

CLINICAL ENGINEERING...



TACKLING YOUR TOP PRIORITIES

ARE YOU MAXIMIZING THEIR TALENTS?

Your Clinical Engineering Department—also known as Biomed or Biomedical Engineering—is responsible for helping to purchase, maintain, and repair medical devices and technology. These educated and highly trained professionals have strong technical skills and extensive knowledge of human anatomy and physiology.

Clinical engineering departments play a vital role in hospitals—improving patient outcomes, controlling costs, reducing risks, and providing critical training and support to physicians, nurses, and other clinicians.

Controlling Costs

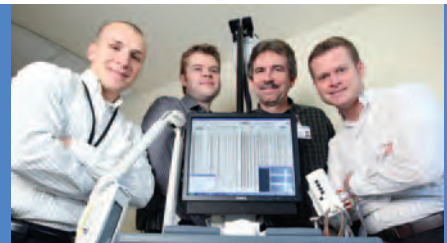
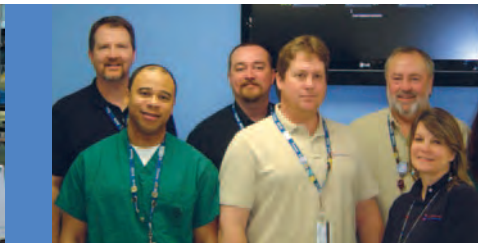
Your facility's clinical engineering department has a major impact on protecting your facility's bottom line through:

- ▶ Technology assessment
- ▶ Strategically planning equipment acquisition and replacement
- ▶ Managing vendors and multi-million-dollar service contracts
- ▶ Coordinating technology assets to maximize utilization and effectiveness
- ▶ Improving clinical efficiency through excellent customer service
- ▶ Maximizing your IT investments

LEADING BY EXAMPLE . . .

AT MCLAREN HEALTH CARE IN MICHIGAN, the clinical engineering department saved \$10.7 million over five years by reducing and renegotiating service contracts, hiring specialized labor, and instituting a cost awareness program to urge staff to take better care of equipment.

AT BAYLOR HEALTH CARE IN TEXAS, the clinical engineering department saved \$1.6 million annually by consolidating imaging contracts and assuming a larger portion of the workload.



Discover and
utilize their
abilities.

1 Make sure they are included in your facility's capital planning, budgeting, and approval process.

2 Include the department's leader in your leadership team meetings.

Improving Patient Outcomes

Patient safety is paramount to clinical engineering—working on life-saving equipment at the point of care. They are responsible for:

- ▶ Inspecting, installing, and repairing medical technology
- ▶ Educating clinicians on the safe and effective use of equipment
- ▶ Managing clinical technology networks
- ▶ Preparing operating rooms and other patient areas to ensure electrical and fire safety
- ▶ Managing medical device recalls and alerts
- ▶ Investigating device failures and near-misses

LEADING BY EXAMPLE . . .

AT HARTFORD HOSPITAL IN CONNECTICUT, the clinical engineering department reduced patient falls by 35% after implementing the recommendations of a multidisciplinary patient safety action group.

AT BRIGHAM & WOMEN'S HOSPITAL IN MASSACHUSETTS, clinical engineering designed, planned, and installed all clinical technology in a new facility, maximizing patient safety, clinical workflow, and ease of use.

Providing Clinical Support

Providing excellent customer service is a top priority for clinical engineering—and essential to physicians, nurses, and other caregivers. They:

- ▶ Support hospital staff with on-the-spot technical expertise 24/7
- ▶ Keep up to date with cutting-edge technology and trends
- ▶ Offer guidance on medical technology purchasing, planning, and facility design
- ▶ Serve a key role in disaster preparedness and safety issues
- ▶ Ensure hospital compliance with accreditation surveys and other regulations

LEADING BY EXAMPLE . . .

AT SUSQUEHANNA HEALTHCARE IN PENNSYLVANIA, clinical engineering developed an innovative solution to the ICU's central monitoring system problems which drastically improved response time for repairs.

AT AURORA HEALTH CARE IN WISCONSIN, clinical engineering significantly increased productivity and reduced equipment downtime by centralizing parts procurement.

“When it comes down to brass tacks, it is biomed that gets it all working and integrated for patient care delivery.”

Brian Jacobs, vice president and chief medical information officer,
Children's National Medical Center in Washington, DC



- 3 Invite them to actively participate on key committees including safety/environment of care, capital planning/budgeting/approval, capital acquisition, product evaluation, facility design/innovation, and risk management.

“One of the real benefits has been the sense of urgency that CE brings to the table. Their attitude is infectious.”

David Muntz,
senior vice president and
chief information officer,
Baylor Health Care System, Texas



“No one knows the medical equipment and has the ability to maintain it like the CE department.”

Chris Abe,
senior director of safety and
support services,
Rady Children’s Hospital,
San Diego, CA



Want to learn more?

The **Association for the Advancement of Medical Instrumentation (AAMI)**—which represents a unique alliance of medical device developers, manufacturers, managers, and users of medical technology—offers a wealth of information about the field of medical technology management at www.aami.org.

Share your experience and opinions by contacting **Patrick Bernat** at pbernat@aami.org.

This brochure was produced by AAMI’s **Technology Management Council (TMC)**, representing the interests of clinical engineers, biomedical equipment technicians, and medical technology professionals around the world. Visit www.aami.org/tmc.

