Irish **Nurses** and **Midwives** Organisation
Working Together

The Irish Operating Department Nurses Experience of Implementation of the Surgical Safety Checklist and Timeout Safety Check

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With thanks to the all the Perioperative Nurses who completed the questionnaires, results of which were compiled by

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The World Health Organisation (WHO) has introduced the Surgical Safety Checklist and the Timeout, or Surgical, Pause (Appendix A), as part of their Safe Surgery Saves Lives initiative.

This checklist has been endorsed by the Operating Department Nurses section of the INMO in conjunction with the Health Information and Quality Authority (HIQA) and the Royal College of Surgeons of Ireland (RSCI). The Surgical Safety Checklist contains recommended guidelines, which include checks before anaesthesia is administered, before skin incision, and prior to the patient leaving the operating room. The checklist aims to improve overall patient safety, improve operating room communications and teamwork between the various clinical disciplines.

Timeout Safety Check is the step prior to skin incision, where the operating team pause, perform various checks and ensure patient safety, before proceeding with surgery.

The WHO devised this initiative by using a team of international experts, from a variety of clinical backgrounds. A large-scale study of the checklist was performed, in 8 international hospitals, from October 2007 to September 2008. The data gathered showed a reduction in inpatient deaths of 0.7%, from 1.5% down to 0.8%. There was also a large reduction in major inpatient complications, dropping from 11% to 7%. The report of this study can be found in the New England Journal of Medicine, January 2009.

Sign In involves the whole surgical team, in particular, the anaesthetist and the anaesthetic nurse. Patient name and procedure is verbalized, and agreed, for the whole team, the anaesthetist confirms the presence or absence of a suspected difficult airway or aspiration risk, and the availability of equipment and assistance. It must be confirmed that all necessary equipment is both present and checked for function.

Timeout is performed/carried out immediately prior to skin incision. All team members identify themselves, the patient is identified a second time, along with the expected procedure, and side and site of procedure. Any potential critical events are identified and it is checked that any prophylactic antibiotics are administered.

Sign Out is performed/carried out immediately following the end of the procedure. The procedure is stated, and checked that it was the correct one performed. Instrument and swab counts are confirmed as completed and correct, and specimen labelling is confirmed as

correct. The patient's name is stated once more, and any problems or critical events/concerns that may affect the patient's post-operative outcome and recovery are identified. Any post-operative instructions are stated at this point.

These three stages are important in ensuring safe surgery for all patients. It is a mechanism for the whole surgical team to agree that surgery was completed, and went well, whether the patient requires any specific care, and whether there are any anticipated post operative problems. The Sign In and Sign Out stages are to perform a number of checks for clarity regarding patient identification, type, site and side of procedure to be performed, and that, post-operatively, all safety checks are complete. Potential consequences of not being involved in the Safe Surgery Saves Lives Initiative are: a wrongly identified patient; wrong procedure being performed in the wrong site or side; the surgical team not being all ready to go; adverse reactions occurring that may have been avoided if verbalised and identified prior to skin incision. If Sign Out is missed, important post-operative instructions may be forgotten, unusual blood loss may not be reported, or there may be an error in instrument or swab counts.

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The ODN section distributed a questionnaire on the implementation of the Surgical Safety Checklist and Timeout to 170 operating department nurses at their annual conference in March 2010. The aim of the questionnaire was to ask participants their opinion of the efficacy of the Surgical Safety Checklist and the Timeout Safety Check as a patient safety tool, as well as to investigate whether the experience is a shared responsibility for all team members. It was also used to ascertain the difficulties in its' implementation, as anecdotal evidence suggested that no two hospitals were performing the checks in the same manner.

120 questionnaires were completed and returned out of 170, a response rate of 71%. The questionnaire and results are in Appendix B. 26 operating departments in the Republic of Ireland both public and private sector were represented and this is around half of the operating departments in the country.

75% stated that the Surgical Safety Checklist was a part of operating room policy in their hospital, but only 50% replied that it has been implemented in its' entirety. This would suggest that a quarter of operating theatres, in Ireland, have no policy, and one half do not fully implement any policy they do have. A majority of replies stated that anaesthetists

were not involved in Sign In, nor did they sign for this check. Whilst most surgeons involved themselves in Timeout, they did not tend to sign either. This would indicate a problem in medical staff committing to the Safe Surgery Checklist in its' entirety. Whether this is due to a lack commitment to the process, or to a fear of litigation (from having their signature on a form), or just a lack of following through on the process is unclear. Interestingly, whilst the majority of anaesthetic and circulating nurses signed for their appropriate check, most of the scrub nurses did not sign for Sign Out. It is possible that the circulating nurse may be signing in place of the scrub nurse, but this was not established from the results of this questionnaire.

The Surgical Safety Checklist appears to be much more of a nursing process, although the WHO has recommended its' implementation to include all operating team members. It would be interesting to see if this is an Irish phenomenon, or if nurse led safe surgery occurs internationally.

