

**HEALTH TECHNOLOGY  
MANAGEMENT IN IMSP  
ICŞDOSMşic**

Inginer IMSP ICŞDOSMşic  
Pîslaru Corneliu

# HTM major problems in Moldova

- Insufficient funding
- Lack of legal framework
- Insufficient equipment to medical institutions with modern medical devices.
- Technical maintenance, repair and metrology insufficient assistance in equipping medical institutions devices.
- The absence of complex programs to replace old devices with new devices
- Insufficient evidence of supervision and operation of medical devices in health facilities.

# Major problems in the health system

- use low-yield devices
- Lack of financial resources for the repair and purchase of spare parts and consumables
- Lack of States Departments of Health Bioengineering units.

All of these need to implement and promote the health technology management at national and local levels.

# What is Health Technology Management?

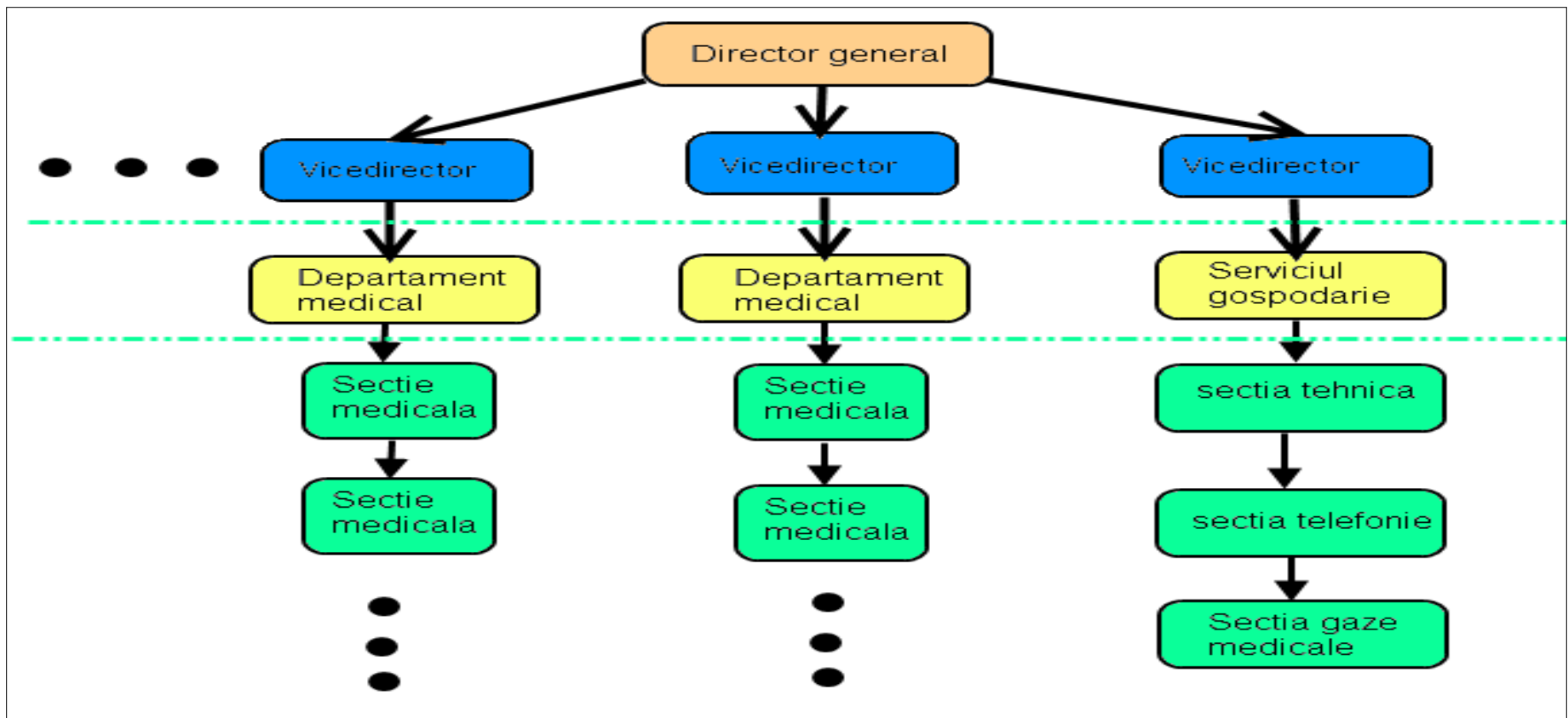
- Gather basic information about devices;
- Planned technological needs and allocate sufficient funds for them;
- Procure suitable models and installs them effectively;
- Provide sufficient resources to use;
- Operate them safely;
- Maintain and repair devices;
- Settled liquidated and replace unsafe and obsolete parts;
- Ensure that staff have the skills needed to properly use medical equipment

