Med Tech Week

EUROPEAN MEDTECH WEEK MAGAZINE • VOL. 03 • 2017





Stories ; valu€

Medtech improving the lives of people

It is often said that good things come in threes, so it should be no surprise that the third European MedTech Week was a great success! This annual event is now firmly embedded in the calendar of medical technology trade associations and companies across Europe and is an increasingly inclusive affair, capturing the voices of patients, health professionals, academics and policymakers.

This reflects the broader trend towards multi-stakeholder dialogue as we work together to steer healthcare onto a sustainable path - ready to meet the needs of our population. In working towards this shared goal, value is the centrepiece of our conversation.

As you will read in these pages, value-based healthcare has the power to transform health services into more patient-centric systems. Our sector, powered by a huge number of SMEs, produces innovative technologies and services that deliver value, improves outcomes for users, brings fulfilment to healthcare professionals' work and enables payers to use resources more efficiently.

'Diagnostics also have a role in tackling the greatest public health challenge of our time: antimicrobial resistance.

Take modern diagnostics, for example. Through early and accurate diagnosis, doctors can make informed decisions which deliver better results for patients. But it's more than that: better outcomes for patients can reduce their risk of hospitalisation and keep people healthy and active longer - all of which is good news for payers. Diagnostics also have a role in tackling the greatest public health challenge of our time: antimicrobial resistance.

Thanks to medtech companies and national medtech associations, this magazine is packed with many more examples of how medical technology innovation is helping to solve healthcare challenges.

I would like to express my heartfelt appreciation for all their efforts in making European MedTech Week 2017 the best yet. I'm already looking forward to seeing what we can achieve together in 2018!

Serge Bernasconi Chief Executive Officer MedTech Europe

Think global, act local

European MedTech
Week shows how
national associations
can put our industry
on the map

For the third successive year, our vibrant associations have come up with inventive ways to highlight the role of innovative medical technologies in shaping the future health of our society.

From 19-23 June, 2017, trade associations and companies from across Europe held public events showcasing medical technologies that support patients on their journey from diagnosis to cure.

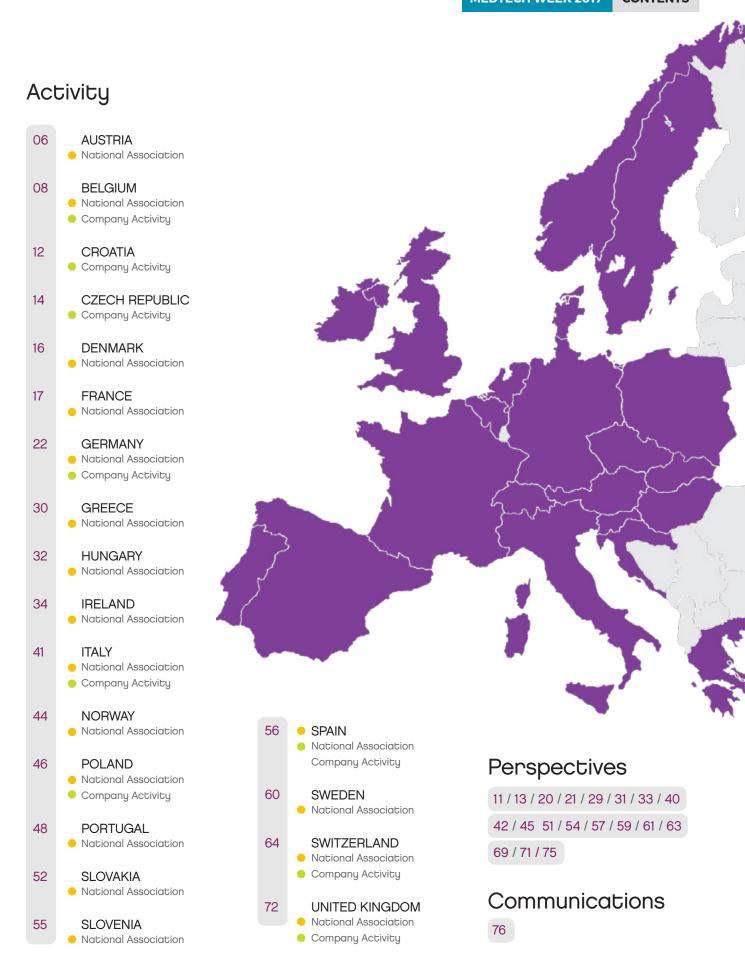
As this publication illustrates, we engaged with health professionals, decision-makers and the media, as well as with bright young people who have the potential to become medtech innovators of the future.

As industry representatives, we recognise the similarities in our national debates and at the same time learn from one another's experience in communicating the value of our sector. But we also know that even in our globalised world, each national health system faces some unique challenges.

Under the umbrella of European MedTech Week, national associations are perfectly placed to engage with key local stakeholders in a way that suits the political and media environments with which we are familiar.

We hope this shines through as you read these pages and inspires companies and other actors to work with national medtech associations. Together, we can ensure that the society gets the most out of the medical technologies and solutions our sector offers.

Sinead Keogh and Paul Arnaoutis





How often do you encounter medical technologies in your daily life? (Hint: it's more than you imagine!)

The campaign used a series of stories to bring technology to life. For example, they introduced the public to Melanie and Franz (above) who would like to start a family.

When you think about medical technologies, perhaps large MRI scanners or life-saving cardiac stents come to mind. But medical devices and diagnostic tests are much more common than you might expect.

Did you know that eyeglasses, walking sticks, plasters and pregnancy tests are all medical devices?

AUSTROMED, the Austrian association for medical device companies, set off on a road-show during MedTech Week to showcase the full spectrum of products helping us to live longer and better lives.

The campaign used a series of stories to bring technology to life. For example, they introduced the public to Melanie and Franz who would like to start a family. The story showed how the young couple's doctors used ultrasound and lab tests to check that mother and baby were in good health.

Other stories looked at how advances in healthcare are helping to improve outcomes for premature babies, diagnose and heal sports injuries, fix heart problems, and help older people to retain their mobility and independence.

Hundreds of people visited the roadshow in Linz, Salzburg, Innsbruck, Klagenfurt and Graz, with many more reached through social media campaigns. The initiative illustrates the broad range of ways that medtech touches people's lives – from the ordinary to the truly extraordinary.



Breaking the silence

Cochlear implants are helping thousands to hear

Click. It may be one of the most dramatic moments in medical technology history: in the 1960s, doctors flicked the switch on the world's first cochlear implant. In an instant, a patient who was once limited to the sound of silence could hear.

In the years that followed, these devices have been repeatedly refined and improved. As a result, hundreds of thousands of people who were born deaf or lost their hearing, can listen to music, hear birds sing and have conversations with loved ones.

Cochlear implants consist of an audio processor, with a build in microphone, and an implant with an electrode array that send messages directly to the auditory nerve bypassing the conventional hearing system which normally detects sound. The effect can be life-changing.



A variety of healthcare professionals have a part to play in helping patients get the maximum value from cochlear implants. The surgical procedure to implant the device is performed byotorhinolaryngologists - doctors specialising in the ear, nose and throat, along with the structures of the head and neck.

Every four years, some of the world's top specialists gather for the IFOS World Congress. In 2017, the IFOS meeting took place in Paris, France. MED-EL, one of the leading providers of cochlear implants was on hand to share information about technologies for hearing loss and to discuss the latest developments in the field.

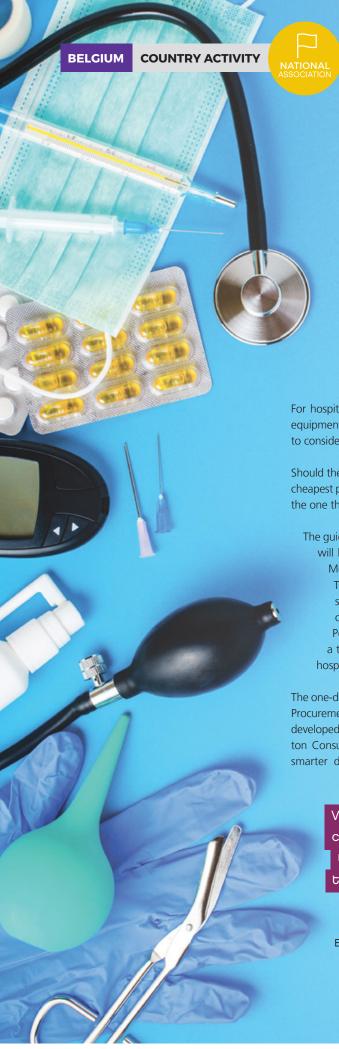
Speech therapists also play a crucial role in child development, particularly in areas such as language and communication. For those suffering hearing loss or adjusting to a

MED-EL was a proud sponsor of a symposium for speech therapists in Friedberg on 22-23 June.



cochlear implant, they can be essential to improving quality of life. MED-EL was a proud sponsor of a symposium for speech therapists in Friedberg on 22-23 June.

'Seeing the incredible moment when children with profound sensorineural hearing loss are able to interact with the world through sound for the very first time is what makes this area unique and, I believe, drives innovation forward,' said Dr Ingeborg Hochmair, CEO of MED-EL.



Creating value-based healthcare For the Future

How can hospitals get value for money?

For hospitals buying new MRI scanners, lab equipment or surgical supplies, there is a lot to consider.

Should they save money today by buying the cheapest product on the market or try to pick the one that delivers the best overall results?

The guiding principle should be value— this will help decision-makers to select the Most Economically Advantageous Tender (MEAT). That was the message from Yves Verboven, Director of Market Access and Economic Policies at MedTech Europe, during a training session for companies and hospital procurers in Dubai.

