To:	**Trust Board**
From:	MEDICAL DIRECTOR
Date:	**27 SEPTEMBER 2012**
CQC regulation:	ALL

Title:	**Thematic review of never events**

Author/Responsible Director: Dr K Harris – Medical Director

Purpose of the Report: To advise the Trust Board of the Trust's thematic review of never events.

The Report is provided to the Board for:

Decision		Discussion	
Assurance	√	Endorsement	

Summary / Key Points:

Summary of never events, lessons learned, and next steps.

Recommendations:

The Trust Board is invited to receive and note the report.

Considered at another UHL corporate Committee ? yes – GRMC 24 September 2012

Strategic Risk Register N/A	**Performance KPIs year to date** N/A

Resource Implications (eg Financial, HR)
N/A

Assurance Implications
Yes

Patient and Public Involvement (PPI) Implications
N/A

Equality Impact
N/A

Information exempt from Disclosure
N/A

Requirement for further review ? reported to the GRMC each month through the patient safety report.

UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST

REPORT TO: **TRUST BOARD**

DATE: **27TH SEPTEMBER 2012**

REPORT BY: **MEDICAL DIRECTOR**

SUBJECT: **THEMATIC REVIEW OF NEVER EVENTS – SEPTEMBER 2012**

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1. INTRODUCTION

1.1 Never Events are serious, largely preventable patient safety incidents that should not occur if the available preventative measures have been implemented.

1.2 Introduced on the 1st April 2009 there were 8 events initially listed. There are now 25 "Never Events" on the expanded list. This includes the original 8, some of which have been modified, and builds on the draft list published in October 2010. The list is as follows:-

- Wrong site surgery.
- Wrong implant/prosthesis.
- Retained foreign object post operation.
- Wrongly prepared high-risk injectable medication.
- Mal-administration of potassium containing solutions.
- Wrong route administration of oral/enteral treatment.
- Wrong route administration of chemotherapy.
- Intravenous administration of epidural medication.
- Mal-administration of insulin.
- Overdose of Midazolam during conscious sedation.
- Opiod overdose of an opoid-naïve patient.
- Inappropriate administration of daily oral Methotrexate.
- Suicide using non-collapsible rails.
- Escape of a transferred prisoner.
- Falls from unrestricted windows.
- Entrapment in bed rails.
- Transfusion of ABO-incompatible blood components.
- Transplantation of ABO or HLA incompatible organs.
- Misplaced naso or oro-gastric tubes.
- Wrong gas administered.
- Failure to monitor and respond to oxygen saturation.
- Air embolism.
- Misidentification of patients.
- Severe scalding of patients.
- Maternal death due to post partum haemorrhage after elective Caesarean section.

1.3 Primary Care Trusts are required to monitor the occurrence of Never Events within the services they commission and publicly report them on an annual basis.

1.4 This paper details the findings of a review undertaken of the 9 Never Events reported by UHL NHS Trust since 2009, which were investigated by the Divisional and Corporate Patient Safety Team.

2. THE CASES

2.1 Case 1 – Retained Blade Post Operation – Musculo-Skeletal (November 2009)

The patient underwent a routine left total hip replacement. During the early stages of the procedure it was noticed that a number 23 blade was missing from the long blade handle. It was immediately brought to the attention of the surgeon and searches were made in the operative site and within the theatre without success. The surgeon closed the wound and arranged for the patient to be x-rayed in recover, where it was noted to be in the soft tissues around the left hip. The patient was taken back to theatre for retrieval of the blade.

What Happened?

- There was a failure to follow the "Management of Surgical Swabs Needles and other Accountable Items within the Operating Theatre Policy and Procedures" (patient should have been x-rayed before leaving theatre).
- The surgeon deviated from the above policy because he believed it certain that the blade could not be in the wound and must have fallen to the floor, despite searching for the blade and it not being found.
- The theatre team suggested to the surgeon that an x-ray be performed in the theatre before closure of the wound, but this was declined.

2.2 Case 2 – Wrong Site Knee Surgery – Musculo-Skeletal (February 2010)

The patient was taken to theatre for a right knee arthroscopy. The correct knee was marked and the consent form correctly completed, but the procedure was commenced on the left knee. The Health Care Theatre Assistant recognised the error and spoke up. The procedure was stopped and the right knee investigated as required.

What Happened?

