

PL-3.2**Evaluation of Health Technology in Republic Moldova**Victor Sontea¹ and Artur Buzdugan²¹ *President of Moldovan Biomedical Engineering Society; Head of National Center of Biomedical Engineering, Technical University of Moldova*² *Technical University of Moldova*
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Medical devices (MD) are indispensable in performing the medical act, and their importance has become a priority at the medical institution level as well as at the national level. To ensure the efficient functioning of a health system, it is necessary to equip it with medical devices, in accordance with the progress of medical technologies. However, the use of quality, safe and effective medical devices also requires qualified human resources, as well as the implementation of an effective management of medical devices [1].

The degree of endowment with high-performance medical devices and ensuring an appropriate level of professionalism of the medical staff are the key tools in ensuring the good functioning of the health system and exert a direct impact on the functional effectiveness of the system, on the quality of the service and the degree of satisfaction of the beneficiary. The effective use of them presupposes, as a matter of priority, the increase in the number of cost-effective and qualitative investigations and treatment. For these reasons, the WHO recommends and it is essential to have a policy at the national level regarding the Management of Medical Devices (MMD), which includes the provision of DM, ensuring the maintenance, verification and correct use of medical technologies, the training of specialists in the field and the creation of a system of their continuous training, etc.

In the Republic of Moldova, Law no. 102 of June 9, 2017 regarding medical devices with the aim of adjusting the legal framework of the Republic of Moldova to the Community acquis for the implementation of European technical regulations in the field of MD and consumer protection of medical services, offered through the application of MD. The signed law stipulates the definitions according to the European Directives with application to DM and establishes that they can be introduced on the market, put into operation or used only if they are certified and registered, so that they do not affect the safety and health of patients, users and other people and the environment.

With the support of the Swiss Development and Cooperation Agency through the PERINAT and REPEMOL projects, all existing procedures related to MDD at the hospital level were analyzed, the necessary set of procedures was defined and the model of MD management and administration procedures was developed, which were initially implemented in five medical institutions and was developed with the support of JICA, the Guide regarding the establishment criteria, roles and responsibilities of biomedical engineering Departments/Sections within medical institutions.

The results of the MMD evaluation at the medical institution level demonstrated the positive impact in the efficient use of the DM, the reduction of the maintenance expenses of the DM, through appropriate internal services in a timely manner, the increase in the cost-efficiency and safety of the medical act.*

In the same context, the "Management of Medical Technologies" Pilot Center was established, at the base of the Mother and Child Institute jointly with the Technical University of Moldova, which aims to develop procedure models for MMD to European and international standards, the development of procedures for maintenance, diagnosis and repair of medical devices, with the support of JICA, 5 departments of Biomedical Engineering were organized.

According to the Statistical Yearbook of the Republic of Moldova for 2020, 12,552 doctors and 23,584 medical personnel worked in the health system, of which 18,514 were nurses - all users of medical devices.

One of the most important roles in the management of medical devices belongs, of course, to the personnel responsible for the maintenance of medical devices (medical bioengineers, technical engineers, technicians, mechanics, etc.).

Starting from 2016 and until now, annual evaluations have been carried out regarding the endowment of the health system with human resources (medical bioengineers, engineers and

technicians). Recent evaluations have shown that their total number is about 150, of which 50 are medical bioengineers. At the same time, the real need of the health system, being over 300 medical bioengineers.

For this purpose, the National Biomedical Engineering Center within the Technical University of Moldova [2], authorized by law with such functions, plays a special role in the periodic training and improvement of staff.

The expected result following the implementation of the MMD in is ensuring the quality of medical devices and optimizing the use of public financial means through a proposed rational and efficient management.

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References

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