

STANDARD OPERATING PROCEDURE FOR BIOMEDICAL EQUIPMENT
FIJI PHARMACEUTICAL & BIOMEDICAL SERVICES



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Standard Operating Procedure - Planning for Procurement of Biomedical Equipment

1. PURPOSE

- 1.1 Medical equipment has a defined life cycle: it is acquired, tested, documented, put into service, checked, maintained, repaired and is finally retired from service or disposed. All of these stages can be further separated into clear steps in order to ensure that all equipment used to diagnose and treat patients is safe and accurate through to the end of its lifespan. The Fiji Pharmaceutical and Biomedical Services Centre (FPBSC) is responsible for coordinating this process in a standardised fashion but remaining within the boundaries of the Ministry of Economy (MoE) and Ministry of Health and Medical Services (MoHMS).
- 1.2 The series of steps should always begin with logical planning for the acquisition and use of biomedical equipment to be certain that the health system is getting as much benefit as possible from the investment.
- 1.3 A standard operating procedure (SOP) will help to avoid some common weaknesses of equipment maintenance and management. On the other hand, the capability to manage and maintain this medical equipment remains rather weak. There are several shortfalls such as a lack of criterion for equipment selection which leads to poor decision making, and poor planning leading to inadequate human resources and financing to maintain delivery of BED services to the health system.
- 1.4 This SOP will broadly outline the steps involved in planning for the purchase of biomedical equipment, and the factors that must be considered when selecting devices. The SOP is intended for use by all people involved in biomedical equipment acquisition of any type.

2. DEFINITIONS

- 2.1 **BIOMEDICAL EQUIPMENT:** Any instrument or apparatus including software used together with accessories necessary for correct operation to diagnose, treat, or monitor a patient for diseases or rehabilitate following disease or injury. Classification of equipment includes medical, dental, laboratory and radiology.

USERS: Include but not limited to medical staff (clinicians, nurses), allied health workers and supervised students who will be using medical equipment in the health facilities. 'Users' does not include patients who receive medical services directly.

2.2 BBREVIATIONS

- FPBSC – Fiji Pharmaceutical and Biomedical Services Centre
- MoHMS – Ministry of Health and Medical Services
- BED – Biomedical Engineering Department
- SOP – Standard Operating Procedure
- NBC – National Biomedical Committee
- CSN - Clinical Services Networks
- DFPBS- Director Fiji Pharmaceutical & Biomedical Supplies
- SBME- Senior Biomedical Engineer

3. SCOPE

| | |
|----------------|---|
| Applies to | FPBSC staff, NBC, CSN, Equipment users/technicians, BED |
| Audience | All MoHMS staff involved in planning for the purchase of equipment. |
| Distributed to | DFPBS, NBC, BED. |

4. RESPONSIBILITIES

| Personnel | Responsibilities |
|-----------|--|
| DFPBS | To ensure this SOP is made available to all staff. Initiate review of SOP when required. |
| CSN, BED | Provide technical information to FPBSC on requirements of biomedical equipment for replacements or to upgrade existing services. |
| NBC | Endorse purchase plan |
| AMU | Provide information on plans for infrastructure upgrades and construction of new health facilities |

5. MATERIALS

Planning:

- Minimum Equipment Standard List

Selection:

- MoHMS Equipment Specifications Catalogue

6. PROCEDURES

6.1 Planning

All equipment to be purchased must be planned at least 2 years to any request for quotations or tender. Planning phase must have:

- Contributions from the users and management of the services to be provided and required equipment with justifications on the need.
- Reference to the **Minimum Equipment Standard List** (if available) to justify the device type and quantity required.
- Advice and assistance from the BED on existing equipment requiring replacement, issues with existing equipment, infrastructural changes required, standardization, equipment maintenance, user and service training, donated equipment and estimated cost.
- Endorsement from the National Biomedical Committee (NBC) or equivalent on the rolling purchase plan.

The following factors must be considered when planning to purchase equipment to ensure safety of equipment, staff and patients. This is a minimum list, so other factors may need to be added depending on the circumstances.