The one-day workshop in MEAT Value-Based Procurement showcased the MEAT Excel tool developed by MedTech Europe and the Boston Consulting Group (BCG) to help guide smarter decision-making. Rather than fo-

'We are proud that the Value-Based Procurement concept is well-received in the MENA region by both the MedTech industry and hospital procurers...'

Dr Inna Nadelwais Executive Manager of Mecomed cusing on price alone, the tool introduces a range of other qualities that may help to improve outcomes for patients, hospitals and health professionals. For example, devices that last longer, deliver shorter recovery times or reduce the risk of complications are preferred.

As a result, one of the leading hospitals in Saudi Arabia is considering piloting the tool for a tender on operating room supplies. Participants will become ambassadors for value-based procurement in their organisations, adding further momentum to the global guest for value-based healthcare.

'We are proud that the Value-Based Procurement concept is well-received in the MENA region by both the MedTech industry and hospital procurers,' said Dr Inna Nadelwais, Executive Manager of Mecomed. 'We will continue working together with MedTech Europe on promoting value for health amongst various stakeholders, including, in addition to the MedTech community, various government institutions, providers and payers in the region.'

Thirty people attended the Dubai event, hosted by Mecomed – the Middle East Medical Devices and Diagnostics Trade Association, headquartered in Dubai – on 12 June. The summary of the event was published on 21 June, during this year's MedTech Week.

Patients First

Health systems should focus on patient

Patients are moving centre-stage in healthcare, playing a more proactive role in managing their health. This shift can improve the patient experience, and may become increasingly important as more people are living with chronic conditions.

Putting patients first is an essential element of value-based healthcare, an approach that focuses on delivering the outcomes that matter to patients in the most efficient manner. From an economic perspective, this means measuring and paying for value, rather than paying for inputs – such as doctor visits, operations or days spent in hospital.

Participants in a debate hosted by Philips and POLITICO in Brussels on 15 June broadly agreed that this patient-centric model can deliver better value for all players. Entitled 'Putting Value at the Heart of Healthcare', the event attracted 136 people, including European policymakers, medical professionals, patients and health innovators.



The video of the event was published on Med-Tech Week website on 19 June.

The patient will remain at the heart of the transformation under way in healthcare, according to Andrzej Rys, a medical

doctor with 30 years' experience who is now Director for Health Systems, Medical Products and Innovation at DG SANTE in the European Commission. 'One of the major changes is the role of the consumer and patient voice in the system,' he said. 'In the past, it was OK to ask a patient questions but patients were not really listened to in the doctors' office. Now it's a dialogue.'

Digital tools are helping patients to manage their own health while giving health providers the means they need to track health outcomes data. 'Patients want to be more involved in their health and are engaging in their healthcare in new ways, empowered by innovative digital technologies, 'said Jørgen Behrens from Philips.

Several speakers called for this technology-powered value-based healthcare to drive a new way of thinking that must be reflected in all health policies – including performance indicators, tenders, reimbursement schemes, health budgets and innovation funds. Health Technology Assessment (HTA) evaluation methods must also embrace the value-based model.

The well-attended event, which was also covered on the influential POLITICO website, made clear that the future of healthcare belongs to patients.







#MTF2018



What do diabetes patients value?

People with diabetes want technologies to 'take the thinking out' of managing their condition

ne of the most overlooked aspects of living with diabetes is the

'cognitive burden', says Kyle Jacques Rose, Board Member of IDF Europe, a leading patient advocacy organisation. People with diabetes are trained to think about what they eat and when they should use medication, and they face constant reminders of their limitations throughout the day.

'We constantly have to think about counting carbohydrates and glucose control if we are to avoid experiencing the rollercoaster of glycaemic variability where blood glucose swings from high to low, and vice versa,' says Kyle. 'Living with this burden takes its toll, often making it difficult to focus on family, work and other aspects of day-to-day life.'



Diabetes care has improved significantly in recent decades but, when it comes to delivering real value to patients, there is still room for improvement. 'One aspect of care that the healthcare world has not been able to address is this cognitive burden,' says Kyle who has insulin-dependent diabetes. 'To be freed from all of this and become more independent would be a huge achievement,' says Kyle.

New technologies use sensors to monitor blood glucose and can then respond by administering glucose if required. This 'artificial pancreas' offers hope of seamless and automatic glucose management.

However, this brings us to another issue: the need for technologies to be accessible. 'The latest version of the technology will probably only be in the hands of a very small percentage of people with insulin-treated diabetes,' explains Kyle. 'We're hoping for something that is not only seamless but also cost-efficient enough to be accessible right across Europe.'

cognitive burden.





completed almost 15 years ago, experts rejoiced at the enormous opportunities it would unlock. This global, collaborative project accelerated scientists'understanding of human genomics - and the genetics of diseases such as cancer. The full potential of this information is now coming into view.

Dr Nevenka Dimitrova, CTO Philips Genomics, led a workshop on the role of genomics in precision medicine in Croatia during European MedTech Week. She explained how this fast-growing field analyses and interprets genomic data, helping to diagnose health problems, guide treatformatics and data science are helping to revolutionise healthcare, making it more personal and precise, while delivering better outcomes for patients.

The event, attended by around 70 people, took place during the 10th ISABS Conference on Forensic and Anthropologic Genetics and Mayo Clinic Lectures in Individualized Medicine (19-24 June) in Dubrovnik. Digital health and personalised medicine were hot topics at the event which also featured a high-profile session led by Jeroen Tas, Chief Innovation and Strategy Officer at Philips.

Philips was a platinum sponsor of the weeklong conference which attracted 550 participants from 40 countries, including top scientists, health professionals and industry representatives. Three Nobel Prize Laureates joined some of the biggest names in medical science, along with Kolinda Grabar Kitarović, the President of Croatia.



Preventing pressure ulcers

'The easiest pressure injury to deal with is one that never happens'

he cost of managing a pressure ulcer can be about \$300 per patient per day. However, new approaches to preventing pressure ulcers can help ease the financial impact.

Health economist William Padula, at Johns Hopkins Bloomberg School of Public Health, advocates the use of multi-layer prophylactic sacrum dressings for pressure injury prevention from the moment a patient enters the health system. This costs around \$62 per patient per day and spares the patient a great deal of pain and discomfort.

Dr Padula and his team also found that using a specific type of soft silicone bordered foam dressing to protect the sacrum led to reduced rates of hospital-acquired pressure ulcers by about 30%. 'The dressings last two to three days, but even if patients got a new pad every day, hospitals would still save money,' he said.

Nurses also play a vital role in reducing patients' risk but can sometimes put themselves in jeopardy when using draw sheets to turn and position patients. Chenel Trevellini, a Registered Nurse from New York, has found that implementing a proper system for turning and positioning patients could lower the rates of injury in hospital staff.

The system uses a low-friction positioning mat with reinforced handles aimed at reducing caregiver back injuries. It also has a low-pressure air chamber designed to adapt to the patient by positive air displacement and redistribute pressure around the sacrum and buttocks, where pressure ulcers often occur. The second component is a fluidised positioner that allows the patient's body to be supported in a comfortable therapeutic position until it's time to be repositioned again.

'The design forces the caregiver to use the correct ergonomic position, using their body weight to move the patient,' said Chenel. 'The system helps prevent the patient from sliding down, which decreases friction and shear injuries. Both patients and staff love it.'



would still save money,



Young at heart

Could you help heal a broken heart?



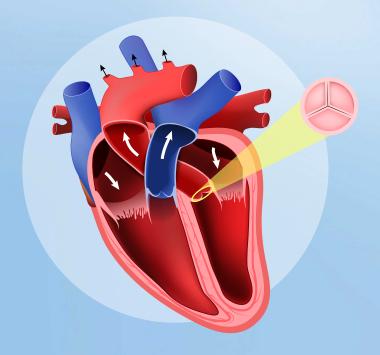
When a valve in Katja Jensen's heart stopped working properly, doctors said surgery would be too risky. But doing nothing wasn't an option, either.

Normally, repairing the aortic valve of a 25-year-old would require open-heart surgery, but Katja's case was unique. 'I was born with a heart defect and had a transplant when I was 11,'the Danish young graduate said. 'As I'd already been opened up a few times and will probably need a transplant again in the future, the doctors wanted to avoid another operation.'

They decided that the safest option was to replace Katja's aortic valve with an artificial one using a procedure called transcatheter aortic valve implantation (TAVI), which wouldn't require open-heart surgery. Within 30 minutes, the job was done and Katja had a new, functioning aortic valve. She was fully recovered and back in the gym six weeks later.

Katja shared her story with around 40 university students and young graduates at a MedTech Career Day hosted by Edwards Lifesciences in Prague on 21 June. The event introduced the medical technology industry to students with finance, medicine, IT or HR backgrounds.

Participants learned about job opportunities at Edwards and how they can have a positive impact on people's lives. The prospect of helping others was exciting for these young people, many of whom hope to join companies that offer meaningful careers.



The students and graduates joined workshops, witnessed demonstrations of Edwards' life-saving products - including models of heart valves and actual Critical Care monitoring devices – and had the opportunity to discuss their career plans with current employees.

Perhaps some of those in attendance will see their futures in the medtech sector – and help to heal millions more hearts.





Ethical Charter MedTech Europe latest initiative

A voluntary certification system showing third parties' commitment to comply with MedTech Europe's ethical standards when interacting with industry, which will facilitate their support to independent medical education.

For more information visit: www.ethicalmedtech.org

Firing up the growth engine

The MedTech sector helps drive economic arowth and can do even better



A new report from Medicoindustrien, the Danish medical device association, reveals that the medtech sector is an economic powerhouse. However, despite its stellar record in job creation, exports, patents and its contribution to GDP, medtech is far from reaching its full potential and can do even better with the right business and regulatory environment.

