Trust Board Meeting in Public: Wednesday 13 September 2017
TB2017.93

<table>
<thead>
<tr>
<th>Title</th>
<th>An Annual Review of the Serious Incidents Requiring Investigation (SIRI) and Never Events reported during Financial Year 2016/2017</th>
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<tr>
<th>Status</th>
<th>A paper for information and discussion</th>
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<tr>
<td>History</td>
<td>A summary paper presented to the Committee</td>
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<tr>
<th>Board Lead(s)</th>
<th>Dr Tony Berendt, Medical Director</th>
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<td>Key purpose</td>
<td>Strategy</td>
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Executive Summary

1. 112 Serious Incidents Requiring Investigation (SIRIs) were declared to the Oxfordshire Clinical Commissioning Group (OCCG) during the financial year (FY) March 2016-April 2017 (compared with 179 in the previous financial year). 6 SIRIs were subsequently downgraded leaving 106 SIRIs for this analysis. Analysis of trends shows an increase in reporting of patient safety incidents and reduced levels of incidents of moderate or greater harm.

2. This report describes the changes to the SIRI programme and allied quality improvement groups, which have been implemented in 2016/17 to further improve the SIRI process and the learning and improvement which ensues. Data is presented showing high levels of compliance with the duty of candour disclosure suggesting cultural change that is now embedded. Increased attendance at the SIRI forum from all multidisciplinary groups is noted as is the CQC’s report which described the forum as outstanding. The institution of patient safety alerts on the intranet following work by the Clinical Effectiveness Committee has allowed better dissemination of the most imperative lessons from SIRIs (more than 12,000 hits to date).

3. The 5 categories of SIRIs which occurred most frequently were
   - Pressure Ulcers (31)
   - Falls and fractures (9)
   - Diagnostic related including delayed diagnosis (9)
   - Hospital acquired thromboses (8)
   - Medication (6)

   Themes and actions taken are presented in detail for these categories in the report. Additional information is supplied with respect to incidents where deaths occurred and the influence of test result endorsement and discharge summaries is also considered.

4. Future plans for further improvements to the SIRI process and overall quality and safety are described

5. Recommendation

   The Committee is asked to note the contents of this report.
1. **Purpose**

1.1 The purpose of this paper is to inform the committee of the trends in reported Serious Incidents during the last financial year (FY) March 2016-April 2017. The paper provides information to the committee on actions taken to prevent recurrence of these types of incident and ongoing work to embed both a culture of safety and the duty of candour across the Trust.

2. **Review of numbers of Incidents and SIRIs**

2.1 During the FY 2016/17 112 SIRIs were declared by the Trust via the Strategic Executive Information System (STEIS), NHS England’s web-based serious incident management system.

2.2 Six of these SIRIs were downgraded (with agreement from the Oxford Clinical Commissioning Group (OCCG)) leaving 106 SIRIs in 2016/17. The number of SIRIs has decreased by 59 compared to 2015/16 (see Section 6).

2.3 In 2016/17, 0.5% of all incidents reported on DATIX involved moderate or greater levels of harm (compared with 1.2% in 2015/16) and 0.65% of patient related incidents involved moderate or greater levels of harm (compared with 1.3% in 2015/16).

2.4 Graph 1 shows all incidents at Oxford University Hospitals NHS Foundation Trust (OUHFT) between April 2013 to August 2017 – this is the longest period currently measurable on Orbit plus. This demonstrates the overall incident reporting culture in the Trust over this period.

**Graph 1** All incidents between February 2013 and August 2017 showing an overall increase in reporting from 1716 incidents per month to 2344 incidents per month

2.5 Patient safety incident reporting peaked in July 2016 rising to more than 2 standard deviations from the mean of the reports for the three years. Reporting is greater in 2016/17 than 2015/16 (see Graph 2).

2.6 It is difficult to attribute this to single events. Changes to culture and process include the Trust’s drive to encourage reporting in February 2016, initiation of the SIRI forum in June 2016 and enhancements to DATIX highlighting duty of candour. Recent events include switching on the feedback function in DATIX which occurred in March 2017. This was followed by a dip in incident reporting in April but the incidents have now increased again in May 2017.
Graph 2 Incident reporting trend data for patient safety incidents (only) January 2014-March 2017 showing an increase year on year which is now past its peak.

Graph 3 Trends in number of patient safety incidents of moderate and greater harm (IMaGH) from January 2014-March 2017 showing a progressive decrease in harm.

2.7 The trends in IMaGHs reflect a developing safety culture and the quality improvement work going on in all the workstreams mentioned in this report and in the divisions and corporate teams.

2.8 National comparators of incident reporting show that OUHFT is in the highest third of incidents reported per 1,000 bed days in the acute organisations category with 44.06 incidents reported per thousand bed days. This is a rise of 2.2 incidents per 1,000 bed days compared to 2015/16. This suggests a good and improving reporting culture (see Graph 4).
Graph 4 shows the rate of incidents reported per 1,000 bed days between April 2016 and September 2016 by acute (non-specialist) organisations each vertical line is an acute provider, OUH is depicted by the black line.

