

Investing in Medical Technology

Good for patients and good for the economy

HSE stands to save **€1 billion** through
investment in medical technology

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- * The Irish medical technology **industry employs 30,000** people mostly in highly paying, high tech jobs.
- * The sector generates **sales in excess of €6 billion** annually.
- * **10% of total Irish exports** are from the medical technology industry.
- * The global industry is forecast to **grow at 10% per annum** over the next 5-6 years and the market size will approach £300bn by 2015.
- * IMSTA believe that by adopting innovative medical technologies, the Government could achieve **€1 billion** in savings to the health budget over the next 4 years.
- * Investment in **medical technology will improve efficiency** in the health system. The use of medical devices has improved the quality of life for patients.
- * Ireland has the potential to become the location of choice for medical technology companies. In order to realise the potential, the Government must commit to investment in the industry and create a **sustainable domestic market**.
- * IMSTA calls for the Government to partner with industry to ensure that patients, the health system and the **economy benefits** from the medical technology industry.

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INTRODUCTION

The medical technology (medtech) industry is responsible for the successful delivery of many aspects of everyday health care. Devices produced by the industry can be found in every GP's office, hospital, health centre, ambulance and dentist office in the country.

IMSTA represents the medical technology supply industry in Ireland. IMSTA's member companies produce and market medical devices, diagnostic products and health information systems that are transforming health care through earlier disease detection, less invasive procedures and more effective treatments.

The objective in this document is to outline, for Government, the benefits of supporting and investing further in medical technologies.

The document discusses the role of medical technology and how the adoption of innovative technologies can improve patient outcomes and reduce overall treatment costs. In addition to health benefits, increased investment in the medical technology sector will help to establish Ireland as the location of choice for the medical technology industry which will create jobs and benefit the economy as a whole.

The role of the medical technology industry in the economies of Ireland and Europe is outlined in the below section. The role of medical technology in the United Kingdom is also outlined below as it serves as a useful indication of the role of the industry in another individual European country.

2 THE ROLE OF MEDICAL TECHNOLOGIES

Medical devices are indispensable in health care delivery as tools for prevention, diagnosis, treatment and rehabilitation. The medical technologies industry covers the manufacturing of everyday medical devices such as thermometers, and high tech equipment, such as pacemakers, dialysis machines and state-of-the-art imaging systems.

In 2008, revenues from the sale of medical devices worldwide were a little over €161 billion and the industry employed approximately one million people. Industry growth rates are forecast at 10% per annum over the next 5-6 years and the market size will approach £300 billion by 2015. This growth is driven by the ageing of the world's population and the per capita income increases in healthcare expenditure across developed countries.¹

The role of the medical technology industry in the economies of Ireland and Europe is outlined in the below section. The role of medical technology in the United Kingdom is also outlined below as it serves as a useful indication of the role of the industry in another individual European country.

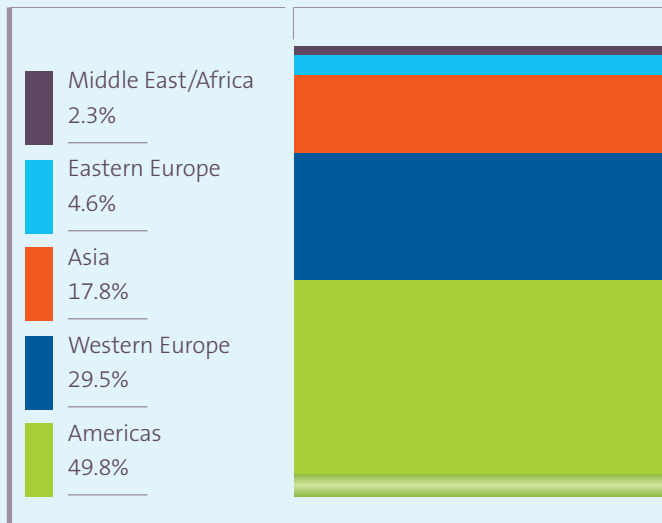


FIGURE 1
GLOBAL MEDICAL DEVICE MARKET BY REGION
 (% OF SALES REVENUE) 2009 ²

¹ Strength and opportunity - the landscape of medical technology, biotechnology and industrial biotechnology sectors in the UK. Annual Update – December 2010, HM Government. <http://www.bis.gov.uk/assets/biscore/business-sectors/docs/s/10-p90-strength-and-opportunity-bioscience-and-health-technology-sectors>
² Medical Devices: Managing the Mismatch, 2010, World Health Organisation http://whqlibdoc.who.int/publications/2010/9789241564045_eng.pdf

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2.1 IRELAND

The medical device and diagnostic sector has been a key player within the Irish economy. A successful industry cluster has developed which is comprised of approximately 160³ companies creating over 30,000 jobs. It is driven by the presence of Multinational Corporations (MNC's) whose capabilities lie in manufacturing of specialised surgical and medical equipment, as well as product and process development activities⁴.

Ireland has attracted 8 of the world's top 10 medical device⁵ companies. The development of indigenous medtech companies that provide complementary activities to the MNC's and manufacture niche products has been a significant feature of the industry.

The cluster that has developed in Galway around the industry is an example of how the sector has developed and benefited the local community. There are approximately 40 medical technology companies in Galway producing products such as catheters, cardiovascular products and anaesthesia equipment. Figure 2 (facing page) illustrates the location of medical technology companies in Ireland.

The industry contributes nearly €7 billion in exports making Ireland the fourth largest exporter of medical technology in Europe. Along with Sweden, Denmark, Finland, Germany and the UK, Ireland had a trade surplus in 2007⁶.