The report is packed with striking facts that help put the strength of the industry in perspective. For example, Danish medtech companies have a combined turnover of DKK 56 billion a year – greater than the entire Danish raw materials industry.

Medtech companies support total employment of 37,200 people in Denmark (including subcontractors), file 10 times more patents than the average firm, account for 7.4% of Danish investment in research and development, and are growing their workforce by 5.5%.

Many of the companies behind this success story are small and medium-sized enterprises developing innovative products. Lars Marcher, chairman of Medicoindustrien and director of the Danish medtech company, Ambu, says smaller players are sometimes overlooked.

'It's often the big companies, such as Coloplast, Ambu and the hearing device companies, who attract media attention but the medtech industry consists of many small and medium-sized companies,' he says. 'Innovation and entrepreneurship are a natural part of the medtech industry.'

Policymakers can help unlock further growth potential by supporting start-ups and rewarding investment in new technologies, according to a report for the Danish government, published in March 2017.

'Together with the other life science areas - pharma and biotech medtech is one of the areas that can create growth in Denmark both now and in the long term,' says Peter Huntley, Director of Medicoindustrien. 'We hope that the government will turn these recommendations into real actions.



At the heart of your health

'Knowledge Hub' shows how medtech is the lifeblood of healthcare

More than 1,000 people visited the Knowledge Hub at the offices of Medtronic France from 19-23 June where they learned how medical technologies can improve people's lives. The booth was hosted by Medtronic employees and representatives of four patient associations eager to educate visitors about health problems – and solutions.

Each day focused on a different theme. The week kicked off with the spotlight on the industry itself and its central role in the healthcare system. In partnership with SNITEM, the national association for medtech industries in France, visitors learned why medical technology companies, with more than 500,000 products on the market, are the sine qua non of modern health services.

The second day taught visitors about the signs of 'cerebrovascular accident'- a serious condition involving a blockage or rupture in a blood

vessel in the brain, also known as stroke. Day three explained the digestive system and its role in energy, growth and cell repair. Representatives from the Association François Aupetit, a patient advocacy organisation, discussed what happens when something goes wrong with this complex system.

Diabetes was highlighted on day four, with a distinction made between type 1 and type 2 diabetes. Fédération Française des Diabétiques (FFD)an association supporting people with diabetes, wason hand to discuss how blood sugar can be managed, allowing them to live a full and active life. In collaboration with Association des Jeunes Diabétiques (AJD -a diabetes patient association - Medtronic animated its first Twitter Chat on diabetes-related topics. The Twitter Chat was animated by specialists and users of medical technologies.

On the final day, Alliance du Coeur took cen-

tre stage and put the focus on the world's biggest killer: cardiovascular disease. Key facts were also shared online, reaching almost 20,000 people via Twitter alone.

For the patients sharing their expertise and experience at the Knowledge Hub it was a chance to raise awareness about serious chronic conditions - but that's not all. Medtronic France organised a quiz, with the proceeds going to support the patient associations that gave their time to the initiative.





New era for diagnostics



White Paper: diagnostics can help reshape healthcare - if we use them

Analysing blood, urine and other tissues samples is often key to diagnosing health problems, helping health professionals to put the patient on the pathway to recovery. In fact, around 70% of therapeutic decisions are taken based on the results of In Vitro Diagnostic (IVD) tests, according to a new White Paper published on 19 June by SIDIV, the French IVD association.

Entitled Biological Diagnostics at the Heart of Tomorrow's Health - 15 Proposals for the Future, the comprehensive document says IVDs can empower the health system to cope with the demands of an ageing population, the increasing burden of chronic diseases, and the threat of antimicrobial resistance. The White Paper can be downloaded from SIDIV's web-

The foreword by Alain Baverel, President of SI-DIV, and Patrick Bugeon, SIDIV past-President, says diagnostics now go beyond detecting disease and monitoring the impact of treatment. 'The patient is gradually becoming an actor in managing their own health, capable of checking their health status and taking corrective action where necessary,' the authors

write. 'In collaboration with health workers, patients will become a manager of their own well-being."

However, the document notes that all healthcare players must proactively collaborate to make the most of the new opportunities on offer from diagnostic technologies: innovation is worthless if it is left on the shelf.

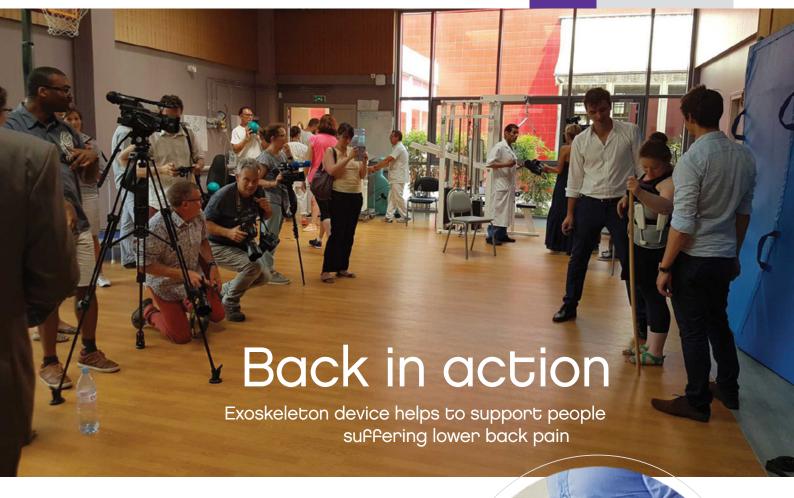
To overcome existing barriers to the adoption of diagnostic tools, the paper lists concrete proposals in the areas of screening; ensuring the sustainability of medical biology in France; promoting market access and support for IVDs; making France more attractive to industry; and improving dialogue between industry and health authorities.

'It is imperative that researchers, biologists and industrialists come together - none of us can go it alone,' writes Prof Marc Delpech, Laboratory of Molecular Genetics and Biology, Cochin Hospital, Paris. 'Progress in research is imperative, but it is useless if it cannot be exploited.

'It is imperative that researchers, biologists and industrialists come together - none of us can go it alone...'

DIAGNOSE

Prof Marc Delpech, Laboratory of Molecular Genetics and Biology, Cochin Hospital, Paris



Chronic back pain is the leading cause of sick leave in the western world. For those affected, it can be a source of considerable discomfort, loss of independence and depression.

Researchers at the rehabilitation centre of the Centre Hospitalier Regional Lille (CHRU) are testing a device designed to alleviate the problem. The exoskeleton, named Atlas after the character from Greek mythology who supported the weight of the sky, helps keep pressure off the lower back.

The device, weighing just 1.5 kg, is composed of two belts equipped with sensors and electric micro-motors. One is positioned on the pelvis, the other under the rib cage. In response to the patient's movements, the device triggers motors which lift part of the body and spare the lumbar discs from bearing the burden.

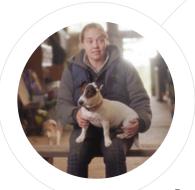
'When I wear the exoskeleton, it provides immediate relief,' says Hélène, who has been testing the device for several weeks. 'It frees me from carrying the weight and allows me to do rehabilitation exercises.



'The device was dreamed up by two engineers, Damien Bratic and Antoine Nivel, founders of Japet – a Lille-based medtech start-up. It was one of several products on show at the 'Innovation Made in France' event hosted by SNITEM on 22 June.

The event attracted almost 20 journalists, as well as members of the public and health professionals, and helped French medtech to hit the headlines.

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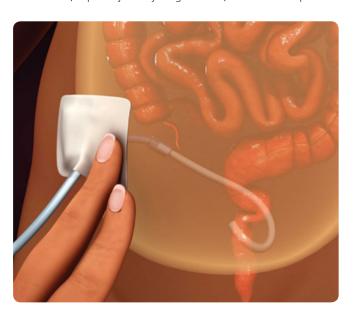


Family matters: having dialysis at home

When you're a busy working mum with kidney failure, the last thing you have time for is for is dialysis in hospital three days a week.

ucy Ward was in this position until she found the perfect solution with remote monitoring. She had suffered from kidney disease for a decade before her kidneys deteriorated to a point where they stopped working and she needed to start dialysis. By then, the 36-year-old had an eight-year-old daughter, as well as a busy and very physically demanding job running a livery yard with her husband.

The haemodialysis she was having required her to spend three days a week in hospital and knocked her out on the days she was home. 'For a mum, especially with young children, it's not a nice position



to be in because you're completely taken away for three days,' Lucy says. 'Haemodialysis is great for some people, but for a very active person, not being able to move for up to eight hours a day is extremely difficult.'

When she was offered another treatment option called peritoneal dialysis (PD), Lucy jumped at the chance. PD is not for everyone but Lucy's doctors advised that she was a suitable candidate. With PD, she was trained to treat herself using a special machine at home while she slept. Medical staff would monitor her remotely 24/7 and be alerted if any problems arose.

'When I started PD, there was a huge difference straight away,' she says. 'I was right out of bed in the morning and straight to work. Before PD it took me an hour to get up and I had to take lots of breaks during the day. Also, I no longer missed picking up my daughter from school and putting her to bed at night.'

position to be in because







Taboos & trampolines

ncontinence is the unwanted and involuntary leakage of urine or stool. Incontinence is a sensitive condition that affects an estimated 400 million people across the world.

Historically, conditions affecting the bladder and bowel have often been uncomfortable or taboo subjects and, accordingly, these medical disorders have been underreported and under-diagnosed.

Surveys have shown that fewer than 40% of persons with urinary incontinence mention their problem to a doctor or nurse and this figure is even higher for those with bowel incontinence.

