

Medical Equipment Maintenance Program

Dr Asela Perera

MBBS MSc MD

Regional Director of Medical Services

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Definitions

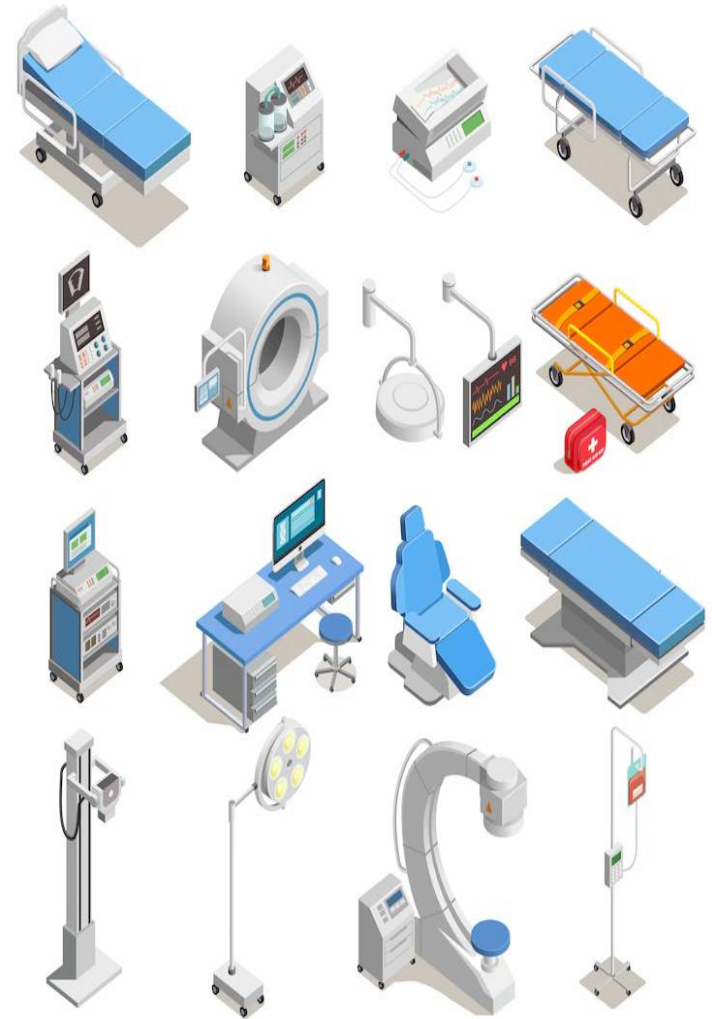
Medical device:

An article, instrument, apparatus or machine that is used in the prevention, diagnosis or treatment of illness or disease, or for detecting, measuring, restoring, correcting or modifying the structure or function of the body for some health purpose.

Typically, the purpose of a medical device is not achieved by pharmacological, immunological or metabolic means.

Medical equipment:

Medical devices requiring calibration, maintenance, repair, user training, and decommissioning – activities usually managed by clinical engineers. Medical equipment is used for the specific purposes of diagnosis and treatment of disease or rehabilitation following disease or injury; it can be used either alone or in combination with any accessory, consumable, or other piece of medical equipment. Medical equipment excludes implantable, disposable or single-use medical devices.