3. The SIRI Forum process

3.1 The SIRI forum is a weekly meeting where incidents are presented and the level of investigation is decided by a multi-disciplinary team (MDT) with divisions and teams encouraged to attend and to take ownership of the decision about the level of investigation. It is a forum founded on just culture and mutual respect. This meeting also has subject matter experts such as tissue viability nurses, the Chief Clinical Information Officer (CCIO), Information Governance, human factors and the Thrombosis Lead as required.

3.2 Attendees at the forum during the year include The Trust’s Chair and CEO; Non-Executive Directors including the Chair of the Quality Committee; representatives of the Academic Health Sciences Network; The Medical Director of the Healthcare Safety Investigation Branch; other trusts including Oxford Health and Worcester; as well as Medical and Nursing students from Oxford and other UK centres.

3.3 Attendance at the SIRI forum: SIRI forum attendance has increased significantly and the range of expertise has widened. On average 28 people attended a SIRI forum and the range was 15 to 40 over this 52 week period.
3.4 A CQC inspection in October 2016 which published its report in May 2017 described the weekly SIRI forum open to all staff to discuss learning from incidents and duty of candour requirements as ‘outstanding’.

3.5 A letter from the Deputy Medical Director has been produced as an informative document sent to all new attendees and attached to the SIRI forum agenda. Its purpose is to explain the SIRI forum process, its ethos and aims.

3.6 All incidents reported on DATIX are screened by the central Clinical Risk Management team (CRM) who meet weekly with the Deputy Medical Director and Head of Clinical Governance with a provisional list of incidents that may meet the criteria of a SIRI or have important cross divisional shared learning. The provisional list is agreed and a final agenda is circulated to all SIRI forum attendees.

3.7 Following on from a Care Quality Commissioning (CQC) inspection on Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) reportable incidents it was agreed that the SIRI forum would be an effective place to monitor these incidents. Consequently, Medical Physics review all DATIX incidents labelled as radiation and inform central CRM which are IRMER reportable; these are then presented at the SIRI forum.

3.8 The Tissue Viability (TV) team verify all DATIX reported hospital acquired category 2, 3 and 4 pressure ulcers and inform central CRM which should be
included on the SIRI forum list. Discussions are in progress to remove those ulcers which TV decide are unavoidable.

3.9 Any DATIX incident with a hospital acquired thrombosis (HAT) is reviewed by the Thromboprophylaxis team (TP) team and a HAT screen completed to ascertain if it is potentially preventable. TP will inform central CRM when there is a potentially preventable HAT that requires inclusion on the SIRI forum list.

3.10 Monthly meetings occur between central CRM and the Trust’s Legal team to go through all open inquests. Any inquest that may meet the criteria for a SIRI are cross checked with the DATIX system and a review by the Division is requested. This is an extra safety net for identifying potential SIRIs.

3.11 The corporate CRM team, together with input from other teams such as the TV team were successful in submitting a poster showing the work and accomplishments around monitoring and execution of DoC (see Section 5 for more details around the DoC). This was presented at the Patient Safety First conference in November 2016. (see Appendix 1)

3.12 The Trust’s Health and Safety (H&S) team report any patient harm from a fall to the Health and Safety Executive (HSE) as a Reporting of Injuries and Dangerous Occurrences Regulations (RIDDOR) report. To aid this process the SIRI forum was identified as a place that can identify and discuss falls where harm has occurred. Consequently central CRM, the Falls Prevention team and the Clinical Governance and Risk Practitioners (CGRPs) have all worked together to produce an ISR specifically for falls that raises pertinent questions regarding the incident so that the falls and H&S teams can establish if it is RIDDOR reportable.

3.13 Two separate OCCG closure meetings are held each month between the OCCG and the OUHFT. There is a hospital-acquired pressure ulcer (HAPU)/falls SIRI closure meeting held with the Deputy Chief Nurse, TV, CRM and the OCCG and a SIRI closure meeting for all other SIRI investigations with the Deputy Medical Director, Head of Clinical Governance, Clinical Governance Risk Manager and OCCG representatives.

4. **Additional training and communication activities include**

4.1 A new training package for investigators has been developed to aid with the root course analysis investigation process.

4.2 Training by the Patient Safety Academy has continued to be funded externally and offers training for staff on human factors and quality improvement.

4.3 A local CQUIN was negotiated in 2016/17 for extended training and train the trainer courses in OxSTaR – all milestones were met in full contributing to the Trust’s safety and sustainability.

4.4 Presentation to the Foundation Year 1 Doctors and foundation nurse workshop on professionalism in practice July 2016 and new teaching session for FY2s on complaints and incident reporting (all FY2s stated in feedback that they agreed or strongly agreed that the training was engaging and relevant).
4.5 Presentations to Medical and Surgical Grand Rounds on Never Event investigations and the influence of situational awareness and human factors in incidents have been given in collaboration with OxSTaR and by the patient safety academy contributing to safety culture in the Trust.