WORLD CONTINENCE /EEK 2017 World Federation of Incontinence Patients

a fun way to tackle stigma

World Incontinence Week found

These conditions have been inadequately treated and poorly addressed by medical professionals, despite the substantial impact on individual health, self-esteem and quality of life.

In the light of this, World Continence Week (WCW) (19-25 June 2017) increased public awareness of these conditions and have sufferers the confidence to seek help and improve their quality of life.

WCW Events are held around the world including Canada, USA, China, Denmark, Brazil, Sweden, Singapore, Poland, Greece, Uganda, Italy, Slovakia, New Zealand and Germany and the UK.

The UK event, organised by INNOVO in association with the World Federation of Incontinent Patients, saw around 350 people bouncing on trampolines in a London park. The initiative sought to break the silence around those embarrassing 'little leaks' that can result from trampolining.



'Move your body'

Extraordinary Film project captures joy of dance

Every year, thousands of people in Europe undergo surgery to protect and improve their health. B. Braun Melsungen AG's world-renowned surgical division, Aesculap, has played a vital role in countless surgical interventions since its foundation 150 years ago.

To mark this anniversary, the company set out to create a unique artistic initiative that captured the beauty of human movement and the supporting role of innovative medical products in facilitating good health.

Aesculap brought a group of patients and employees together with a dance choreographer and two filmmakers. Together they produced a dance performance that expressed how people feel about having the freedom to move and communicate with the world through dance.

'Our idea was to bring people together in a different way that normally doesn't occur,' explained Tobias Hasse, a filmmaker who co-produced the show. 'In this case, communication goes beyond talking, and that was precisely our approach.'

After two weeks of training, the dancers performed the 'Move your body' show to an audience of 400 people at Aesculap headquater in Tuttlingen.

Fellow artistic director, Lukas Kretschmer, said the performance carried a powerful message about the role of medical technologies while at the same time making the products 'invisible'. 'Medical technology should dovetail seamlessly into life; hip joints, a knee joint or sutures are products that always function reliably,' he said. 'The project enables personal communication between employees and patients, outside of the context of medical technology.'

Aesculap Project Manager Christian Praedel said the most remarkable thing about the event was that participants were ordinary people doing an extraordinary thing: 'For me, the fascinating thing is that we have no actors reading a text, but rather it's the patients and employees who experience something in these rehearsals and express their feelings and experiences.'





Obesity expo

Photo exhibition moves obesity centre-stage

Medical congresses are a great opportunity to raise awareness of medical conditions and solutions, but standing out from the crowd can be tricky. This becomes even more challenging at large-scale events such as the Hauptstadtkongress in Berlin – the biggest and most important congress for healthcare decision makers in Germany - which attracts more than 8,000 people.

At this year's Hauptstadtkongress (20-22 June), Johnson & Johnson decided to try something different. Instead of hosting a booth with medical information for delegates, they teamed up with DAK - a German health insurer – to create an eye-catching exhibition.

Schwere(s)los was a gallery of photos of obese people which emerged from a photo competition run by the Institute of Design in Berlin, Dusseldorf and Hamburg.

The goal of the campaign was to raise awareness of obesity as a chronic disease, to reduce prejudices against people affected by obesity, and to remove barriers to effective treatment.

Once drawn by the photo gallery, visitors had the opportunity to check their own health and speak to the winner of the competition as well as a model featured in some of the images.

The event helped to sensitise politicians, health professionals and the general public to the burden of obesity in society, its impact on individuals and the available treatment options. Visitors saw the exhibition as a valuable way to highlight an important issue.

Dr Heidrun Thaiss, Director Federal Centre for Health Education, summed it up: 'We need this obesity photo exhibition.'



Art of Life

When MedTech meets Art



22 November 2017

6:00pm - 8:00pm

European Parliament Members' Restaurant

Hosted by: MEP Brando Benifei (S&D), Italy and MEP Adam Kosa (EPP), Hungary



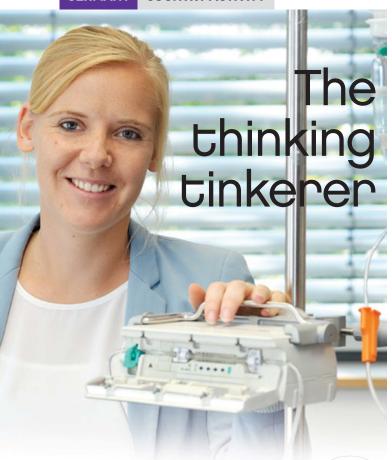






#ArtofLife

Please register at www.medtecheurope.org/artoflife



Meet the engineer devoting her skills to medical product development



Perhaps it was inevitable that Sarah Jakobskötter would find her way As an engineering graduate with an interest in product development, Sarah could have devoted her career to advancing aerospace, communications or domestic appliances. What would have been so bad about developing a new line of washing machines?

'Of course, that is very interesting from a technical point of view,' she says. 'But it's a question of whether to work on products that are niceto-haves or must-haves:medical technology products help people to become healthy, or even survive – making a contribution to this field makes me feel fulfilled.

'Sarah has worked in the development department at B. Braun since August of 2013 and, as Research & Development Manager, is responsible for the new development of an infusion device portfolio for application on infusion pumps.

Her story was published by B. Braun during MedTech Week to give the public a glimpse of the people behind their products. The hundreds of thousands of people employed in the medical technology sector are dedicated professionals who do extraordinary work while living ordinary lives.

As the article was published, Sarah was beginning parental leave and preparing to welcome a new baby. Whether her new arrival will have the 'tinkerer's gene' and a soft spot for medical technology, only time will tell. But as Sarah's husband is a physician, it would not probably surprise anyone!

Nation of Innovation

A 10-point plan for better health in Germany

'We need a new culture of innovation with a greater focus on patients' needs.' That is how Dr Meinrad Lugan, chairman of the board of BVMed, sees the future of German healthcare. BVMed represents Germany's medtech sector as a business association. Speaking at BVMed's Parliamentarian Summer Reception, he set out a 10-point plan designed to make health services more patient-centric, while improving the business environment.

Our call is for more transparency and active participation in the self-governing bodies and in the Federal Joint Committee as the central decision makers in Germany,' Dr Lugan said.

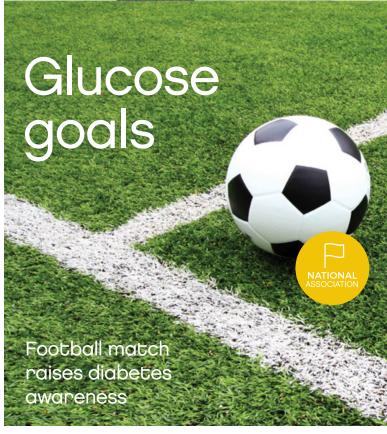
The event was attended by 250 influential stakeholders, including Ingrid Fischbach, State Secretary at the Ministry for Health. Hosted by BVMed at their Berlin offices on 22 June, the event was an opportunity to set out the industry's priorities for the new parliamentary term.

The 10-point plan calls for greater adoption of medtech innovations in hospitals, infection control, and ambulatory care. It urges health insurance funds and buying syndicates to prioritise quality over price when purchasing medical supplies and to develop the health system's digital infrastructure. The importance of small and medium-sized enterprises (SMEs) in medtech is also emphasised, particularly in relation to the implementation of new EU rules and health technology assessment (HTA). Middle-sized companies, the backbone of Germany's vibrant medtech industry, need special support from the government, according to BVMed. 'Given their smaller numbers of staff and funding opportunities, it is likely that SMEs will be hard hit by the extensive clinical and reporting requirements in the new EU Medical Device Regulation,' Dr Lugan said.



He declared a nationwide funding programme for SMEs was necessary to help smaller companies to cope with the big challenges that lie ahead.





Around seven million people in Germany suffer from diabetes mellitus, including two million who do not know they have the disease. This puts considerable strain on individuals, society and the health system.

To raise awareness of diabetes control among the general population and politicians, members of the Bundestag (the German parliament) played a football match against FC Diabetologie – a team comprising doctors, scientists, people with diabetes and several ex-professional footballers.

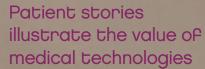
High-profile football coach Christoph Daum was on hand to guide FC Diabetologie to a 4-1 win, while commentary was provided by Waldemar Hartmann, a well-known sports reporter. The match was supported by Deutsche Diabetes-Hilfe (diabetesDE) and the Association of the Diagnostica Industry (VDGH) which has a Committee on Diabetes Self-Management.

It was a good-humoured game with a serious goal: highlighting the role of prevention, early detection and disease self-management. Spectators were given the opportunity to have their blood glucose measured before, during and after the game to illustrate how glucose levels can fluctuate over a short period of time.

'Blood glucose measurement, including self-monitoring, is a central component of effective therapy,' said Dr Martin Walger, Managing Director of VDGH who put the spotlight on new technologies that can continuously monitor glucose levels in real-time. 'Using these instruments, people with diabetes can reliably control blood glucose levels throughout the day.'

While FC Diabetologie's star-studded line-up claimed victory on the night, the event was a win-win for diabetes advocates and politicians who shared their commitment to defeating diabetes together.

Body Pride





Diabetes, breast cancer, incontinence - many diseases not only threaten our health, they also hit our self-confidence. For some people, medical treatment can save their lives, but change how they feel about themselves and how others perceive them.

The 'Body Pride' campaign challenges public perceptions of people with chronic conditions through storytelling. Organised by BVMed the German Medical Technology Association - the initiative shares a range of patient stories and invites people to step into the patients' shoes.

