

12th Panhellenic Congress of Nuclear Medicine

Future of Nuclear Medicine, Global Trends and Forecast

Dr. J. Bomanji

Institute of Nuclear Medicine, UCLH NHS Foundation Trust, 235 Euston Road, London NW1 2BU

Nuclear Medicine faces significant challenges world-wide and the next decade will be a difficult one. The speciality is fragmented between dedicated practitioners and radiologist with an interest in the technique. Nuclear medicine indications are in a continuous flux with some becoming outdated resulting in loss of market share whilst in other areas such as PET the numbers have increased. In 2012 nearly 10 million procedures were performed in Europe. However, overall a decrease in patient studies has been observed with an annual decline of 2.5%/year between 2008-12 (total fall ~9%). Non-PET indications have suffered most with nuclear cardiology being a major loser. This erosive trend will continue with progress in competing modalities such as CT, MR, ultrasound, and in-vitro tests/marker, furthermore, changing demographics of diseases will also have an influence as preventive programmes and treatments become more effective. Long term strategy for the Nuclear Medicine community must focus on delivering cost-effective, large-volume patient based service, identify more tracers like FDG and avoid spending resource on niche indications limited to a few centres. Radiopharmaceuticals (diagnostic & therapeutic) have the potential to be king-makers and there are sufficient new non-PET and PET tracers on the research horizon with potential to enter the clinical domain. In 2012, the european radiopharmaceutical market was worth approximately 434.55 million and the equipment market was estimated at 1.34 billion euros (SPECT/CT & PET/CT). Looking ahead, multimodality imaging and software platforms will continue to evolve and the lines between Nuclear Medicine and Radiology will disappear in the next decade. The job market is a major driver of this trend. World-wide there is a shrinking market for pure Nuclear Medicine graduates and a clear preference for dually accredited personnel. Training programmes although slow to adapt, will have to cater to this changing need in the next decade. Despite the tough times it is crucial that everyone involved in Nuclear medicine believes in the future. Everyone must buy-in to the future plan and success and work for a common goal. Our leaders need to adapt new innovations with speed and position Nuclear Medicine as an attractive speciality for the next generation.