# Benefits of medical technology management

- Medical institutions can provide a complete service that is not hindered by malfunctioning technology;
- Devices are used and maintained correctly
- Staff-efficient devices
- Health services institutions is made available reliable information about:
  - Functional status of devices
  - Performance of maintenance services;
  - Practice and skills of staff involved in the use of medical devices;

# MEDICAL TECHNOLOGY ASSESSMENT efficiency in ICȘDOSMșic

- organizational structure



# Technical department structure and functions

- Head of Department - Engineer
- engineer
- mechanical
- Locksmith electrician
- Metrology engineer 0.5

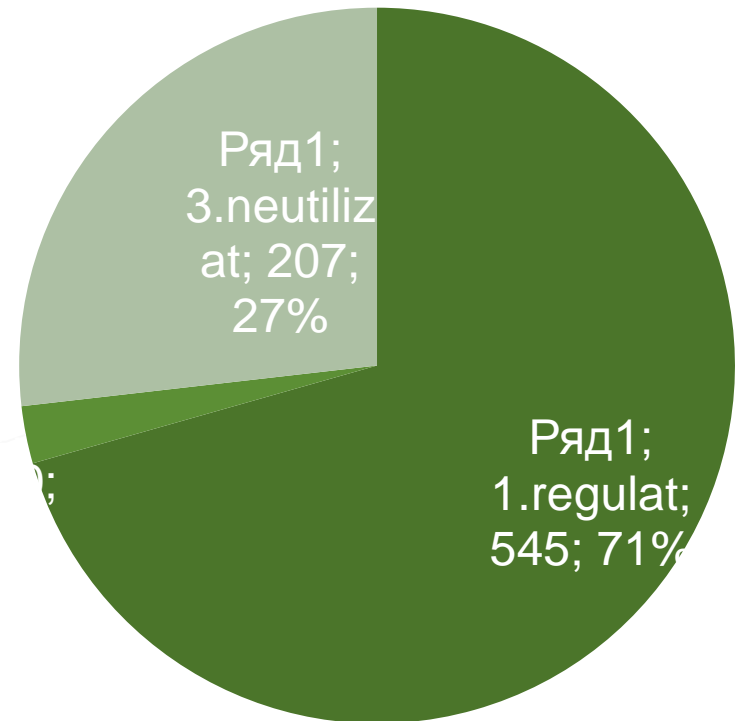
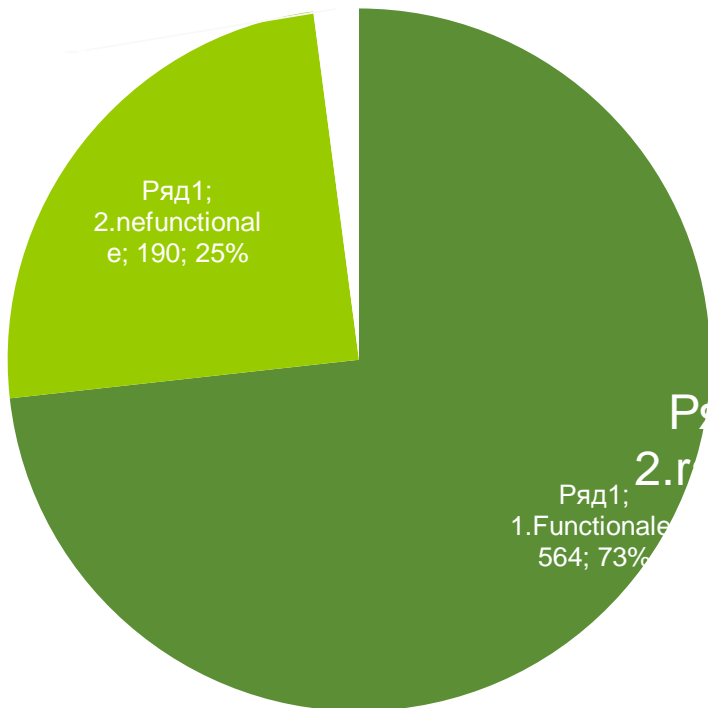
# drawbacks:

- Not equipped workshop
- Lack of tools and devices for testing and calibration
- Lack of qualified personnel
- Lack of specialists in bioengineering
- Lack of documents and forms
- Lack database of medical devices
- Lack stock supplies
- Lack of technical documentation
- low efficiency
- More than 50% of the external devices are served



# Assessing the functionality and use of medical devices

■ 1.Functionale ■ 2.nefunctionalitate ■ 3. functional necesitate reparatie ■ 1.regular utilizate ■ 2. neutilizate