- Type of service to be provided – existing or new or expansion;
- Type (e.g. brand, model, specifications) and quantity of equipment required for the service to be provided;
- Importance of service and equipment in comparison to other equipment and service requested or required;
- Site visits for availability of sufficient space and infrastructural changes required for equipment;
- Availability of donated or second-hand equipment and whether feasible.
- Human resource requirements and existing capacity for new or expanding services.

- Repair versus replacement costs – whether the device(s) is worn out or damaged beyond economical repair;
- Reliability of existing equipment;
- Clinical or technical obsolescence;
- Availability of parts and expertise to repair;
- Clinical or cost effectiveness of current equipment versus available equipment;
- If the equipment has been in use for a period of seven years or more from the acceptance date;
- Using a scoring mechanism to determine replacement priority for medical equipment.

6.2 Standardization

The standardization of medical equipment MUST be considered in order to achieve best value for money. There are 'pros' and 'cons' for standardizing on medical equipment. Consideration should always be given to the range of similar equipment already in use. Additionally, issues regarding staff familiarity and training and subsequent clinical risk should be taken into account. Standardisation of equipment should include the associated software and how compatible device software is with current systems.

Standardization of equipment will:

- Reduce risks.
- Ease cost pressures on technical and user training.
- Give more 'buying power' for negotiating discounts.
- Reduce the amount/ value of spare parts held for stock.

7. FORMS AND REGISTERS

- New Biomedical Equipment Request Form
- Biomedical Technical Reports

8. References

- National Biomedical Equipment Management Policy

9. Signature

10. Appendices

Standard Operating Procedure – Acquisition/Purchase of Biomedical Equipment

1. PURPOSE

- 1.1 This Standard Operating Procedure describes the steps that must be followed to acquire or purchase biomedical equipment for any use in the MoHMS. The SOP begins at the stage of selecting particular equipment and concludes with the device being logged in the Asset register as it is stored or sent to its clinical destination. This SOP should be immediately preceded by the *SOP – Planning for Procurement of Biomedical Equipment* and followed by *SOP – Use and Maintenance of Biomedical Equipment*.
- 1.2 The acquisition and purchase of biomedical equipment is a necessary step-by-step process well-documented and legislated in the Ministry of Finance (MoF) and the Ministry of Health and Medical Services (MoHMS). This requires several individuals and groups to work together, and as such an SOP which ties technical/operational aspects with the management levels allows all parties to move through a standardised process for any purchase.
- 1.3 This SOP will guide the FPBSC quotation officer and/or coordinator of the equipment acquisition process in the steps involved in selecting appropriate equipment, finding the appropriate price and supplier, through to the device being ready for service.

2. DEFINITIONS

- 2.1 **Biomedical Equipment:** any instrument or apparatus including software used together with accessories necessary for correct operation to diagnose, treat, or monitor a patient for diseases or rehabilitate following disease or injury. Classification of equipment includes medical, dental, laboratory and radiology.
 - **USERS:** include but not limited to medical staff (clinicians, nurses), allied health workers and supervised students who will be using medical equipment in the health facilities. ‘Users’ does not include patients who receive medical services directly.
-

2.2 Abbreviations

- FPBSC – Fiji Pharmaceutical and Biomedical Services Centre
- MoHMS – Ministry of Health and Medical Services
- BED – Biomedical Engineering Department
- MoF – Ministry of Finance
- NBEC – National Biomedical Equipment Committee

3. SCOPE

| | |
|-----------------------|---|
| Applies to | FPBSC quotations officer and other procurement staff. |
| Audience | Within government operations: MoF Procurement office, FPBSC quotations officer and other procurement staff. |
| Distributed to | MoF Procurement Office, MoHMS Planning and Policy Development Division, FPBSC, BED?, NBEC? |

4. RESPONSIBILITIES

| Personnel e.g. | Responsibilities |
|-----------------------------|---|
| Chief pharmacist | To ensure this SOP is made available to all Hospitals and Biomedical Engineering staff. Initiate review of SOP when required. |
| Biomedical equipment donors | To be aware of this procedure and the MoHMS Donation Policy |
| FPBSC Quotation officer | |
| FPBSC staff | |
| BED staff | Safely carry out or oversee acceptance testing, maintain Asset Register. |
| MoF Procurement Office | |
| ...add more | |