Responses to the questionnaires returned were analysed, and some issues that were more frequently mentioned by participants' included;

1. **The need for all team members to be involved in Safe Surgery**

   "ongoing need for open and honest communication between the multidisciplinary team"

2. **Concerns regarding consent**

   "Consent needs to be more specific as the anaesthetic nurse is expected to pick up on discrepancies but may not be aware if operation on list is generic but consent is more or less specific than the operating list. Especially in complex general or vascular procedures"

3. **An acknowledgement that Safe Surgery requires teamwork and participation**

   "Lack of co-operation from surgeons and anaesthetists, they see it as being imposed by a nurse"

4. **The Safe Surgery Checklist can identify patient safety issues and can assist in the reduction of error**

   "It has assisted to identify surgical site error during it's' use"

   "There have been situations where allergies have been brought to the attention of theatre staff and wrong procedures have been avoided"

5. **Issues surrounding education**

   "Not all staff performing surgical timeout. More education needed to promote positive awareness"

RECOMMENDATIONS FOR THE FUTURE

- Enforcement of greater participation from all team members, in particular medical staff.
- Increased education of Safe Surgery and the Timeout Safety Check. This education needs to be focused on all participants, as a mandatory component of nursing and medical curricula.
- A change in process for consent - there may be a requirement for a more senior doctor (rather than intern level) consenting the patient, as well as ensuring the consenting doctor is a member of the surgical team who will be in the operating room for the surgery.
- Improvement in the participation of Safe Surgery, particularly in the area of individuals participating fully and signing for the 3 stages - Sign In, Timeout, Sign Out.
- Ensure the staff member leading the Checklist is sufficiently senior to command the respect and attention of all of the surgical team at all stages of Safe Surgery.
- Hospital-wide policy enforced by management.
- The research highlights that 66% of respondents indicated that Time Out is performed prior to prepping and draping which is not in line with the WHO guidelines. The WHO guideline specifies that Time Out pause is to ensure that before the scrub nurse hands over the scalpel, that this is the correct patient, identified by their medical record number and a second unique patient identifier that surgery is commencing on the correct patient, correct site, and is the correct procedure etc. It must be concluded that the guidelines have been adapted to suit individual departments therefore;

  Nationwide standardisation of procedures and the checklist, surgical site marking and the recording of important patient information is imperative.
- It would have been beneficial if a working group for the development of this initiative had been set up prior to its introduction. This would have resulted in this vital project being implemented in a standard process across the country, with policy development centralised and hence saving time for already stretched operating department nurses. This may also be a crucial factor as to why not all hospitals have implemented the checklist thus far.

Appendix A

http://whqlibdoc.who.int/publications/2009/9789241598590_eng_Checklist.pdf

http://www.youtube.com/watch?v=6-myLENTBO4&feature=related

Appendix B

1. **Are you employed in: Public sector** 90 (75%) **Private sector** 20 (17%)
2. **Name of Hospital:** 26 hospitals were identified
   Are you predominantly employed in: Anaesthetics 21
   Scrub 34
   Both 47
3. **Is there a policy for the Safe Surgery Checklist and Timeout in your department?**
   Yes 91 (75%) **No** 6 **Timeout only** 3
4. **Has your department implemented the Safe Surgery Checklist in its' entirety?**
   Yes 52 (43%) **No** 48 (40%)
5. **Has your department implemented Timeout only? Yes** 54 (45%) **No** 23 (19%)
6. **Is the Anaesthetist involved in Sign in? Yes** 44 (37%) **No** 57 (47.5%)
7. **Is the Anaesthetist signing for the Sign in? Yes** 13 (11%) **No** 93 (77.5%)
8. **Is the lead surgeon involved in Timeout? Yes** 84 (70%) **No** 11 (9%)
   Reg: 3 **Sometimes** 6 (5%)
9. **Is the surgeon signing for the Timeout? Yes** 31 (25%) **No** 72 (60%)
   If Yes, is it: Timeout sheet 18 (14%)
   Operation note 8
10. **Is the Anaesthetic nurse signing for the Sign in? Yes** 63 (51%) **No** 41 (34%)
11. **Is the Circulating nurse signing for the Timeout? Yes** 92 (77%) **No** 23 (19%)
12. **Is the Scrub nurse signing for the Sign out? Yes** 31 (25%) **No** 64 (51%)
13. **Do you have difficulty getting staff to listen to the Timeout? Yes** 65 (52%) **No** 35 (29%)
14. **Is there a surgical site marking policy in your organisation? Yes** 83 (69%) **No** 17 (14%)
15. **When is Timeout performed?**
    In theatre, prior to prepping and draping? Yes 81 (66%)
    After draping has been completed? Yes 26 (25%)
    Pre-anaesthesia? Yes 2
16. **Can the surgical site marking be clearly seen at the time of Timeout?**
    Yes 89 (75%) **No** 18 (14%)
17. **Is the duty of performing Timeout being seen as a nursing responsibility?**
    Yes 90 (75%) **No** 11 (9%)
18. **Has performing Timeout highlighted any areas for improvement in your hospital?**
    Yes 71 (59%) **No** 15 (13%)

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