Although a strong medical technology industry has developed in Ireland, domestic procurement of the devices is still low. The HSE spends less than 4% of its budget on medical technology which is below that of the European average of 6.3%.

³ Enterprise Ireland June 2010
<http://www.enterprise-ireland.com/en/Source-a-Product-or-Service-from-Ireland/Sector-and-Company-Directories/Medical-Devices-Sector-Profile.pdf>

⁴ Transferring manufacturing hubs into internationally competitive clusters in medical technology
http://www.nuigalway.ie/cisc/documents/bostonirl_med_tech_conference.pdf

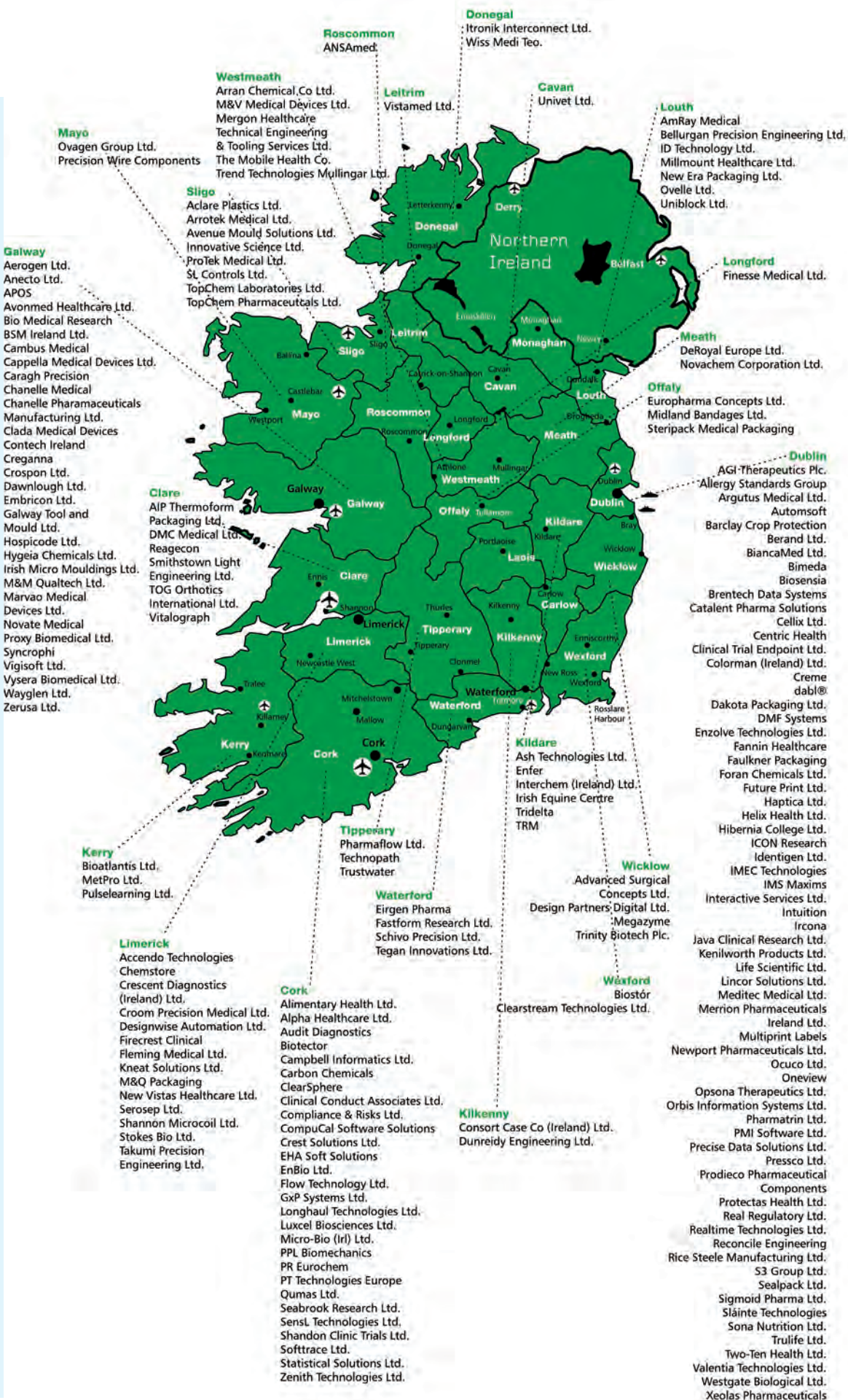
⁵ Medical Devices, Enterprise Ireland, June 2010
<http://www.enterprise-ireland.com/en/Source-a-Product-or-Service-from-Ireland/Sector-and-Company-Directories/Medical-Devices-Sector-Profile.pdf>

⁶ About the Medical Technology Industry, Eucomed <http://www.eucomed.org/abouttheindustry.aspx>

⁷ IDA Map and list of medical technology companies in Ireland.
http://www.ibec.ie/Sectors/IMDA/IMDA.nsf/vPages/About_u-Sector_Profile-ida-map-and-list-of-medical-technology-companies-in-ireland?OpenDocument

FIGURE 2

IDA MAP OF MEDICAL TECHNOLOGY COMPANIES IN IRELAND 7



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2.2 EUROPE

The medical technology industry plays a significant role in the performance of the European economy. The European market is second largest behind the United States.

According to research carried out by Eucomed⁸, medical technology industry is growing at a rate between 5% and 6% with sales in Europe amounted to €72.6 billion in 2007. The research also revealed that the industry employed nearly 529,000 highly skilled workers in 2007⁹, with 80% of the sector consisting of small and medium sized companies.

