WHO Surgical Safety Checklist

In June 2008, the World Health Organization (WHO)\textsuperscript{1} launched a second Global Patient Safety Challenge, ‘Safe Surgery Saves Lives’ to reduce the number of surgical deaths across the world.

The goal of the initiative is to strengthen the commitment of clinical staff to address safety issues within the surgical setting. This includes improving anaesthetic safety practices, ensuring correct site surgery, avoiding surgical site infections and improving communication within the team.

A core set of safety checks has been identified in the form of a WHO Surgical Safety Checklist for use in any operating theatre environment. The checklist is a tool for the relevant clinical teams to improve the safety of surgery by reducing deaths and complications.

A study of the checklist in nearly 8,000 surgical patients, published in the New England Journal of Medicine, showed a reduction in deaths and complications.\textsuperscript{2}

The National Patient Safety Agency (NPSA), in collaboration with a multi-professional expert reference group, has adapted the checklist for use in England and Wales (see overleaf). This checklist contains the core content but can be adapted locally or for specific specialties through usual clinical governance procedures.

In industrialised countries, major complications are reported to occur in 3–16% of inpatient surgical procedures, with permanent disability or death rates of approximately 0.4–0.8%.\textsuperscript{3} In England and Wales, 129,419 incidents relating to surgical specialties were reported to the NPSA’s Reporting and Learning System in 2007 with the following degrees of harm:

<table>
<thead>
<tr>
<th>Degree of harm</th>
<th>Number of reported incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>No harm</td>
<td>90,368</td>
</tr>
<tr>
<td>Low harm</td>
<td>29,929</td>
</tr>
<tr>
<td>Moderate harm</td>
<td>7,746</td>
</tr>
<tr>
<td>Severe harm</td>
<td>1,105</td>
</tr>
<tr>
<td>Death</td>
<td>271</td>
</tr>
</tbody>
</table>
### WHO Surgical Safety Checklist

(adapted for England and Wales)

#### SIGN IN (To be read out loud)

Before induction of anaesthesia

- Has the patient confirmed his/her identity, site, procedure and consent?
  - Yes

- Is the surgical site marked?
  - Yes/not applicable

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

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

#### TIME OUT (To be read out loud)

Before start of surgical intervention for example, skin incision

- Have all team members introduced themselves by name and role?
  - Yes

- Surgeon, Anaesthetist and Registered Practitioner verbally confirm:
  - What is the patient’s name?
  - What procedure, site and position are planned?

- Anticipated critical events

  - Surgeon:
    - How much blood loss is anticipated?
    - Are there any specific equipment requirements or special investigations?
    - Are there any critical or unexpected steps you want the team to know about?

  - Anaesthetist:
    - Are there any patient specific concerns?
    - What is the patient’s ASA grade?
    - What monitoring equipment and other specific levels of support are required, for example blood?

  - Nurse/ODP:
    - Has the sterility of the instrumentation been confirmed (including indicator results)?
    - Are there any equipment issues or concerns?

- Has the surgical site infection (SSI) bundle been undertaken?
  - Yes/not applicable

  - Antibiotic prophylaxis within the last 60 minutes
  - Patient warming
  - Hair removal
  - Glycaemic control

- Has VTE prophylaxis been undertaken?
  - Yes/not applicable

- Is essential imaging displayed?
  - Yes/not applicable

#### SIGN OUT (To be read out loud)

Before any member of the team leaves the operating room

- Registered Practitioner verbally confirms with the team:
  - Has the name of the procedure been recorded?
  - Has it been confirmed that instruments, swabs and sharps counts are complete (or not applicable)?
  - Have the specimens been labelled (including patient name)?
  - Have any equipment problems been identified that need to be addressed?

- Surgeon, Anaesthetist and Registered Practitioner:
  - What are the key concerns for recovery and management of this patient?

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This checklist contains the core content for England and Wales.

Last name: 
First name: 
Date of birth: 
NHS Number:* 
Procedure: 

*If the NHS Number is not immediately available, a temporary number should be used until it is.

www.npsa.nhs.uk/nrls
The NPSA has informed:

NHS organisations, the Independent Sector, providers (direct and commissioned) of all NHS and Independent Sector care and commissioners, regulators and professional bodies in England and Wales.

Supporting information

A supporting information document with more details on our findings, links to resources and the checklist is available from http://www.npsa.nhs.uk/nrls/alerts-and-directives/alerts/safer-surgery-alert/ or contact Fran Watts, fran.watts@npsa.nhs.uk, 020 7927 9595 or Joan Russell, joan.russell@npsa.nhs.uk, 020 7927 9519.

Organisations endorsing WHO Surgical Safety Checklist: