Collins McNicholas

Recruitment & HR Services Group

LABOUR MARKET REVIEW SERIES: VOLUME 1

Med Tech


Aerogen

Executive Summary

Collins McNicholas
Recruitment & HR Services Group

Ireland's medical technology industry:

50% of its companies engage in R&D.

Employs over 32,000 people.

Engineering skills are in strong demand; process engineers, automation engineers, lean six sigma engineers, validation engineers, quality engineers, NPD engineers, and polymer engineers are all sought after.

Salaries and benefits are competitive and have largely remained stable over the last 12 months. There is some upward pressure on niche engineering and science skills that are in demand.

Strong regional presence with an excellent geographic spread.

The fastest growing subsectors of the industry are in-vitro diagnostics, connected health, and combination devices.

Government support for the industry includes the creation of Springboard courses to retrain professionals with new skills, a national programme to increase STEM course applications, and Science Foundation Ireland funding support for several R&D centres.

Future talent pool looks strong; educational trends show an increase in STEM graduates over the last 10 years as well as greater enrolment in engineering and other STEM courses. Level 8 engineering and technology first preference applications have increased by 26%, while science applications have increased dramatically by 78%.

There is a very strong pool of indigenous senior and executive talent within the industry, both in Ireland and globally of Irish expats.

We expect the sector to continue to grow over the next few years due to increased demand for medtech products globally. Ireland's competitive cost base, strong talent supply and track record in the industry provides a positive outlook for the future of medtech in the country.

Introduction

Ireland's medical technology sector employs over 32,000 people, hosts 18 of the 25 largest medtech companies in the world, and has €12.6 billion worth of exports annually, making it the fifth largest exporter in Europe. Ireland develops some of the most sophisticated products in the industry, with particular strengths in high value manufacturing and R&D.

Half of all medtech companies in Ireland now have a dedicated R&D function. There will be approximately €27 billion spent on R&D by medtech companies in 2018 and this figure will grow in subsequent years as companies continue to integrate new technologies into their existing products and develop new products. There are over 450 medtech companies in Ireland and 60% of these are indigenous SMEs. The global medtech market was worth an estimated €422 billion in 2017 and is expected to reach €455 billion by 2020, this presents the Irish Medtech sector with an excellent opportunity to grow. Ireland continues to receive major international investments and has generated continuous employment growth in recent years.

Collins McNicholas believes the outlook for the medical device industry in Ireland to be very positive and anticipates robust growth in the years ahead as the industry takes advantage of expanding global demand for medical technologies. Critical to Ireland's position will be its ability to provide a sufficient number of qualified professionals for the industry. Over 2,000 jobs have been created in the medical technology sector since 2014 and another 4,000 jobs are expected to be created by 2020. Through a combination of increased graduate output, a greater number of retraining and apprenticeship programmes, and the judicious sourcing of international talent, Ireland should be able to provide the quantity and calibre of talent that the industry needs to thrive.

Most of the biggest companies in the medical device industry have a presence in Ireland. Companies such as Abbott, Medtronic, Johnson & Johnson, Hollister, Baxter, Boston Scientific and Stryker all have major operations in the country. Indigenous companies are also important contributors to the Irish medical device sector. Creganna, Trulife, Vistamed and Steripack are just a few of the Irish medtech companies exporting their products globally.

Ireland produces a wide range of medical device products. Products manufactured in Ireland include pacemakers, stents, pregnancy tests, HIV tests, orthopaedic hips and knees, ventilators, and contact lenses. In 2014 and 2015, medical technology companies invested €960 million in Ireland. This has resulted in strong job growth in the sector over the previous three years. Investment has occurred in several regions and the type of employment created includes high value manufacturing roles, support services and R&D.

R&D is growing in importance in the Irish Medical Device sector; Medtronic, Cook Medical, SMT, Stryker and DePuy Synthes all announced investments in new R&D and Innovation Centres in the last 3 years. Edwards Lifesciences recent announcement of its planned €80 million investment in the Midwest region demonstrates Ireland's continued ability to attract significant international investment. It also highlights the depth of engineering talent that is present across the country. The availability of this talent will be a key factor in acquiring more investment in the increasingly competitive global medtech sector.

