In November 2009 Australian Health Ministers endorsed the World Health Organisation’s (WHO) Surgical Safety Checklist (Checklist) as the national strategy for surgical safety in Australia, superseding the current Correct Patient, Correct Procedure, Correct Site Protocol (C3 Protocol). Ministers agreed that local versions of the Checklist must be implemented in all jurisdictions by 1 July 2011.

Implementation of the attached WA Health Surgical Safety Checklist (WA Health Checklist) is to commence immediately in all WA operating theatres and procedure rooms where invasive procedures requiring sedation/anaesthesia are performed. The WA Health Checklist should be implemented in conjunction with the Correct Patient, Correct Procedure, Correct Site Policy and Guidelines for WA Health Services (2005)¹ and fully operationalised by 30 June 2011.

BACKGROUND
Complications of surgery and adverse events caused by procedures on the wrong patient or wrong site remain a significant patient safety concern locally and internationally.

The Correct Patient, Correct Procedure, Correct Site Policy and Guidelines for WA Health Services were implemented in 2005 following Ministerial endorsement of the C3 Protocol. A national review in 2008 found variation in the level of implementation of, and compliance with, the C3 Protocol. Variation was also evident following a local compliance audit in 2009.

In 2008 the WHO developed the Surgical Safety Checklist as a tool to reduce the rate of surgical error and complications. The Checklist includes a core set of safety checks for use in any operating theatre environment, and incorporates all steps of the C3 Protocol.

It was developed via a comprehensive iterative process, and was subject to rigorous international piloting and study. A global trial of almost 8,000 surgical patients found that its use was associated with reductions in error, complications and mortality rates in both developing and developed countries. Evidence is also emerging that use of the Checklist increases patient flow through theatre, improving efficiency of busy surgical wards, and that its use is cost-effective.

The Checklist is designed to improve safety by focussing on anaesthetic safety practice, ensuring correct site surgery, avoiding surgical site infection and venous thromboembolism. Most importantly the Checklist enhances communication within the surgical team, a critical factor in ensuring safety and quality of care. Its structure is based on the universally accepted sequence of surgical and other invasive procedures.

¹ Note the Correct Patient, Correct Procedure, Correct Site Policy and Guidelines for WA Health Services (2005) is currently under review
The Checklist has been widely adopted internationally and is supported by a range of learned Colleges and Associations, including the Royal Australasian College of Surgeons, Australian College of Operating Room Nurses, Australian and New Zealand College of Anaesthetists, and Royal Australian College of Obstetricians and Gynaecologists.

THE WA HEALTH SURGICAL SAFETY CHECKLIST

The WA Health Checklist was developed through extensive consultation across WA Health, the private hospital sector and relevant professional associations. The WA Health Checklist is to be implemented as a minimum standard (see below) in all WA operating theatres and procedure rooms where invasive procedures requiring sedation/anaesthesia are performed. As the Checklist’s three-phase sequence is an important feature, adaptation must be limited to adding elements to the template without altering its configuration.

WA public hospitals and health services are directed to commence implementation of the WA Health Checklist as soon as practicable. The WA Health Checklist must be fully operationalised by 30 June 2011. Use of a detailed implementation plan and an inter-professional team to enact this is encouraged. Either of the two versions attached (landscape or portrait) may be used according to local preference. A flowchart to assist in education and implementation is also provided.

Core Principles for adaptation:

The WA Health Checklist is a minimum standard, which hospitals may adapt to local requirements by adding extra elements. The following three principles are to be considered during adaptation:

1. The Checklist is a tool to improve VERBAL communication among the surgical team in the operating theatre. The requirement for a signature at the bottom has been requested to ensure a level of accountability in its implementation and uptake.

2. The Checklist is the FINAL safety check before a procedure is commenced. It is not designed for planning or documenting treatment or care, and does not supplement other documentation or pre-surgical processes and procedures.

3. The Checklist should be SIMPLE, easy to follow and it should not take longer than one minute to complete each section.