5. MATERIALS

5.1 Selection:

- **MoHMS Equipment Catalogue**

5.2 Request for Quotation:

- FPBSC SOPs #16-1 to 16-7
- FPBSC SOPs #17-1 to 17-9

5.3 Documentation:

- **Inventory card**
- **Service record card**

6. PROCEDURES

6.1 **Selection**

Based on the available funding, the required equipment will be prioritized such that the most important equipment is purchased first. In determining the most important equipment, consideration will be given to:

- Achieving the greatest benefit for the greatest number
- Addressing the most urgent need
- Primary/Secondary healthcare policy balance
- National priorities
- Current shortfall in meeting demand

The Biomedical Procurement Section follows the procurement rules and regulations of the MoF (*Finance Instructions* and *Procurement Regulations*) to purchase equipment as per the endorsed purchase plan.

Specifications for the required equipment will be obtained from the MoHMS **Equipment Catalogue** or functional specifications obtained from the users.

Selection of equipment is based on a cost effectiveness approach and will take into account the following factors:

- Appropriateness and fitness for purpose judged against considered specifications,
- Standardization with existing equipment in use,
- Reliability and durability (country environmental conditions, and that equipment will be suitable in its immediate environment),
- User and service training needs,
- Maintenance implications: Cost of maintenance, warranty terms, in-house technical support, supplier/manufacturer technical support, availability and accessibility of documents – user and service manuals, and cost and options of service contracts;

Estimated total costs across the device lifespan including associated consumables, disposables, training and/or service contracts, etc

6.2 Quotation Process

For purchases of less than \$100, competitive quotations need only be received verbally.

For purchases of \$100 to \$50,000, the quotation officer of FPBSC should collect a minimum of 3 written quotations following the following detailed SOPs:

- | | |
|-------------|-------------|
| • SOP# 17-1 | • SOP# 17-6 |
| • SOP# 17-2 | • SOP# 17-7 |
| • SOP# 17-3 | • SOP# 17-8 |
| • SOP# 17-4 | • SOP# 17-9 |
| • SOP# 17-5 | |
-

6.3 Tender Process

For purchases over \$50,001, the purchase must be put to public tender. The following SOPs from the FPBSC indicate this process in more detail.

- SOP# 16-1
- SOP# 16-2
- SOP# 16-3
- SOP# 16-4
- SOP# 16-5
- SOP# 16-6
- SOP# 16-7

6.4 **Donations**

Donations of Biomedical Equipment may only be accepted by MoHMS public health facilities if they comply with the MoHMS Donation Policy for Medical Equipment (2012) and that all stakeholders in the donation process are aware of the donation policy.

6.5 **Payments**

The payment and financial processes for acquiring biomedical equipment (i.e. goods, services and works) are given in the *Finance Instructions 2010* of the *Financial Management Act 2004*.

6.6 **Acceptance**

Acceptance checks are clearly good practice, with the safety of the patients and end user in mind, and also are a safeguard against litigation.

All biomedical equipment must be initially inspected, tested for its full functionality and safety and documented before it is entered into the database and dispatched for clinical use. Calibration and safety tests should only be carried out by Biomedical Department.

Some checks can be carried out by the receiving department/ward staff. Functional checks must be carried out by professional users or end users who have received suitable training prior to clinical use of any medical equipment.

All professional and end users MUST have access to the manufacturer's instructions.

6.7 **Documentation**

The BED maintains the complete, updated asset register of medical equipment used in the health facilities under the MoHMS. For non-centralized records there should be suitable cross references between the various record systems, with the Asset Database holding details of the purchase information and the local record keeping the maintenance and repair information. Access to information on the inventory/Asset Database should be available with the facility and more detailed access can be sought via the BED at the Divisional Hospitals.

All MOH clinical service providers must have an inventory of medical equipment. The inventory card should be filled whenever new equipment is received by the department. The officer responsible is required to fill out all the information required and store the card with the other inventory cards for the department's records.

A Service Record card should be filled whenever new equipment is received by the department. The officer responsible is required to fill out all the information required and store the card with the other Service Record cards for the department's records. These cards are also updated whenever any equipment is repaired or serviced. Safety Checks are performed and is documented on the card as well.

