

EFFICIENCY OF MEDICAL DEVICES IN HOSPITAL MANAGEMENT

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The evaluation of the global health experience has shown that advanced medical devices are an indispensable part of the medical care in the process of prevention, proper diagnosis and treatment of diseases. Using them effectively requires, as a priority, increasing the number of investigations and cost effective and quality treatment. The Department of Biomedical Engineering ensures optimal conditions for providing effective and safe, qualitative medical devices for Institute of Mother and Child in order to guarantee the quality of medical services, the complex organization of measures and daily activities for maintaining and repairing the medical devices.

The maintenance, examination and medical device management have become a priority in health policy in many countries, many studies proving that through coherent policies in these areas, the ratio the cost / efficiency of the advanced medical technologies can improve, the safety of patients increases and last but not least the quality of medical care.

In order to ensure optimal conditions for making available the qualitative, efficient and safe medical devices for the Institute of Mother and Child, to guarantee the quality of medical services, the complex organization of measures and daily activities for maintaining and repairing the medical devices the Department of Biomedical Engineering was founded, which has the following responsibilities: preventive maintenance for medical devices, achieving effective management of testing, calibration and repair of medical devices, collaboration with external technical services, tests the performance and operational safety of medical devices and other responsibilities.

An important step in implementing the medical device management in the medical institution is evaluating and detecting needs, inventorying the medical equipment, the operating status and their own use. The information system WEB-PRAXIS - Medical Equipment Management System was used, that is easy to use and facilitates a better medical device management in the healthcare system.

The analysis of the non-operating time of the defective medical devices for a period of three months shows that 122 devices were repaired in less than an hour, 586 devices were repaired within a period of 1-5 hours, 26 devices in about 5-24 hours, and only three devices in a period up to one month.

The benefits and savings of implementing the Medical Device Management and Biomedical Engineering Department activities are:

- The medical institution can offer a complete service that is not hindered by the non-functional technologies;
- The staff uses the equipment at the maximum level, following written procedures and good practice;
- Decreasing the costs for maintenance of medical devices, through internal appropriate services in a timely manner;
- Optimal use of expensive medical devices by qualified and trained personnel, reducing the user's errors and thus the maintenance costs.