USING THE WA HEALTH SURGICAL SAFETY CHECKLIST

The Correct Patient, Correct Procedure, Correct Site Policy and Guidelines for WA Health Services (2005) is currently being revised and will be released in 2011. This Policy remains current and should be used to augment the use of the WA Health Checklist. Specific interpretation of this Policy in relation to the WA Health Checklist is outlined below.

Marking of Site of Surgery or Invasive Procedures ‘site marked / not applicable’ step in the ‘Sign In’ section

The site of the surgery or invasive procedure should ideally be marked by the person performing the procedure (proceduralist). A hospital/health service may permit the task of marking the site of the surgery or invasive procedure to be delegated to another health practitioner. Any health practitioner delegated to mark the site of the surgery or invasive procedure must be sufficiently competent and knowledgeable about the patient’s case to be able to undertake this task.
If any health care practitioner is at any time concerned that the incorrect side/site is being prepared for surgery or invasive procedure, or feels uncomfortable or too inexperienced to undertake the verification task, they should immediately voice their concerns. Raising concerns by health care practitioners should always be encouraged, even if these concerns prove to be unfounded.

Where a patient refuses marking, this must be documented in the medical record and alternative strategies must be employed to prevent the procedure being performed on the wrong site.

The proceduralist retains overall responsibility for ensuring that the site of the surgery/invasive procedure has been correctly identified and marked, and that the surgery/invasive procedure is performed on the correct side and at the correct site. The proceduralist may be held responsible if the side/site of the procedure was not marked or the task was not properly carried out, resulting in the procedure being performed on the wrong side/site.

**Process**

- When marking the site of the surgery/invasive procedure, care should be taken to ensure that the patient is not injured or compromised.
- The intended site of incision or site of insertion must be unambiguously marked. Multiple sites must be individually marked.
- All cases involving laterality, multiple structures (e.g. fingers, toes or lesions) or levels (e.g. spine) must be clearly marked.
- The mark must be visible and sufficiently permanent so as to remain visible following skin preparation and draping. Site marking should be performed with an indelible marker, wherever practical.
- Do **not** mark non-procedure sides/sites.
- Marking of the operative site should be done in such a way as to ensure that when a patient is turned or placed in a different position, the mark is still clearly visible to the surgical team.
- Marking must take place when the patient is awake and before the patient enters the procedure room. Except in an emergency, the patient should not enter the procedure room until this has been completed.
- Where imaging is used during the marking process, members of the clinical team must confirm that the images are properly labelled and are for the correct patient.
- The method of marking should be consistent throughout the hospital/health service.

Hospitals/health services should use single-use marker pens to mark the site of the surgery or invasive procedure in order to minimise risk of infection.

Once appropriate marking has been completed, the patient’s medical record should be properly documented. “Left” or “Right” should be written in full on all documentation. Any abbreviations and symbols used should be endorsed and published by the hospital/health service.

**Possible Exceptions**

Exceptions to the requirement for operative sites to be clearly marked may include:
- Interventional cases for which the catheter or instrument site is not pre-determined (e.g. cardiac catheterisation, epidural or spinal analgesia or anaesthesia).
- Procedures performed on midline organs/structures such as the umbilical, perineal, or anal areas. Note that the vertebral level of the spinal column where surgery/procedure is required or entry into the spinal cord is indicated should always be marked.
- Endoscopic or other procedures performed through the mouth or anus.
- Single organ cases such as caesarean section, midline sternotomy, laparoscopy, laparotomy or urethrotomy.
- Where the procedure site cannot be marked (e.g. teeth). Relevant radiographs or other scans must, if possible, be marked to indicate the operative site. Where this is not possible, a diagram clearly indicating the site and side must be prepared and entered into the patient’s medical record.
- Where marking of premature infants may cause permanent tattoos.
- Where the operative site is a traumatic site (obvious surgical site).
- Where intra-procedure imaging for localisation (e.g. radiological, MRI, stereotaxis) will be used.
- Where the urgency of surgery precludes marking. This should be documented in the medical record as soon as practicable.
- Where marking of premature infants may cause permanent tattoos.
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Where the site of the surgery is not marked for urological procedures involving the ureter, clinicians should develop and implement agreed processes and procedures to prevent errors such as the wrong ureter being instrumented.

