“Safe Surgery Saves Lives”

WHO Challenge impacts on daily CSSD activities

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– EORNA – EORNACongress
Objectives

- To develop your understanding of the aims and global elements of the WHO Surgical Checklist
- To highlight items in connection with sterilization core business
- To list impact of this process on daily activities between OR & CSSD
- To confirm the role of CSSD professional in regard to the “Patient safety checklist” concept (applies to any patient for any type of surgery under any circumstance)
Context
First WHO challenge\(^{(1)}\)
Context
Second WHO challenge\(^{(2)}\)
Context
Second WHO challenge

234 million operations are done globally each year

- Known surgical complications of 3-16%
- Known death rates of 0.4-0.8%

At least 7 million disabling complications – including 1 million deaths – worldwide each year

Building a consensus

- Working groups of the second Global Patient Safety Challenge

  - **Safe surgical teams**, by promoting communication among team member.

  - **Safe anesthesia**, by appropriate patient monitoring and advance preparation to identify potentially lethal anesthetic or resuscitation problems before they cause irreversible harm.

  - **Prevention of surgical site infection**, through antisepsis and control of contamination.

  - **Measurement of surgical services**, by creating public health metrics.
10 essentials objectives for safe surgery

1. The team will operate on the correct patient at the correct site.

2. The team will use methods known to prevent harm from anesthetic administration, while protecting the patient from pain.

3. The team will recognize and effectively prepare for life-threatening loss of airway or respiratory function.

4. The team will recognize and effectively prepare for risk of high blood loss.

5. The team will avoid inducing an allergic or adverse drug reaction known to be a significant risk to the patient.
Building a consensus

10 essentials objectives for safe surgery

6. The team will consistently use methods known to minimize risk of surgical site infection.

7. The team will prevent inadvertent retention of sponges or instruments in surgical wounds.

8. The team will secure and accurately identify all surgical specimens.

9. The team will effectively communicate and exchange critical patient information for the safe conduct of the operation.

10. Hospitals and public health systems will establish routine surveillance of surgical capacity, volume and results.
Currently, hospitals do MOST of the right things, on MOST patients, MOST of the time.

The Checklist helps us do ALL the right things, on ALL patients, ALL the time\(^{(3)}\).
### Surgical Safety Checklist

<table>
<thead>
<tr>
<th>Before induction of anaesthesia</th>
<th>Before skin incision</th>
<th>Before patient leaves operating room</th>
</tr>
</thead>
<tbody>
<tr>
<td>(with at least nurse and anaesthesiologist)</td>
<td>(with nurse, anaesthesiologist and surgeon)</td>
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#### Has the patient confirmed his/her identity, site, procedure, and consent?
- Yes
- No

#### Is the site marked?
- Yes
- No
- Not applicable

#### Is the anaesthesia machine and medication check complete?
- Yes
- No
- Not applicable

#### Is the pulse oximeter on the patient and functioning?
- Yes
- No

#### Does the patient have a:

- Known allergy?
  - No
  - Yes

- Difficult airway or aspiration risk?
  - No
  - Yes, and equipment/assistance available

- Risk of >500ml blood loss (7ml/kg in children)?
  - No
  - Yes, and two IVs/central access and fluids planned

#### Confirm all team members have introduced themselves by name and role.
- Yes
- No
- Not applicable

#### Confirm the patient’s name, procedure, and where the incision will be made.
- Yes
- No
- Not applicable

#### Has antibiotic prophylaxis been given within the last 90 minutes?
- Yes
- No
- Not applicable

#### Anticipated Critical Events

- To Surgeon:
  - What are the critical or non-routine steps?
  - How long will the case take?
  - What is the anticipated blood loss?

- To Anaesthetist:
  - Are there any patient-specific concerns?

- To Nursing Team:
  - Has identity (including indicator results) been confirmed?
  - Are there equipment issues or any concerns?

#### Nurse Verbally Confirms:

- The name of the procedure
- Completion of instrument, sponge and needle counts
- Specimen labelling (read specimen labels aloud, including patient name)
- Whether there are any equipment problems to be addressed

#### To Surgeon, Anaesthetist and Nurse:

- What are the key concerns for recovery and management of this patient?
Checklist content

- **Sign In:**
  before induction of anesthesia by nurse & anaesthesiologist

- **Time out:**
  before skin incision by surgeon, nurse & anaesthesiologist

- **Sign out:**
  before patient leaves OR by surgeon, nurse & anaesthesiologist
Checklist content
Confirmation

• Increased rate of adherence to basic standards from 36% to 68% – in some hospitals to almost 100%.