RECENT MAJOR INVESTMENTS IN IRELAND

June 2014
Hollister
BALLINA
Invested €80m in plant, employs over 600 people

May 2017
Abbott
SLIGO
€10m investment in manufacturing facility

June 2015
AbbVie
SLIGO : 50 Jobs
€40m investment to expand manufacturing capacity

Mar 2014
Vistamed
CARRICK-ON-SHANNON : 125 Jobs
Invested €7 million in plant

Jan 2015
Zimmer
GALWAY : 250 Jobs
€51m manufacturing plant for orthopaedic implants

Dec 2015
Medtronic
GALWAY
Invested €13m in new manufacturing facility

June 2015
Moss Vision
ROSCOMMON : 50 Jobs
Establishing a facility to produce intraocular lenses

June 2016
Allergan
GALWAY : 60 Jobs
Manufacturing facility

Oct 2014
Teleflex
ATHLONE : 100 Jobs
Expanding its shared services and R&D facility

Sept 2016
SMT
GALWAY : 50 Jobs
European HQ and R&D centre

Dec 2017
Beckman Coulter
CLARE : 70 Jobs
Expanding its manufacturing facility

June 2016
Surmodics
GALWAY : 100 Jobs
€16.5m investment in R&D and manufacturing upgrade

April 2014
Ethicon Biosurgery
LIMERICK : 270 Jobs
Invested €80m in plant

April 2018
Edwards Lifesciences
MIDWEST : 600 Jobs
€80m to construct a new manufacturing plant

Dec 2016
Becton Dickinson
LIMERICK : 100 Jobs
€21m investment in a new R&D Centre of Excellence

July 2017
Bausch & Lomb
WATERFORD : 125 Jobs
€85m to increase manufacturing capacity

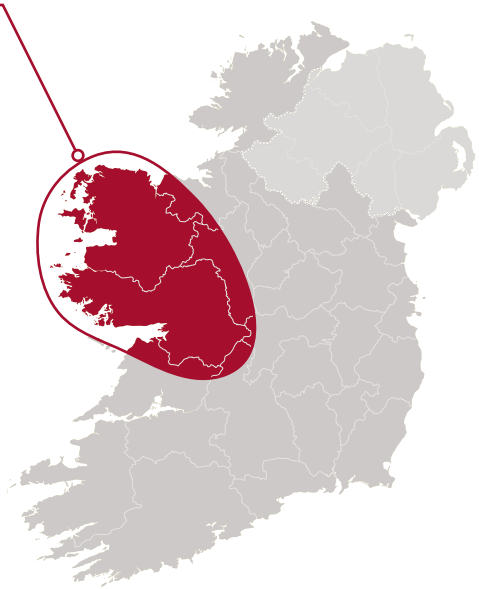
Sept 2014
Stryker
CORK
Building a new Surgical Innovation Centre

Regional Overview

Medical device companies are dispersed throughout Ireland. Their presence means that there is a steady supply of talent in every region, allowing medical device companies to easily set up a facility anywhere they choose. A renewed focus on regional investment from IDA Ireland should see further gains in employment for regional locations, particularly in this sector. The presence of these multinationals around the country has generated an ecosystem of support companies in tool making, polymer processing and automation. Infrastructure developments put in place to support these multinationals benefits the broader economy greatly as well.

West

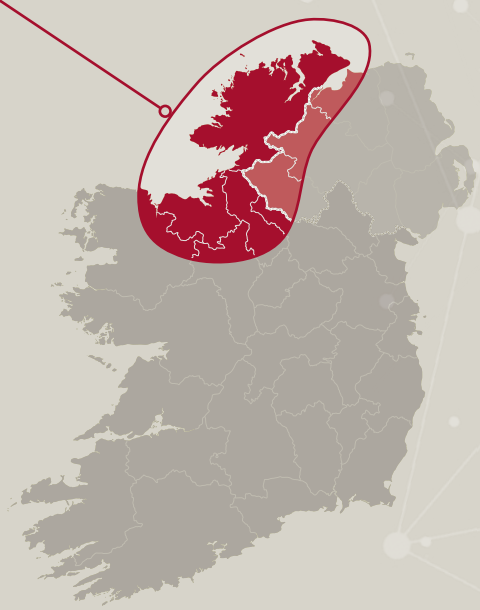
Galway is the most important medtech cluster in the country. Galway has a vibrant ecosystem of medical technology start-ups, multinationals and research centres that in total accounts for approximately 31% of all medical device employment in Ireland. Galway has significant expertise in vascular technologies, which are dominated by Boston Scientific and Medtronic. Boston Scientific is the largest medical device employer in Ireland with a staff of more than 4,500 across 3 sites located in Clonmel, Cork and Galway. Its range of products include drug eluting stents, structural heart products, pacemakers and Implantable Cardiac Defibrillators (ICD). Boston Scientific employs around 3,000 people in Galway. Medtronic has roughly 2,000 staff working at its Galway facility, including over 100 employees working in R&D. Creganna employs over 800 people globally and is headquartered in Galway, providing outsourced solutions for medical device companies. It can provide design, manufacturing, clinical and regulatory support specialising in minimally invasive delivery and access devices such as catheters. In April 2016, TE Connectivity Ltd a world leader in connectivity and sensors, acquired Creganna Medical Group. Other notable companies in Galway include Merit Medical, Cambus Medical, Crospon and Zimmer who opened a facility in Oranmore along with their well-established facility in Shannon. The medical device industry in Galway is continually expanding, with SMT, Allergan (formerly known as Zeltiq) and Surmodics all making job announcements of 50-100 people.