4.6 Patient safety alerts on the front page of the Trust intranet were developed as a project of the Clinical Effectiveness Committee (and its Chair) and have had >12,000 hits. At least ten of the alerts relate to publicising actions arising from serious incidents.

5. **Duty of Candour (DoC)**

5.1 The legal, professional and regulatory DoC has been embedded into the Trust’s day to day processes within the divisions with weekly monitoring via the SIRI Forum.

5.2 DATIX incident reporting forms were initially redesigned in 2016/17 and further alterations have now been incorporated to provide decision support on DoC for any incidents which are of moderate or above harm.

5.3 Since January 2017 the central CRM team updates DATIX as a failsafe system following each SIRI forum’s discussion to ensure that it accurately reflects actions relating to the DoC.

5.4 The CGRPs upload the written evidence of DoC onto each incident record in DATIX.

**Graph 6** shows responses recorded on DATIX to the question ‘Has the person(s) affected or their representative been made aware of the incident and offered an apology?’

![Graph showing responses to DoC](image-url)
Graph 7 shows responses recorded on DATIX to the question ‘Was the Person affected or their representative offered a written notification of the incident?’

Table 1 DoC compliance from 2016/17 by quarter

<table>
<thead>
<tr>
<th>Financial quarter</th>
<th>Verbal notification</th>
<th>Written notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Q2</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Q3</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Q4</td>
<td>100%</td>
<td>97%</td>
</tr>
</tbody>
</table>

Graph 7 and Table 1 show that one written DoC was not completed for one individual who had moved abroad and despite repeated attempts it had not been possible to contact them.

6. **An overview of the 106 SIRIs declared over the last financial year**

6.1 This financial year has seen a 39% drop in the mean number of Serious Incidents declared per month from 13.8 to 8.3 and the median has also seen a decrease of 43% from 13 to 7.5 investigations declared per month.

6.2 The most positive explanation is a real decrease in the occurrence of harm to patients in face of a well-evidenced positive reporting culture. A project is in progress with the coding and information teams to examine whether HES data can be used to exclude any increase in coded but unreported harms.

6.3 One additional factor is a new criterion introduced for classifying the level of investigation to undertake for HAPU in November 2016 which has reduced the number of HAPU incidents being declared as a SIRI but this is not the only contributory factor to the overall decrease (see Section 9). The total decrease in SIRIs in FY 2016/17 compared to the prior year is 59. A mean of 4.2 pressure ulcer SIRIs were declared per month in the year to September 2016 and 1.2 per month thereafter. The impact of the change in policy is likely to be 15 fewer SIRIs declared in the last 5 months of FY 2016/17.
6.4 Graph 8 shows the number of SIRIs of all types declared during 2016/17. The vertical line indicates when the implementation of the new criteria for HAPU incident classification occurred.

![Graph 8](image)

6.5 The decrease in SIRIs being declared may in part be due to the increased attendance of ‘experts’ from the multi-disciplinary team as additional information can be presented and queries raised cumulating in more robust discussions surrounding an incident. This has led to a more thorough understanding about an incident and therefore a level of investigation decision being made with an increased knowledge-base. It may also reflect the increased multidisciplinary attendance at the SIRI forum.

6.6 There were no delays in completing SIRI reports beyond the national guidance time scale of 60 working days or an agreed extension from the CCG. This is an improvement compared to 2015/16 where there were 2 delays.

6.7 Table 2 shows the number of SIRIs investigated per Division.

<table>
<thead>
<tr>
<th>Division</th>
<th>SIRIs declared</th>
<th>Downgraded</th>
<th>FFCE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS</td>
<td>10</td>
<td>0</td>
<td>2,206</td>
</tr>
<tr>
<td>C&amp;W</td>
<td>22</td>
<td>3</td>
<td>26,604</td>
</tr>
<tr>
<td>MRC</td>
<td>25</td>
<td>1</td>
<td>59,495</td>
</tr>
<tr>
<td>NOTSS</td>
<td>24</td>
<td>1</td>
<td>40,003</td>
</tr>
<tr>
<td>S&amp;O</td>
<td>28</td>
<td>1</td>
<td>55,851</td>
</tr>
<tr>
<td>Corporate</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* Total number of first finished consultant episodes (FFCE) for elective admissions, day cases and non-elective episodes
6.8 Numbers of SIRIs broadly reflect the size of the Division. CSS has only a small number of finished consultant episodes attributed to it but has many patients passing through its theatres and intensive care units where the SIRI may be assigned to CSS even though the patient's episode is logged under a different division. To note some SIRIs require cross-Divisional input, the table may show the lead Division who will investigate but other Divisions may have had equal input into the findings and conclusions of the report.