• Resulted in substantial reductions in mortality and morbidity

• Dozen of study confirms and some moderate it.
EORNA has endorsed Second WHO challenge
### Surgical Safety Checklist

**Before induction of anaesthesia**

(with at least nurse and anaesthetist)

- Has the patient confirmed his/her identity, site, procedure, and consent?
  - [ ] Yes
  - [ ] Not applicable

- Is the site marked?
  - [ ] Yes
  - [ ] Not applicable

- Is the anaesthesia machine and medication check complete?
  - [ ] Yes

- Is the pulse oximeter on the patient and functioning?
  - [ ] Yes

- Does the patient have a:
  - [ ] Known allergy?
    - [ ] No
    - [ ] Yes
  - [ ] Difficult airway or aspiration risk?
    - [ ] No
    - [ ] Yes, and equipment/assistance available
  - [ ] Risk of >500ml blood loss (7ml/kg in children)?
    - [ ] No
    - [ ] Yes, and two IVs/central access and fluids planned

**Before skin incision**

(with nurse, anaesthetist and surgeon)

- Confirm all team members have introduced themselves by name and role.
- Confirm the patient’s name, procedure, and where the incision will be made.
- Has antibiotic prophylaxis been given within the last 60 minutes?
  - [ ] Yes
  - [ ] Not applicable

### Anticipated Critical Events

**To Surgeon:**
- What are the critical or non-routine steps?
- How long will the case take?
- What is the anticipated blood loss?

**To Anaesthetist:**
- Are there any patient-specific concerns?

**To Nursing Team:**
- [ ] Has sterility (including indicator results) been confirmed?
- Are there any equipment issues or any concerns?

**Before patient leaves operating room**

(with nurse, anaesthetist and surgeon)

- Nurse Verbally Confirms:
  - [ ] The nature of the procedure
  - [ ] Completion of instrument, sponge and needle counts
  - [ ] Specimen labelling (read specimen labelling, including patient name)
  - [ ] Whether there are any equipment problems to be addressed

- To Surgeon, Anaesthetist and Nurse:
  - [ ] What are the key concerns for recovery and management of this patient?

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This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged. Revised 1/2009 © WHO, 2009
Sterility confirmed

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**Anticipated Critical Events**

**To Surgeon:**
- What are the critical or non-routine steps?
- How long will the case take?
- What is the anticipated blood loss?

**To Anaesthetist:**
- Are there any patient-specific concerns?

**To Nursing Team:**
- Has sterility (including indicator results) been confirmed?
- Are there equipment issues or any concerns?

**To Surgeon, Anaesthetist and Nurse:**
- Completion of instrument, sponge and needle counts
- Specimen labelling (read specimen labels aloud, including patient name)
- Whether there are any equipment problems to be addressed

- What are the key concerns for recovery and management of this patient?
Sterility confirmed
CSSD responsibilities

• Cleaning and mechanical removal
• Inspection and assembly
• Packaging and tray assembly
• Sterilization
• Correct storage
• Transportation
• Delivery to the operating room
• Certification of the sterilization process
Sterility confirmed
OR responsibilities

• Tapes
  • Imperfection

• Dryness
  • Expiry date

• Control
  
• Environment
  (6)
Sterility confirmed
OR responsibilities

• No dirty surgical instruments

• Surgical instruments properly maintained

• Surgical instruments and their accessories properly mounted and positioned.
Completion of instrument count \(^{(7)}\)

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Completion of instrument, sponge and needle counts

Specimen labelling (read specimen labels aloud, including patient name)

Whether there are any equipment problems to be addressed

To Surgeon, Anaesthetist and Nurse:

What are the key concerns for recovery and management of this patient?
Completion of instrument count
CSSD responsibilities

- Instruments counting process
- Instrument sets standardized
- Up-to-date inventory
- Tray list under electronic/paper format
- Accurate information for new device\(^8\)
Completion of instrument count
CSSD responsibilities

- The number of instruments and its parts inventoried
- Trays comply with their original composition
- Instruments clean, functional and usable
- CSSD management must train and help OR nurses
Completion of instrument count
OR responsibilities

- Counting by two persons\(^{(9)}\)
- Count before the start/wound closure
- Instruments with component parts
- Inspection for completeness.
- Broken or disassembled instrument
Completion of instrument count OR responsibilities

- Instrument falls to the floor or passed off the sterile field
- No instrument removed from the operating
- Counts recorded on a count sheet or nursing record
- Results recorded as correct or incorrect
- Instruments intentionally left with the patient
Completion of instrument count OR responsibilities

- Count discrepancy or incorrect count documented
- Reasons for not conducting a count documented
- Policy in case of a discrepancy in every health-care facility
- Methodical wound exploration before closure
Conclusion

• At least two checks of the “patient safety checklist” affect directly or indirectly CSSD professionals work and responsibilities

• Sterilization professionals have a role to play at all times to guarantee security and quality of care

• Their work can be envisaged as essential and rewarding in collaboration with their colleague of the operating room
Thank you for your attention

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www.afiso.be
www.eorna.eu
www.eornacongress.eu
Bibliography

5. WHO Guidelines for Safe Surgery 2009