This helps them to understand the daily realities of living with a stoma or requiring regular dialysis. As a result, the challenges faced by patients - and the positive role of technologies in their lives - become more relatable. It also shows that people with health conditions are just like everybody else, trying to manage everyday life and enjoy time with their families and friends.

'Body Pride' was featured at BVMed's booth at the German Capital Congress 'Medicine & Health', which ran from 20 to 22 June in Berlin. The event was attended by 8,000 decision-makers, politicians, health professionals and health insurers.

'The campaign portrays patients with chronic diseases who live their lives to the fullest,' says Joachim M. Schmitt, BVMed CEO. 'It aims to improve the public's understanding of the situations the patients face in their lives, and to show the importance of medical devices for independent living.

'The 'Body Pride' motto emphasises how individuals can benefit from modern healthcare: 'Every human being is unique - we help some of them to live like everybody else'



Quality counts

Focusing on patient outcomes will make health systems more sustainable

Health systems around the world are under financial pressure. Budgets are limited and, in many countries, demand for services is growing as the population ages.

For hospitals, it can be tempting to choose price over quality when buying equipment and services - but experts speaking at an event at the Athens Chamber of Commerce and Industry on 22 June warn that this may be short-sighted.

'At first, innovative medical technologies may require increased resources,' said Pavlos Arnaoutis. President of SEIV, the Greek Association of Health, Research and Biotechnology Industries. 'But in the long run, it turns out that these technologies help to contain total health costs.'

Technologies can make healthcare more efficient by diagnosing illnesses more quickly, reducing the risk of infection, and accelerating recovery times - all of which is music to the patient's ears. Some devices even help to keep patients out of hospital by managing or monitoring chronic diseases in the community and at home.

Mr Arnaoutis focused on the role public procurement has in driving quality improvements in healthcare. Calling for a flexible system that prioritised quality over upfront cost, he urged decision-makers to take a long-term view and to build a more sustainable health system.

'At Pirst, innovative medical technologies may require increased resources, but in the long run, it turns out that these technologies help to contain total health costs.'

Pavlos Arnaoutis, President of SEIV



Dr Athanasios Vozikis, a health economist and lecturer at the Department of Economics, University of Piraeus, suggested that existing systems are not ideally suited to evaluating modern technology. 'Today's technological, economic and medical reality has surpassed the traditional processes of production, licensing and compensation of medicines, medical devices and diagnostic products,' he said.

Dr Vozikis explored the role of Negotiating Committee of the EOPYY – the main payer and providers of public health services in Greece pointing to its role in combining health economics with scientific evidence. This opens the door to a more patient-centric approach which rewards quality and value.

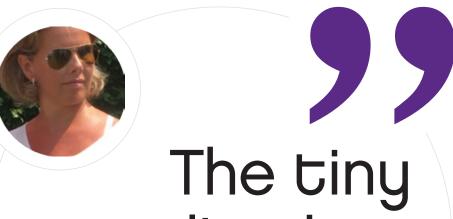
The complexity of assessing quality, and factoring this into purchasing decisions, is widely acknowledged. Yves Verboven, Director of Market Access and Economic Policies at Med-Tech Europe, said the EU Directive on public procurement puts greater emphasis on quality, life-cycle cost, cost-effectiveness and wider societal benefits of good outcomes for patients.

MedTech Europe and the Boston Consulting Group have developed a new tool to help

decision-makers select the Most Economically Advantageous Tender (MEAT). 'This provides a way to incorporate quality criteria, to consider the total cost of care, and choose the most economically advantageous offers,' said Mr

These issues were also addressed in two press releases and at a Press Dinner attended by 35 journalists, helping to generate significant media coverage.





clip that **Fixes hearts**

rica's life literally changed overnight. One day, the 38-yearold mother of four was playing in a tennis championship at her local club and the next day, she was having a heart attack.

'I had no health problems. I had a job, a family, did a lot of sport. And that was my life. Suddenly I didn't feel so good, and then I collapsed,' she recalls. Fortunately, Erica's husband Gert realised that there was something wrong with her heart and called an ambulance.

At the hospital, doctors determined that she'd had spontaneous coronary artery dissection, a rare occurrence that happens when a person's coronary artery wall tears without any warning. Her heart had completely stopped but doctors were able to save her on the operating table

But that wasn't the end of the ordeal. After having a second heart attack, Erica recovered and was thrilled to be going home. However, she needed help with everything and couldn't even make it up the stairs.

Another operation was needed to repair a heart valve which was leaking badly. The night before the operation, however, Erica's surgery was cancelled because she was too weak. Then her cardiologist proposed another solution that wouldn't require open heart surgery. The procedure involved reaching the damaged heart valve via a vein in her leg.

> Erica's surgeon made a minimally invasive incision in her groin, where he inserted a tube carrying a small polyester-covered metal clip up through the vein to her heart and then secured the loose valve flaps together with it.

> Since the operation, she's been able to get back to normal life. 'My cardiologist says I can grow old like this. And that is the best thing you could ever hear,' says Erica.

uou could ever hear'





Unravelling the red tape

A roundtable Forum tackled a new procurement law causing bureaucratic headaches

In a worst-case scenario, patients' wellbeing would be under threat if hospitals struggle to buy the products they need.

The problem stems from procurement law changes passed in January by the Hungarian Parliament. Some institutions and companies have been sanctioned for ignoring the revised regulations, raising tensions between officials and other players in the health system.

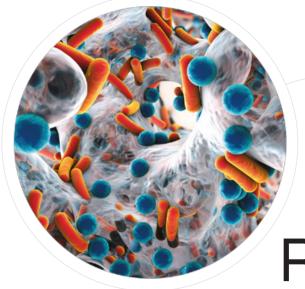
To address this, 25 healthcare stakeholders met at the Hungarian Academy of Sciences on 8 June. Participants in the roundtable included representatives of public procurement departments, government officials, hospital and health services managers, and members of the Hungarian Association of Medical Devices Manufacturers. The event summary was published on 21 June as part of MedTech Week.

The meeting heard that complying with the latest version of Hungary's procurement law is a major challenge which limits the use of value-based health-

care - an approach to healthcare that prioritises improving patient outcomes in the most cost-efficient manner.

As a result of the roundtable, two working groups were set up – one to review the public procurement regulation and the other to explore value-based procurement. Their upcoming meetings are set for autumn 2017.





Resisting resistance

> We have tools to fix AMR crisis - let's use them



esistant bacteria kill 25,000 patients annually in the European Union, with extra healthcare costs and productivity losses of €1.5 billion each year. We have innovative diagnostic technologies which can contribute - as part of a broader plan - to tackling antimicrobial resistance (AMR) by preventing infections and reducing antibiotic misuse and overuse. Why are they not implemented in our healthcare systems?

It is estimated that infection prevention and control programmes, such as active surveillance, hand hygiene, screening, or isolation, may prevent up to 30% of HAIs.

> Despite their value and relevance, the uptake and implementation of new diagnostic technologies in national healthcare systems remain low due to the lack of recognition of its intrinsic value.

Prescribing antibiotics is cheaper than using diagnostic tools which are perceived to be a short-term expense. Innovation in diagnostics needs to be seen as a long-term investment which could help to save costs, reduce waste across healthcare levels, and preserve the effectiveness of antibiotics longer.

A multilevel and "one health" approach to AMR is critical to tackle this emergency. In practice, this means:

- Screening patients for infections before entering hospitals
- Investing in new vaccines
- Incentivising diagnostic tests to prevent antibiotic misuse
- Enabling the uptake of technological solutions to prevent and control infections in hospital and healthcare facilities
- Encouraging hospitals to publish data on infection and resistance rates so that patients can make more informed choices

John Bowis is President of Health First Europe



It is estimated that infection





What have we got in common?

One less challenge for ostomy patients

The answer lies in what you cannot see: all six are ostomy patients. An ostomy is a surgically-created opening in the body for the discharge of waste. This may be the result of life-saving cancer surgery or treatment for a serious injury.

For people living with an ostomy, it can be difficult to find underwear and swimwear that they are comfortable with. But the range of clothing modelled by these six ostomy patients is designed to support and conceal ostomy bags.

The company behind the fashion line believes that patient experience is an important factor when designing and evaluating health products. We all have specialised individual needs and we all need individual medical technological help,' says Nicola Dames, CEO of Vanilla Blush – a colostomy underwear business. 'I so happen to need additional support with

my stoma. Other people need other help. This is what I call a normality of needs.

'The Vanilla Blush photoshoot in central Dublin was arranged in partnership with the Irish Medical & Surgical Trade Association (IMSTA). The image was widely shared on social

media and in the national press, prompting a debate about patients' access to products that improve their quality of life.

'The Vanilla Blush photoshoot in central Dublin was arranged in partnership with the Irish Medical & Surgical Trade Association (IMSTA)...'

Nicola Dames, CEO of Vanilla Blush





Let's talk about incontinence

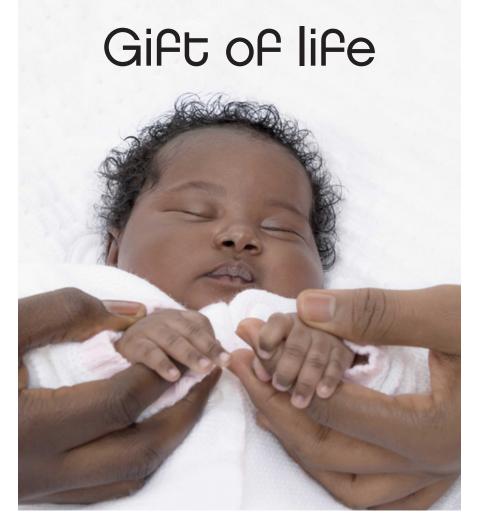
by the Irish Medical & Surgical Trade Association (IMSTA)

Meanwhile, a survey published on 20 June shows that 82% of Irish people want easier access to innovative surgical treatments for incontinence. The research by Medtronic, based on an online survey of 1,001 people and a consumer panel, also revealed high levels of embarrassment in discussing incontinence issues.