It is strongly recommended that extra precautionary measures are also taken when preparing a patient for eye surgery. Where possible, the eye should be marked in the ward by the ophthalmologist. Other recommended in-house risk management strategies include:

- Labelling eye drops “left eye” or “right eye” as appropriate, on the bottle.
- The pre-op nursing record having a tickbox section verifying that the type of procedure and correct side has been fully stated on the consent form and also marked on the patient.
- An operating theatre policy document containing the elements of the said policy.
- A “team time-out” prompt being included in the “prep” dish of all bowl sets, which is then handed to the surgeon with every prepping solution.

It is recognised that the above list of possible exemptions may not cover the full range of surgical and medical procedures undertaken in all WA hospitals. Therefore, the hospital/health service executive, in consultation with relevant clinicians, learned Colleges and associations may modify this policy and expand the list of exempted procedures to suit clinical and administrative conditions at the local level.

As a minimum, where this site-marking policy has been modified to suit local clinical conditions, it is expected that hospitals/health services will implement appropriate audit procedures to verify that clinical teams are following the mandated procedures.

Team Time Out (TTO) Section

One of the principal aims of the Checklist is to improve verbal communication among the surgical team. Correct execution of the TTO is therefore crucial. The precise timing of the TTO is contingent on several factors such as the type of procedure and the constitution of the surgical team.
The TTO must be initiated at an appropriate time before incision. This time should be agreed according to requirements unique to individual teams, procedures and local context. All members of the team are required to participate verbally in the TTO.

In the past there have been cases of error in emergency situations that could have been avoided with a TTO. It is strongly encouraged that TTO be carried out in all cases, including emergencies. In these cases an abridged format may be adopted to expedite commencement of the procedure. This condensed TTO should aim to confirm/ensure:

1. patient identification
2. correct procedure
3. correct site.

RESOURCES TO ASSIST IN IMPLEMENTATION

The WHO Website contains useful material and resources for implementation, including implementation guides and manuals, a starters’ kit and a PowerPoint presentation:

Also attached is a Flowchart to serve as a quick reference guide to assist in carrying out the Checklist. It is recommended that this Flowchart be laminated and placed in operating theatres and procedure rooms.

EVALUATION & AUDIT OF IMPLEMENTATION

According to the Health Ministers’ directive of November 2009, implementation of the Checklist is to commence in 2010 and be completed by July 2011. An evaluation, including an audit of compliance and outcomes will be conducted some time after roll-out. Resources and tools enabling evaluation will be provided. Where possible evaluation should be conducted by local staff.

OTHER SPECIALTIES

The Surgical Safety Checklist is to be implemented in all operating theatres and procedure rooms where invasive procedures requiring sedation/anaesthesia are performed. Modified Checklists for specialties such as radiation oncology will be developed in consultation with relevant stakeholders throughout 2010/11. As per the surgical specialties, the Correct Patient, Correct Procedure, Correct Site Policy and Guidelines for WA Health Services (2005) remains current and should be used to augment the use of the WA Health Checklist or versions modified for other specialty use.

REQUIRED ACTION IN THE EVENT OF A WRONG PATIENT, WRONG PROCEDURE, WRONG SITE INCIDENT OR OTHER CLINICAL INCIDENT RELATED TO SURGERY

Procedures involving the wrong patient, wrong site or wrong procedure resulting in death or major permanent loss of function are reportable sentinel events. It is a Department of Health policy requirement that a sentinel event notification form is completed and forwarded to the Director, Office of Safety and Quality in Healthcare within seven (7) working days of the incident occurring.
Please refer to the Office of Safety and Quality in Health Care (OSQH) website for more information on clinical incident management processes, including sentinel event reporting and investigation process: www.health.wa.gov.au/safetyandquality/.