West (continued)

Mayo has several large multinational medtech companies with manufacturing operations, including Baxter and Hollister. They produce renal dialysis equipment and ostomy/continence care products respectively. Hollister has invested €80 million in its Ballina plant, which currently employs over 600 people. National University of Ireland, Galway and the Galway Mayo Institute of Technology have important links with medical device companies operating in the region, providing research collaboration and skilled graduates ready to specialise in the medical device industry. The medical device companies within this cluster are supported by such organisations as Enterprise Ireland, IDA Ireland, Local Enterprise Office Galway, GMIT and NUI Galway.

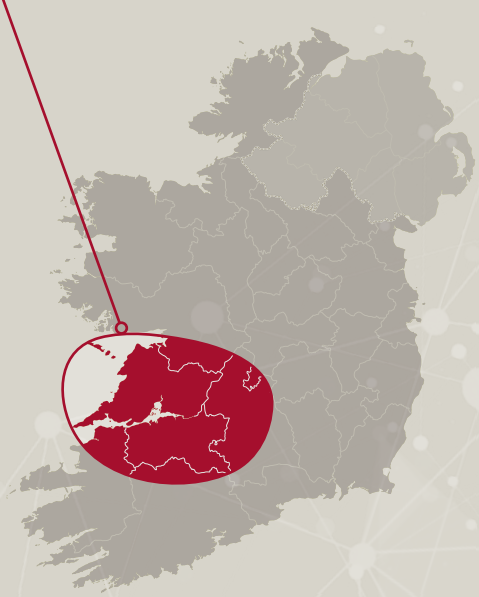
North West



The North West is home to several large medtech companies. Abbott has a number of facilities in the region including Abbott Diabetes in Donegal, Abbott Diagnostics and Abbott Nutrition in Sligo. The region supports both large multinationals and indigenous companies, with Irish owned Arrotek and Inblex Plastics based in Sligo. Multinationals B. Braun, ICU Medical, Amcor Flexibles and AbbVie are all located in Sligo as well. Donegal also contributes to the North West medtech cluster with Abbott Diabetes, Phillips-Medisize, Zeus and Moll Industries all located in the county. Vention in Boyle is another significant medtech manufacturing site in the North West. Harmac Medical in Castlerea employs approximately 300 people.

The sector continues to grow with a number of investments and job announcements in the last 24 months. AbbVie, which makes medical delivery devices, has invested €40 million in one of its Sligo plants, and has hired 50 people. Vistamed, which makes precision extrusions and catheters, doubled the size of its Carrick-on-Shannon plant, expanding its headcount to over 300. The industry has also given rise to a diverse range of support companies to serve the sector. These include specialist tooling companies such as Avenue Mould which was bought by GW Plastics in July 2017 and employs over 60 people, automation companies such as ATS Automation, and metrology and manufacturing consultancy companies such as Verus.

Midwest



Limerick is also an important location for medical device companies. Cook Medical has an 800 person manufacturing facility in Limerick that makes products for use in gastroenterology, urology, obstetrics and gynaecology. Stryker Orthopaedics, Teleflex Medical and Johnson & Johnson Vision Care are also important employers in the county. Ethicon Biosurgery, part of J&J, has recently invested €80 million in its Limerick plant, which will see it create 270 jobs. Vistakon, part of the J&J group that employs almost 2,000 people in Ireland, made a landmark €100 million investment at the start of 2013 that will see the creation of 100 additional jobs at its Limerick site where it manufactures the Acuvue range of disposable contact lenses. In June 2015 Vistakon announced another €100 million investment to further its manufacturing capabilities. Becton Dickinson is investing €21 million in the development of a new R&D Centre of Excellence that will double their number of staff in Limerick to 200 people. Edwards Lifesciences is constructing a purpose-built manufacturing site in the Midwest at a cost of €80 million. This facility will open in Shannon in 2020 and employ 600 staff. The University of Limerick has a strong engineering department that offers a specialised Biomedical Engineering Degree in addition to its other engineering programmes.