**Graph 9** shows the number of SIRIs declared by Division

![Graph 9](image)

**Graph 10** shows the number of SIRIs by site with the most at the JR site which also has the largest patient activity

![Graph 10](image)

7. **Downgrades of SIRIs**

7.1 Six SIRIs were downgraded, five of these incidents were declared as SIRIs outside of the serious investigation framework because they fall under the specialities of Information Governance (IG) or NHS screening (led by Public Health England (PHE)). IG and PHE have their own published set of criteria
for declaring SIRIs and therefore advise the OUHFT on the level of investigation required.

7.2 **Information Governance:** Two incidents were initially declared as a SIRI by IG but once further facts were established a decision was made with the Information Commissioners Office to downgrade the incidents with no further investigations required.

7.3 **Screening incidents**

7.3.1 There were three screening incidents declared, two anomaly scan screening incidents and one neonatal physical examination incident. PHE declared that these should be SIRIs based on the Managing Safety Incidents in NHS Screening Programmes framework (NHS screening Programmes 2015).

7.3.2 Screening incidents involve monthly meetings with a multidisciplinary team including PHE. The guidance requires that these are chaired by an executive or deputy (commonly the Deputy Medical Director), minutes are taken and terms of reference co-agreed. A downgrade of these two incidents was proposed and accepted by PHE due to the evidence provided by OUHFT that published detection rates for limb abnormalities are considerably lower than 100% (50-70%) and images are not captured for this diagnosis as they can be misleading. A downgrade was also accepted for the neonatal examination incident after a case review had been held and evidence provided of the detection rates and initial examinations carried out. All three incidents were still investigated internally and the final reports were sent to PHE as requested. PHE provided positive feedback about the quality of the reports.

8. **Analysis of types of SIRI and themes within these categories**

**Graph 11** provides an overview of the 165 SIRIs reported in 2015/16 and the 106 SIRIs reported in 2016/17 by category demonstrating that HAPU remains the highest reported category.
8.1 Some incidents may span two categories for example a venous thromboembolism (VTE) may be in the VTE category but also have aspects of medication safety if anticoagulation was not administered appropriately. When reporting on STEIS a single most dominant category is chosen.

8.2 The greatest number of SIRIs reported in 2016/17 related to pressure ulcers. Detailed analysis of the top five most common categories of SIRI is presented below. In addition SIRIs related to deaths have been reviewed and those incidents that relate to the review of test results or incidents relating from discharge summaries.

9. **Category 3 and 4 hospital acquired pressure ulcers (HAPU)**

9.1 SIRIs were declared where serious harm to the patient was deemed to have occurred (as defined by the Tissue Viability Society Consensus Paper, 2014) and there is undocumented deviation from the Trust Pressure Ulcer Prevention Policy (2015). All other HAPU related incidents are investigated within the Divisions.

9.2 During 2016/17, 31 HAPU SIRIs were reported. All investigations were for category 3 pressure ulceration, as defined by the European Pressure Ulcer Advisory Panel (2014). No category 4 pressure ulcers were reported.

**Graph 12** shows the total number of pressure ulcers in each quarter and their anatomical locations.

![Graph showing total number of pressure ulcers in each quarter and their anatomical locations.]

9.3 A decrease in incidents reported as a SIRI occurred in Q3 and Q4 2016/17. This reflects the changes made in response to the Care Quality Commission’s (CQC) publication in Q2, suggesting that learning from incidents was being stifled by the burden of investigation, a review of the investigation process and decisions related to HAPU was undertaken. A national position statement (TVS, 2010) was consulted to assist with the definitions of harm following pressure ulceration formation, alongside a review of current policy. A paper was presented at Clinical Governance Committee reflecting the findings of the review and was agreed Trust wide
and approved by the local Commissioning Group. A review of the process has been scheduled for Q3 of FY 2017/18.

9.4 **Themes:** Aggregate analysis of the investigation summaries has been undertaken in order to identify common themes.

9.5 Pressure damage to sacral and heel areas are the most common anatomical locations for SIRI HAPU. The incidence of heel pressure ulceration declined in Q3 and Q4 following the launch of the e-learning module and changes to associated guidelines along with input from the Inpatient Podiatry team.

9.6 Medical device reported incidents continue to present an issue at 26% of those HAPUs reported as SIRIs. The increase in reporting of device related pressure damage reflects increased awareness of thorough skin assessment and early identification. The pressure ulcer prevention e-learning module highlights the requirement for the reporting of device related pressure damage and the need for further investigation.

9.7 Approximately 65% of all category 3 pressure ulcers had deteriorated from an earlier reported category 2 pressure ulcer. The Tissue Viability Team will commence validation of all category 2 HAPU from April 2017, to support timely care and earlier remedial interventions.

9.8 **Themes from root cause analysis of HAPUs:** All Serious Incident investigations demonstrated failure to comply with the Trust Policy for the Prevention of Pressure Ulceration (2015). Below is an analysis of the common themes.

9.9 **Care planning:** A consistent theme through the majority of the investigations was a lack of appropriate care planning in order to reduce the risk of pressure ulcer formation or deterioration of pre-existing damage. This is in line with the findings of the annual clinical audit of the Pressure Ulcer Prevention Policy. The lack of appropriate care planning resulted in variation of remedial interventions. Significant work has been undertaken to raise awareness of the importance of care planning to reflect patients care needs. The Tissue Viability team has been instrumental in the development of an electronic care plan for the EPR system due to be launched in 2017/18.