Germany is the leading provider of medical technology in Europe, in 2007 exports were valued at €14 billion, the country is also the biggest importer, imports were valued at €9.2 billion.

The medical technology industry undertakes high levels of research and development. The average lifecycle of products produced by the industry is 18 months therefore innovation plays a major role in the development of improved products.

Eucomed estimates that between 3% and 6% of total medical technology sales is spent on R&D which equates to R&D services spending of up to €3.8 billion annually.¹¹

Expenditure on medical technology has grown substantially over the previous decades, however it constitutes a relatively small share of overall health expenditure. Eucomed's research suggests that in 2007, the average spending per head on healthcare was €2,073 and of this, €128 was spent on medical technology.

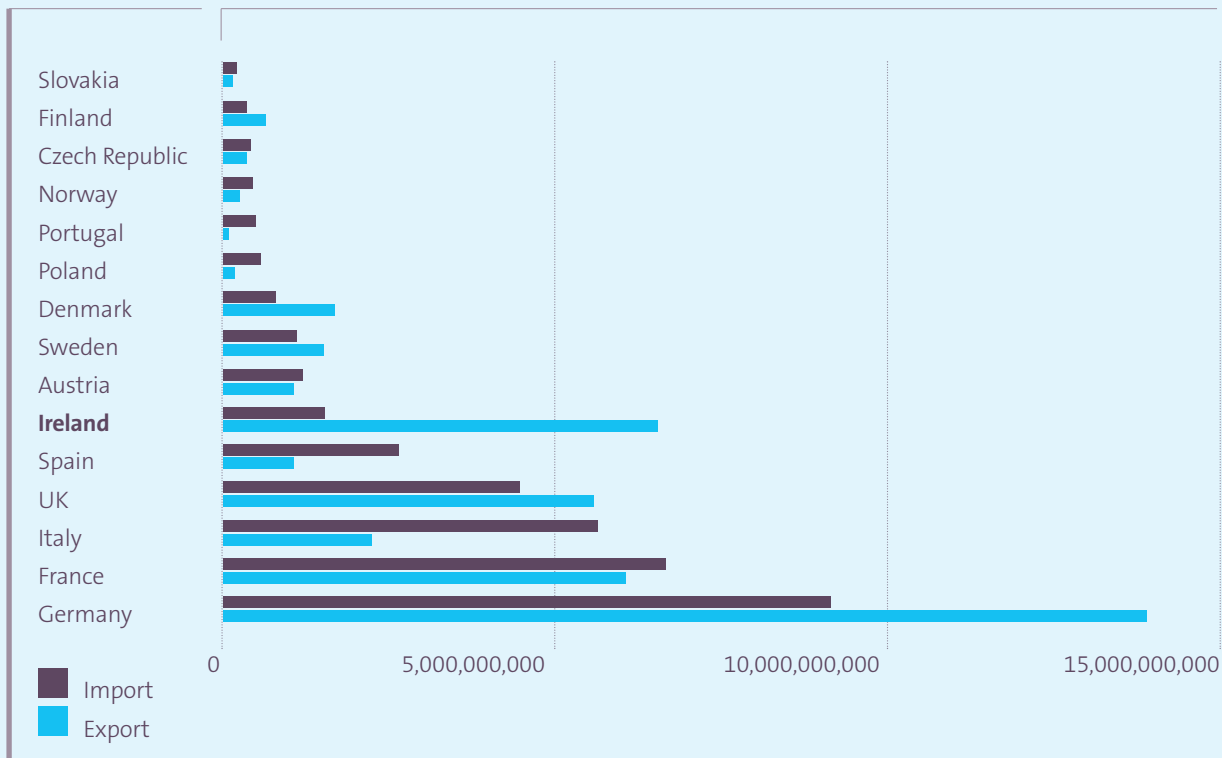


FIGURE 3
IMPORT AND EXPORTS OF MEDICAL
TECHNOLOGY IN 2007¹⁰



FIGURE 4
TOTAL HEALTHCARE EXPENDITURE ON MEDICAL TECHNOLOGY IN 2007¹²

Due to the importance of the medical technology sector to Europe, an exploratory process on the future of the medical devices sector was put in place by the European Commission over the second semester of 2009.

The objective was to gather at the end of the process an overview of existing public health and industrial challenges, to identify current dynamics of the industry and highlight key topics of interest at the European level which has resulted in a set of suggested themes of potential further reflection adopted by the members of the exploratory process.¹³

The process identified issues such as public health and industrial challenges, the need to encompass innovation, the lack of information around the value of medical devices and the need for greater stakeholder involvement. The members strongly endorsed the need for a clear political vision of the role of the medical device sector in the health of citizens and the economy.

It was also agreed that the European Union should act to make Europe the global leader for Medical Devices by promoting innovation, efficiency and sustainable health outcomes.

⁸ Eucomed represents the European medical technology industry About the Medical Technology Industry, Eucomed, <http://www.eucomed.org/abouttheindustry.aspx>

⁹ Medical Technology Brief – Key facts and figures on the European Medical Technology Industry <http://www.eucomed.be/press/~media/pdf/tl/2008/portal/aboutindustry/medtechbrief2007.ashx>

¹⁰ Medical Technology Brief – Key facts and figures on the European Medical Technology Industry <http://www.eucomed.be/press/~media/pdf/tl/2008/portal/aboutindustry/medtechbrief2007.ashx>

¹¹ Medical Technology Brief – Key facts and figures on the European Medical Technology Industry <http://www.eucomed.be/press/~media/pdf/tl/2008/portal/aboutindustry/medtechbrief2007.ashx>

¹² Consumer Affairs, European Commission http://ec.europa.eu/consumers/sectors/medical-devices/competitiveness/exploratory-process/index_en.htm

¹³ Strength and opportunity - the landscape of medical technology, biotechnology and industrial biotechnology sectors in the UK. Annual Update – December 2010, HM Government.

