge
- Harm free care

PRIORITY

- Falls Care plan on Cerner
- Triangulate Falls incidence with other outcome measures
- Physio
- Workforce training
- Falls Prevention Group
- Targeted reflective practice exercises
- Weekly audits against Falls Prevention Policy and acting on results
- KHVD monthly deep dives
- Implement improvements through measurement and data
- Compliance to National guidance, Operational and Trust procedures
- Define pathways for accessing Falls prevention
KPI achieved – falls reduction 30% but over period of 3 years
Summary

- Choose the right patients with the patient centred care
- Post falls assessment paying attention particularly to head injury and fracture neck of femur
- Analysis of local data and understand the local demographics
- Think training / equipment / facilities
- Be realistic in setting targets
- Shared learning from Root Cause analysis investigations
Reference

- Falls Prevention Group: Proactive and innovative approach to reducing falls
  - Chantelle Beer, Jane Gorman, Heather Sud and Wallace Tan, Agility, Chartered Physiotherapists working with older people, winter issue 2013/2014

- FallSafe Care Bundle (Royal College of Physician, Royal College of Nursing)
Fallsafe care bundles RCP / RCN

Bundle for all patients

1. A history of previous falls and of fear of falling is taken at the time of admission - Admission process and paperwork need to be changed to include these items
2. Urinalysis is conducted on admission
3. New prescriptions of night sedation are avoided
4. A call bell is in reach
   - The existing call bell system must be able to reach all patient beds and chairs
   - Systems are needed for rapid repair of faulty call bells
5. Appropriate footwear is available and in use
   - Supplies need to be made available for patients without relatives or friends
6. There is immediate assessment for and provision of walking aids
   - Physiotherapists must train nursing staff to provide appropriate walking aids at the time of admission to the ward, or as soon as they might be required
   - Walking aids need to be made available for each ward area, and need a suitable storage area
Bundle for older and more vulnerable patients

7. A cognitive assessment (mini-mental state examination (MMSE) or abbreviated mental test score (AMTS)) is conducted in all admissions aged >70yrs.
8. Those at risk are tested for delirium (confusion assessment method).
   - Trusts must implement delirium screening as per NICE guidelines.
9. An assessment of risk versus benefit for use of a bedrail is conducted.
10. Visual assessment is conducted.
    - The ability to recognise objects from end of the bed can be used as a screen for severe eyesight problems, and fuller assessment should be carried out if required.
11. Lying and standing blood pressure are taken with a manual sphygmomanometer.
12. Medication is reviewed with respect to cardiovascular and central nervous system acting medications (see enclosure)
    - Nurses should request a review of medication to try and reduce the burden of drugs, particularly those associated with falls, and in patients who are unsteady, hypotensive, or have orthostatic hypotension.
13. Based on observation, toileting arrangements are assessed and planned (tailored to needs rather than the standard two-hourly arrangement).
Bundle for after a fall

14. After a fall, appropriate assessments and procedures are followed (see enclosure), including neurological observations in those who have hit their head or had an unwitnessed fall.
   -Trusts have been mandated to include these procedures within their policies by July 2011.
15. A post-fall review (how can further falls be prevented for this patient) is conducted.
16. A complete incident report (all falls) is created.
17. A root cause analysis (lessons to prevent falls for future patients) is carried out for severe harm falls.