Quality Improvement through Documentation Reviews for Clinical Engineering

Timothy J. Zakutney, MHSc, PEng Manager, Biomedical Engineering – Ottawa Heart Institute

Clinical chart review is an important clinical quality improvement tool to improve decision making, developing patient care maps, and improving patient care. Clinical and Biomedical Engineering services also rely heavily on service documentation to track departmental and technology performance. The Department of Biomedical Engineering at the University of Ottawa Heart Institute, Ottawa, Canada implemented a quality improvement initiative to assess, monitor, and improve documentation quality prepared by technical staff in the computerized asset management system (CAMS). Terms of reference were developed for a technical documentation review to be convened monthly. The purpose of the review is to assess the quality of documentation in terms of completeness, clarity, and continuity to consequent and related service reports and other documentation. Monthly reviews are directed by each staff member on a rotating basis. Random and selected documents are evaluated and discussed by all members. Initial assessments revealed inadequate consistency across staff members, detail of actions performed, continuity between service records, and completeness. After 6 months of reviews, dramatic improvements were achieved in each of these areas. Secondary benefits arising from the reviews included improved team communication, increased awareness of the necessity of accurate documentation and liability aspects, improved individual communication and presentation skills, improved individual accountability, identification of procedure deficiencies, and improved development of the CAMS. A formal documentation review process can offer significant benefits to the quality of service performed of medical engineering departments. Future work includes development of a quantitative scoring system for monitoring quality and relating these results to annual performance reviews of staff.