7. **FORMS AND REGISTERS**

-
- Assets register
 - Inventory card
-

11. **Service Record Card**

8. **REFERENCES**

-
- Guide for immediate relief assistance and emergency procurement (Procurement Office, MoF)
 - Donation Policy for Medical Equipment (FPBSC, MoHMS)

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- National Biomedical Equipment Management Policy (MoHMS, in draft)
- Financial Management Act 2004 (MoF)

9. SIGNATURE

10. APPENDICES

10.1 INVENTORY CARD

Front

| | | | |
|--|------------------|-------------------------------------|-----------------|
| EQUIPMENT TITLE: | | BIOMEDICAL EQUIP. NO. <i>Amor</i> | |
| MODEL: | SERIAL NO: | EQUIP CLASS | CLASS OF YES/NO |
| MANUFACTURER: | SUPPLIER: | CLASSIFICATION OF PATIENT CIRCUITS: | |
| SERVICE/SPARES AGENT: | ACCEPTANCE DATE: | WARRANTY EXPIRE DATE: | |
| COST: | SERVICE MANUAL | PROJECTED REPLACEMENT DATE: | |
| SERVICE CONTRACT: YES/NO EXPIRY DATE: | | HOSPITAL: | |
| RMS INTERVAL (months) Major Minor | | LOCATION: | |
| COMMENTS: | | | |
| BIOMEDICAL ENGINEERING DEPARTMENT — INVENTORY CARD | | | |

Rear

| ASSOCIATED EQUIPMENT/ACCESSORIES | | | |
|-----------------------------------|-----------|------------|-----------------------|
| TITLE | MODEL NO. | SERIAL NO. | BIOMEDICAL EQUIP. NO. |
| | | | |
| COMMENTS: | | | |
| BIOMEDICAL ENGINEERING DEPARTMENT | | | |
| | | | 46/HE/97 |

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Standard Operating Procedure – Use and Maintenance of Biomedical Equipment

1.0 PURPOSE

1.1 Medical equipment has a defined life cycle: it is acquired, tested, documented, put into service, checked, maintained, repaired and is finally retired from service or disposed of. All of these stages can be further separated into clear steps in order to ensure that all equipment used to diagnose and treat patients is safe and accurate through to the end of its lifespan. The Fiji Pharmaceutical and Biomedical Services Centre (FPBSC) is responsible for coordinating this process in a standardised fashion but remaining within the boundaries of the Ministry of Economy (MoE) and Ministry of Health and Medical Services (MoHMS).

2.0 DEFINITIONS

2.1 **Biomedical Equipment:** Any instrument or apparatus including software used together with accessories necessary for correct operation to diagnose, treat, or monitor a patient for diseases or rehabilitate following disease or injury. Classification of equipment includes medical, dental, laboratory and radiology.

- **USERS:** include but not limited to medical staff (clinicians, nurses), allied health workers and supervised students who will be using medical equipment in the health facilities. 'Users' does not include patients who receive medical services directly.

2.2 **Abbreviations**

- FPBSC – Fiji Pharmaceutical and Biomedical Services Centre
- MOHMS – Ministry of Health and Medical Services
- BED – Biomedical Engineering Department
- CSN - Clinical Service Network
- PM - Preventative Maintenance
- DBC - Divisional Biomedical Committee
- NBC - National Biomedical Committee
- AMU - Asset Management Unit

3.0 SCOPE

| | |
|----------------|--|
| Applies to | FPBSC, NBC, DBC, BED, AMU and all Health Facilities. |
| Audience | All MOHMS staff involved in the Use & Maintenance of Biomedical equipment. |
| Distributed to | FPBSC, NBC, DBC, BED, AMU and all Health Facilities. |

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4.0 **RESPONSIBILITIES**

| Personnel | Responsibilities |
|-------------------|---|
| FPBS | To ensure this SOP is made available to all Hospitals and Biomedical Engineering staff. Initiate review of SOP when required. |
| BED | To ensure that the contents of the SOP are followed as stipulated. |
| Health Facilities | To ensure that Users are made aware of the contents of the SOP. |

5.0 **MATERIALS**

- Asset Register
- Preventative Maintenance Sheet
- Ward Round Register
- Stores Ledger/Tally Record Card
- Dispatch Note
- Hazard Notice
- Fault Card
- Biomedical Log in/Log out book

6.0 **PROCEDURES**

6.1 **Introduction of Biomedical Equipment**

For the introduction of all Biomedical Equipment into the Health Facilities, all stakeholders need to ensure the following factors need to be accounted for.

