



Advancing Safety in Health Technology

Healthcare Technology Management Frequently Asked Questions

What is healthcare technology management?

Healthcare technology management (HTM) is the field responsible for managing the selection, maintenance, and safe use of all health technology and medical equipment found in healthcare. HTM professionals are engineers and technicians who generally work in hospitals, helping to purchase, repair, and maintain health technology. They are fully integrated members of the healthcare delivery team and have significant influence in the management of all aspects of health technology in the hospital. HTM professionals typically do not develop or manufacture medical equipment.

Who is considered an HTM professional?

While job titles vary across the HTM field, the particular job functions of these professionals do not. Some commonly used job titles are:

- Clinical engineer
- Biomedical equipment technician (BMET)
- Biomedical equipment support specialist
- Clinical equipment specialist
- Healthcare engineering technician
- Laboratory equipment specialist
- Imaging equipment specialist
- Project manager
- Medical device cybersecurity specialist
- Field service engineer
- Clinical systems engineer
- Manager, director or vice president of HTM

What do HTM professionals do?

- Plan, select, and manage medical devices and technologies
- Calibrate, inspect, and repair medical devices and technologies
- Ensure a high standard of performance of medical devices and systems through preventive or corrective maintenance checks or quality inspections
- Provide clinical staff with on-call technical assistance and device training
- Help facilities provide safe, cost-effective, and well-maintained health technologies that improve clinical outcomes
- Participate in new construction projects, from planning to installing equipment
- Ensure compliance with state and national regulations on medical equipment management

What kind of equipment is serviced by an HTM professional?

- Surgical robots
- Virtual reality and artificial intelligence systems
- Anesthesia machines
- Defibrillators
- Computerized tomography machines
- Magnetic resonance imaging machines
- X-ray machines
- Contrast injectors
- Diagnostic ultrasound
- Patient monitoring
- Infusion pumps
- Fetal monitors
- Ventilators
- Sterilizers
- Lasers

Who hires HTM professionals?

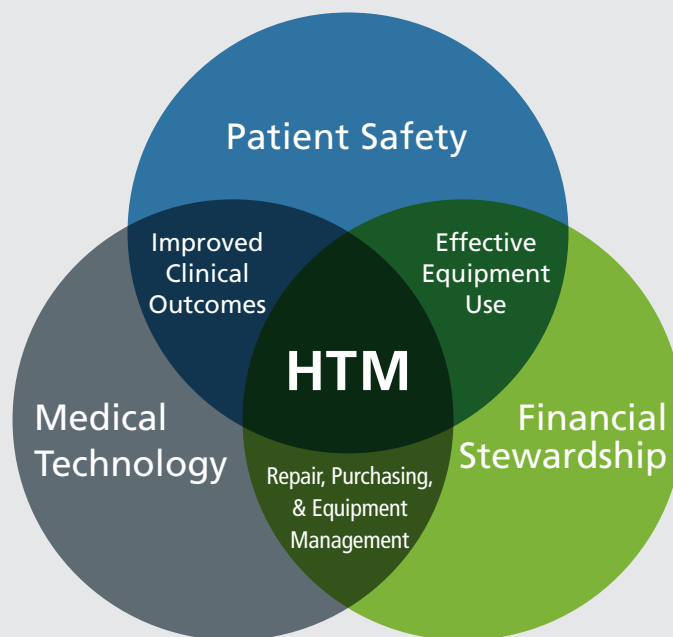
HTM professionals are employed by large and small healthcare delivery organizations, stand-alone surgical centers and hospitals, research facilities, original equipment manufacturers, medical and dental practices, and independent service organizations.

How do I become an HTM professional?

There are several ways to join the HTM career field. Some of the most common avenues include:

- The military's BMET program.
- The BMET apprenticeship program through the Department of Labor.
- An associate's degree from a biomedical electronics/technology program.
- An associate's degree from an electronics program with additional training in HTM.
- A bachelor's degree in biomedical engineering from an accredited school.

However, some employers will provide on-the-job training. The medical device industry is growing, and so is the nationwide demand for HTM professionals. Currently, there is a shortage of HTM professionals in the workforce—now is a great time to join the HTM profession!



This diagram shows the intersection of HTM roles and responsibilities within healthcare.

What are the differences between HTM and information technology (IT) professionals?

The line between HTM and information technology (IT) is no longer a distinct divide. HTM and IT professionals cross paths every day in healthcare settings to troubleshoot and resolve issues for the clinical staff. Many HTM departments have incorporated cybersecurity and other IT-related roles into their departments, and it is essential that all HTM professionals have a strong IT knowledge base. HTM staff also work with the IT department to interface medical equipment into various applications (e.g., the electronic medical record), network medical devices, and develop wireless strategies for emerging health technologies.

How do I find out more about HTM?

Reach out to the HTM department (sometimes alternatively referred to as “clinical engineering” or “biomedical engineering”) at your local hospital and ask to shadow an HTM professional for a day.

Visit www.lamHTM.org or email HTM@aami.org for more information about this amazing career field.