CONSIDERATION FOR MEDICAL EQUIPMENT IN A MOBILE HEALTH UNIT

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Abstract: The Mobile Health Unit – USM – represents the medical structure organized in a specially arranged vehicle (caravan type, utility vehicle type, truck body type or other mobile structures) with minimal but effective equipment in order to save the patient's life. The medical equipment existing in the USM is monitored both by the medical staff who handle it, by the technical support staff, that is, by the biomedical engineers of the health institution, and, if necessary, by the technical staff of the company that ensures the introduction of the equipment.

KEY WORDS: *mobile health unit, medical equipment, biomedical*.

1. INTRODUCTION

USM, they can provide emergency medical services in the areas where they are requested and are directed to the scene of the incident by dispatchers. As a structure, they belong to and are governed by Health Institutions, according to the order of the Ministry of Health. The management of activities in USM is based on a well-developed plan, in order to maximize the efforts of the team working within the structure and minimize risks.role

The acquisition of medical equipment is an important activity of the engineer in the technical support service, who establishes the sufficient number of medical devices needed, their technical characteristics and quality. The acquisition of medical equipment must be planned, taking into account the data collected from the inventory and can be done in several ways, endorsed by the technical support staff. figure 1.[1.2.3.4.6.7.8.9.]

Figure 1. USM model

2. EXPERIMENTAL - Monitoring and maintenance of equipment in the USM

The operations, monitoring and maintenance activities of the equipment in the USM are the responsibility of the medical support staff, biomedical engineers and technicians, who are responsible for the implementation and management of medical devices, namely:present, the first condition of energy security is met, holding energy resources that ensure an energy mix this point. Judicious exploitation of these resources:

- Inventory of medical devices;
- Planning and purchasing of medical equipment, consumables and spare parts;
- Exploitation - operation, monitoring and maintenance of equipment;
- Disposal of medical devices.

The registration of medical equipment in the USM is one of the primary activities that must be carried out by the technical support staff, it must be constantly updated in order to have a current and correct database, useful also to the personnel who handle the equipment. The collection of this information can be done in tables, in documents that are developed and modified only by the technical support staff, the biomedical engineer, and the storage is more efficient in electronic format, Table 1.

Tabelu 1. Inventarierea aparaturii medicale

Crt	Name/ standardized by MS	Model	Manufacturer	Year of manufacturer	Frequency of use	Repair history	Depart. To which belongs
1	**Vital functions monitor**			2010	Daily		USM
2	**EKG/EGG**			2010	Daily		USM
3	**Defibrillator**			201	Daily		USM
4	**Ventilator Mecanichal**			2010	Daily		USM
5	**Surgical aspirator**			2010	Daily		USM
6	**Oxygen cylinders**			2010	Daily		USM
7	**Hydraulic ambulance strecher**			2016	Daily		USM

The same type of inventory is also possible for consumables or spare parts. Their number will be monitored accordingly to ensure their availability in case of need.

To achieve the goals of medical devices, the actions to identify new medical equipment must be planned in advance, according to the needs of the department, respectively the USM. [1]

Planning is also important with regard to the budget required to purchase new equipment, consumables and spare parts. Following the purchase, acceptance test acceptance and installation of the equipment, the operation and monitoring phase will begin. Before operating the medical equipment, the medical staff, who will handle the equipment, as well as the technical support staff, who will ensure maintenance, will be trained to ensure that the equipment will be used in accordance with the manufacturer's M O and in terms of efficiency, thus preventing malfunctions due to operators.

After the medical equipment has been put into operation, the optimal operating condition is monitored by both the medical staff and the biomedical engineers of the Department of Biomedical Engineering.

The maintenance of medical devices, equipment, in the USM is a task that belongs primarily to the equipment support employee, the biomedical engineer or technician, but also to the entire staff who handles this equipment, from all subdivisions of the medical institution. The monitoring and evaluation of the activities belonging to the maintenance cycle can be illustrated as in figure 2.

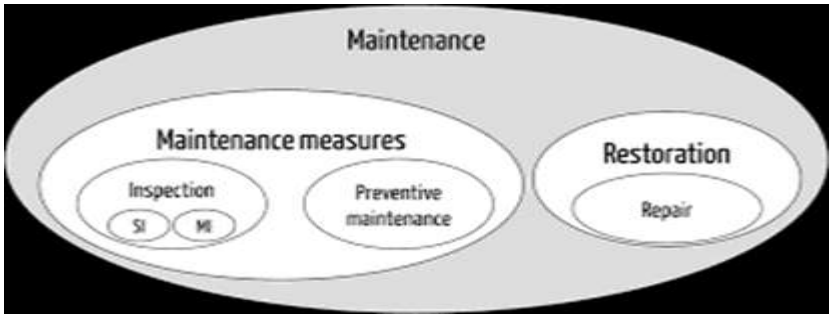

Figure 2. The maintenance cycle of medical devices

Inspections and maintenance are vital for the safe operation of medical equipment, sufficient technical and medical knowledge is also required to ensure adequate maintenance of medical devices, we can say that maintenance of medical equipment must be ensured by technical support personnel.

Maintenance of medical devices includes: preventive maintenance and corrective maintenance

The responsibility for reporting incidents with medical devices lies primarily with medical personnel, medical and healthcare institutions, other users, the manufacturer or its authorized representative. Incidents are reported, in accordance with the legislation in force, to the responsible authority in this field, namely the Agency for Medicines and Medical Devices.

Technical support personnel, biomedical engineers, together with medical personnel must take all necessary actions to prevent incidents. The occurrence of an incident concerning medical devices must be reported immediately, i.e. medical and biomedical personnel must report it.

3.CONCLUSION

- Ensuring the mitigation of shock caused by preventive or forced driving of the mobile structure, as well as the occurrence of unpredictable elements.
- We can certify that activities related to medical devices are the responsibility of specialized personnel, technical support personnel, therefore they must govern the appropriate management of medical devices, which includes the accumulation, implementation and modification of all data that influence the operation of the equipment in the USM.
- Cost of operation of impact on the environment.
- Ensuring the mitigation of shock caused by preventive or forced driving of the mobile structure, as well as the occurrence of unpredictable elements
- Provision of medicines, disinfectants, antiseptics and decontamination substances authorized or admitted by the Medicines Association.

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