In addition, health care professionals are required to openly disclose and communicate any clinical incident that may have resulted in harm (or result in future harm) to a patient while receiving health care. The WA Open Disclosure Policy: Communication and Disclosure Requirements for Health Professionals Working in Western Australia (2009) outlines the processes that WA health practitioners, hospitals and health services are to follow when informing a patient, their nominated carers and family about a clinical incident that has occurred in a WA public hospital/health service.

RELATED POLICIES

Correct Patient, Correct Procedure, Correct Site Policy and Guidelines for WA Health Services (2005)

Consent to Treatment Policy for the Western Australian Health System (2009)


WA Open Disclosure Policy: Communication and Disclosure Requirements for Health Professionals Working in Western Australia (2009)

Sentinel Event Policy (2008)

WA Patient Identification Policy

Attachments:
1. WA Health Surgical Safety Checklist (landscape)
2. WA Health Surgical Safety Checklist (portrait)
3. Surgical Safety Checklist Flowchart

Mr Kim Snowball
DIRECTOR GENERAL
DEPARTMENT OF HEALTH WA

This information is available in alternative formats upon a request from a person with a disability.
## WA Health Surgical Safety Checklist

### BEFORE INDUCTION OF ANAESTHESIA ➔

#### SIGN IN

- **PATIENT HAS CONFIRMED**
  - Identity
  - Site
  - Consent

- **SITE MARKED**
  - **NOT APPLICABLE**

- **ANAESTHESIA SAFETY CHECK COMPLETED**
  - (including airway/aspiration risk)

- **ALL MONITORING EQUIPMENT IN PLACE AND FUNCTIONING**

#### DOES PATIENT HAVE A:

- **KNOWN ALLERGY?**
  - No
  - Yes

- **RISK OF >500ML BLOOD LOSS (7ML/KG IN CHILDREN)?**
  - Yes
  - No

- **PROSTHESIS/SPECIAL EQUIPMENT:**
  - If prosthesis (or special equipment) is to be used in theatre, has it been checked and confirmed?
  - Yes
  - **Not applicable**

### BEFORE SKIN INCISION ➔

#### TIME OUT

- **ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE**

- **SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM**
  - Patient identity
  - Site
  - Allergies

**BRIEFING:**
- **Surgeon** briefs team on intended procedure, critical steps, anticipated events and equipment requirements.
- **Anaesthesia team** verbally reviews any patient-specific concerns.
- **Nursing team** verbally reviews sterility requirements and equipment concerns.

#### HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?

- **Yes**
  - **Not applicable**

**IS THROMBOPROPHYLAXIS REQUIRED?**

- **Yes and implemented**
  - **No**

#### Mechanical
- **Pharmacological**
- **Not applicable**

**IS ESSENTIAL IMAGING DISPLAYED?**

- **Yes**
  - **Not applicable**

### BEFORE PATIENT LEAVES OPERATING ROOM

#### SIGN OUT

- **NURSE VERBALLY CONFIRMS WITH THE TEAM:**
  - Name of the procedure recorded
  - Instrument, sponge and needle counts are correct
  - Specimens labelled correctly and sent
  - Any equipment problems to be addressed
  - Post op destination discussed/arranged
  - Key post-op concerns discussed/documentated
  - EBL (Estimated Blood Loss)/likely ongoing blood loss discussed/documentated
  - Need for post op pathology or imaging discussed/documentated
# WA Health Surgical Safety Checklist

## BEFORE INDUCTION OF ANAESTHESIA

### SIGN IN

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td><strong>PATIENT HAS CONFIRMED</strong></td>
<td></td>
</tr>
<tr>
<td>• Identity</td>
<td>• Procedure</td>
</tr>
<tr>
<td>• Site</td>
<td>• Consent</td>
</tr>
</tbody>
</table>

**DOES PATIENT HAVE A:**

- KNOWN ALLERGY?
  - Yes
  - No

**RISK OF >500ML BLOOD LOSS (7ML/KG IN CHILDREN)?**
  - Yes
  - No

**PROSTHESIS/SPECIAL EQUIPMENT:**
- If prosthesis (or special equipment) is to be used in theatre, has it been checked and confirmed?
  - Yes
  - Not applicable