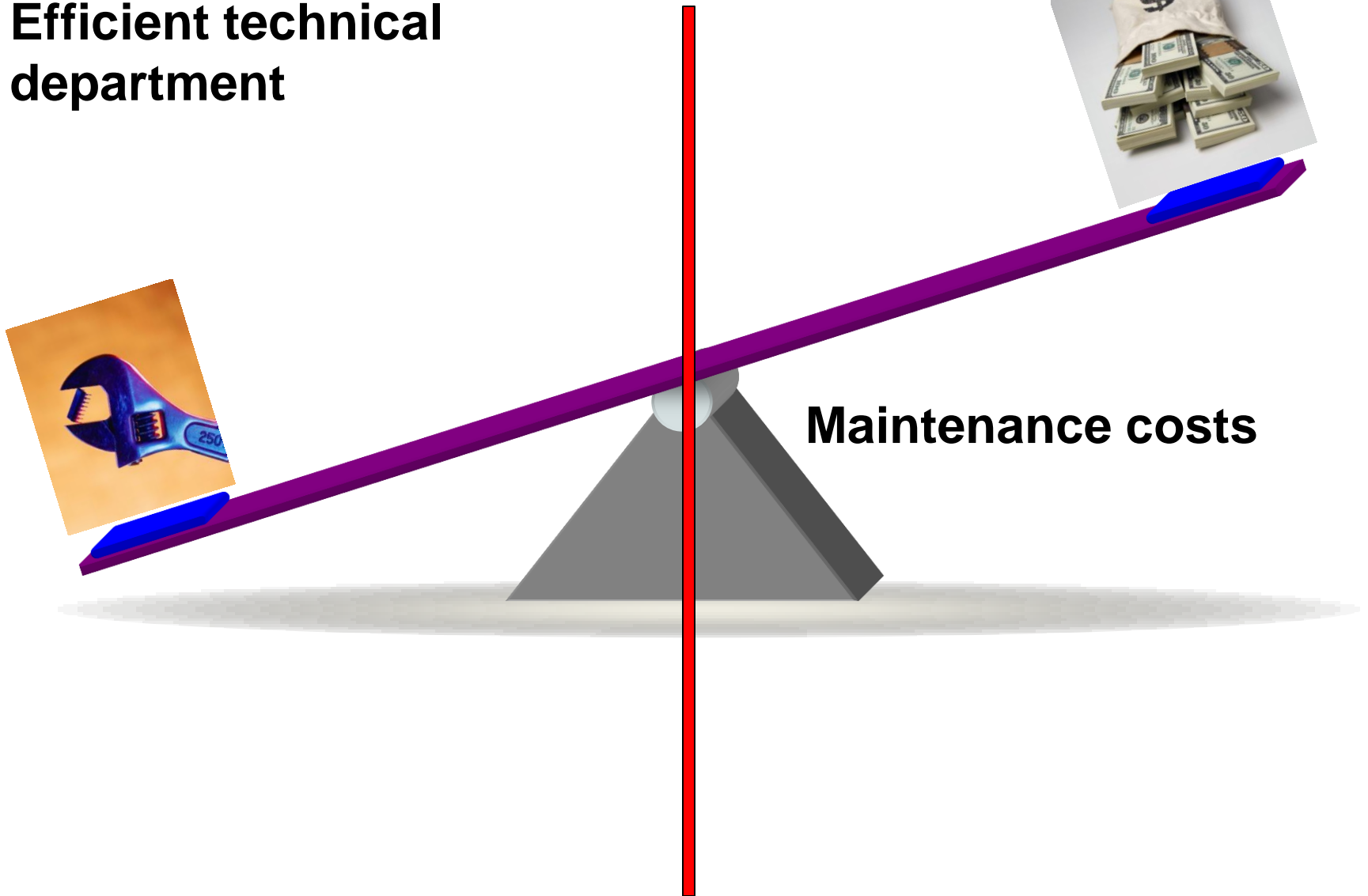


# Cost-effectiveness of service

**Efficient technical  
department**



**Maintenance costs**



## Develop and implement MEDICAL MANAGEMENT TECHNOLOGIES IN ICŞDOSMşic

- With modernization and equipping with modern medical institution in international projects were necessary changes in the organizational structure and staffing a management that would ensure the implementation of health technologies and medical devices would maintain functionality throughout their use.