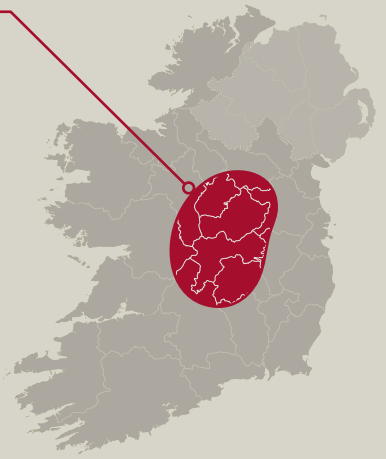
South

Cork has significant expertise in orthopaedic technologies. Stryker, which manufactures orthopaedic implants, minimally invasive surgical equipment and neurovascular products, is the biggest medical device employer in Cork. Stryker is building a new 44,000 sq. ft. surgical innovation centre in Cork that will conduct research on the surgical issues of bone cutting and soft tissue dissection. Stryker has 5 facilities located in Ireland employing approximately 2,300 people. The Stryker Ireland Campus consists of 4 manufacturing sites and a Research and Development Innovation Centre. DePuy Synthes produces orthopaedic knees and hips from its Cork plant, employing over 900 people. This site also includes a global supply chain operation and an R&D Innovation Centre. Boston Scientific employs approximately 800 people in Cork and produces over 5.5 million units which includes active and access catheters, occlusion coils and microspheres, inflation devices and atherectomy devices. Alcon is a manufacturing facility in Cork that employs more than 450 people in the production of Intraocular Lens.

South East

Waterford hosts contact lens manufacturer Bausch & Lomb and precision engineering company Schivo. Bausch & Lomb recently invested €85 million to increase its manufacturing capacity. Currently employing 1,300, Bausch & Lomb will hire another 125 people this year. Thus far, they have invested over €200 million in their Waterford facility. Waterford based Nypro Healthcare is hiring more than 150 new staff members to manufacture its complex respiratory and injection devices. Clearstream in Enniscorthy, which was bought by CR Bard, now has over 400 employees at their facility and manufactures angioplasty catheters that are used in both coronary and peripheral procedures to unblock arteries. Boston Scientific employs over 700 people in Clonmel and manufactures all of their pacemakers and implantable defibrillators for the global market. The Clonmel facility is also involved in R&D for its next generation of Cardiology Rhythm Management devices. Abbott Vascular is also located in Clonmel with 1,200 employees and manufactures a host of vascular devices for the international market. Lake Region Integer Corporations Holding, based in New Ross, develops and manufactures medical devices and components for the Cardio & Vascular and Advanced Surgical markets and employs more than 800 people in the region.

Midlands



Athlone hosts a number of key multinationals with companies such as KCI, Covidien/Medtronic and Teleflex all located there. Other notable companies in the region include Abbott Diagnostics, Avery Dennison (formerly Finesse Medical) and B. Braun in Longford. These companies, with the exception of Teleflex, are all involved in the manufacturing of various medical device products, from diagnostic kits and advanced wound care products to an assortment of medical tubing. Teleflex has a shared services centre and their European HQ in Athlone from which they run their key back office functions such as quality, regulatory, finance, HR and IT from this site. It currently employs 160 people in Athlone and is set to add a further 100 jobs over the next two years – these jobs will be in multilingual customer and technical services. Renew Health established its manufacturing and R&D functions in Athlone in June 2014 and now employs over 50 staff. Integra Life Sciences are continually investing in their site in Tullamore. They have expanded to over 130 staff and are continuing to refurbish and reinvest in their facilities to increase automation and facilitate the development of new products. Isotron Ireland is also located in Tullamore. Biotech Vision Care, formerly Moss Vision, is a new start up in Roscommon that manufacture contact lenses. The midlands region is also home to several polymer companies who provide polymer solutions and outsource manufacturing to the medical device industry, for example – Kelpac, Tool & Plastics, Mergon, Trend Technologies and Steripack/Beamis. Signature orthopaedics recently set up operations in Athlone with manufacturing facilities located there.

