GUIDELINE FOR ACQUISITION OF TECHNOLOGY

Published: 6/16/07

PREAMBLE

Acquisition of medical equipment constitutes the initial phase of the life cycle management of medical equipment. This initial phase must be carefully considered because it can greatly affect later use and maintenance of equipment. The acquisition process determines the equipment vendors, solicits bids, and systematically determines a healthcare organization's technology-related needs based on strategic, financial, risk management, and clinical criteria.

QUALIFICATIONS

- Clinical Engineer shall be either a Certified Clinical Engineer, licensed as a Professional Engineer or otherwise be qualified by education, training, and experience.

GUIDELINES

Clinical Engineering should:

1. Work with the design team to identify and assess the requested technology and alternative technologies that could meet the identified clinical need. This process will include following steps:
    a) Identification and detailing of the clinical procedures for which the requester intends use of the technology.
    b) Collection of information about specific technology being requested.
    c) Identification of other clinical procedures for which the technology could be used.
    d) Collection of information about alternative technologies that could be used for the same clinical procedures.
    e) Comparison of the requested and alternative technologies to the existing technologies within the organization.
    f) Determination of the clinical efficacy of the requested and alternative technologies.
    g) Examination of the clinical efficacy of the requested and alternative technologies.
    h) Performance of a conceptual needs analysis based on all of this information.
2. Note whether the product has been evaluated by nationally recognized testing entities: e.g., Underwrites Laboratories (UL), Canadian Standards Association (CSA), or City of Los Angeles. Further, note whether the product does or does not comply with governmental labeling and performance requirements.

3. Examine and perform manufacturer-identified maintenance and service procedures to determine human and financial recourses that are required. The ease of the disassembly and the need for special tools can be examined.
4. Facilitate procurement and the process by listening, interpreting, evaluating, and teaching. By asking the right questions, communicating the defined need, and monitoring whether expectations can be or are being met, the clinical engineer can contribute to the quality and scope of patient care as well as to the financial well being of the organization.
5. Evaluate the requirements for installation, training, and service of the equipment.
6. Identify all of the technology features, options, accessories, services, and other acquisition issues that are important to the organization, and for ensuring that those items are contained within the procurement contract.
7. Make sure that acceptance testing, monitoring installation, and verifying delivery of specified items ensures the following:
    a) The technology performs its intended function
    b) Initial (baseline) performance characteristics are measured and recorded.
    c) The remaining terms and conditions of sale are met.

REFERENCES

1. **Cheng M, Dyro JF, Good Management Practice for Medical Equipment,** *Clinical Engineering Handbook by J. Dyro, 2005*
2. **Harding GH, Epstein AL.** *Technology Evaluation, Clinical Engineering Handbook by J. Dyro, 2005*
3. **Harding GH, Epstein AL.** *Technology Procurement, Clinical Engineering Handbook by J. Dyro, 2005*

AAPROVAL DATE (ACCE Board): 6/16/07

REVIEW DATE

ADDENDUM