# Progress made

Progress has been made in:

- Changing organizational structure
- Develop and implement HTM forms
- Develop quick guides users
- Develop electronic registry of medical devices
- Develop electronic register of consumables
- Regular maintenance plans for medical devices
- Local Repair

- Introducing regular reporting and statistics on hospital maintenance
- Training for users
- Training for engineers
- Verification and calibration of medical devices
- Reducing medical devices served by foreign firms
- Developing electronic library of manuals and technical manuals

# Changes in organizational structure

## ORGANIGRAMA IMSP ICȘDOSM și C

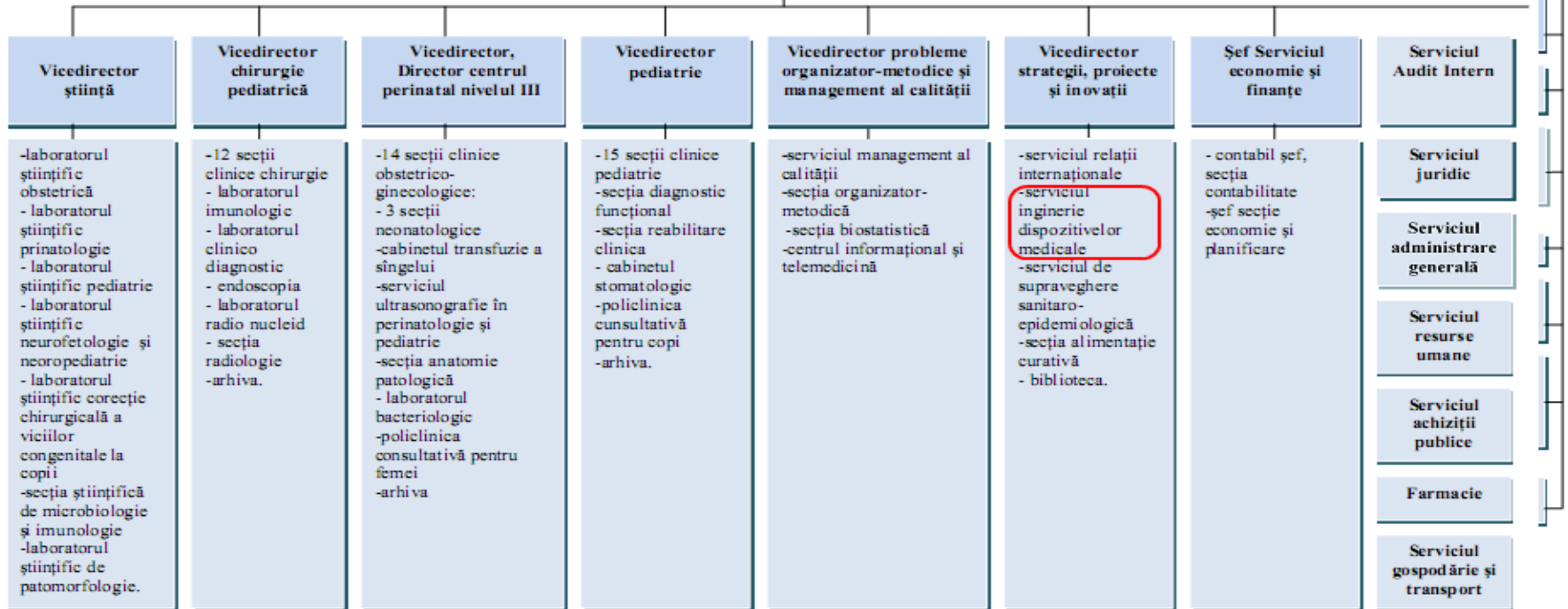
Anexă la ordinul Ministerului Sănătății  
nr. 321 20.04.2011