Medical Device Talent and Graduate Output

Demand for Skills

We have seen a strong demand nationally for a range of engineering professionals; process engineers, lean six sigma engineers, quality engineers, validation engineers, manufacturing engineers, NPD engineers, automation engineers, process design engineers, biomechanical engineers and polymer engineers are all sought after. Engineering salaries have increased in the last 2 years due to expanding demand within the sector. The salaries remain competitive relative to other medtech hubs in Europe and the salary increases have been relatively minor overall. The robust growth in demand for engineers over the last few years has put some pressure on supply, and demand is set to remain strong over the next few years. However, the output of new engineers, the dispersed nature of the existing engineering talent, and the experience the higher education institutes have in servicing the demands of medical device multinationals, will ensure there is no critical shortage of engineering skills in the industry.

The Irish Medtech Association Skillnet surveyed senior business leaders in the industry to estimate the level of demand for different skills. Engineers make up the second largest cohort of employees in the industry, after operators, and demand for engineers is expected to grow by 23% from 2016-2020. The number of investments in R&D centres in the last few years has led to an expected increase in R&D professionals of 51%.

The development of new technological trends will impact hiring decisions with demand for data analysts (56%) and scientists (74%) increasing substantially, albeit from a low base. This reflects the increased potential of big data and drug-device combinations for developing new products. New technologies will generate a need for more regulatory expertise (43%) over the next 3 years as well. The need for the usual support services, supply chain, sales and marketing, finance, HR, etc. will also grow with the industry.

There is an increased demand for biotechnology and pharmaceutical related skills. Personnel with qualifications in the biological sciences, chemistry and pharmacology are becoming more important as well. The convergence of different technologies with medical device products means that there is a demand for expertise in the areas of nanotechnology, software, ICT, maths, statistics, informatics and bioprocessing, and material science. There has been an increase in the pace of automation as the industry in Ireland shifts towards the production of more high value products. This requires greater training for employees in the industry and places more pressure on 3rd level institutes to produce the necessary volume of graduates. Overall, this will drive up the quality of employment in the industry and increase Ireland's competitiveness internationally.

Graduates

Sustained efforts at encouraging STEM careers and the provision of conversion courses should ensure there are a sufficient number of graduates with the appropriate skillset. CAO Level 8 first preference applications for STEM courses, which include science, engineering, and technology, have increased by 13% over the 5 years since 2012. Growth in STEM applications grew more rapidly in the 5 year period from 2007. From 2007 to 2017, first preference applications for Level 8, honour degrees in STEM subjects have grown by 51%. As categorised by the Central Applications Office (CAO), science first preference applications grew by 78% and engineering and technology first preferences grew by 26%, for Level 8 degrees during the last 10 years. This increase in STEM applications has been ongoing since 2007, but there are still minor shortages in certain disciplines. CAO application trends suggest that this will abate over the next few years. The government are devising a new apprenticeship programme in consultation with industry to provide more skilled professionals at technician level. This will further bolster the supply of qualified personnel for the medical device industry.

ICT skills are playing an increasing role in the medical device industry, particularly in the area of connected health. Government efforts to increase the ICT graduate output have been very successful, but the rapidly expanding incorporation of ICT into other industries means that a greater increase in graduate output is required in order to keep pace with this rise in demand. The government sponsored Springboard programme provided 9,463 places in ICT courses for students between 2011 and 2016. In 2015, they offered 42 ICT courses, with this number rising to 92 courses in the 2017/18 academic year. This should help address the demand for ICT professionals. Springboard is also providing 75 advanced manufacturing courses in 2017/18 and has provided 4,472 places for students in courses in the manufacturing/biopharmachem skills sector. In addition to the demand for the major technical skills, highly qualified staff are also needed in support functions such as regulatory affairs, HR, finance, ICT and sales. Irish third level institutes will be able to match demand for these skillsets going forward.

The Irish government has committed funding to three new apprenticeship schemes for the medical technology and polymer sectors, with a target of registering 1,100 people for these apprenticeships by 2025.

Senior & Executive Talent

The rapid expansion of the medical device industry since the mid '90s has created a strong pool of senior and executive talent. There are numerous Irish expats in these positions in medical device companies globally. This has benefitted the Irish medical device industry significantly. They have helped to promote Ireland around the world and made Ireland a more attractive destination for FDI. Many have also returned to Ireland in the last decade, either to set up a new medical device company, or to take over the operation of an existing facility. Collins McNicholas has seen numerous examples of this, having conducted several international recruitment searches to identify senior and executive talent on behalf of medical device companies operating in Ireland. These experienced Irish expats will often have worked across several divisions within a company giving them a broad, as well as a deep, knowledge of the operation of medical device companies. They know the business well, but they also have a strong network within the parent group which can help attract investment to Ireland. This makes them sought after talent for senior roles. They are often eager to return to Ireland, waiting for the right role before moving home.

