



Australian Government

HLTTHE006 Provide intra-operative equipment and technical support

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Modification History

Release	Comments
1	This unit of competency was first released in HLT Health Release 11.0.

Application

This unit describes the skills and knowledge required to provide equipment and technical support during operative procedures.

This unit applies to operating theatre technicians who work under the direction of a surgical and anaesthetic team.

The skills in this unit must be applied in accordance with current Commonwealth and State/Territory legislation, Australian/New Zealand standards and industry codes of practice.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite unit(s)

No pre-requisite units

Competency field(s)

Theatre Equipment

Unit sector(s)

Health

Elements and Performance Criteria

Element	Performance criteria
<i>Elements define the essential outcomes</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element</i>
1. Maintain sterile field	1.1 Position self and equipment to avoid breach of sterile field during procedure

	<p>1.2 Move around sterile field following aseptic techniques to prevent contamination according to organisational procedures</p> <p>1.3 Report breaches of aseptic techniques to surgical and anaesthetic team according to organisational procedures</p>
2. Monitor equipment performance	<p>2.1 Operate surgical devices and check operation according to organisational procedures</p> <p>2.2 Verify gas, electrical, and suction levels meet procedural requirements</p> <p>2.3 Verify back-up systems are functional, available and accessible according to procedural requirements</p> <p>2.4 Observe equipment during use and report faults according to organisational procedures</p> <p>2.5 Rectify faulty equipment according to organisational procedures</p> <p>2.6 Complete equipment documentation according to organisational procedures</p>
3. Attach and detach equipment	<p>3.1 Select and use personal protective equipment according to procedural requirements and organisational procedures</p> <p>3.2 Select attachments for healthcare recipient procedures, and attach to sites according to instructions from surgical team</p> <p>3.3 Re-position attachments during theatre procedures according to equipment requirements and instructions from surgical team</p> <p>3.4 Detach attachments using techniques according to organisational procedures to minimise risk of damage to healthcare recipient, staff and equipment</p> <p>3.5 Provide counter-traction during orthopaedic and plastic procedures and manipulations according to instructions from surgical team</p>
4. Connect irrigation	<p>4.1 Select irrigation and sequencing for operative procedure according to instructions from surgical team</p> <p>4.2 Check irrigation type, sterile integrity and expiry date and report discrepancies according to organisational procedures</p> <p>4.3 Connect irrigation to sterile giving set according to aseptic techniques and organisational procedures</p> <p>4.4 Change irrigation according to aseptic techniques and organisational procedures</p> <p>4.5 Communicate volume, type and number of irrigation bags to surgical team</p>

	4.6 Dispose of used irrigation bags and giving sets according to organisational procedures
5. Adjust theatre equipment	<p>5.1 Handle theatre equipment according to surgical team and manufacturer guidelines</p> <p>5.2 Connect theatre equipment to electrical, vacuum, gas supply according to standard operating procedures</p> <p>5.3 Adjust theatre equipment settings according to instructions from surgical team and manufacturer guidelines</p> <p>5.4 Communicate equipment readings to surgical team according to organisational procedures</p> <p>5.5 Recognise and communicate alarms, warnings, abnormal readings and equipment usage to surgical team</p> <p>5.6 Receive sterile equipment and lines from the surgical team and connect to theatre equipment according to aseptic techniques and organisational procedures</p>

Foundation skills

The foundation skills essential to performance of this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

Skill	Description
Learning skills to:	Apply knowledge of aseptic techniques and equipment requirements to support intra-operative tasks.
Reading skills to:	Interpret technical and procedural information to support safe intra-operative practice.
Numeracy skills to:	Interpret and communicate equipment reading and volume to support safe operation against safety limits.

Digital literacy outcomes are included in the Foundation Skills Companion Volume.

Range of conditions

N/A

Assessment Requirements for HLTTHE006 Provide intra-operative equipment and technical support

Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role. There must be evidence that the candidate has:

- followed established technical, infection control and safety procedures and instructions for equipment support in a range of different situations, including at least 3 occasions addressing the following at least once:
 - during emergency
 - re-positioning
 - change of surgical procedure

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- role of the operating theatre technician, including:
 - scope of job role and skill set of the operating theatre technician when working with theatre equipment
- medico-legal considerations, including:
 - medico-legal implications in relation to the use of equipment by technicians in the operating suite environment
 - legal and organisational responsibilities related to safe equipment use and documentation
- standard and transmission-based procedures, including:
 - the operating theatre environment
 - equipment used within the operating theatre
- theatre equipment knowledge, including:
 - types of theatre equipment and their purpose
 - specific hazards and precautions related to equipment use for individual and staff safety, including:
 - electrical safety
 - equipment settings
- features and correct use of theatre equipment in relation to:

- set-up procedures
- assembly and connection
- preparation for use in surgical procedures
- safe manual handling practices
- irrigation equipment, including:
 - function
 - application
 - associated hazards of irrigation equipment used during operative procedures
- human anatomy and physiology relevant to individual transfer and positioning, including:
 - normal and abnormal body positioning
 - joint movement
 - features of body locations where equipment may need to be attached and detached
- operative positions and risk management, including:
 - the 4 main surgical positions required for operative procedures, including:
 - supine
 - prone
 - lateral
 - lithotomy
 - associated risks and correct methods for positioning individuals to ensure safety and procedural access
- environmental systems, including:
 - theatre airflow and ventilation
 - operation of air-conditioning and ventilation systems in the operating room
 - impact of environmental systems on patient safety, the technician's role, and intra-operative work practices
- communication and reporting, including:
 - requirements for communicating equipment readings, alarms, and warnings to surgical and anaesthetic team
 - procedures for reporting breaches of aseptic technique and faulty equipment to surgical and anaesthetic team
 - communication protocols for liaising with surgical and anaesthetic teams, including during emergency situations and procedure changes
- emergency and contingency response, including:

- procedures for responding to equipment issues during emergencies, repositioning, and changes in surgical procedures
- back-up systems and protocols for maintaining safety during intra-operative equipment failure
- counter-traction techniques, including:
 - principles of counter-traction and the technician's role during orthopaedic and plastic procedures

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including access to:
 - operating theatre equipment, including:
 - operating table and lights
 - electrosurgical unit
 - instrument trolley
 - suction apparatus including mobile and wall-mounted systems
 - microscopes
 - laparoscopic stack systems
 - positioning and mobility equipment, including:
 - bean bags
 - yellowfin stirrups
 - pat slides, slide sheets, hovermats
 - lateral supports
 - head supports and head foams
 - gel supports
 - traction or orthopaedic extension frames
 - tourniquet
 - lightweight table extensions
 - hospital beds
 - documented procedures that the candidate must follow
- modelling of industry operating conditions, including presence of situations requiring problem solving

Assessors must satisfy the current Standards for Registered Training Organisations (RTOs)/AQF mandatory competency requirements for assessors.

Mandatory Workplace Requirements

Assessment of performance evidence may be in a workplace setting or an environment that accurately represents a real workplace.

Unit Mapping Information

Previous Code and Title	Equivalence	Comments
HLTTHE003 Provide intra-operative equipment and technical support	Not equivalent	Major changes to performance criteria and performance evidence. Additions to knowledge evidence and assessment conditions. Foundation skills added. Minor changes to unit application.

Links

Companion volumes, including implementation guides, are found on the national training register - <https://training.gov.au/training/details/HLT>.