<http://www.bis.gov.uk/assets/biscore/business-sectors/docs/s/10-p90-strength-and-opportunity-bioscience-and-health-technology-sectors>

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2.3

UNITED KINGDOM

The medical technology sector in the United Kingdom consists of 3,034 companies employing over 55,625 individuals with a combined annual turnover of £13.1 billion in 2010. The four largest segments in this sector, with turnover greater than £1 billion, were single use technology, in-vitro diagnostics, orthopedic devices and wound care.

Between 2009 and 2010 there was a 3% decrease (a loss of 82 companies) in the number of medical technology companies. However, the sector has experienced a 3% increase in the number of employees and a 4% increase in turnover in the sector, led by ophthalmic devices and implantable devices companies respectively.¹⁴

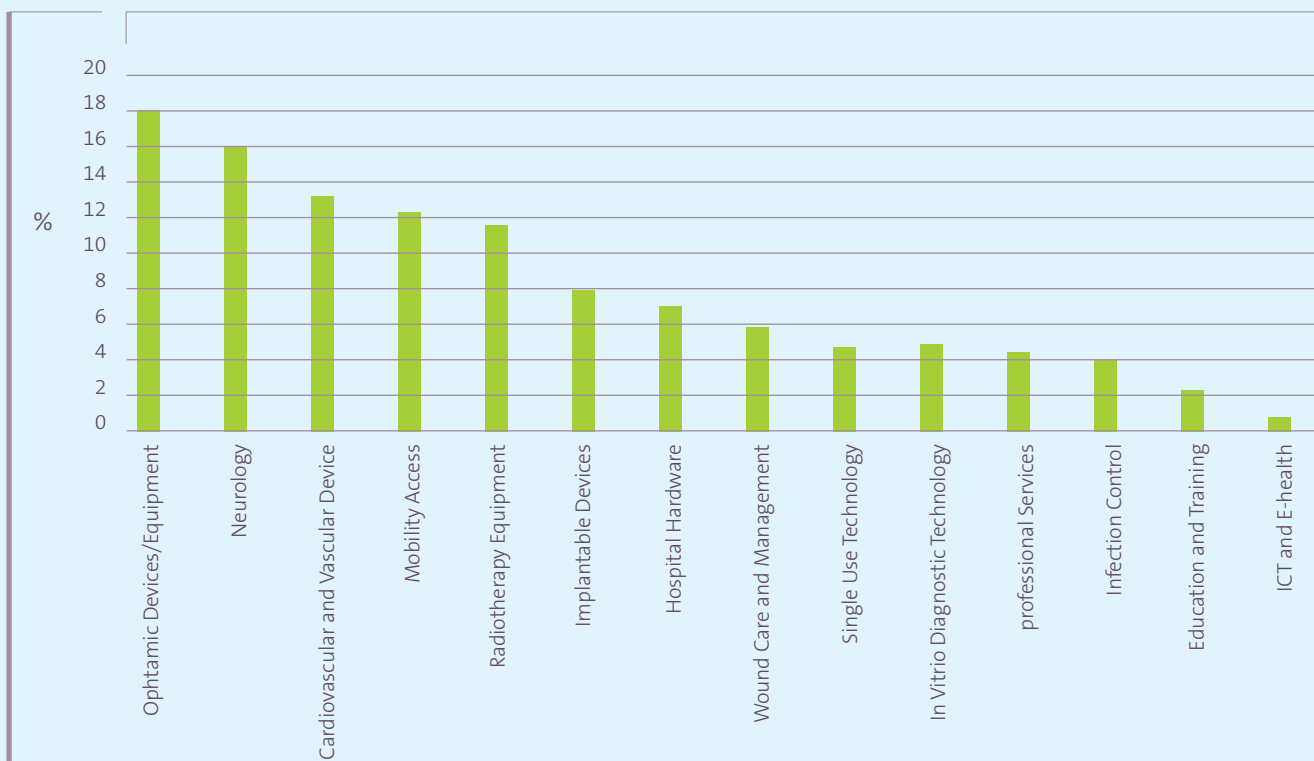


FIGURE 5

MEDICAL TECHNOLOGY EMPLOYMENT: SEGMENTS WITH INCREASED EMPLOYMENT 2009 ¹⁵

¹⁴ Strength and opportunity - the landscape of medical technology, biotechnology and industrial biotechnology sectors in the UK. Annual Update – December 2010, HM Government.

<http://www.bis.gov.uk/assets/biscore/business-sectors/docs/s/10-p90-strength-and-opportunity-bioscience-and-health-technology-sectors>

¹⁵ The use of new technologies within the NHS, House of Commons Committee 2004-05

<http://www.parliament.the-stationery-office.co.uk/pa/cm200405/cmselect/cmhealth/398/398i.pdf>



“ The medical technology industry plays a vital role in advancing efficiency and productivity within the health care system. Since 2002 an average of 200 new technologies have been added to the EuroScan database for innovative health technologies. ”

The medical sector is widely distributed across the UK, with concentrations of turnover and employment in the West Midlands, East of England, and the South East. The sector mainly comprises of SMEs who make up 99% of all companies in the sector.

