



Market analysis editorial for International Conference on Medical Physics

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Medical Physics Medical Conference

The Medical Physics is the incorporation of physics theories, concepts, and methods in medicine and healthcare. The medical physicist often practices in hospitals and universities. Medical physics is also widely known as biomedical physics, medical biophysics, or applied physics in medicine.

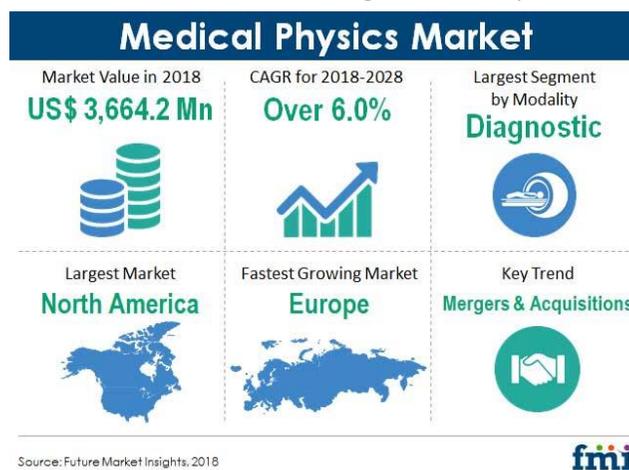
Medical physicists working at the hospital focus on clinical service and consultation with physician colleagues in radiology, nuclear medicine, radiation protection, and radiation oncology. The medical physicist practicing at the university level is categorized in two areas of activity. Biomedical physicists focus on research and development in many areas including cancer, heart disease, and mental illness. The second area of focus for a medical physicist is teaching medical physics students, medical students, resident physicians, and technologists.

Medical Physics Market - Key Research Findings

1. Global medical physics market size in 2018 – Approximately US\$ 3.5 Bn
 2. The medical physics market has been estimated to expand at a healthy CAGR of 6.4% over 2018-2028.
 3. North America and Europe will remain the most lucrative regional markets for medical physics.
- Most medical physics companies are densely concentrated in the North America and Europe regions. However, in regions such as Brazil, India, Malaysia, China, Japan, Australia, Turkey, and others, there are significant opportunities for the growth of the medical physics market due to the increasing adoption of radiology equipment for diagnosis & treatment, and the ever-increasing medical tourism in these regions.
 - Furthermore, in emerging countries, there has been an increase in the number of hospitals, which is boosting the number of growth opportunities in these regions.
 - However, the adoption of medical physics in emerging regions is expected

to result in market growth only towards the end of the forecast period.

4. Medical tourism is reportedly a major impact factor associated with the medical physics market growth.
 - The growing trend of medical tourism, especially for cancer therapy in countries, such as Brazil, Thailand, Malaysia, and China, is expected to drive the medical physics markets in these regions.
5. Diagnostics is expected to remain the most preferred type of service in medical physics market.
 - Rapidly increasing adoption of diagnostic devices, such as PET, SPECT, mammography, CT, & MRI, and advancements in technology, such as the development of hybrid systems including PET-CT and SPECT-CT, is expected to continue during the forecast period.



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Top 3 Factors Shaping Medical Physics Market

Increasing outsourcing is expected to drive the medical physics market

Healthcare facilities are looking to cut expenses, due to which they outsource a number of services, which include medical physics. This can be attributed to the high cost involved in training or skill update certification, which is not likely to be possible in an in-house setup. In several medium or large facilities, a hybrid arrangement exists, which includes an in-house medical physics department that is supplemented with contracted services.

Increasing mergers & acquisitions in the medical physics market is one of the leading trends

A highly fragmented market, enhanced regulatory protocols, and increased consolidation of healthcare systems & hospitals are some of the factors driving the trend towards

increasing mergers and acquisitions. There has been a significant increase in mergers and acquisitions in the medical physics market. For instance, in 2014, West Physics acquired Medical Physics Inc.

Increasing acceptance of nuclear medicine in developing economies is estimated to drive the medical physics market in these regions

In the past decade, there have been remarkable advancements in the nuclear medicine practice owing to noteworthy advancements in information technology, instrumentation, and radio pharmacy. These factors are significantly boosting the medical physics market. The emergence of new technologies, which include SPECT/CT and PET/CT, has encouraged the adoption of nuclear medicine. In addition, other hybrid modalities, which include the development of new radiopharmaceuticals as well as SPECT/MRI, are also expected to drive new therapeutic and diagnostic applications.

Medical Physics Market Structure Analysis

- The global medical physics market is categorized by strong presence of several small independent companies.
- Most of the key players maintain a strategic focus on markets in North America and Europe.
- The trend of hospital consolidation in developed nations is boosting the demand for larger-scale operators to reduce the number of contracted service providers. Leading players in the medical physics market are thus concentrating on the acquisitions and mergers strategy to cater to the requirements of healthcare providers.
- Important entrants in the medical physics market such as Aloka and Sonosite are strategizing on new product launches, such as the introduction of the Aloka ProSound SSD-5500 Ultrasound Machine and SonoSite NanoMaxx Ultrasound Machine to expand their product portfolios.

Medical Physics is generally defined as the application of physics to the needs of medicine. Many medical physicists are heavily involved with responsibilities in areas of diagnosis and treatment, often with specific patients. These activities take the form of consultations with physician colleagues. In radiation oncology departments, one important example is the planning of radiation treatments for cancer patients, using either external radiation beams or internal radioactive sources. An indispensable service is the accurate measurement of the radiation output from radiation sources employed in cancer therapy.

