

Medical Equipment Maintenance and Removal from Use

Standard operating procedure (SOP) | EQP-SOP-001

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Replaces	None (new document)
Standards and criteria supported	Standard 2B, criterion 2B.4 (non-negotiable)
Evidence basis	E-009
Status of this document	Recommended best-practice model. A hospital may adopt, adapt or replace it with an equivalent that meets the same criteria.

At a glance: what to do

1. List every clinical device on the inventory, with its last service date and next due date.
2. Service each device on the schedule, and record it.
3. When a device is faulty, label it "out of use", remove it, and report it.
4. Do not return a faulty device to use until it is repaired and tested.
5. Review the schedule every quarter.

Stop and get help straight away if: a faulty device is in use on a patient, or a device is past its service date and still in use with no approved reason.

1. Purpose

To keep every clinical device safe and working through a planned maintenance programme, and to remove faulty equipment from use until it is repaired [EC].

2. Scope

Applies to	Clinical engineering, biomedical staff, clinical users and the facilities team
Locations	All clinical areas at {{facility.legal_name}}
When	On the schedule, on any fault, and after any repair or incident involving equipment
Does not apply to	Non-clinical equipment such as office equipment, covered by the facilities plan

3. Definitions and abbreviations

Term	Meaning in this SOP
Clinical device	Any device used in patient care, diagnosis or monitoring
Planned maintenance	Checks and servicing done on a set schedule by the manufacturer, approved contractor or trained engineer

Term	Meaning in this SOP
Out-of-use tag	A tag attached to a faulty device that prevents use until released

4. Background and rationale

Faulty equipment is one of the most avoidable causes of patient harm in hospitals. Criterion 2B.4 requires a schedule covering all clinical equipment and removal of faulty equipment from use, not keeping it in service while it waits for repair.

5. Responsibilities

Role	Duties in this SOP	Competence needed
Biomedical or clinical engineering lead	Owns the inventory and the schedule; releases repaired equipment	Biomedical engineering
Ward or department head	Checks equipment before use; reports faults at once; keeps the device out of use	Trained in equipment use
Users	Check the device before use; report faults; do not use a tagged device	Induction and device training
Procurement lead	Ensures new equipment comes with service information and a service contract where needed	Procurement

6. Equipment, materials and resources

Item	Specification or standard	Check before use
Equipment inventory (EQP-REG-001)	Every clinical device listed	Current
Out-of-use tags (EQP-FRM-001)	Printed, in stock	Available in each area
Test equipment	Calibrated as required by the manufacturer	In date

7. Safety and infection prevention

- Never use a device with an out-of-use tag, even if it seems to work.
- Never remove the tag yourself. Only the authorised engineer releases a device.
- Follow the manufacturer's safety instructions when servicing.

8. Before you start

- Check the device is clean and has its inventory number.
- Check the device's next service date.

9. Procedure

Follow the steps in order. Where a step says "If", take the action for the case that applies. Do not skip a step. If a step cannot be done, use section 11 and section 12.

Step	Action	How to do it	Key point
1	Build the inventory.	• List every clinical device with its name, model, serial number, location, owner, last service and next service due. • Check the inventory every quarter against the devices in use.	A device not on the inventory is never serviced.
2	Service on schedule.	• Carry out maintenance at the interval set by the manufacturer or the committee (EC). • Use a qualified or approved engineer. • Record the service on EQP-REG-001 with the date, engineer and result.	The service record proves the device was checked, not just that it was supposed to be.

Step	Action	How to do it	Key point
3	Check before each use.	- The user checks the device is clean, undamaged, and within its service date. - Test the device as the manufacturer requires for daily checks.	Daily checks catch faults that the scheduled service will miss.
4	Remove faulty equipment from use.	- When a device is faulty, stop using it at once. - Attach an out-of-use tag (EQP-FRM-001) that states the fault, the date and the user's name. - Move it to the store for repair, out of the clinical area. - Report to the engineering lead the same shift.	A tagged device cannot be used by mistake. A device left in place can be.
5	Repair, test and release.	- The engineer repairs the device and tests it. - Only the engineer releases the device by removing the tag and recording the release on EQP-REG-001. - If the device cannot be repaired, withdraw it and record the disposal.	Release is a controlled step. Repair alone is not enough.
6	Review the schedule quarterly.	- Review overdue services, repeated faults and equipment ages. - Set actions for devices with repeated faults, including replacement.	Repeated faults show a device or a process that needs changing.

Decision points

- If a device is found in use with a fault, the engineer and the ward head review all patients treated with it in the last period and decide on further action (EC).

10. Special situations

Situation	What to do
Emergency device needed	Use the nearest working equivalent. Inform the engineering lead and record the substitution.

11. Problems and escalation

- Faults causing patient harm are reported as incidents at once (INC-POL-001).
- Overdue services for life-critical devices are escalated to the chief executive.

12. Monitoring and compliance

What is checked	Target	How often	Who	If the target is missed
Clinical devices in inventory with a service date	100%	Quarterly	Engineering lead	Add to inventory within 7 days
Services completed by due date	95% (EC)	Monthly	Engineering lead	Escalate to chief executive
Faulty devices removed from use the same shift	100%	Each event	Ward or department head	Review of the event

13. Records

Record	Where it is kept	Kept for
EQP-REG-001 Equipment Inventory and Service Log	Engineering file	Life of the device plus {{facility.records_retention_years}} years
EQP-FRM-001 Out-of-Use Tag record	Engineering file	{{facility.records_retention_years}} years

14. Training and competence

- Users are trained on each device before use, and on daily checks (EC).

- Engineers are trained and approved for each device type.

15. Related documents

ID	Title	Relationship
EQP-REG-001	Equipment Inventory and Service Log	Used in steps 1 to 3
EQP-FRM-001	Out-of-Use Tag	Used in step 4
FAC-REG-001	Integrated Facility Risk Register	Equipment risks are recorded there
SOP-031	Equipment Malfunction Procedure (generic)	Malfunction response

16. Evidence

ID	Source and status
E-009	ASF Expert Committee consensus. Service intervals must follow each manufacturer's instructions; the committee sets the review rules.

EC = ASF Expert Committee consensus. Items marked EC are reviewed by the Committee each year.

17. Change history

Version	Date	What changed	Approver and signature
1.0	{{document.effective_date}}	First version	Approved by the ASF Expert Committee
1.1	{{document.effective_date}}	Internal quality review: corrected cross-references, status wording and document control	Approved by the ASF Expert Committee