Consiliul administrativ

Director General

Consiliul Științific

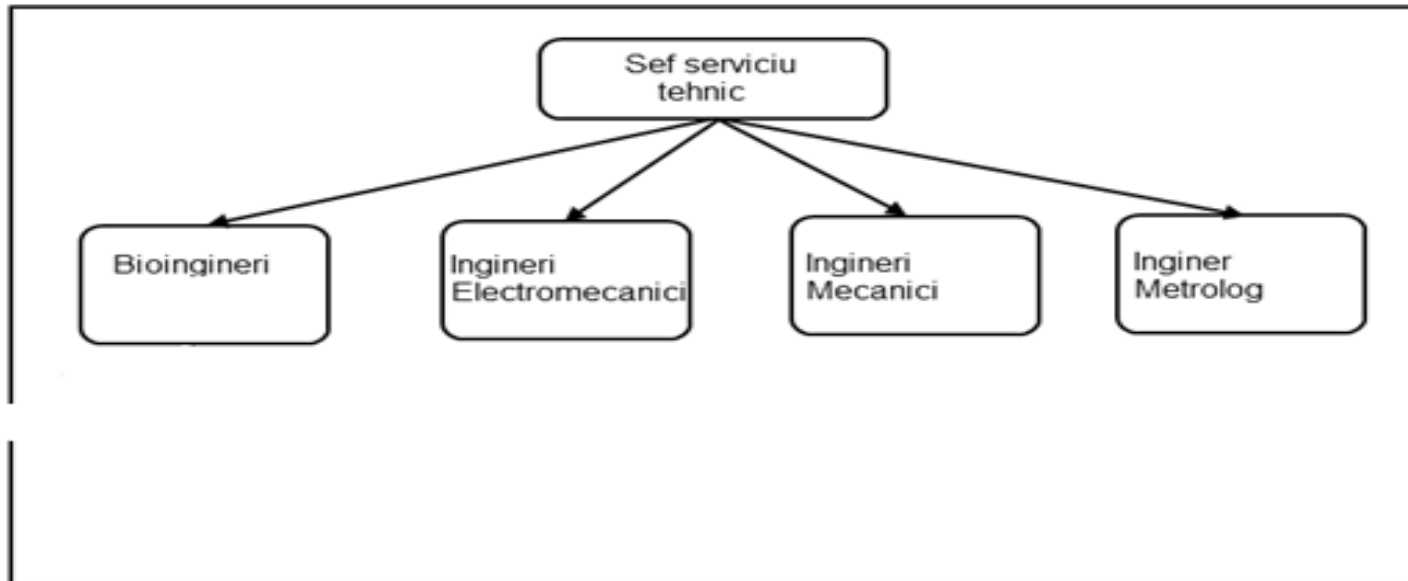
Consiliul Medical



# Structure and function of engineering service medical devices

Today working in engineering service medical devices 9 persons:

- Head of Service
- five bioengineering
- An electromechanical engineer
- Two mechanical engineers
- A metrology engineer



# Functions:

- Assessment and inventory of devices
- Installation and settlement
- Planning and procurement of medical devices and supplies
- Preventive and corrective maintenance of medical devices
- Organizing training for users
- Verification and implementation of health technology management



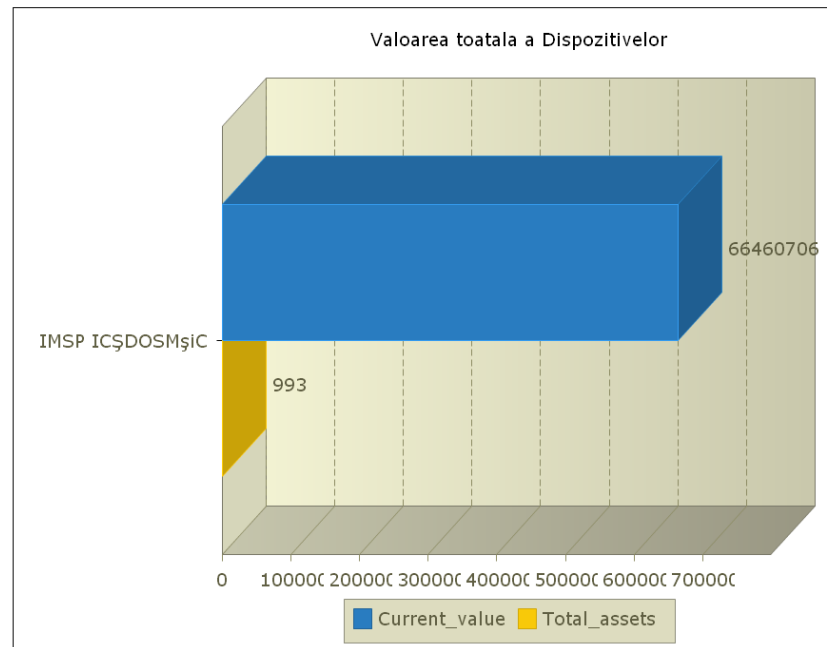
# Service operating tools

- Devices for testing and calibration
- Tools for maintenance procedures
- Storage supplies
- Library user and service manuals
- Electronic register of medical devices
- MTM forms
- Qualified personals

# OpenMedis

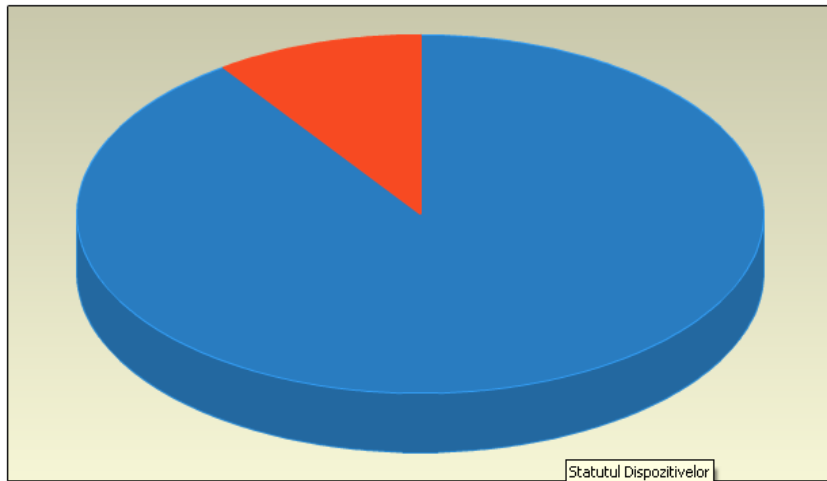
- Another step in the implementation of medical technology management is evaluating and screening needs, inventory of medical devices equipment, operating state, utilization. Thus was implemented electronic register of medical devices