The NHS spent 4.5% of its 2007 health budget on medical technology. Although this figure is higher than that of Ireland, it is still below the European average. In an effort to bring closer cooperation between Government, the NHS and industry, the Healthcare Industries Task Force was set-up in 2003.¹⁶

A Ministerial Medical Technology Strategy Group (MMTSG) has been established in accordance with the recommendation of the Healthcare Industries Task Force (HITF) Strategic Implementation Group (SIG). The Group takes forward the SIG recommendations, the Next Strategic Review innovation agenda for medtech and provides a strategic forum for joint discussion of other issues of importance.¹⁷

3 DIFFERENCES BETWEEN MEDICAL TECHNOLOGIES AND PHARMACEUTICAL

Many in the medical technology sector are concerned that medical technology suppliers are perceived to be similar to pharmaceutical companies. This is a problem as a lack of understanding can result in inappropriate procurement policies. The significant differences¹⁸ between the pharmaceutical industry and the medical technology industry are outlined below:

Industry History

The pharmaceutical industry has a long history and is comprised primarily of large multinationals. The medical technology industry is a relatively young industry in which 80% of the companies are small to medium sized.

Products

The pharmaceutical industry products are developed by trial and selection is based on quality, safety and efficacy. The industry is based on pharmacology, chemistry, biotechnology and genetic engineering. Products are biologically active and become effective when absorbed into the body

There are more than 10,000 medical devices that range in different sizes and models. The devices are designed specifically to perform certain functions based on quality, safety and performance. The industry is based on mechanical, electrical and/or materials engineering. The products generally act by physical means.

Product Development

The pharmaceutical industry is based on continuous innovation and some improvements are based on new science and technology. Innovation is primarily the result of laboratory work. The drugs have an extensive product life cycle and long investment recovery period.

The medtech industry is based on continuous innovation using new science, technology and available materials. Innovation is generally the result of collaborative relationships between the industry and healthcare professionals, such as nurses and physicians, rather than through laboratory exploration.

Gaining insights and feedback from those working with the technology is a valuable resource for the industry as it allows for incremental improvements of products that are effective and safe to use in a clinical setting. As a result of the working partnerships between industry and medical professionals, medical devices have a short product life-cycle, typically 18 months. New devices bring added functions and clinical value based on incremental improvements.

¹⁶ Ministerial Medical Technology Strategy Group, Department of Health http://www.dh.gov.uk/ab/HITF/DH_091803

¹⁷ Ministerial Medical Technology Strategy Group, Department of Health http://www.dh.gov.uk/ab/HITF/DH_091803

¹⁸ Differences between devices and pharma, Medec <http://www.medec.org/en/content/differences-between-devices-pharma>

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3

DIFFERENCES BETWEEN MEDICAL TECHNOLOGIES AND PHARMACEUTICAL CONTINUED

Costs

Pharmaceuticals have a low distribution cost and have no service or maintenance costs. There is often limited training required when compared to the training involved in the use of high-tech medical devices.

Medical devices have a high cost of distribution. There is often a learning curve associated with the use of products so there is a need for technical training and education and therefore costs can be high. Medical devices also have extensive service requirements which can be costly.

Product Efficacy

Pharmaceuticals are developed through complex scientific theory before being tested by clinical trial and then selected on the basis of quality, safety and efficacy. The efficiency of a product can be proven before going to market.

In the case of medical devices, randomized control trials are difficult to perform. The efficiency of a product is difficult to prove before the product is used. The efficacy of the product also relies on a range of factors such as the skills of the physician and the quality of the hospital.

4

CASE FOR INVESTING IN MEDICAL TECHNOLOGIES

The case for increased investment in medical technologies is based on the advantages to be gained from investment such as a reduction in costs, improved efficiency and the higher quality of life for patients. In addition to health benefits, Ireland has the potential to become the location of choice for the medical technology sector which will attract FDI, leading to job creation and a stronger economy.

4.1

REDUCING COSTS AND IMPROVING EFFICIENCY / PRODUCTIVITY OF HEALTHCARE SYSTEM

Reduction in costs

The medical technology sector has the ability to deliver substantial cost savings to the health service through the provision of innovative technologies. As stated in IMSTA's pre-budget submission to An Taoiseach, IMSTA estimates that €1 billion in cost savings to the HSE and to the Exchequer could be made over the next 4 years. IMSTA calculates that, along with the proposed €79 million annual saving through the use of electronic patients records¹⁹, savings of €185 million per annum could be made in overall treatment costs. The total savings figure would be €264 million annually which equates to over €1 billion in four years.

IMSTA's proposed savings are based on National Innovation Procurement Plan published by the Department of Health in the United Kingdom in 2009²⁰. The plan, part of the Quality, Innovation, Productivity and Prevention (QIPP) agenda, describes the importance of innovation procurement in ensuring quality, productivity and sustainability in the NHS, and details the methodology by which innovation will be identified, procured, adopted and diffused across the NHS.

¹⁹ ICT's Role in Healthcare Transformation, Report of the Health ICT Industry Group, November 2009

²⁰ The National Innovation Procurement Plan, Department of Health, December 2009

²¹ Spectaris: Medtech offers healthcare savings potential, Devicemed, November 2010

²² Medical Technology Brief – Key facts and figures on the European Medical Technology Industry

<http://www.eucomed.be/press/~media/pdf/tl/2008/portal/aboutindustry/medtechbrief2007.ashx>



“ Innovations in medical technology over the past two decades have dramatically altered the processes and methods by which medical care is provided. By collaborating with healthcare professions, the medical technology sector has produced innovative medical technology products.”

The Procurement, Investment and Commercial Division (PICD) of the Department of Health requested details of innovative technologies that could contribute positively to the QIPP initiative. Over 100 technologies were identified by the medical technology industry. Following initial examination the implications of technologies for the NHS, it is estimated that the financial benefits amount to £2.5 billion per annum.