International assignments are often viewed as a way of fast tracking your career and talented senior level executives in the medtech industry in Ireland will often look for international opportunities to enhance their prospects in the future. They are viewed by Irish executives as attractive opportunities to further progress their careers.

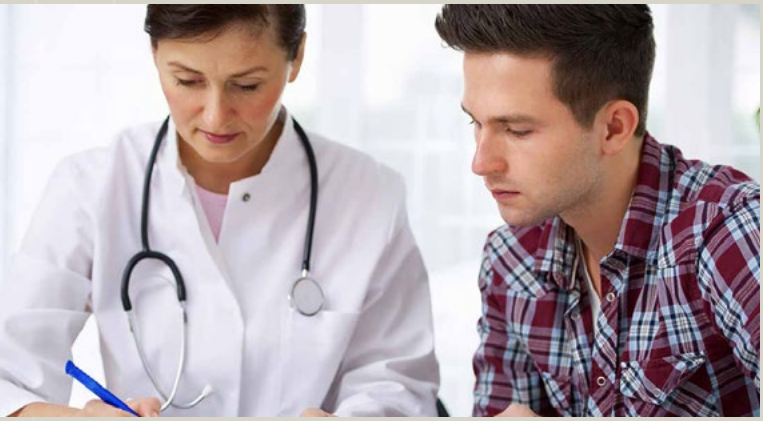
Trends in the Medical Device Sector in Ireland

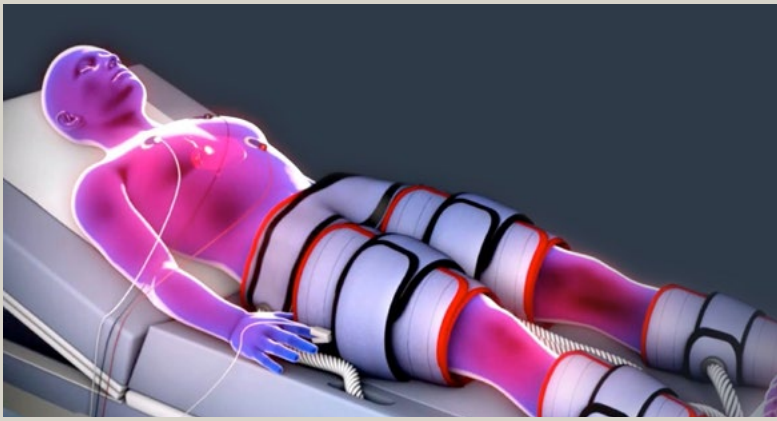
The medical device sector is highly diverse, producing everything from bandages to MRI machines. Medical device companies in Ireland perform a wide variety of activities, such as R&D, clinical and preclinical trials, manufacturing, marketing and sales, and shared services. Ireland has particular expertise in diagnostics, orthopaedics, vascular technology, combination devices and connected health. As a result, there are excellent employment opportunities in this sector for a wide range of skills.

Combination Devices

Combination devices bring together two different medical technologies in a single product. Types of drug device combinations include drug eluting stents, antimicrobial catheters, and infusion pumps. Ireland has several companies operating in this sector. AbbVie in Sligo manufactures a pen-style injector for its biopharmaceutical products. Boston Scientific manufactures drug eluting stents from its Galway facility. Clearstream Technologies is also involved in the production of drug-eluting stents and antimicrobial catheters from its facility in Enniscorthy. The market is estimated to grow by 7.9% per year to 2019 when it will be valued at $115 billion, according to Transparency Market Research. Developments in material science and nanotechnology will assist the rapid expansion in combination devices.

Ireland's knowledge of pharmaceutical and biopharmaceutical production, along with its medical device expertise, gives it a major advantage in developing combination devices. Many of these companies bring together more traditional skillsets like plastic moulding and tool making with newer skillsets involving nanotechnology or biopharmaceutical production. Ireland's manufacturing history as well as its investment in highly automated and complex manufacturing technologies provides the range of skills required to produce these devices.