Statutul Financiar



# data Analysis

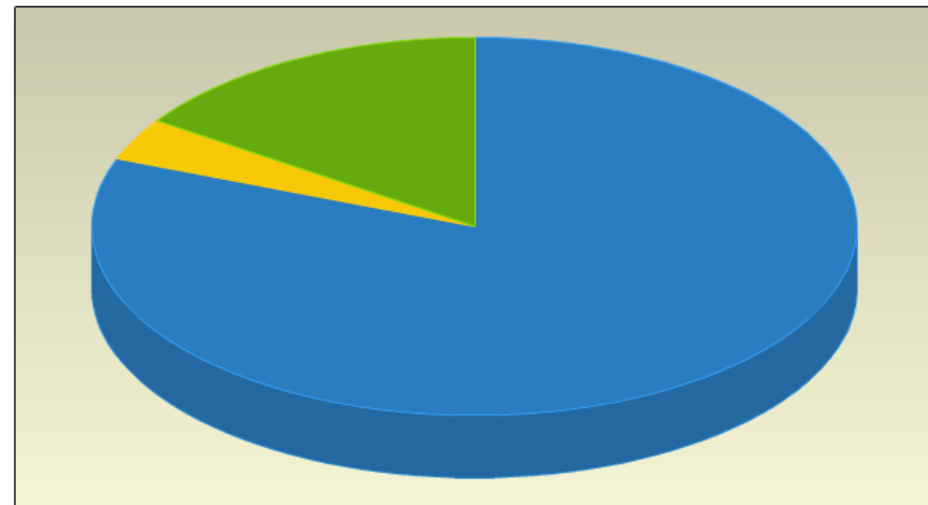
## Statutul Dispozitivelor



Statutul Dispozitivelor

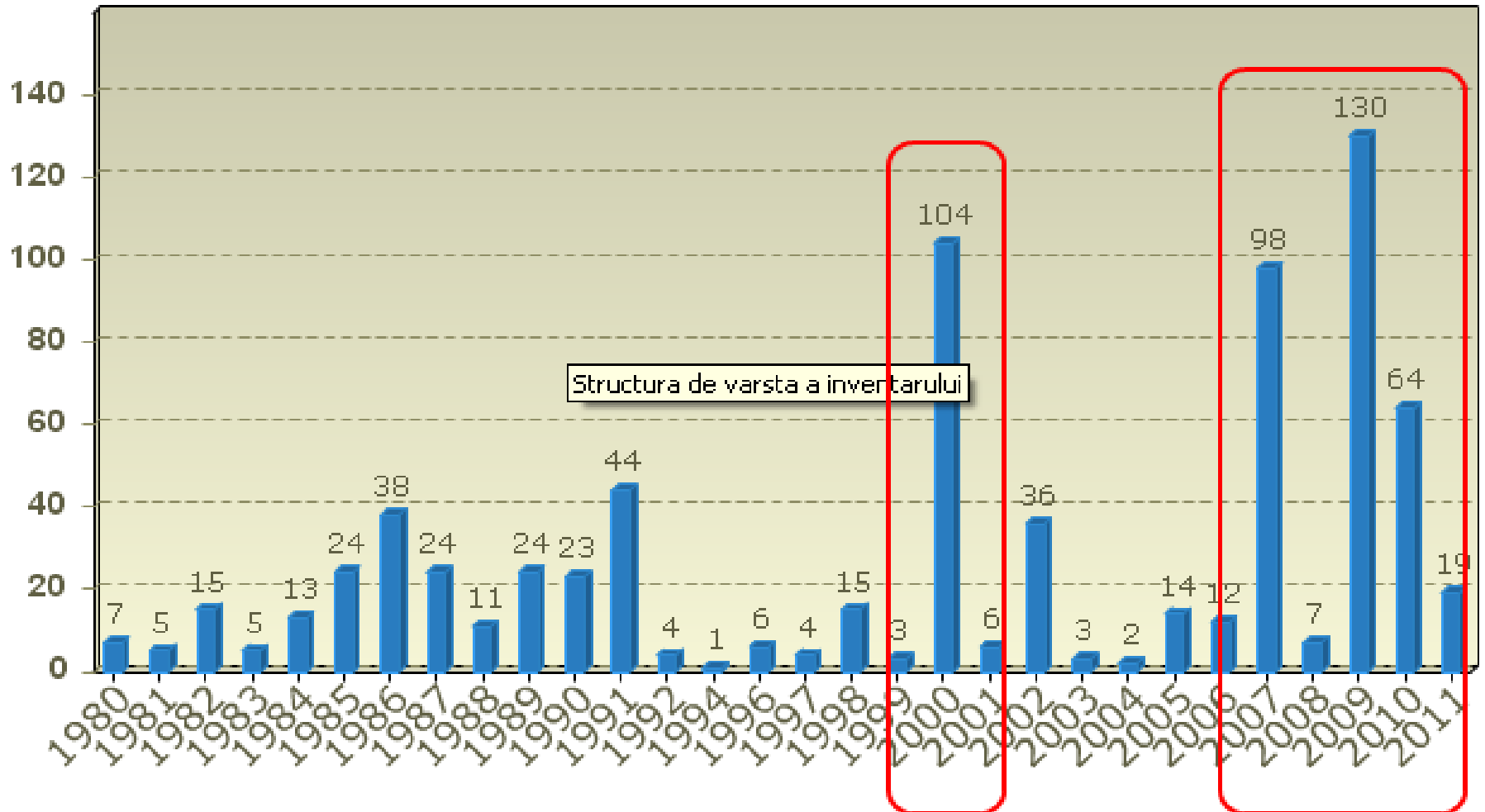
Functional (799) Utilizat, necesita reparatie (2) Necesita reparatie majora (2) Nefunctional (81)