9.10 **Skin assessment:** Delays or inaccurate skin inspection was a common theme, specifically associated with medical devices and areas of skin not routinely associated with pressure damage, such as elbows. Guidelines have been updated to address deficiencies related to skin assessment under specific devices such as non-invasive ventilation (NIV) masks. A Patient Safety Alert to support the checking of skin under devices has been communicated and a project group formed to identify further learning. The inconsistent documentation of care delivery related to the above themes was a frequent theme. Documentation audits and monitoring of compliance remain the responsibility of the Ward Sisters and Matrons.

9.11 **Actions:** A Trust work plan was developed and monitored for this time period to reflect the learning and support remedial actions from incidents. The work plan has been revised for 2017/18.

9.12 A total of 1413 clinical staff undertook either Pressure Ulcer Prevention Classroom updates (461) or e-learning (952). High impact training has been delivered by the Tissue Viability team to support Divisional areas in 2016/17.

9.13 The Pressure Ulcer Prevention Clinical Improvement Group (PUPCIG) reviewed progress of all SIRI HAPU related action plans. Clinical areas presented evidence to support the completion and closure of actions. All
incidents during this time period were closed at Commissioner and Trust level.

10. Diagnostic related serious incidents (including delayed diagnosis)

10.1 There were nine incidents in the category of diagnostic related incidents which is seven fewer than in 2015/16. These events are evenly spread across the different divisions and are disparate in themes.

10.2 Missed opportunities for results to be acted upon

10.2.1 Three relate to incidental findings on radiological tests requested for unrelated reasons.

10.2.1.1 A lung lesion detected on a CT scan done for an unrelated condition of a different organ system was reported in an addendum to the initial report but this was mistaken for a duplicate report by the patient’s GP.

10.2.1.2 A CT for a gynaecological condition showed a pulmonary embolus (PE) but the system for communicating urgent results failed and a two week delay occurred.

10.2.1.3 A chest x-ray (CXR) was reviewed by doctors during a ward round and thought to be normal and the patient was discharged. A radiology report suggested a possible tumour and further investigations were delayed because the result was not seen, acted upon or endorsed.

10.2.2 A histopathology result which was not reviewed for several years resulting in a spread of cancer where the disease was expected to be non-cancerous. This has some parallels with the failure to act on unexpected and incidental findings and highlights the need for teams to use supportive technology such as results endorsement.

10.2.3 Patients lost to follow up.

10.2.3.1 One patient moved to Oxford after being treated for cancer and was seen in clinic but then lost to follow up. The patient presented 3 years later with cancer. The root cause was identified as system errors and actions have been embedded within the department to prevent any further system failures for the follow up of patients.

10.2.3.2 The other patient lost to follow up had a delay of 6 weeks when referral between teams failed which caused unnecessary delay and anxiety for the patient.

10.2.4 One SIRI related to a patient having a laparoscopy where the wrong area of the abdomen was examined due to a lost opportunity to review a CT from another Trust and a misinterpretation of a transcription on an MDT form.

10.2.5 Emergent care

10.2.5.1 The other two incidents relate to emergency care and diagnosis.

10.2.5.2 In one case a very rare complication of surgery, done elsewhere, was missed and a significantly abnormal blood test which might have prompted admission was not acted upon. Retrospective review suggests there was no earlier
opportunity to make the correct diagnosis until the patient deteriorated and died in theatre.

10.2.5.3 In the second case time critical stroke care was not delivered due to the team from another specialty being unaware of how to initiate the stroke pathway inside the hospital – this has in part given rise to the quality priority on time critical care.

10.2.6 Actions arising from these SIRIs include

10.2.6.1 Instituting pools and proxies for the review and endorsement of results by teams on EPR particularly during leave.

10.2.6.2 Improved access to imaging from other trusts including in MDTs.

10.2.6.3 Clarity about the consultant responsibility for patients discussed in MDTs.

10.2.6.4 Tracking lists and databases for patients under long term follow up e.g. for cancers or after specific surgical procedures requiring onward surveillance.

10.2.6.5 Improved access to images for radiologists including 'scout' images for CT scans.

10.2.6.6 Failsafe emails rather than faxes for urgent findings on X-rays.

10.2.6.7 Letter from the Medical Director to all clinical staff re-referalls between teams having consultant input and responsibility.

10.2.6.8 e-requesting for histopathology is now mandatory to ensure results go into a pool to be endorsed and are highlighted on EPR which does not occur with paper requests.

11. Falls and Fractures

11.1 Nine falls were reported as SIRIs during 2016/17. Three of the incidents occurred on the Oncology Ward, with two incidents on Level 7 of the John Radcliffe. The remainder took place on the Emergency Assessment Unit (EAU), Short Stay Ward and Bedford Ward on the John Radcliffe site, with one SIRI on Oak Ward/CCU on the Horton site.