- The person operating was not the same as the person taking consent and marking the site.
- The site marking was not prominent or undertaken in accordance with the policy.
- The WHO Surgical Safety Checklist was not used in this theatre and there was no time out or verbal check of the site for surgery or position of the table before the procedure started.
- The scrub nurse rotated the table for the left knee which caused confusion. The nurse then left the theatre and did not return until the procedure had started.
- Additional theatre staff joined the team during the procedure but were not briefed.

2.3 Case 3– Retained Surgical Swab – General and ENT Surgery (March 2010)

The patient had an oesophagogastrectomy and anastomosis of oesophagus to the stomach. All swab counts were documented as being correct at the final

count. Post-operatively the patient complained of abdominal pain which did not settle. Eight days post-operatively an x-ray identified a large abdominal swab which was removed the next day from behind the spleen.

What Happened?

- There was a failure to follow the "Management of Surgical Swabs, Instruments, Needles and Other Accountable Items within the Operating Theatre Policy and Procedures". (The swab placed in the body cavity was not recorded on the board in theatre and the swab counts did not detect the retained swab and was therefore inaccurate).
- The surgery performed was highly complex and required two separate surgical teams to operate at the same time, with the abdomen and neck incisions being undertaken synchronously, increasing the risk in terms of tracking swabs.
- All disciplines of theatre staff (surgeon, operating department practitioner (ODP) and scrub practitioner) directly involved in the surgery were being supervised during the procedure by a colleague.
- There was a mis-count of surgical swabs and failure to perform a count when one of the scrub practitioners returned to theatre following a break.
- There was no verbal acknowledgement of the swab going in to the patient's cavity, and no record made on the theatre white board.
- There was a single circulating practitioner to support 2 surgical teams, creating pressure on all involved.

2.4 Case 4 – Wrong Route Chemotherapy – Oncology (April 2011)

The haematology patient was admitted for combination chemotherapy treatment (intravenous and intrathecal). Intravenous Cytarabine was prepared. Two qualified nurses completed the necessary checks at the bedside in accordance with Cytoxic Policy but failed to identify during checking the route of administration. The drug was administered subcutaneously rather than intravenously.

What Happened?

- There was a failure to adhere in full to the checking procedure during the administration of the drug i.e. the route was not checked.
- There is a national requirement, reflected in the local Trust policy, that all intravenous chemotherapy must be administered prior to any intrathecal drugs being released from pharmacy. The nurses felt some pressure to administer the IV drug promptly to allow the patient to go to theatre for the intrathecal drugs.
- The patient was on an oncology ward as there were no beds in haematology.

2.5 Case 5 – Wrong Lens Implant – Ophthalmology (April 2012)

The patient was admitted for elective cataract surgery (as a day case) to the left eye, including a replacement lens. The wrong strength lens was implanted. This was identified once the patient was in the recovery area, and following discussion with the patient, the decision was made to go back in to theatre and replace it with one of the correct power. No additional local anaesthetic was required.

What Happened?

- The Who Checklist was used and completed correctly.
- There was a deviation from standard procedure as a theatre assistant selected the lens for implant instead of the surgeon.
- There was a deviation from standard procedure as there was more than one lens in the theatre at the same time.
- There was a failure in the checking process immediately prior to implantation to ensure that the correct prosthesis had been selected.

2.6 Case 6 – Wrong Site Surgery to Finger – Musculo-Skeletal (April 2012)

A patient with diffuse osteoarthritis of the distal interphalangeal joints of most digits of both hands was scheduled for fusion of the left middle finger. Surgery was commenced on the index finger of the left hand. The mistake was immediately noticed by the assisting trainee and the procedure stopped. Surgery continued on the correct finger.

What Happened?

- Consent was confirmed by the operating consultant on the ward prior to theatre, in the presence of his registrar.
- Operative marking was undertaken using a permanent marker by the registrar, who was present in theatre at the time of the procedure.
- The WHO Safer Surgical Checklist was completed prior to the patient being prepared or draped.
- It was visually difficult to distinguish the digits of the hand due to the deformities caused by the osteoarthritis.
- The marking on the finger nail of the affected digit became either washed off or obscured by the Betadine skin preparation.
- There was a failure to undertake a definitive “STOP” to check and verbalise “loud and clear” the correct operation and site.

2.7 Case 7 – Wrong Dental Extraction – Maxillo-Facial (May 2012)

The patient was consented for extraction under general anaesthetic of upper right 6, lower right 7and upper left 6. Dental extraction was undertaken by two Senior House Officers. Instead of removing the upper right 6, they removed the upper left 7, leaving 6 in place.

What Happened?