**SITE MARKED**
- Not applicable

**ANAESTHESIA SAFETY CHECK COMPLETED**
- (including airway/aspiration risk)

**ALL MONITORING EQUIPMENT IN PLACE AND FUNCTIONING**

## BEFORE SKIN INCISION

### TIME OUT

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
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<td></td>
</tr>
</tbody>
</table>

**SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM**
- Patient identity
- Procedure
- Site
- Allergies

**BRIEFING:**
- Surgeon briefs team on intended procedure, critical steps, anticipated events and equipment requirements.
- Anaesthesia team verbally reviews any patient-specific concerns.
- Nursing team verbally reviews sterility requirements and equipment concerns.

**HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?**
- Yes
- Not applicable

**IS THROMBOPROPHYLAXIS REQUIRED?**
- Yes and implemented
  - Pharmacological
  - Mechanical
- No

## BEFORE PATIENT LEAVES OPERATING ROOM

### SIGN OUT

**NURSE VERBALLY CONFIRMS WITH THE TEAM:**
- Name of the procedure recorded
- Instrument, sponge and needle counts are correct

**SPECIMENS LABELLED CORRECTLY AND SENT**

**ANY EQUIPMENT PROBLEMS TO BE ADDRESSED**

**POST OP DESTINATION DISCUSSED/ARRANGED**

**KEY POST-OP CONCERNS DISCUSSED/DOCUMENTED**

**EBL (ESTIMATED BLOOD LOSS)/LIKELY ONGOING BLOOD LOSS DISCUSSED/DOCUMENTED**

**NEED FOR POST OP PATHOLOGY OR IMAGING DISCUSSED/DOCUMENTED**

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Name: ____________________________

Signature: ________________________

Designation: _____________________

Date: _________________
**FIRST STEP:**
Designate Checklist Coordinator (CC) for the duration of the procedure.
- Can be any member of the surgical team.
- The CC can be appointed for an entire operative session.

2. **Time Out:**
Directly after induction of anaesthesia, before any incision/insertion.
1. CC initiates time-out.
2. Each member of team introduces themselves (confirm that everyone known to each if team is part way through operative session).
3. Pause before incision to confirm **out loud** that the correct operation is being performed on the correct patient and site.
4. Verbal team-briefing on intended procedure, critical steps, concerns, anticipated events and equipment.
5. CC confirms that:
   a. Prophylactic ABs have been given
   b. Thromboprophylaxis has been ordered/given (specify if pharmacological or mechanical)
   c. Essential imaging is displayed and matches the patient’s ID.

1. **Sign In:**
- Directly before induction of anaesthesia.
  - Surgeon’s presence advised but not essential.
1. Confirm Pt ID/procedure **with patient:**
   a. ‘What is your FULL name?’ (ask to spell if unclear)
   b. ‘What is your date of birth?’
   c. ‘What is your address?’
   d. ‘What procedure are you here for; what site/side?’
2. Check that consent has been provided and that the ID, procedure and site specified on the form matches verbal confirmation.
3. Visual confirmation of site marking (if appropriate).
4. Full anaesthesia check completed by anaesthetic team.
5. Confirm with anaesthetist re. risk of blood loss (ensure group/screen and/or cross match available), airway problems or allergic reactions.
6. Confirm that special equipment/prosthesis has been checked.

* Can be legal guardian/family member.
  If skipped (e.g. in an emergency) – leave box unchecked. Refer to WA Patient Identification Policy for more detail.
** Refer to Consent to Treatment Policy for the WA Health System for more information.

3. **Sign Out:**
Immediately after wound closure/completion of procedure.
1. Coordinator verbally confirms with team:
   a. Name of procedure recorded (this may be different to the operation initially planned)
   b. Instrument count
   c. Specimen labelling (Name, DOB, UMRN)
2. Team reviews key plans and concerns regarding post-op management/recovery before patient leaves operating room.
3. One signature at the end.