Diagnostics

In vitro diagnostics is one of the fastest growing subsectors in the medical device industry. Real time diagnostics, the development of personalised medicine, reduced costs and the expansion of healthcare in developing countries is driving this growth. Ireland has extensive experience in this sector with Abbott Diagnostics, Covidien, Alere, Roche, Beckman Coulter, Siemens Healthcare, and many others, engaged in either production or research operations in Ireland.

Connected Health

Connected health, the use of information technology to provide better healthcare, is another significant development in the medical device industry. It incorporates mobile technology, advanced sensors, remote monitoring tools and networked devices to better monitor patients' health. It allows for a vastly improved system for gathering and sharing medical information. Ireland is superbly positioned to take advantage of this rapidly developing field due to our strong medical device and ICT sectors. BiancaMed, Helix Health, Intel Digital Health Group, Slainte Technologies and Valentia Technologies are just a few of the connected health companies in Ireland. These companies are supported by connected health research centres, such as the Applied Research for Connected Health (ARCH), the Biomedical Diagnostics Institute (BDI) and INSIGHT, which provide opportunities for collaborative research. The government has committed to providing funding support for the connected health sector, and it has received considerable investment over the last few years.

Shared Service Activity: Quality, Regulatory Affairs and 3rd Party Manufacturing

Ireland has an excellent track record for regulatory compliance and is experienced in dealing with the FDA and other regulatory bodies. The medical device industry is facing ever stricter quality and regulatory oversight and is therefore in need of greater numbers of personnel to fill these industry requirements. There will be a strong demand for experienced QA and Regulatory Affairs professionals in the next few years as greater emphasis is placed on the safety and effectiveness of increasingly complex medical technologies.

Many medical device companies have shared services operations in Ireland, including Abbott, Alere and Baxter. They tend to cluster around Dublin but can be found in many regional locations. Often these companies will have a manufacturing or research facility in the country as well. Shared services operations provide opportunities for professionals with a wide range of skills. These centres can contain several functions, from accounting and finance, to multilingual customer and technical support centres, tech support, supply chain management, HR services and legal services. Ireland is ideally suited for this type of activity as it has an excellent supply of talent to fill these roles and has accumulated an abundance of experience in this area over the previous decades. Ireland's quality and regulatory expertise, in addition to its shared service experience, has brought investment in 3rd party manufacturing activities. Many international 3rd party manufacturing operations are also managed from Ireland.

Research

The medical device industry is the #1 industry for innovation globally, with 8% of sales being invested in R&D and a new patent filed every 50 minutes. The innovation cycle is incredibly fast, taking just 18-24 months. This means that a new product will be superseded by an improved version in less than 2 years. The funding of research will therefore play an important role in the continued development of the medtech industry in Ireland.

Research funding has increased markedly in the last number of years, with the Irish government committed to investing over €5 billion in science and technology research annually up to 2020, and several new research centres being established. Key priority areas for R&D include combination devices, personalised orthopaedics, drug eluting balloons, stents and connected health. Institutes such as the National Centre for Biomedical Engineering Science, the Network of Excellence for Functional Biomaterials, the Centre for Research in Medical Devices (CURAM) and the Regenerative Medicine Institute (REMEDI) have made NUI Galway a European hub for medtech research. Industry collaboration has been a key feature of this new research environment. CURAM's research concentrates on the development of 'smart,' implantable medical devices. It has over 40 industry partners.

REMEDI is combining stem cell and gene therapy technologies to assist in tissue repair. It is partnered with Creganna, Enbio, Ovagen, and Medtronic, among others. The Advanced Materials and BioEngineering Research (AMBER) Centre recently launched an additive manufacturing laboratory and partners with 11 medical technology companies as part of its overall research efforts.

Research centres specialising in nanotechnology (CCAN, CRANN); in ICT and data analytics (Tyndall, INSIGHT); and material science (MSSI in Limerick, the National Polymer Centre in Athlone IT, and SEAM in Waterford IT); are applying their expertise to the medtech sector. They are all partnered with major domestic and multinational companies. Substantial resources have been invested in Irish research institutes in recent years and this has greatly benefitted the work of medical devices companies operating in the country.

