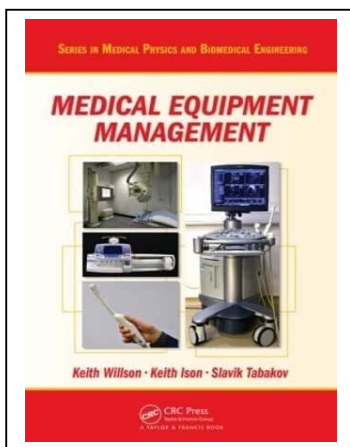


## “MEDICAL EQUIPMENT MANAGEMENT “ by Keith Wilson, Keith Ison and Slavik Tabakov

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**Abstract—** This article is a brief summary of the content and the 10-year experience of using the textbook “MEDICAL EQUIPMENT MANAGEMENT” by Keith Wilson, Keith Ison and Slavik Tabakov, CRC Press, Boca Raton, USA, ISBN-13 9781420099584



Over the years the textbook “Medical Equipment Management” has become an important resource for both clinical engineers and medical physicists. Equipment management however is a key topic not only when it comes to medical equipment’s physical and technical aspects, but also healthcare management. Therefore the book turns out to be an important resource of information and practical guidance for hospital managers, healthcare administrators, academic departments chairs, etc.

The book is based on the lecturing of the module “Management of Medical Equipment” at the MSc Medical Engineering and Physics at King’s College London, UK – a unique module introduced in 2003 and delivered to this day. The authors, who have introduced the content of this module, have worked on the book from 2009 to 2013 and have structured the book in an unusual and very effective way. The book includes sections, allowing the user to access various moment of the Medical Equipment Life Cycle. Most of the sections include examples of three different equipment: small, medium, large (syringe driver, Ultrasound scanner; X-ray equipment). This practical approach makes the book very usable for various specialists dealing with medical equipment. Since 2014 the knowledge from the book has been applied by S Tabakov in the curriculum of the ICTP College on Medical Physics. Later the book structure and approach have been used in the MSC in Advanced Medical Physics of the ICTP and the University of Trieste and in various medical physics-related

lectures at the Medical University of Plovdiv. To our knowledge elements of the book are used also in medical physics/engineering educational courses in various countries

Many examples in the book are based on the experience and legislation of the UK and the European Union, but the authors have aimed the content to be of use in various countries. Special focus is given on applicability in LMICs where access to such or similar guidance material may be quite limited and quite often Departments for Medical Physics and Clinical Engineering do not exist.

The book has c.340 pages and includes a detailed Content of 10 pages. The book has 14 chapter and two Appendices and concludes with an Index of 12 pages. The Chapters of the book are:

- 1.Introduction;
  - 2.Medical Equipment and its Life Style;
  - 3.Medical Device Risk, Regulation and Governance;
  - 4.Approaches to Equipment Management: Structure and Systems;
  - 5.Purchase and Replacement: Allocating Priorities and Managing Resources;
  - 6.Procurement, Specification and Evaluation;
  - 7.Equipment Training for Clinical and Technical Users;
  - 8.Assessing Maintenance and Support Needs;
  - 9.Maintenance Contract Management;
  - 10.Adverse Incidents, Investigations, Control and Monitoring;
  - 11.Supporting Research and Development;
  - 12.Disposal;
  - 13.Sources of Information for Equipment Management Professionals;
  - 14.Improving Performance: Quality Indicators, Benchmarking and Audit;
- Appendix A: Practical Issues in Running and In-House Clinical Engineering Service;
- Appendix B: Electrical Safety for Medical Equipment.

As seen from the Content the book covers the specific parts of Medical Equipment Management and gives excellent practical advice. Thus, activities as: Preparing specifications; Understanding tenders and purchase of equipment; Dealing with Service Contracts; Training staff; Investigating incidents; Improving performance; Disposing equipment, etc. are part of the activities of medical physicists in many countries.

The book can find its place and value in medical physics or engineering departments as well as healthcare management & decision makers globally.