11.2 Acute General Medicine, Geriatrlogy and Oncology ward areas frequently admit patients who have a high risk of falls. All three areas have a high volume of acutely unwell and elderly frail patients. Five of the SIRIs were in MRC, with three SIRIs in the S&O Division.

11.3 The majority of serious incident investigations related to falls with a fractured hip or neck of femur, two were subdural haematomas.

11.4 Falls giving rise to SIRIs had the highest prevalence in the morning or at bedtime when patients were getting up from their chairs or beds unaided for toileting purposes, and then fell, even if they had their call bell to hand and had been asked to call for assistance. These are also the times where staff are completing handover or busy completing medication rounds.

11.5 Table 3. Review of the root causes in relation to the lessons learnt from SIRI falls.
<table>
<thead>
<tr>
<th>Root Cause</th>
<th>Lessons Learnt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falls assessments not acted on/completed/inaccurate</td>
<td>Complete all nursing assessments on admission to identify risks – ensure care plans are in place.</td>
</tr>
<tr>
<td>Safety measures not formally documented/implemented</td>
<td>Safety measures to be documented and implemented on EPR. Care plans to be formalised to include safety measures and equipment utilised.</td>
</tr>
<tr>
<td>Nursing delays – such as medication rounds</td>
<td>Ensure patients at risk of falls are supervised as much as possible, ask another staff member to monitor patient.</td>
</tr>
<tr>
<td>1:1 supervision not provided to patient</td>
<td>Patients with known falls risk to be closely supervised and have formal assessments and documentation – “Baywatch” pilot in ward areas with high number of falls.</td>
</tr>
<tr>
<td>Bedrails raised/bedrail assessments not completed</td>
<td>Education on causes of falls/prevention of falls</td>
</tr>
<tr>
<td>Ward layout</td>
<td>FallSafe risk assessment and care plans. Avoid side rooms if possible for patients at risk of falls as less visibility. Keep curtains open in bay areas as much as possible.</td>
</tr>
<tr>
<td>Failure to identify patients who are at high risk of falls (condition/medication)</td>
<td>Complete falls risk assessments – changes in cognition and physical condition</td>
</tr>
<tr>
<td>Patients with delirium/dementia/confusion</td>
<td>Ensure patient is supervised, given bed in a ward environment.</td>
</tr>
<tr>
<td>Falls risk assessments not reviewed and updated throughout the patient pathway</td>
<td>Reassess falls risk with deterioration and change of environment. Importance of handover to understand previous care and patient needs.</td>
</tr>
</tbody>
</table>
Graph 13 shows the number of SIRI falls in 2016/17 by Quarter.

11.6 There were three falls in each of the first three quarters of 2016/17 and none in Q4. Six of the nine SIRI incidents took place between May and August 2016. Four of the six incidents between May and August 2016 were unwitnessed falls.

11.7 The FallSafe training is an ongoing quality improvement programme that is being rolled out to priority areas initially i.e. those with the highest number of high impact falls with harm. Those ward areas that have had SIRIs reported in 2016/17 were also given the opportunity to have High Impact Training with the Falls Prevention Practice Educator, considering the incident in great detail as well as the other aspects of falls, such as safeguarding and finance.

12. Potentially preventable hospital acquired thromboses (HATs)

12.1 The Trust is required by the national service contract to perform root cause analysis of all confirmed cases of pulmonary embolism and deep vein thrombosis acquired by patients whilst in hospital (both arising during a current hospital stay and where there is a history of hospital admission within the last 3 months).

12.2 HATs are recorded as ‘not potentially preventable’ if all thromboprophylaxis (TP) (mechanical and pharmacological) was prescribed and administered according to guidelines throughout admission. If there is any accidental omission, even if this is only one unexplained missed dose of pharmacological prophylaxis during a 20 day admission, then it is reported as ‘potentially preventable’ HAT as per national criteria. This is not in itself a conclusion that clinical harm has resulted from any omission.

12.3 There has been increased reporting of potentially preventable HATs at OUHFT: in 2014/15 there were 4, in 2015/16 there were 20, and in 2016/17 there were 38 (Graph 14).
12.4 This is as a result of improved detection following on from changed reporting systems in 2015/16 (Q2). The process was changed in two key ways. Firstly, rather than sending an uncompleted HAT screen form to the patients consultant, the VTE prevention nurses started to partially complete the HAT screen with information available from EPR, including highlighting any potentially ‘missed’ doses of dalteparin or mechanical thromboprophylaxis, before sending to the patient’s consultant. This increased the ease of completing the form for the consultants, and also increased the accuracy of the returned form. Secondly, the Medical Director’s Office supported the VTE Prevention team in following up uncompleted HAT screens which has significantly increased the speed and overall percentage of HAT screens returned by consultants in a timely manner.