6.1.1 **Site Readiness**

BED, Health Facility and AMU in a coordinated effort are to ensure that the site identified is prepared well in advance for installation of biomedical equipment according to the requirements set out by the Manufacturer/Supplier of the equipment.

6.1.2 **Receipt of Equipment**

All equipments received by BED should be accompanied with documents containing the following;

- a. Contents information,
- b. Supplier information,
- c. Cost (for equipment purchased by MOHMS),
- d. Manuals (soft or hard copies),
- e. Warranty information (if applicable) and
- f. Distribution information.

Should there be a circumstance whereby a Health Facility has received any biomedical equipment other than those dispatched by BED, it is the immediate responsibility of that facility to inform BED before the equipment is put to clinical service.

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6.1.3 **Installation**

All installation of biomedical equipment should only be carried out by;

A. Engineers or Agents authorised by the Supplier/Manufacturer:

- BED is to ensure that BED Technicians/Engineers are present on site during installation.
- BED is to also ensure that the Installation Reports are provided by the Engineers/Agents at the end of Installation.

B. BED Technicians/Engineers:

For installations that are carried out by BED Technicians/Engineers, BED is to ensure that the equipment is issued with a mandatory Despatch note containing the following information;

- a. Equipment type,
- b. Biomedical equipment number,
- c. Model of the equipment,
- d. Serial number,
- e. Accessories/auxiliary items, and
- f. User manuals issued (if available).

6.1.4 **Commissioning**

During the commissioning of all biomedical equipment BED is to ensure that the following documents are provided.

- a. Acceptance Form (if applicable)
- b. Installation Report
- c. Training Report

Upon commissioning of all biomedical equipment BED is also to ensure that the Assets Database and mandatory documentation records is updated accordingly.

6.2 **TRAINING**

6.2.1 **BED Training**

FPBS and BED are to ensure that BED Technicians/Engineers involved with the repair, servicing and maintenance are trained adequately either before, during or after introduction of new or donated biomedical equipment.

BED Technicians/Engineers should engage in capacity building training where training is not available for carrying out the repair, service and maintenance duties.

6.2.2 **Staff Training for Usage**

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FPBS & BED are to ensure that the users of the Biomedical equipment are adequately trained for proper use of Biomedical equipment. This also included Training provided by the Suppliers/Manufacturers during or after installation.

BED is also ensure that the Users are trained to perform and document the routine User Maintenance as specified in the equipment User Maintenance Checklist provided.

6.3 **MAINTENANCE AND SERVICING**

BED, USER & Authorised Engineers.

Day to day maintenance will be carried out by the user on a routine basis in accordance to instructions given by the BED or manufacturer. Professional users and end users are responsible for pre-use checks, preparation for use and regular decontamination. These verification checks should be properly documented on a regular basis.

The BED is responsible for planned preventative maintenance and for selecting the methods used to do so. This includes all equipment not covered by a service/maintenance contract and logged onto the **Asset Register**. All work performed on medical equipment is documented in the assets register. A schedule of all the preventative maintenance works is drawn up by each of the respective Biomedical Officer In-Charge in the different divisions. This preventative maintenance checks are carried out on a 6 monthly basis (two trips in a year) and this is done to ensure the longevity and proper utilization of the equipment in all MoHMS Health facilities.

The officers assigned to carry out the maintenance checks are required to check each piece of equipment according to the **Preventative Maintenance Sheet** and also to fill out the following details:

- Equipment title;
- BME number;
- Serial number;
- Model/make;
- Hospital and;
- Location.

All the preventative maintenance checks adhere to the AS3551 standard.

After the scheduled maintenance checks are completed the information is brought up to the department and a report on the maintenance checks is drawn up and also all the equipment records maintained at the department are updated.