## Utilizarea



Utilizarea  
Regulat (716) Rar (32) Neutilizat (136)

# Structura de varsta a inventarului



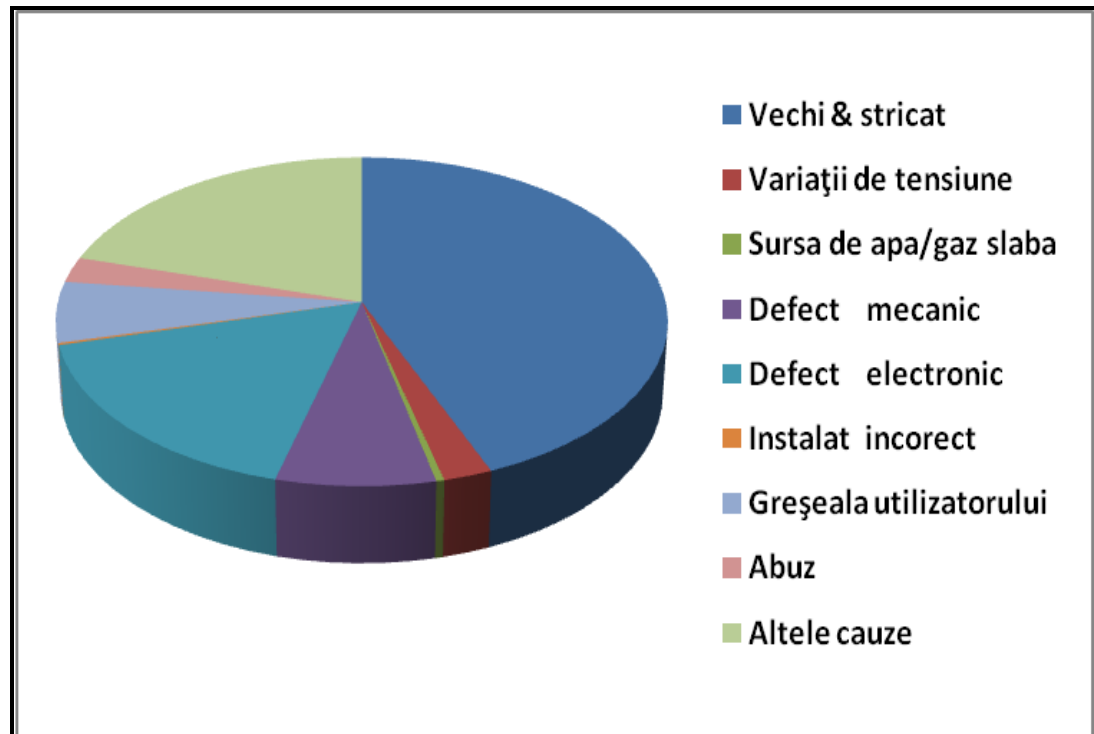
# Electronic library of technical documentation