12.5 When the SIRI forum was set up, all potentially preventable HATs were graded at moderate harm or above and discussed in the weekly SIRI forum. As new safety nets are introduced the aim is to reduce the level of harm resulting from omissions, and ultimately to reduce the percentage of HATs which are potentially preventable. Since January 2017 some HATs have been reported as minor harm which reflects that some are very minor omissions e.g. 1 missed dose in a 20 day admission (dalteparin prescribed but not administered).

12.6 **Data for 2016/17:** During 2016/17, 38 potentially preventable HATs were identified. Almost all of these potentially preventable HATs were discussed at SIRI forum, and a SIRI level investigation was considered appropriate for 8 of them. The breakdown of potentially preventable HATs per Clinical Division is shown in Graph 15.
12.7 Root cause analysis of potentially preventable HATs demonstrates the following themes:

- No action taken from completion of e-VTE risk assessment to prescribe VTE prevention measures
- Delay in prescribing prophylactic dalteparin peri-operatively, particularly in patients awaiting emergency surgery
- Delay in review and re-prescribing dalteparin following temporary stopping around high risk bleeding procedures such as lumbar puncture
- Failure to prescribe extended thromboprophylaxis
- Failure to prescribe mechanical thromboprophylaxis: such as intermittent pneumatic compression in stroke patients and anti-embolic stockings in medical patients who have a contraindication to pharmacological thromboprophylaxis

12.8 Action plan: The VTE prevention team’s action plan includes patient safety initiatives developed following root cause analysis of these incidents, as well as from regular audits:

12.9 The Trust VTE Prevention and Management of DVT in Adults policies were updated in July 2016. The related VTE Prevention Medicines Information Leaflet was also updated to include a one page practical flowsheet, and to highlight perioperative management of dalteparin prophylaxis.

12.10 Improved e-learning and education packages. Doctors and pharmacists, nursing, and healthcare support workers VTE prevention e-learning module and assessment updated January 2017. The e-learning has been made more practical, and key areas of safety concern are highlighted.

12.11 Use of the Trust-wide Patient Safety Alerts on the intranet to disseminate critical safety advice and new guidelines, including dissemination of learning from SIRI investigations.

12.12 Updated eVTE risk assessment with outcomes linked directly to prescribing in e-PMA (implemented Dec 2016).
12.13 Improve prescription of mechanical thromboprophylaxis (antiembolic stockings (AES) and intermittent pneumatic compression (IPC)) and documentation of safety checks. Prescription of AES should be improved by linking the VTE risk assessment to e-PMA. EPR Nursing Care Plan for AES and IPC have been designed, reviewed and approved by EPR Clinical Advisory and the Nursing Electronic Documentation Groups. The estimated time frame for implementation is September 2017.

12.14 A new robust quarterly audit of ‘appropriate TP’ - a key safety measure required by both NICE quality standards and the national service contract - was introduced in July 2016. It has been undertaken by pharmacy and the results analysed by the VTE prevention team. This audit demonstrates improvement in appropriate TP during the last year: overall appropriate TP at OUHFT was 94.2% July 2016, 94.8% October 2016, 96.7% January 2017 and 98.0% April 2017. This improvement is likely to be due to: feedback of robust data around appropriate TP, upskilling of pharmacists in VTE prevention, the linking of an updated eVTE risk assessment to e-prescribing in December 2016, and the education around mechanical TP undertaken by the VTE prevention nurses.

13. Medication Incidents

13.1 There were six serious incidents reported where medication was the key cause. Three of which occurred in the NOTSS Division, with one each in MRC, C&W and S&O. Five of these incidents involved high risk medicines. This is a greater than 50% reduction when compared with the 14 reported in the previous year.

13.2 Key themes across these incidents were: communication, technology, transfer of care, team working, education and training, and policies, procedures and guidelines. Most patients had complex medical histories and care had been provided across a number of departments and specialities.

13.3 Pressure to expedite the patients care was a contributory factor, especially at discharge.

13.4 Issues arose with the staff interaction with the electronic prescribing and administration system some of which were related to this becoming embedded as routine practice whilst others pertained to usability of the system. Major changes have been successfully implemented as a result of the learning from incident investigations but training is an ongoing need.

13.5 The other main theme related to policies, procedures and guidelines where there was a lack of awareness of local guidance, lack of standardisation or failure to follow guidelines. Documents have been revised with changes to induction and training in areas where the incident occurred.

14. SIRIs in which the patient died

14.1 14 SIRIs were related to patients who died. These are cases where the patient died but the incident which was the subject of the investigation may not have impacted on the eventual outcome.

14.2 All SIRIs related to deaths have been presented to the Mortality Review Group (MRG) by the investigator to ensure Trust wide learning and review. MRG has consultant representation from all divisions except Women’s and Children’s where nursing or safeguarding representation is usually present.
14.3 Of the 14 SIRIs related to deaths; there are four related to failure to rescue; two neonatal deaths; four where diagnoses were not made sufficiently rapidly and one fall. The other deaths do not readily fall into a category and are unique.

14.4 Each incident has been investigated in great detail and has extensive recommendations which do not lend themselves to brief summaries which cannot reflect the extensive learning and actions put in place.