A roundtable discussion to consider the findings with patient groups, clinicians and representatives of the medical technology sector found that incontinence remains an under-treated condition as patients remain uncomfortable about seeking treatment.

'The clinical benefits of surgical technology are clear; they often relieve symptoms when other treatments fail and give a new lease of life to silent sufferers across Ireland,' said Dr Eleanor Faul, Consultant Colorectal Surgeon at the Mater Misericordiae University Hospital.

This was echoed by Dr Mary Pat Fitzgerald, Consultant Gynaecologist at Bon Secours Hospital Galway, who called for greater openness around incontinence. 'It is critically important that we bring this condition out in the open so another generation does not suffer in silence.'



Hospital beds and ultrasound machines donated to Zambia

Ten ultrasound machines, 50 in-patient beds, 20 labour and delivery ward beds, infant incubators, foetal monitors and ENT microscopes

– just some of the reusable medical equipment on its way from Ireland to 7ambia

The donation is part of the EQUALS initiative established by the Royal College of Physicians in Ireland and Ireland's Health Service Executive. The Irish Medical & Surgical Trade Association (IMSTA) is the newest addition to the scheme which supports hospitals in the southern African nation through donations and medical

'We are delighted to be on board with this positive and excellent initiative as it continues to go from strength to strength,' said Justin Carty of IMSTA. 'Many of our members in the medical technology sector have manufactured the equipment being donated and they will be heartened to know that it can still have

> a significant impact after its time in the Irish healthcare setting is over.'

> > Not only will IMSTA support the donation of equipment, its bioengineering expertise will be made available to train hospital staff in Zambia in maintenance

Professor Frank Murray, President of the Royal College of Physicians of Ireland welcomed IMSTA's commitment to the initiative. 'We have developed a significant collaboration around training and equipment in this area, and the involvement of IMSTA has the possibility of bringing this to a higher level,' he said. 'It fulfills part of our mission statement to improve patient outcomes.'

Designs for life

One in three deaths could be prevented

Better use of Ireland's world-class medtech and medical expertise can help avoid one in three deaths, according to an analysis of Eurostat data by the Irish Medtech Association.

'The latest figures show that more than 33% of death from certain diseases in people below the age of 75 could have been avoided with better use of medical technology and medical knowledge as a part of effective health care,' said Dr Sinead Keogh, Director of the Irish Medtech Association.

Speaking after a Patient-Industry Dialogue held in Dublin on 19 June to launch Medtech Week, Dr Keogh said there were 126.2 avoidable deaths per 100,000 inhabitants across the EU according to the latest data. Figures for Ireland showed there were 112.4 deaths per 100 000 inhabitants but there is still room for improvement. Heart attack, stroke and cancer were the main causes of preventable deaths.

'Our ability to attract some of the world's leading clinicians and medical experts, as well as our dynamic medtech industry, plays a vital role in saving patients' lives,' she said. 'But it's clear that we need to continue to increase awareness and understanding of the role medtech plays in improving and saving lives by engaging in initiatives like European Med-Tech Week.'

Dr Keogh said Ireland should be an early adopted of innovative technologies and should do more to empower patients to be proactive in managing their health. The Irish Medtech Association also co-hosted an event on patient-centric design on 20 June in Galway.

Around 80 people from the medtech industry, designers and entrepreneurs explored the role of design in meeting the needs of patients. In particular, innovative design solutions that cater to an older population with rising rates of chronic conditions will be essential to safeguarding the stability of health systems.

The dynamic nature of the medtech industry was on show throughout MedTech Week with a series of events and strong media coverage over five action-packed days.



Jobs For life

Fancy a career in a vibrant industry that improves people's lives?



The medical technology sector is a major source of employment in Ireland where 18 of the world's top 25 medtech companies have a base. On 21 June, the Irish Medtech Association launched its 'Roadmap to medtech careers' initiative to highlight the job opportunities on offer to people with the right skills.

Targeting parents, students, teachers, guidance counsellors and the general public, the campaign showcased the broad range of roles available - from product design and manufacturing to marketing and engineering.

A one-page guide was published, highlighting the school and university subjects that can pave the way for a medtech career. Medtech cham-

pions shared their stories and experiences to inspire the next generation of medtech professionals. The initiative was well-timed, coming just ahead of the deadline for secondary school students to finalise their college course choices.

Ireland is the second largest employer of medtech professionals in Europe, per capita. And the industry has seen exceptionally strong jobs growth with 6,000 more people working in the sector since last year, taking the total to 35,000. The jobs are spread across several hubs in Dublin, Sligo, Galway, Limerick and Cork, with more jobs expected to be added by 2020.

To ensure the workforce is equipped with the skills valued by the sector, the association led

a Masterclass in connected health solutions on 22 June. The half-day course, entitled 'The Internet of Medical Things Forum', covered everything from the connected health business model to data protection regulations. The event was hosted by the Internet of Medical Things Skillnet, in association with the Irish Medtech Association, BioPharmaChem Ireland and Technology Ireland.

'For students considering their Puture, medtech is an exciting opportunity to not only innovate but also to save and improve lives...

> Sinead Keogh Director, Irish Medtech Association







Crective

New Irish award for best European MedTech Week initiative

The Irish Medtech Association has launched a new award for the Best European MedTech Week Campaign. The prize, which will be presented at the annual Irish Medtech Awards in December, will recognize efforts to raise public awareness of medical technology.

Participants, big and small, are in with a chance of collecting the award as the judges will choose a winner based in their impact relative to their size.

Submissions must show vision, strong execution and evidence of impact on stakeholder and the media.

Originality and creativity will also help capture the judge's attention.

help capture the judge's attention.

Media coverage of MedTech Week was strong in Ireland this year with feature articles in traditional media, several radio interviews, a national newspaper supplement, and strong online engagement.



Diabetes surger

Can bariatric surgery save time and money while curbing the diabetes epidemic?





rancesco Rubino still remembers the day he realised that surgery could cure diabetes type 2. 'It was July 3rd, 1999,' he recalls. 'When I saw that surgery could put the disease into remission - despite the consensus at the time that it was progressive, irreversible and incurable - I knew our generation had an opportunity that could not be missed.'

The possibilities were so exciting that Rubino didn't sleep that night. A great deal of work lay ahead: he would have to show that surgery was an effective therapeutic option; to win over sceptics in the medical establishment and the public; and to study whether it would deliver value for money.

Now, the jury is in. Almost two decades after Rubino's 'Eureka moment', he is a professor at King's College London and has co-authored landmark guidelines which recommend bariatric surgery as a treatment for diabetes type 2.

Endocrinologists – specialists with a key role in managing diabetes patients- are coming on board the surgical revolution. 'I think it's a game-changer,' says Carel le Roux, Co-Director of the Metabolic Medicine Group at University College Dublin.

Implementing the new guidelines will require a considerable scaling up of surgical capacity and a commitment to spend money today in order to save over the longer term. Politicians will need persuading.

'For someone with type 2 diabetes who may be on expensive- but excellent – medication, the costs can easily run to €4,000 per year,' says le Roux. 'If an operation costs, let's say, €8,000 and means we can use cheap, low-dose drugs from now on, the health system gets its money back in a couple of years.'

That back-of-the-envelope calculation becomes stronger still if indirect costs are considered. The ability to work and pay tax, and reduced demand on social insurance systems, promises even greater impact.

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Replaying Sofia's symphony

Meet the violinist whose power to play was restored by science





Sofia suffers essential tremor – a nervous system disorder that causes involuntary shaking. The condition, sometimes confused with Parkinson's disease, can have a detrimental impact on quality of life. For Sofia, a violinist, it is particularly catastrophic.

But this story has a happy ending. She regained control of her rhythm thanks to deep brain stimulation, a surgical procedure in which an electrode is implanted in the brain. The electrode is subsequently switched on to deliver regular pulses that block the abnormal brain activity associated with essential tremor.

Sofia's story is one of several created by Assobiomedica to illustrate the value of medical technology in helping people get back to their normal lives. Promoted using the hashtag #StoriePerLaVita, they are a compelling way to introduce innovative devices to the public.

Another campaign rolled out by Assobiomedica during MedTech Week was the #InVitroVeritas selfie competition. To enter, participants had to take a photo of themselves playing an interactive video game featuring four characters undergoing screening, monitoring, diagnosis and therapy. The campaign was widely shared on social media and proved popular with all ages.

Engaging storytelling was also used to illustrate the complex and varied paths that lead creative minds to produce medical innovations. The Virtual Man: When Physics Meets the Human Body, an exhibition housed on the premises of the Palazzo Blue in Pisa, combined medicine, physics and technology.

Curated by the National Institute for Nuclear Physics, it put the spotlight on some of Europe's most interesting breakthroughs. Exhibits told the story of a British doctor inspired by sonar to invent ultrasonography; how a horse became a 'guinea pig' for testing a blood pressure monitor; and the tale of Galileo's quest to develop a heartbeat monitor. Today's medtech innovators follow an illustrious line of predecessors.





'Pushy parents' saved son's hearing

21 years ago, Max Roeder became the first child in the world to have two cochlear implants. Now he's a rugby playing college student living a full and busy life.

ax's parents were told their son was deaf when he was six months' old. It may have been difficult news to hear but they were determined to do the very best for their young son. Then, serendipity struck

'My mother found an information leaflet on the floor of a doctor's office,' Max recalls. 'It explained that it was sometimes possible to help deaf people to hear.' This was big news. It was 1994 and cochlear implants – small devices that replace a part of the inner ear which is essential for hearing – were still relatively new.