Further evidence of the cost savings can be found in a series of surveys carried out in 2010 by German medtech representative association Spectaris and its partners. It was concluded that from five examples of process optimization in hospitals or doctor’s practices the potential savings in German healthcare could amount to just under €182 million annually. In addition, an exemplary five medical technology product innovations could result in further savings of approximately €720 million. It is believed that when these are added to the findings of the 2006 to 2009 surveys, there is a potential total saving of thousands of millions of euros.

The findings showed that although the use of medical devices is initially an investment cost for hospitals and doctors practices, modern technology The findings showed that although the use of medical devices is initially an investment cost for hospitals and doctors practices, modern technology is not a cost driver and can potentially lead to substantial savings for the healthcare system ²¹.

An example of the cost-effectiveness of medical technology is provided by Prof. Cutler in *The Value of Medical Technology Spending in the United States, 1960-2000*. Between 1960 and 2000, life expectancy for newborns in the US increased by 6.7 years. During that time, lifetime medical spending increased by \$69,000 and the cost per life gained was \$19,000. By assuming that a value of an additional year of life of \$100,000, Prof. Cutler calculates that in this case, the net benefit of medical technology spending is \$80,100.

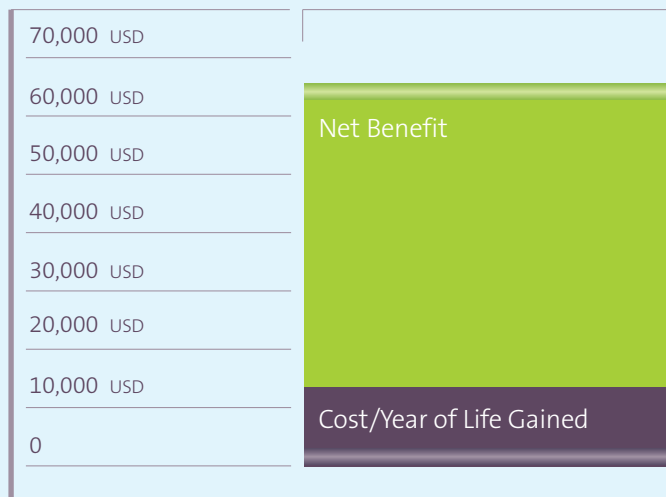


FIGURE 6
NET VALUE OF MEDICAL TECHNOLOGY ²²

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4.1

REDUCING COSTS AND IMPROVING EFFICIENCY / PRODUCTIVITY OF HEALTHCARE SYSTEM CONTINUED

In order to achieve the proposed savings outlined of €1 billion over 4 years, IMSTA believes that the Government needs to significantly increase investment in the medical technology industry and to effectively utilise medical technologies throughout the health system. By working in partnership, industry and government can better control total health care costs.

Improving efficiency/productivity

The medical technology industry plays a vital role in advancing efficiency and productivity within the health care system. Since 2002 an average of 200 new technologies have been added to the EuroScan²³ database for innovative health technologies²⁴. Innovations in medical technology over the past two decades have dramatically altered the processes and methods by which medical care is provided.

By collaborating with healthcare professions, the medical technology sector has produced innovative medical technology products that have:

- * Allowed patients to receive care outside of a hospital setting due to the development of portable devices which would support the HSE Primary Healthcare Strategy
- * Enhanced clinician efficiency and allowed an increased case load
- * Increased efficacy of treatments

- * Reduced hospital stays
- * Increased the potential for patients to self-manage their treatment
- * Reduced the risk of infections and medical errors
- * Enhanced the health of the workforce

The potential for the health care system to become more efficient is increased as technology becomes more sophisticated. For example, emerging medical technology trends in areas such as computer aided surgery and robotics will have impact on the accuracy of surgical procedures and time required.

With the current level of HSE procurement, medical technology has made a difference to the efficiency and productivity in the health care system. However to unlock the full potential for cost savings and efficiency gains, the level of investment must increase. In addition, by utilising the medical technology available, the HSE will be able to achieve completion Transformation Programme 207-2010²⁵.

²³ The International Information Network on New and Emerging Health Technologies (EuroScan) is a collaborative network of member agencies for the exchange of information on important emerging new drugs, devices, procedures, programmes, and settings in health care.

²⁴ Innovative technologies that address global health concerns, World Health Organisation, 2010
http://whqlibdoc.who.int/hq/2010/WHO_HSS_EHT_DIM_10.12_eng.pdf

²⁵ Transformation Programme 2007-2010, HSE <http://www.hse.ie/eng/services/Publications/corporate/transformation.pdf>



“ Life expectancy in Ireland is at its highest level ever, at 76.8 years for males and 81.6 years for females. Much of Ireland's gain is attributable to reduced mortality of infants and children, and improved control and management of infectious diseases. Medical technology has contributed to the improvements in health care.”

4.2

QUALITY OF LIFE OF PATIENTS

It is internationally acknowledged that the medical technology sector has a major role in producing devices that improve the health and quality of life for patients. For example, the World Health Assembly (WHA) Resolution 60.29 on Health Technologies recognises that “*medical devices are indispensable tools in health care delivery for prevention, diagnosis, treatment and rehabilitation*”²⁶. Medical devices are vital to attain health-related goals including those contained in the Millennium Declaration²⁷.

Life expectancy in Ireland is at its highest level ever, at 76.8 years for males and 81.6 years for females. Much of Ireland's gain is attributable to reduced mortality of infants and children, and improved control and management of infectious diseases. Medical technology has contributed to the improvements in health care. Although there is a lack of reliable data on the number of categories of devices available, it is estimated 10,000 are available on the global market today²⁸.