14.5 The two neonatal deaths relate to not recognizing the onset of sepsis in labour or the significance of meconium liquor as a sign of fetal distress with a lack of sufficiently swift action to deliver the baby. Lessons include new guidance, requirement for medical review of all admissions to delivery suite after transfers, and strict adherence to early warning chart alerts.

14.6 The diagnostic incidents relate to lack of recognition of psychological deterioration and a subsequent suicide at home; lack of diagnosis of a late complication of a vascular procedure because the patient was too ill to have a scan at the usual time interval; and failure to recognise sepsis and a perforation after a procedure in a patient who was already unwell with pancreatitis. Actions to prevent repetition of these incidents are extensive but include publicizing access to the psychological medicine team, a database to track all patients with a particular type of vascular procedure through their follow up, and a protocol to perform CT scans on all patients admitted for >24 hour for pain after a type of endoscopy. A further death is described under the Section 10 and is felt to be unavoidable.

14.7 Four deaths with an element of failure to rescue include a patient in whom oxygen was administered in increasing concentrations without escalation to medical staff overnight and who did not respond to treatment after late escalation; failure to recognise the onset of second degree heart block in a cardiac patient in part because ECGs were discussed with but not reviewed by sufficiently senior doctors; and a prescription error in which three doses rather than three days of antibiotics were prescribed and warnings on EPR that the treatment was stopping were not acted on. The final death related to a patient who lacked medical input after moving wards at a weekend and multiple areas for improvement in care were identified.

14.8 A delay in administering thromboprophylaxis contributed to a hospital acquired thrombosis and latterly treatment for the pulmonary embolism was instituted at a suboptimal dose and too slowly. It is not clear if best practice would have averted this death. Actions to prevent this are included in Section 12.

14.9 A patient who fell was behind a curtain for privacy with staff directly outside. It had not been appreciated that the patient who was already very frail and ill had the strength to move to then fall from the bed.

14.10 Two other deaths which are uncategorized relate to a ‘can’t intubate can’t ventilate’ emergency after an elective extubation on ITU which hastened a death and a terminally ill patient who accidentally set fire to themselves while smoking in Sobell house. The former has multiple actions which include a simulation training program in situ on ITU and in OxSTaR and the latter is the subject of a prevention of future death notice and an extensive review of risk assessments and visual supervision of smoking in Sobell House Hospice.
15. **Never Events**

15.1 Two never events were declared on STEIS in FY 2016/17 this is compared to seven in FY 2015/16. They were:

- **Wrong site surgery:** A nerve block was carried out on the incorrect eye during cataract surgery. The error was recognised and the block was completed on the correct eye.
- **Wrong implant/prosthesis:** The incorrect intraocular lens was implanted, the error was recognised before the end of surgery and the correct lens was implanted.

15.2 Actions plans which are closely monitored by divisional and corporate teams are in place to reduce the risk of recurrence.

15.3 These events have been reported to the Trust Board and Quality Committee in detail at the time and in the Quality Account. They will not therefore be further discussed in this report.

16. **Future Plans**

16.1 An annual report will be produced for each year going forward.

16.2 Situational awareness review of 200 incidents will also inform future training now has ethics approval and is in progress.

16.3 Choices of Trust quality priorities and CQUINs will consider lessons from SIRIs such as the priorities this year around preventing patients from deteriorating, safe discharge, mental health and cancer pathways.

16.4 Work is continuing with the patient safety academy and Oxstar to develop training for staff.

16.5 Risk Management will develop a leaflet for staff about incidents and investigations, what it means and support available

16.6 Central CRM to provide additional face to face time with the investigator when changes are suggested on draft SIRI reports

17. **Summary**

17.1 This report describes the a reduction in SIRIs declared this year with a downward trend in patient safety incidents of moderate and greater harm despite increased incident reporting.

17.2 The SIRI forum process has been further strengthened with the stronger links with external organisations and the triangulation with other services within the OUHFT to capture potential SIRIs. The CQC has commented in its formal report that the forum is outstanding.

17.3 Patient safety alerts were developed as a project of the Clinical Effectiveness Committee and have had >12,000 hits.

17.4 Data is presented showing the continued substantial improvement in duty of candour disclosure suggesting cultural change that is now fully embedded.

17.5 The five categories of SIRIs which occurred most frequently were: Pressure Ulcers (31); Falls (9); Diagnostic related including delayed diagnosis (9) HATs (8) and Medication (6).
17.6 Themes and actions taken have been presented in detail for these categories in the report.
17.7 Future plans for further development of the serious incident and quality and safety process within the Trust have been described.

18. Recommendations
18.1 The committee is asked to note the contents of this report.

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The sections for Pressure Ulcers (9), Falls (11) HATs (12) and Medication Incidents (13) were contributed by Liz Wright, Deputy Chief Nurse and her team with input from the Tissue Viability team, the Quality Improvement Nurse Educators, the Thromboprophylaxis team and Medicine Safety team.