However, the procedure was primarily performed in adults who had lost their hearing, and doctors were reluctant to try it in a young child. 'My parents kept pushing and pushing until, finally, they were told when I was almost two years old that doctors in Frankfurt would perform the operation.'

The operation was a success. But his parents refused to settle for that. If one implant could deliver such a big improvement, why not two? 'Back then, nobody had implants on both sides,' he says. 'Doctors didn't know whether having two devices would lead to interference or cause a conflict for the brain.'

But if you've learned anything about Max's parents, you'll know they have great perseverance. Just a few days before his fourth birthday, Max became the first child ever to have cochlear implants on both sides. While the history of medtech is packed with stories of doctors, engineers and their bright ideas, there are also countless tales of parents who refused to take 'no' for an answer – and accelerated medical progress along the way.

perform the operation.



A heavy burden

What is it like to live with severe obesity?

Imagine struggling to perform daily tasks such as tying your shoelaces, walking upstairs or sitting into an armchair. These are the everyday struggles faced by people with severe obesity. To help employees experience the reality of obesity, Johnson & Johnson Medical Italy in partnership with Amici Obesi onlus held an Obesity Awareness Day on 19 June. More than 200 employees were given the opportunity to wear specially-created obesity suits and to hear an inspirational keynote speech from Marina Biglia, President of Amici Obesi Onlus. She explained the physical challenges of obesity, as well as the social stigma that accompanies the condition.

'This experience made me more aware of the difficulties and constraints that obesity brings, 'said one employee. 'This event, including the testimony from the patient association, helped to bring this issue to life and reduce the stigma of obesity.'

News of the Obesity Awareness Day was shared online, generating 71 posts on websites and social media channels.

Medical technology can play a role in reducing the impact of obesity on individuals and society. Scientific and patient's associations commitment to foster education and raise public awareness of the condition - and the therapeutic options – is laudable to reducing the burden of disease.





procurement management

Simplicity For suppliers?

New electronic systems aim to make public procurement more user-friendly

Most hospital supplies are purchasing using public procurement procedures. However, the complexity of bidding for public contracts can sometimes be overwhelming - especially for smaller companies who may lack expertise and resources.

The European Single Procurement Document (ESPD) was designed to streamline the process. It allows suppliers to fill in a self-declaration form instead of submitting documentation to prove their qualifications.

'When errors in the system are removed and we get better at using it, this electronic self-declaration Form will deliver simplification and save us time...'

The use of self-declaration forms will make it easier for suppliers to submit offers and thus avoid rejection due to lack of documentation.

However, getting used to the new system will take time and training. Medtek Norge - the Norwegian Association for Health and Welfare Technology - organised a workshop for its members on EPSD and public procurement on 23 June. The event explored the practical and legal aspects of completing the self-declaration form. It was organised in cooperation with one of Medtek Norge's legal partners, Arntzen de Besche and Mercell, a supplier of tender systems and an ESPD-tool.

'When errors in the system are removed and we get better at using it, this electronic self-declaration form will deliver simplification and save us time,' said Anita Stubberud of B.Braun AS. 'It is, however, crucial that our customers also learn how to use the system.



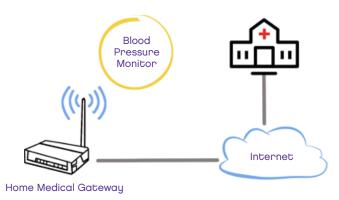


Tackling high blood pressure once and for all

If Lohmann was frustrated that chronic high blood pressure had taken over his life. Then doctors offered him an innovative new treatment that completely turned things around.

For years Ulf was taking pills that didn't seem to have any effect on his condition, which he believes deteriorated because he worked too much and didn't know how to relax. 'Along with hypertension, I also had diabetes for 25 years, and these long-time illnesses had left me really demoralised,' he says. 'I'd become indifferent to the things I used to enjoy, like listening to music, going to films and spending time with my wife,' adds the home decorator from Germany.

Then the opportunity arose for Ulf to try a new blood pressure therapy that had already been gaining interest among cardiologists in the US. The treatment was designed especially for people like Ulf who cannot control their high blood pressure with three or more blood pressure medications.



Similar to a pacemaker, the small device is implanted inside the patient's body beneath the collar bone. An electrical impulse works with the body's own natural blood pressure regulation system to relax the person's blood vessels, making it easier for blood to flow to the body. It also slows the heart down so that it can work more efficiently and reduces fluid in the body, meaning the heart doesn't have to work as hard.

'After the operation, I went back to my old self: self-confident, interested in learning about new things, polite, caring and enjoying my work. Many people noticed the change,' he says. 'I've always appreciated classical music and I've started going to concerts again.'

Doctors are able to personalise Ulf's therapy settings via wireless communication. He has to visit Tübingen twice a year for an assessment, but besides that, Ulf is just getting on with his life.





expanding the use of diagnostics to catch diseases before they become advanced. This would help to control long-term treatment costs and spare patients from debilitating complications which hamper quality of life.

Published on 20 June by the Chamber of Producers and Distributors of Laboratory Diagnostics (IPDDL) and Deloitte Consulting, the report is the result of two years'



at an event in Warsaw which attracted 15 journalists and generated media coverage during this year's MedTech Week.

The report explores how diagnostics can improve the management of five major health conditions: cardiovascular diseases, hepatitis, chronic kidney disease, diabetes and throat infection/tonsillitis. For example, distinguishing between bacterial and viral throat infections would reduce the inappropriate use of antibiotics in some patients suffering from tonsillitis. Not only would this save money, it is also an essential element of the global fight against antimicrobial resistance.

Kidney disease, hepatitis and cardiovascular disease may develop without symptoms for several years. If detected too late, these dised complications can be reduced by beginning treatment and monitoring at an early stage.

Despite these benefits, the report reveals that the use of laboratory testing in Poland is well below the EU average. Even neighbours at a similar level of development, such as the Czech Republic, have significantly higher levels of diagnostic testing than Poland.

'Changes are needed to motivate more medical personnel to systematically use preventive diagnostics, especially in basic healthcare centers,' said Józef L. Jakubiec, Director General of the IPDDL. 'Switching from interventional medicine to systemic prevention is the key to improving the effective use of healthcare spending."



21st century problems - and solutions



Lab diagnostics will help meet superbug challenge

The threats of antimicrobial resistance (AMR) and food-borne pathogens will be amongst the biggest faced by the developed world in this century. Lab diagnostics will play a key role in rising to this challenge.

This was one of the key messages delivered by experts at the XXV anniversary of the Polish subsidiary of bioMérieux. To mark the occasion, 260 lab diagnosticians and lab managers gathered in Warsaw on 21 June to discuss the future of medical laboratories.

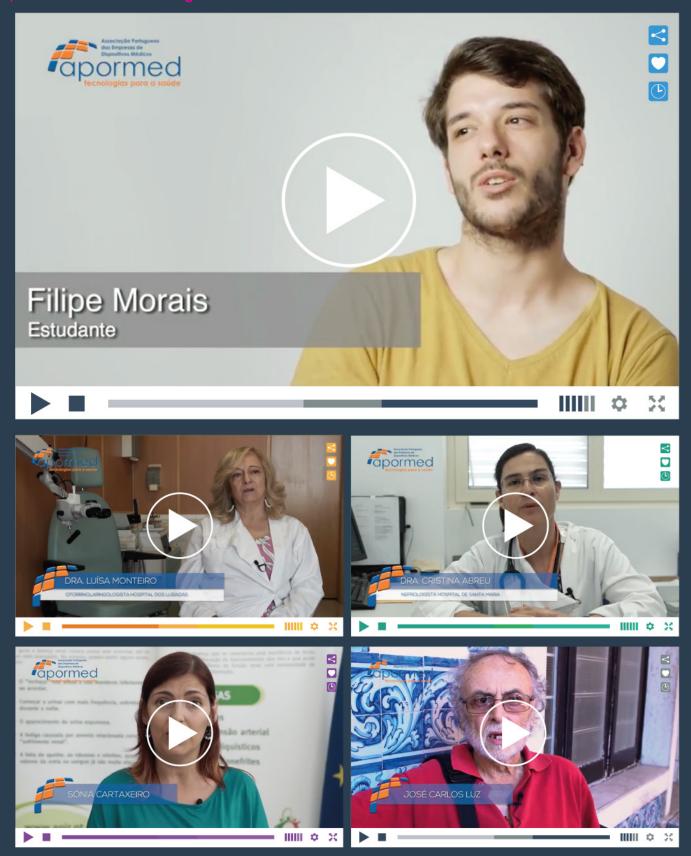
The event featured lectures from four thought leaders, including Prof B. Sokołowska who discussed bacterial and viral pathogens derived from food; Prof W. Hryniewicz who spoke about antibiotic resistance in the community; Prof M. Gniadkowski who addressed the threat posed by multidrug resistant gram-negative bacteria; and Prof A. Fijałkowska who covered 21st century challenges for lab diagnostics.

The event concluded with a lecture from Mr Alain Merieux, President of the Merieux Institute



What is medtech?

A new video explores what the public knows about medical technology. (Spoiler alert: not very much!)





'X-rays', 'electrocardiogram', 'intrauterine devices'- these are just some of the responses offered by members of the public when asked to name a medical device. However, many people simply cannot name any of the life-saving technologies we turn to in our hour of medical need.

A new vox pop video produced by APORMED explores public perceptions of medical technology and the medtech industry in Portugal. The responses reveal that while some people can name a couple of common devices – such as stethoscopes and pacemakers – many have little knowledge of the hundreds of thousands of products on the market. Some even suggested 'saline solution' as medical device.