Many of these have helped to improve the quality of life of patients. A London School of Economics (LSE) study on the use of devices in cardiology which focused on the implantable cardiac defibrillators and coronary stents showed a significant reduction in mortality and found improvements in event-free survival and adverse event/complication rates with technological innovation. Improvements were also seen in reduction of procedural times, hospital stays and readmission rates²⁹.

In 2008, Ireland produced 80% of the world's drug-eluting stents, however other devices manufactured included items such as pacemakers, catheters, infusers, devices for gastroenterology and urology use, prosthetic lenses, micro heart pumps, diagnostic kits and, in the orthopaedic area, artificial knees and hips – all of which are innovations which help to improve the quality of life of patients.

Medical technology solutions can generate quality gains for patients such as³⁰:

- * Improving hospital and procedure safety
- * Providing lighter intervention and less invasive procedures
- * Facilitating faster recovery and reducing length of stay in hospitals
- * Providing solutions tailor made illnesses
- * Integrated disease management
- * Empowering patients through individual healthcare management

Further gains to the quality of life of patients in Ireland can be improved by an increase in spending on medical technology by the Government from less than 4% of the health budget in Ireland today to the European average of 6.3%.

²⁶ Innovative Technologies that Address Global Health Concerns - Outcome of the Call Global Initiative on Health Technologies 2010, World Health Organisation (WHO) http://whqlibdoc.who.int/hq/2010/WHO_HSS_EHT_DIM_10.12_eng.pdf

²⁷ UN Millennium Declaration, 2000 <http://www.un.org/millennium/declaration/ares552e.htm>

²⁸ Medical Devices: Managing the Mismatch, WHO, 2010 http://whqlibdoc.who.int/publications/2010/9789241564045_eng.pdf

²⁹ Professor Michael Drummond, Research Institute (EHTI) Session, Eucomed Medtech Forum, October 2009 <http://www.together4healthinnovation.eu/uploads/presentations/2009/EHTISessionAMFinal.pdf>

³⁰ The role of medical technology in modern healthcare management, Eucomed, 2010 http://whatsnew.eucomed.org/wpcontent/uploads/2010/11/101104_be_ministerial_conference_chronic_diseases_eucomed_gl_201010_v5_finalpptx.pdf

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4.3

CONSOLIDATE IRELAND AS THE LOCATION OF CHOICE FOR MEDTECH DEVELOPMENT

Over the past 20 years the medical technology sector has grown in Ireland due mainly to the presence of MNC's manufacturing specialised medical and surgical equipment. The MNC's were attracted to Ireland through the Government grant aid and low corporate taxation policy.

The foreign owned companies also saw the opportunity to take advantage the educated work force and Ireland's position as a gateway to the European market. The Irish medical technology sector has contributed to rising high-tech exports and knowledge-based employment ³¹.

The presence of the world's top companies such as Abbott, Baxter, Boston Scientific, J&J, Medtronic and Stryker has led to Ireland being recognised as having a medical technology cluster that has been compared to Massachusetts and Minneapolis, both leading global medical centres. In addition, knowledge transfer from the MNC's resulted in the development of an indigenous base of small companies. The indigenous firms mainly produce complementary or niche products to the MNC's.

In the current economic climate, Ireland can no longer rely on cost competitiveness to attract FDI. Therefore it is essential that the Government acts in partnership with industry to ensure continuous and new investment from medical technology companies in the sector in Ireland.

Ireland has the potential to offer a comprehensive industry solution by leveraging and integrating the medtech supply capabilities to facilitate the R&D, regulatory approval requirements and cost benefit analysis of the device industry as it evolves.

A crucial component for Ireland as the location of choice for medical technology development is the growth of a domestic market which can only be achieved by more active Government involvement and investment in the medical devices industry. A domestic market, where cost benefit analysis for new technologies could be undertaken, would be an attractive location for medical technology companies to set-up and to use this as a base for further international expansion.

The Government has given The Health Information and Quality Authority (HIQA) responsibility for ensuring the best outcome for the service user by evaluating the clinical and economic effectiveness of drugs, equipment, diagnostic techniques and health promotion activities ³². HIQA will oversee Health Technology Assessments (HTA) which would offer manufacturers a route to commercial endorsement for their new technologies. HIQA's role is vital in establishing Ireland as a choice location for medical technology companies seeking to invest in Europe.

In December 2008, the Governments framework for sustainable economical renewal '*Building Ireland's Smart Economy*' was published. As part of its strategy, the Government aims to *invest heavily in research and development, incentivise multinational companies to locate more R&D capacity in Ireland, and ensure the commercialisation and retaining of ideas that flow from that investment*³³.

³¹ Capabilities and competitiveness: A methodological approach for understanding Irish Economic Transformation – Lucerna Project Report 2010
http://www.nuigalway.ie/cisc/documents/lucerna_project_final_report_june2010.pdf

³² Guidelines for the budget impact analysis of health technologies in Ireland, HIQA, 2010
http://www.hiqa.ie/media/pdfs/HTA_Guidelines_for_Budget_Impact_Analysis.pdf

³³ Building Irelands smart economy – A framework for sustainable economic renewal, 2008
http://www.taoiseach.gov.ie/attached_files/BuildingIrelandsSmartEconomy.pdf



“ The presence of the world’s top companies such as Abbott, Baxter, Boston Scientific, J&J, Medtronic and Stryker has led to Ireland being recognised as having a medical technology cluster that has been compared to Massachusetts and Minneapolis, both leading global medical centres.”

The framework document also lists FDI from medical technology companies as a strength that needs to be secured. Government investment in the medical technology sector is vital in helping in achieving the Smart Economy objectives. Industry knowledge gained through domestic market experience can in turn help to attract further FDI to Ireland.