Conclusion

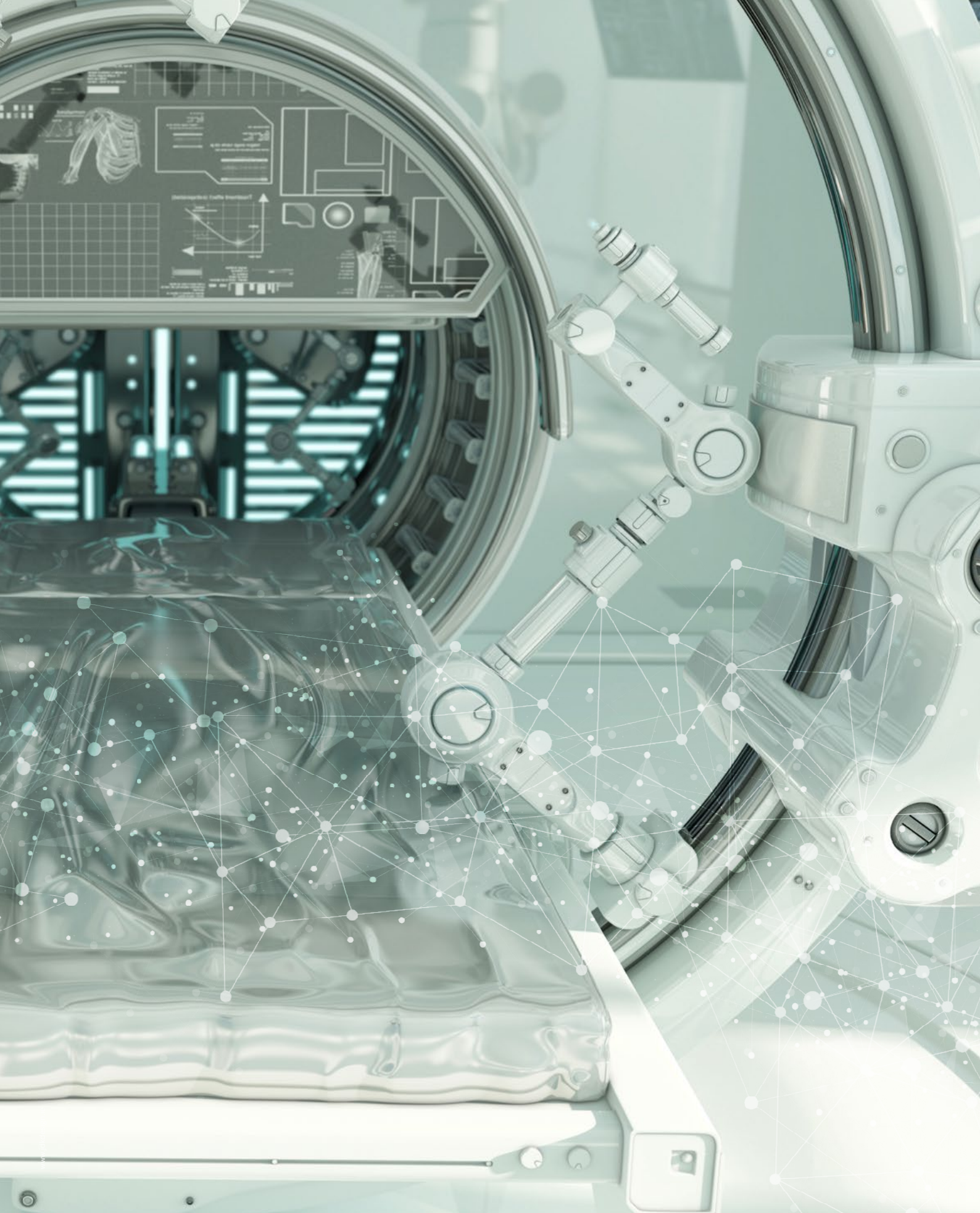
Overall, the outlook for the medical device industry, both globally and in Ireland, is extremely positive. The industry in Europe is growing at about 4% annually.

Despite greater financial pressures, and increased regulatory constraints, there is a fast-growing demand for new medical technologies. Ageing developed country populations, the growth of emerging markets, and technological developments, are opening up new opportunities and expanding the size of the market. Ireland is already an important producer of medical devices and is well positioned to expand on this success.

The medical device industry in Ireland is investing more of its resources in high value manufacturing and R&D to maintain its leading position in the industry. This transition will require better qualified, and more highly skilled, employees. The increase in STEM graduates will provide the talent needed to support this transition and the creation of new apprenticeships will provide a technical base to drive the industry forward.

The outlook for the medical device industry in Ireland is positive. It has the capability to expand and presents excellent career opportunities for qualified professionals.

Niall Murray
Managing Director
Collins McNicholas Recruitment & HR Services Group



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