Apart from the routine preventative maintenance checks a weekly ward round is made by the biomedical staff to different wards. This is to ensure that there are no faulty equipment in the ward and that all faulty equipment is being sent up to the biomedical workshop for all necessary repairs. All the visits are documented in the **Ward Round Register** which is handed to the officers in charge of carrying out the visits to the different wards. The biomedical officers note down all the information gathered on the visit and is also signed by the person providing the information on the equipment kept in the ward. On every maintenance visit the users are informed on the proper use and care of the equipment to ensure that equipment breakdowns do not occur.

The BED in collaboration with FPBS is responsible for the selection of the maintenance provider which maybe in-house, by the manufacturer or by a third party maintenance organization.

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6.4 Repairs

6.4.1 Reporting Faults

Faulty equipment is reported to the BED either through a phone call, or bringing the equipment to the Department with a **Fault Card**. The fault cards are filled by the person bringing the equipment for repair. The fault cards are filled and attached to the faulty equipment. The cards are used by the officer(s) for filling in the **Biomedical Log In Log Out** book. It also contains information on the equipment and also the details of the fault as stated by the user.

6.4.2 **Conducting Repairs:** Upon receipt of faulty equipment and attending to onsite repairs, BED carries out the following tasks.

- Troubleshooting
- Operational Checks
- Safety Checks (as per AS3551)

Upon completion of repair works BED Technicians/Engineers are to ensure that all equipment records are updated accordingly with the repair works conducted. All accessories and spare parts used during repair works is also to be documented and inventory records are to be updated.

BED Technicians/Engineers should always ensure that the station is kept updated on the status of the repair to their equipment.

6.4.3 Repaired Equipments

All equipment that are brought in to the BED workshop for repairs and are to be returned to the station after repair works should be accompanied by a despatch note.

BED Technicians/Engineers responsible for the repairs are to ensure that the equipment is logged out of the Biomedical Log In/ Log out Register and the Stations is informed to collect the equipment.

For onsite repairs, the facility is informed accordingly upon completion of repairs.

6.5 Storage/Distribution

Inappropriate storage of items affects their subsequent safe use. Manufacturers' information and instructions both on storage conditions and shelf life should be followed.

The Biomedical **Stores Ledger/ Tally Record card** should be filled whenever new spare parts are received and stored within the department. The officer responsible is required to fill out all the information required and store the card with the other Biomedical Stores Ledger/ Tally Record cards for the department's records. These cards are also updated whenever any parts are used for repairs or service of equipment.

The **Dispatch Note** is used whenever any equipment is issued out to other stations. The officer dispatching any equipment should fill out the Dispatch Note accordingly and also provide a copy to the person receiving the equipment after he/ she signs on the note.

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6.6 Reporting

BED is required to provide the following Reports;

- Report on all activities carried out on a weekly basis to the CSNs of the Divisional Hospitals.
- Technical Reports for equipment to be written off.
- PM Reports after conducting Preventative Maintenance works in the different health facilities
- All Reports as required by Management.

6.7 HAZARDS AND INCIDENTS

The Biomedical Department will monitor performance of newly introduced equipment.

The Risk Management Unit coordinates all investigations on adverse incidents relating to medical devices and will be assisted by the BED to investigate and report on equipment status.

The BED removes the medical equipment involved in an incident from service until it is recommended to be returned to service.

All equipment **Hazard Notices** and Recalls are coordinated through Biomedical Department. The BED is responsible for checking the asset register to identify the presence of affected equipment and completing and documenting any appropriate work.

The BED notifies the Risk Management Unit on the Hazard/Recall and about affected equipment and removes them from service until fault is rectified.

The hospital department/unit using the equipment determines the emergency clinical interventions to use when equipment fails. The user ensures patient safety first, removes equipment from service, labels it and notifies the BED.

6.8 RISK MANAGEMENT

The BED is responsible for the development of criteria used to identify and evaluate risks associated with medical equipment, based on the function of medical equipment, physical risks related to use of equipment, and history of patient safety issues related to the use of equipment.