In line with the Government’s Smart Economy objectives, the increase of €11 million of capital allocation to Science Foundation Ireland (SFI) announced in Budget 2011 shows the Government’s commitment to investing in scientific and engineering research. The SFI research community enables increasing levels of high tech foreign direct investment and indigenous innovation.

The budget allocation will allow third level institutions to foster emerging talent and continue to build partnerships with industry so that innovative research can continue. IMSTA welcomes this commitment by the Government as it will help SFI to continue its support of the medical technology industry and further successful industry-academic collaboration leading to the development and commercialisation of innovative products and the future growth of the sector.

The presence of IMSTA means that companies that establish themselves in the Irish market have access to advice on the aspects of final commercialisation of technologies including marketing and distribution.

The specialist skills medtech suppliers have acquired could be resourced to ensure the effective commercialisation of devices developed not only in Ireland, but throughout the world.

To develop the value that IMSTA can add to medical technology companies, Government and industry must work together to ensure that Ireland is at the forefront of addressing market access issues.

Building on the knowledge and capability that already exists in the medical technology sector in Ireland, a new strategy of Government partnership with the medical technology industry and investment in innovation will be the model by which Ireland can become the location of choice for MNC’s seeking to locate in Europe. This will also instil confidence in the existing MNC’s.

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JOB CREATION

The Irish medical technology industry employs 30,000 people, many of which are employed by MNC's. The medical technology sector provides high-paying hi-tech jobs even in trying economic conditions. The Irish medical sector employs 6% of the European total.

By committing to investing in the sector, the Government will be ensuring the safety of the existing jobs and will facilitate job creation through the establishment of other companies that are attracted to Ireland.

The Governments Smart Economy strategy has led to an investment of €570 million in science, technology, innovation and enterprise. The aim of the strategy is to make Ireland an *Innovation Island* where research can be turned into jobs. The Government forecast 117,000 to 235,000 new jobs in high-tech over a decade. By investing in devices produced by the medical technology sector, this figure can potentially be increased.

Investment in the medical technology sector will also have indirect benefits to local communities as the jobs created result in a greater level of disposable income and a high demand for consumer durables which in turn creates jobs.

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RECOMMENDATIONS

Medical innovations and the economic and patient benefits do not just happen. Industrial policy is required to enable this to happen. Inadequate development of the industry will threaten this opportunity and the substantial economic impact and patient benefits that could accrue. Therefore IMSTA makes the following recommendations to the Government and HSE:

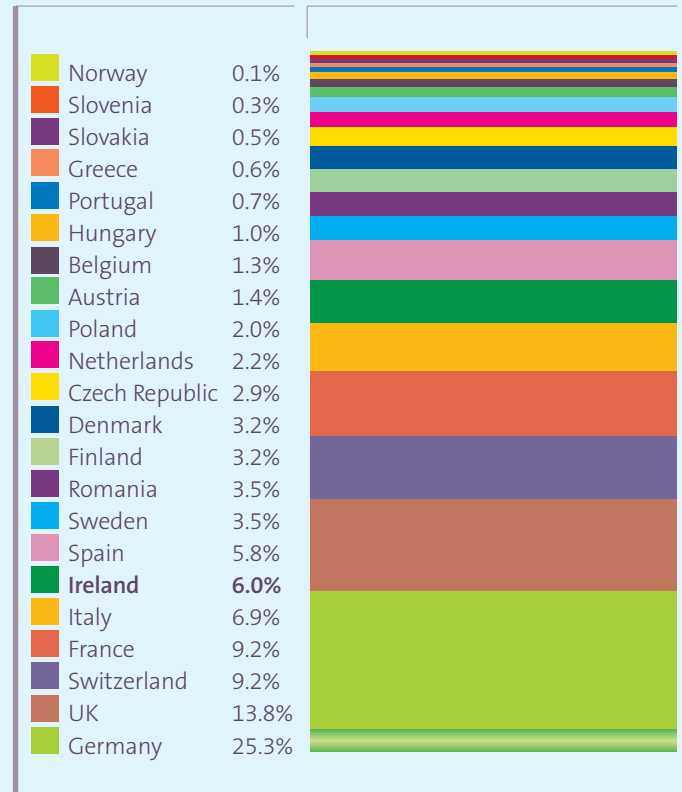


FIGURE 7
EMPLOYEES IN MEDICAL SECTOR, 2007³⁴

- * The Department of Enterprise, Trade and Innovation and the Department of Health and Children should partner with the industry to develop policies that will enable the medical technology industry to enhance its footprint in Ireland and make Ireland a destination for investment for the industry globally.
- * The Government needs to align its ambition on the industrial front with procurement policies of medical technology and innovation.
- * The HSE needs to work towards focusing it's spend on medical technology that provides specific patients benefits and ensure that price reduction is not a prime driver in procurement selection criteria.
- * Mechanisms need to be put in place to evaluate the contribution and role of the medical technology in Ireland. Attention needs to be given to maximising the value of this sector

³⁴ Medical technology brief, Eucomed, 2007
<http://www.eucomed.be/press/~media/pdf/tl/2008/portal/aboutindustry/medtechbrief2007.ashx>

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CONCLUSION

This paper has established IMSTA's position on the need for Government to invest further in the medical technology sector. It is clear that the medical technology industry has made a significant contribution to the Irish economy however the disconnection between the production of the devices and the procurement of the devices needs to be addressed.

IMSTA will work with Government in order to ensure the ongoing development and sustainability of the medical technology industry in Ireland to continue to provide the economic and patient benefits.



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