Electronic library contains 243 documents that:

- technical manuals
- User manuals
- technical passports
- quick user guides
- electro-standards
- regulations and rules
- MTM guides
- maintenance procedures
- training presentations
- local papers and records

# Maintenance report for 2011

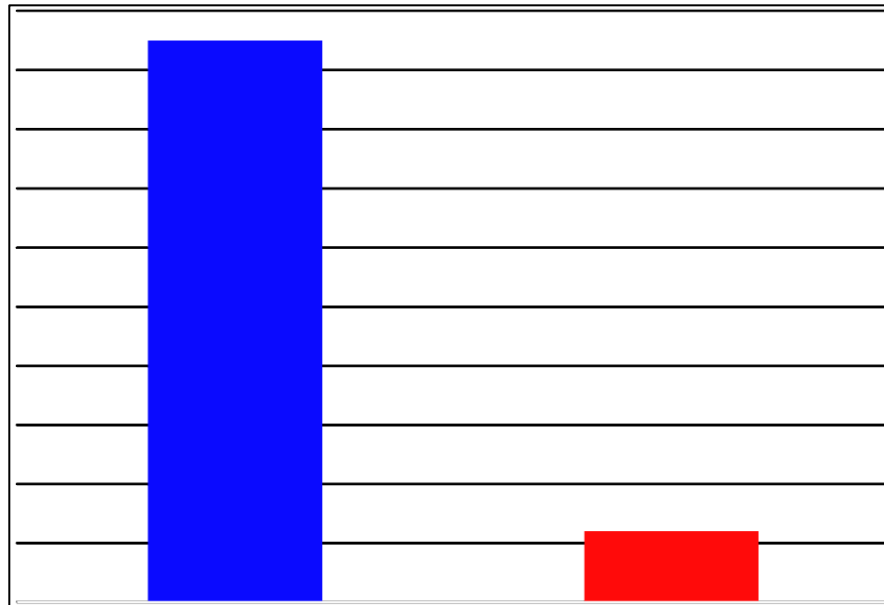
- The report was made 518 maintenance repairs, 82 preventive maintenance procedures and 12 other works such as training.



# Reducing medical devices served by foreign firms

In 2011

- 120 devices to foreign firms
- 950 local service

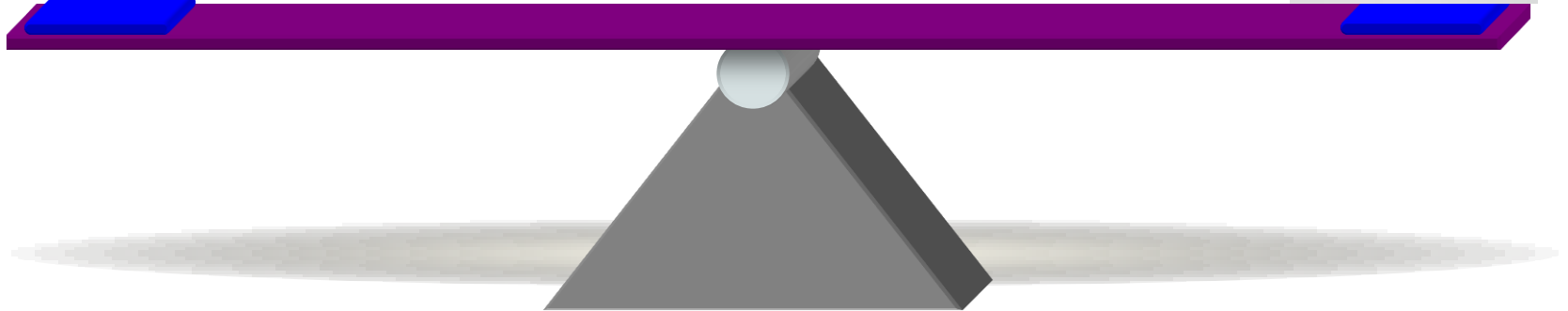
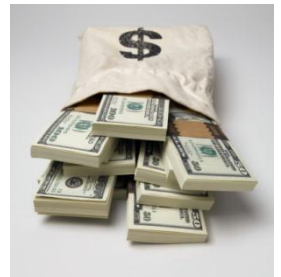


# Cost-effectiveness of service

**efficiency of service  
technical**



**Maintenance costs**





# Conclusion

- Today, medical institutions face a lot of problems, one of which devices inoperative as a result of several factors, such as inadequate planning and procurement, poor organization management and technical services and lack of qualified personnel.

Only by implementing a quality and functional management could ensure consistency of supply technologies and their need for health care, the balance between capital expenditure and capacity to manage technology throughout their life, thus contributing to improving the quality of medical .