The BED is responsible to ensure that all equipment is assessed and tested to be fully functional and safe to use at the time of commissioning by either the in-house Biomedical Technicians/Engineers or the authorized service personnel from the Manufacturer/Supplier.

7.0 FORMS AND REGISTERS

- *Asset Register*
- *Preventative Maintenance Sheet*
- *Ward Round Register*
- *Stores Ledger/Tally Record Card*
- *Dispatch Note*
- *Hazard Notice*
- *Fault Card*
- *Biomedical Log in/Log out Register*

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| Date Effective: | Planning for Procurement of Biomedical Equipment |
| Date of Review: | |

8.0 REFERENCES

9.0 SIGNATURE

10.0 APPENDICES

Hazard notice

Dispatch notes

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|--|----------------|---|--|-----------------|
| ORIGINAL AS PACKING SLIP | | MEDICAL DEPARTMENT DESPATCH NOTE | | Nº 51051 |
| Despatched To | | | | |
| Per | | | | |
| From | | | | |
| Date | | Signature | | |
| Article | Pattern | Quantity | | |
| | | | | |
| Upon receipt of the goods the original enclosed must be signed and returned to the originator without delay. | | | | |
| Received the above mentioned articles in good condition. | | | | |
| Date | | Signature | | |
| Date | | Post | | |

White Copy (retained for records)

| MEDICAL DEPARTMENT | | |
|--|---------|----------|
| DESPATCH NOTE | | |
| No 51051 | | |
| Despatched To | | |
| Per | | |
| From | | |
| Date | | |
| Signature | | |
| Article | Pattern | Quantity |
| | | |
| Upon receipt of the goods as listed above the original which accompanies the goods must be signed and returned to the originator without delay. Retain this duplicate copy for your records. | | |

HE415

Blue Copy (issued out to person receiving equipment)

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| TRIPLICATE AS FAST COPY | | |
| MEDICAL DEPARTMENT DESPATCH NOTE | | |
| No | | 51051 |
| Despatched To | | |
| Per | | |
| From | | |
| Date | | Signature |
| Article | Pattern | Quantity |
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Standard Operating Procedure – Decommissioning of Biomedical Equipment

1.0 PURPOSE

2.0 DEFINITIONS

2.1 **Biomedical Equipment:** Any instrument or apparatus including software used together with accessories necessary for correct operation to diagnose, treat, or monitor a patient for diseases or rehabilitate following disease or injury. Classification of equipment includes medical, dental, laboratory and radiology.

- **USERS:** *include but not limited to medical staff (clinicians, nurses), allied health workers and supervised students who will be using medical equipment in the health facilities. 'Users' does not include patients who receive medical services directly.*

2.2 Abbreviations

- FPBSC – Fiji Pharmaceutical and Biomedical Services Centre
- MOHMS – Ministry of Health and Medical Services
- BED – Biomedical Engineering Department
- SOP – Standard Operating Procedure

3.0 SCOPE

| | |
|----------------|--|
| Applies to | |
| Audience | |
| Distributed to | |

4.0 RESPONSIBILITIES

| | |
|------------------|---|
| Personnel e.g. | Responsibilities |
| Chief pharmacist | To ensure this SOP is made available to all Hospitals and Biomedical Engineering staff. Initiate review of SOP when required. |

| | |
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| | |
|---|---|
| Medical Superintendents of Divisional Hospitals | |
| NBEC | |
| BED staff | |
| Staff of all Health Facilities | . |
| MoF | . |

5.0 **MATERIALS**

6.0 **PROCEDURES**

6.1 **DECOMMISSIONING AND DISPOSAL**

Decommissioning and disposal of medical equipment is as per the policies and procedures set by the MOF.

BED assists by recommending the disposal methods, which may include burial in ground, auctioning, selling to scrap metal, selling to a refurbishing company, donating to other institutions or returning to the manufacturer or supplier for proper disposal.

Environmental considerations are to be taken into account before deciding on disposal methods to ensure no hazardous chemicals are disposed in the environment.

The BED ensures that before medical equipment is disposed, it is recorded on the asset register as having been removed from service.

7.0 **FORMS AND REGISTERS**

8.0 **REFERENCES**

9.0 **SIGNATURE**

1.0 **APPENDICES**

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