This investigation is not yet complete however preliminary findings are:-

- The Who check list was used and correct instructions written on the whiteboard in theatre
- Due to previous dental extractions a human error occurred in the identification of the Upper Right 6 tooth.
- There is no reliable method of marking teeth prior to surgery.
- The extractions were undertaken by 2 separate surgeons.

2.8 Case 8 – Miss-placed or Displaced Naso-Gastric Tube – Medicine (July 2012)

The patient was experiencing continued inability to swallow oral fluids and so a naso-gastric tube was inserted. There as intolerance of the tube, which was repeatedly pulled out by the patient. A Deprivation of Liberty Safeguard Urgent Authorisation was put in to place and mittens applied to reduce the risk of the tube being removed by the patient, and allow feeding to continue. The correct testing was undertaken to establish that the tube was in the correct place and feeding recommenced. Following deterioration of the patient an x-ray confirmed that the tube was in the lungs.

What Happened?

This investigation is not yet complete however preliminary findings are:-

- The Policy for placing an NG Tube was followed appropriately.
- The member of staff inserting the tube was experienced.
- Was the patient suitable for having a NG tube sited at all given.

2.9 Case 9 – Inappropriate Administration of Daily Oral Methotrexate - Medicine (August 2012)

The patient was admitted to hospital for investigations having taken ill at home. Prior to admission, oral Methotrexate was being taken once weekly for arthritis. This was prescribed by the admitting doctor and a dose was given correctly on the Monday. However, it was given again the next day.

What Happened?

This investigation is not yet complete and it is too early to identify any preliminary findings.

3. THEMATIC REVIEW

3.1 A review of issues identified within the cases has identified that:-

- On (5) occasions there was deviation from UHL Policy and/or Procedures.
- On (2) occasions there was deviation from the WHO Safer Surgery Checklist.
- On (3) occasions the marking of the operative site played a part.
- On (4) occasions staff changes, interruptions or breaks played a part.

Within all cases there were human factors that played a part such as:-

- Situation Awareness e.g. not recognising increasing risks
- Decision making e.g. over-reliance on assumptions as to correct location/dose/route
- Teamwork e.g. failure to speak up when checklist not followed or swab count wrong
- Leadership e.g. not demonstrating compliance with procedure/policy
- Coping with stress e.g. staff new to a procedure or area and dealing with difficult or complex issues
- Coping with fatigue e.g. working in busy, high volume areas.

3.3 These human factors will be considered in future investigations.

4. LESSONS FROM CASES REVIEWED

4.1 Marking the site:-

- The operating surgeon should always be the person who marks the operative site.
- Indelible ink marker pens should always be available and used throughout the Trust.
- As well as marking the procedure to be undertaken, it should be written on also.
- Where the side cannot be marked on the skin, another type of visual clue should be used e.g. a mark on another part of the body that will not be covered by a drape.
- Never allow patients to be anaesthetised without the site being marked on the patient.

4.2 Adhering to the WHO Safer Surgery Checklist:-

- Say the site or side for the surgery out loud when going through the safe surgery checklist.
- All members of the operating team should be there and take full part in the final checklist before the procedure starts.
- The operating surgeon should check out loud the side and the site before proceeding.
- A team brief should be undertaken at the beginning and the end of each case.

4.3 Staff changes, interruptions and distractions:-

- New staff to the team should be introduced to the rest of the team.
- Robust mentorship should take place to ensure new staff are familiar with the policy, procedure, all equipment used and any specific requirements demanded by either the type of surgery or surgeon preference.
- Staff breaks must be managed to ensure consistency in the team involved in the surgery.
- Those staff setting up the theatre equipment for the case must be the same as those present at the start of the procedure.

4.4 Adherence to National/Trust Policy and/or Procedures:-

- Strict adherence to Trust policies such as the “Management of Surgical Swabs, Needles and other Accountable Items within the Operating Theatre”, the “Cytoxic Drug Policy” and the WHO Safer Surgery Checklist.

5. NEXT STEPS FOR UHL

5.1 A Never Event task and finish group has been established for UHL with surgical, anaesthetic, corporate and divisional patient safety representation.

5.2 Work streams developed as follows:-

- Further refinement of the WHO Checklist within theatres.
- Review the technique and equipment for marking operative sites.
- Develop an enhanced checking process for implantation of prosthetics.

- Implement a “say it out loud” protocol for drugs and prosthetics.
- Ensure face to face contact by the operating surgeon with the patient prior to anaesthetic.

5.3 A work stream lead has been identified for each of the above and an update will be provided in 2 months time.