In the specialty of nuclear medicine, physicists collaborate with physicians in procedures utilizing radionuclides for delineating internal organs and determining important physiological variables, such as metabolic rates and blood flow. Other important services are rendered through investigation of equipment performance, organization of quality

control in imaging systems, design of radiation installations, and control of radiation hazards. The medical physicist is called upon to contribute clinical and scientific advice and resources to solve the numerous and diverse physical problems that arise continually in many specialized medical areas.

Medical physicists play a vital and often leading role on the medical research team. Their activities cover wide frontiers, including such key areas as cancer, heart disease, and mental illness. In cancer, they work primarily on issues involving radiation, such as the basic mechanisms of biological change after irradiation, the application of new high-energy machines to patient treatment, and the development of new techniques for precise measurement of radiation. Significant computer developments continue in the area of dose calculation for patient treatment and video display of this treatment information. Particle irradiation is an area of active research with promising biological advantages over traditional photon treatment. In heart disease, physicists work on the measurement of blood flow and oxygenation. In mental illness, they work on the recording, correlation, and interpretation of bioelectric potentials.

Importance & Scope:

Medical Physicists will contribute to maintaining and improving the quality, safety and cost-effectiveness of healthcare services through patient-oriented activities requiring expert action, involvement or advice regarding the specification, selection, acceptance testing, commissioning, quality assurance/control and optimized clinical use of medical devices and regarding patient risks and protection from associated physical agents (e.g., x-rays, electromagnetic fields, laser light, radionuclides) including the prevention of unintended or accidental exposures; all activities will be based on current best evidence or own scientific research when the available evidence is not sufficient. The scope includes risks to volunteers in biomedical research, careers and comforters. The scope often includes risks to workers and public particularly when these impact patient risk.

Medical Physics -2017 is an international platform for presenting research about Medical Physics, exchanging ideas about it and thus, contributes to the dissemination of knowledge in marketing for the benefit of both the academia and business. We bring together business, creative, and technology leaders, Academics from the Medical Physics, Radiology, and Oncology for the most current and relevant.

Conference Highlights:

- Radiology
- Nuclear medicine
- Oncology
- Biophysics
- Radiation Oncology
- Biomedical Physics
- Biomedical Engineering
- Medical Devices

- Tomography
- Laser & photonics
- Biosensor
- Latest Imaging Techniques
- New Technologies in Cancer Treatment
- Clinical Physics and Patient Safety
- Dosimetry

Why to attend???

Meet Your Target Market With members from around the world focused on learning about Medical Physics & Biophysics, this is your single best opportunity to reach the largest assemblage of participants from the all Over the World. Conduct demonstrations, distribute information, meet with current, make a splash with a new product line, and receive name recognition at this 2-day event. World-renowned speakers, the most recent techniques, tactics, and the newest updates in Medical Physics & Biophysics are hallmarks of this conference.

Major Medical Physics Associations around the Globe:

- The American Association of Physicists in Medicine
- European Federation of Organizations for Medical Physics
- American Society of Neuroimaging
- European Society of Neuroradiology
- International Federation for Medical and Biological Engineering
- Indian Society of Vascular and Interventional Radiology
- Association for the Advancement of Medical Instrumentation

Major Medical Physics Associations in Europe:

- Swiss Society for Radiobiology and Medical Physics
- European Federation of Organizations in Medical Physics
- European Biophysical Societies' Association (EBSA)
- National Institute for Nuclear Physics and High Energy Physics
- Japan Society of Applied Physics
- The Biomedical Engineering Society (Singapore)
- Korean Society of Electron Microscopy

Statistical Analysis of Associations:

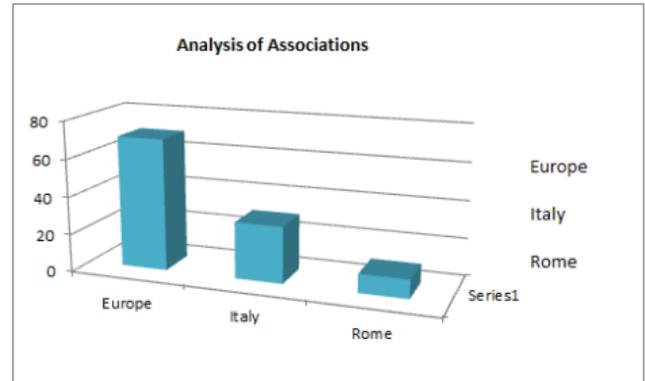


Figure 1: Statistical Analysis of Associations (1)

Target Audience:

The professors, Medical Physicist, researchers, clinicians, educators, program developers marketing and Students from Academia in the study of Medical Physics and Biophysics.

Target Audience:

- Academia 80%
- Industry 60%
- Others 20%

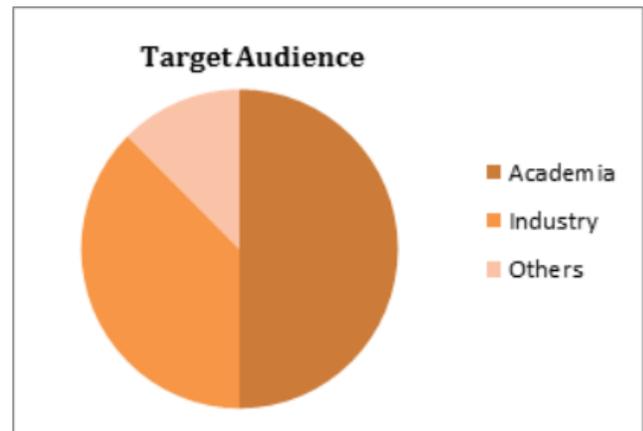


Figure 2: Target Audience (1)

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