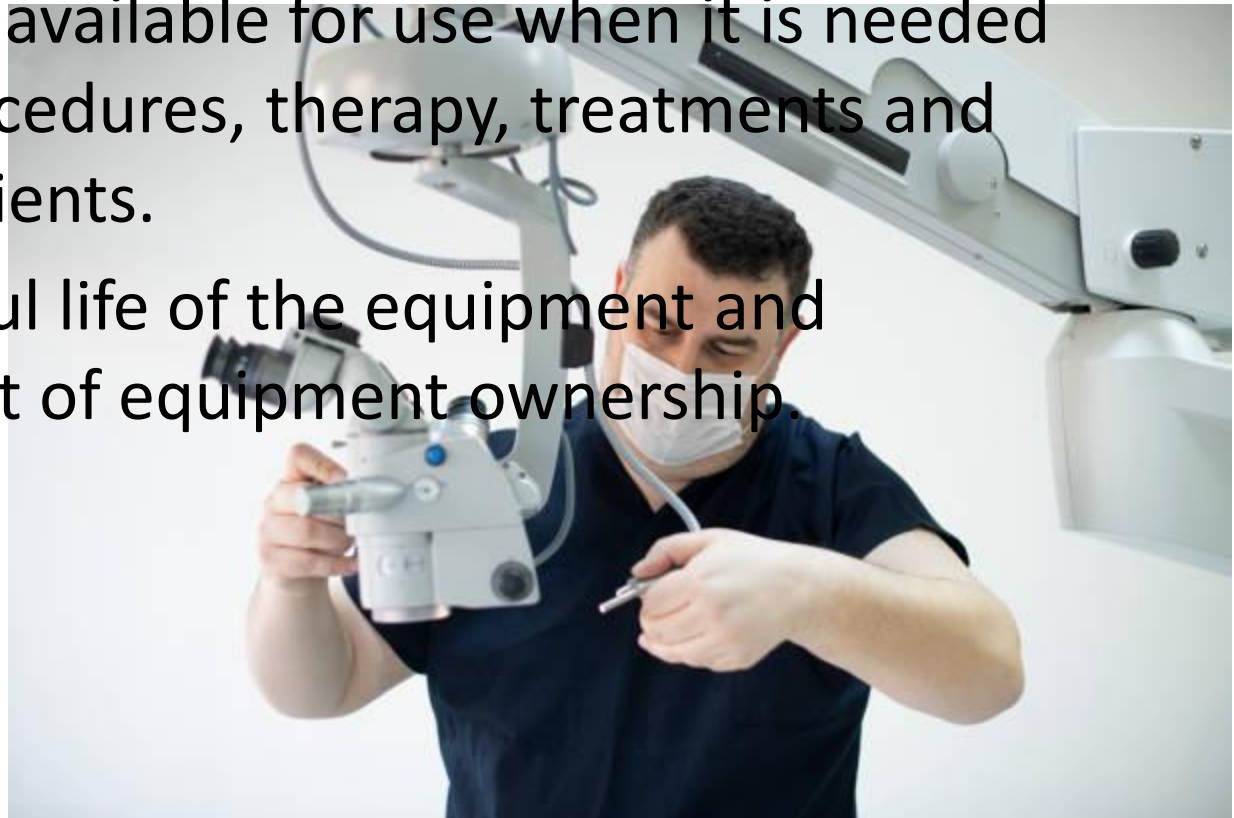


Health technology:

The application of organized knowledge and skills in the form of devices, medicines, vaccines, procedures and systems developed to solve a health problem and improve quality of life.³ It is used interchangeably with health-care technology.

Why Health Care Institutions should have a well planned and managed med Equip maintenance program?

- Considerable investment.
- High maintenance cost.
- Reliable, safe and available for use when it is needed for diagnostic procedures, therapy, treatments and monitoring of patients.
- Prolongs the useful life of the equipment and minimizes the cost of equipment ownership.

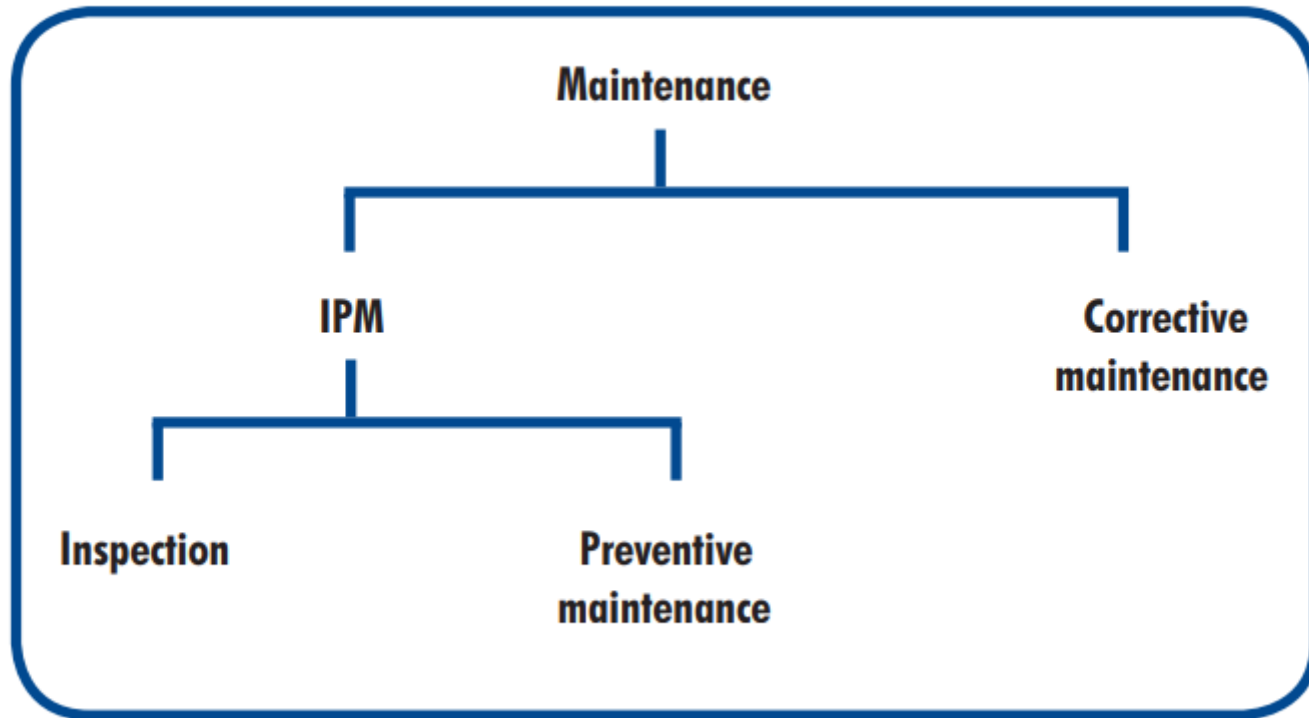


Purpose of medical equipment maintenance

Availability

Reliability

Figure 1. Components of a maintenance programme



There are three critical factors that should be considered in planning a medical equipment maintenance programme.

- Inventory
- Methodology
- Resources.

Equipment Survey 2022

Equipment Survey Sample Sheet

Medical equipment maintenance calendar

Maintenance calendar is a one of important planning tool of medical equipment maintenance. It can be prepared either in quarterly or annually. District level calendar should be prepared by the district health authority with the considering the cost effectiveness and other prioritized planned activities. Preparation of health facility level calendar is the responsibility of respective health administrator by the considering district level calendar.

Stake holders in medical equipment maintenance

Several categories of health care workers and providers play different role in maintenance of medical equipment.

Those include

- Users
- Maintenance personnel
- Medical administrators
- Manufactures and Vendors

Prioritization

Criticality of the equipment

According to the literature five criteria model is used to determine the criticality of the equipment. Degree of the complexity of the maintenance, function, risk, degree of the mission importance and age of the equipment are the five criteria.

Figure3. Decision support procedure for select appropriate medical equipment maintenance strategy proposed by Malek et al

