



INTERNATIONAL UNION FOR PHYSICAL AND
ENGINEERING SCIENCES IN MEDICINE

2015 IUPESM AWARD OF MERIT (MEDICAL PHYSICS)

*This award recognizes an outstanding individual who has established
a distinguished career in Medical Physics*



Presented to:

Dr Peter H.S. Smith, Ph.D.

Aberdeen, UK

Cost-Effective Provision of Medical Physics and Medical Engineering Services in Healthcare

Peter H S Smith
Aberdeen, UK.

All healthcare services, in both developed and developing countries, are under increasing pressure. Growing use of technology is one of the factors involved and medical physics and engineering services are one just more cost pressure and therefore it is essential that these services are provided in the most cost-effective way.

A number of factors will be examined including organizational aspects, staffing and research and development. The author's experience of providing integrated engineering and physics services on a regional basis will be used to illustrate some of the issues, including the advantages and disadvantages of horizontally organized and integrated medical physics and engineering service.

The correct provision and deployment of professional, technical, administrative and other staff is essential and can raise difficulties: cultural, perceived job roles, professional barriers, supply and training. Should clinical engineers and physicists be involved in research? If so, who funds and what links to academic institutions are essential?

Manufacturers of medical devices are a major influence on the deployment and maintenance of technology in healthcare and medical physicists and engineers can help ensure that appropriate technology is procured in accordance with defined needs and maintained in a cost-effective manner.

The contribution that can be provided by national, regional and international professional, governmental and UN organisations, to finding solutions to these issues will also be considered.