For many, the fact that Portugal exports medical devices was big news while none of those interviewed for the video could name a company or trade association that represents the sector

'The majority of the population does not know what a medical device is and is unaware that some of them can save lives and are critical to the diagnosis and treatment of many diseases and medical emergencies,' said Maria Antonieta Lucas, President of APORMED.



'Medical devices can be a source of revenue - not just a cost'

Innovative technologies can boost the economy in more ways than one: they can deliver long-term savings to health budgets by accelerating patient recovery and keeping people out of hospital; the medtech sector is a source of employment and tax revenue for European governments; and medical technologies are one Europe's strongest export industries.

Those were some of the key messages from Maria Antonieta Lucas, President of APORMED, the Portuguese medtech association, in a wide-ranging newspaper interview delivered during European Med-Tech Week.

However, she was quick to highlight some of the economic challenges that the industry faces. These include public tenders that prioritise low-cost products over those that offer the best value. 'This should be replaced by criteria which value the most economically advantageous product,' she said. 'This would allow innovation to enter the system.'

The current focus on price is a legacy of austerity era policies but, in the post-crisis period, a broader view should be taken of the quality of products as well as the contribution of medical devices to the economy, according to the APORMED chief.

Prices of medical technologies fell by around 10% per year during the worst of the financial crisis and hospitals are often slow to pay their bills to companies, said Antonieta Lucas. Rewarding innovation by improving access for patients would be a win-win for Portugal, she suggested.

New technologies For an older population

Innovative medtech can help us stay healthy and active as we age





European solutions to European problems

It would be absurd to neglect the health of our 500 million citizens



n this modern world of ageing populations and co-morbidities - where citizens suffer from more than one disease at the same time - one would think that striving towards sustainable healthcare would be a no-brainer.

The problem is, it isn't happening. Or at least not quickly enough.

Of course, the EU's current 28 Member States all have individual competence for their own healthcare systems, so an umbrella view on most aspects of health is not possible from Brussels (although centralised legislation on IVDs, clinical trials and sharing within data protection laws have subtly changed this).

In the European Union, a population of some 500 million will all, at some time, need healthcare. In fact, we will need more healthcare than ever before as we age and, like pension funds, healthcare budgets are becoming way too stretched, arguably to the point of being unsustainable.

It's an absurd situation, as apart from anything else the direct correlation between the health of a nation and its wealth has long been known and shown.



Politicians will tell you that, if you ask any citizen, health and healthcare is high on their agenda - and as we live longer that will surely become more the case, rather than less.

The key problem is, there appears to be a lack of a political will to act together as one bloc, sharing knowledge and best practice and fighting as one to find new and better ways to serve our patients now and into the future.

This must change. Now.

Denis Horgan is Executive Director of EAPM



The amazing, 'disappearing' life-saver



Innovative implant reinforces artery – then 'vanishes'

Coronary artery disease is a major source of death and disability. When arteries get blocked, the risk of heart attack rises sharply.

Among the great breakthroughs of the 20th century were small implantable devices that provide structural support to the blood vessel to ensure it remains open, allowing blood to flow. This has saved countless lives but leaves patients with a small metal implant for the rest of their days.

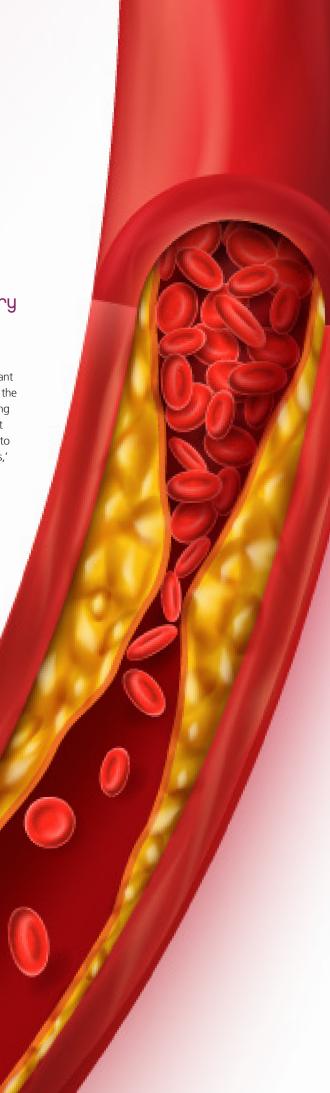
Now, a new innovation promises the benefits of this crucial intervention but with a difference: the implant is totally absorbed by the body when its work is done. The device provides support to the blood vessel during the first six months after implantation –helping to stop the artery from becoming blocked again – and then slowly disappears.

This was just one of a series of eye-opening technologies highlighted by the Slovak Association of Medical Devices Suppliers (SK+MED) during MedTech Week. Other devices in the spotlight included a tiny camera that patients swallow to allow doctors to diagnose gastrointestinal problems; a procedure for reducing the risk of stroke; and a silicone wound dressing that accelerates healing.

The association also took the opportunity to highlight the need to enhance patient access to innovative diagnostics and devices, emphasising the importance of quality when choosing medtech products. Patrícia Kubicová, Executive Director of SK+MED said new Slovak legislation will help to make value a priority.

'We believe that the current dominant position of the price will weaken as the most important criterion for assessing medical technology and will prevent an inflow of low quality products into EU from outside of the EU countries,' she said.

A strong media campaign ensured coverage of medical technologies throughout MedTech Week, with innovative technologies and the need for sound regulations making the headlines.





Healthy Futures

New technologies are essential caring for an ageing population

nnovation in medical technology is central to easing the burden of an ageing population. Looking just 10-20 years into the future there are already incredible developments to look forward to.

In general surgery, robotics will become routine. Already in the US 90% of surgeries to remove the prostate are performed robotically. Robotic surgery, performed with miniaturized instruments mounted on robotic arms, allow surgeons unprecedented precision and control.

Robotics, 3-D imaging and augmented reality will soon allow surgeons to see structures as tiny as blood vessels in the liver. Surgeons will begin to feel as if they are actually inside the patient.

One day, instruments will give real-time diagnostic feedback on the chemical and biological composition of tissue to surgeons. These techniques will speed recovery and allow operations that would otherwise not be possible.



While robots are the future of general surgery, lasers are the future of eye surgery. Surgical implants can already today correct multiple sight conditions at the same time. In the future, implants assisted by lasers, will not just repair impaired eyesight but improve eyesight beyond what we consider normal today.

Between 2015 and 2035 the number of stroke events is predicted to rise by more than a third, with a significant health and social care burden. Looking to the future, 3-D diagnostics will spot problems earlier, allowing for earlier intervention.

New technologies such as real-time thermal modelling, plastic electronics and steerable catheters guided by radio frequency, will enable corrective treatment to be delivered with extreme accuracy and reduced recovery time.

We have a lot to look forward to in the medical technology sector, but the industry cannot be complacent. We must continue to invest in innovation, so that we are ready to play our part for decades to come.

Mark Lloyd Davies is Johnson & Johnson's EMEA Medical Devices Leader in Government Affairs and Policy

more patient-centred.





extra pressure.

even decades ago, experts from scientific societies in Europe came together to found the European League Against Rheumatism (EULAR) - an association dedicated to improving the care of people with rheumatic and musculoskeletal diseases.

In the years that followed, the prevalence of those conditions and how they are treated have changed significantly. Today's experts have tools their predecessors could only dream of. Patients, who may in the past have seen their quality of life profoundly limited, can now enjoy active and productive lives.

'In rheumatology, we've experienced major advances since the beginning of the century thanks to the arrival of very potent medicines,' says Prof Lories. 'That was particularly beneficial to patients with autoimmune disease such as rheumatoid arthritis. Now we are seeing stronger focus on treating diseases like osteoarthritis as well as rare and orphan disease."



Osteoarthritis – which, unlike rheumatoid arthritis, is not a primarily inflammatory disease -is a growing concern as populations age. Wear and tear over many years can lead some patients to require joint replacement. In addition, one of the knock-on effects of the obesity epidemic is a rise in knee and hip problems as ageing joints come under

Science has transformed arthritis

and rheumatism care

- what's next?

This combination of factors, says the Leuven-based expert, is a major challenge to the medical community and policymakers: 'As people are living longer, the impact of musculoskeletal disease on individuals is high, and the societal costs are also increasing.'

While medicines have transformed the lives of some patients with musculoskeletal diseases, there remains unmet needs in the treatment of many conditions. 'There is plenty of scope for new technologies to improve patients' lives,' Prof Lories says.

> Dealing with this is a healthcare has been





'We are happy and proud to be part of the story and a member of MedTech Europe, as this is a great way to help our members get the most relevant information and experience from other member associations in the field of medical devices...'

> Mojca Šimnic Šolinc, President of SLO-MED

Members and partners of SLO-MED, the Slovenian medical technology association, swapped their offices for a farm for this year's MedTech Week. The event was an opportunity to reflect on the organisation's first year as active members of MedTech Europe in a relaxed environment.

The Slovenian association has 45 members. Mojca Šimnic Šolinc, President of the association, said SLO-MED had been growing nicely and looks forward to continuing to work with businesses and stakeholders in Slovenia and throughout Europe.

2017 was the first year SLO-MED has been part of MedTech Week. 'We are happy and proud to be part of the story and a member of MedTech Europe, as this is a great

way to help our members get the most relevant information and experience from other member associations in the field of medical devices,' she added.

A total of 33 people attended the event where they shared good practices and discussed future goals, as well as socialising in the popular tourist location.



The Innovation Age

Clearing blood clots from veins saves lives and reduces long-term care costs

Deep-vein thrombosis (DVT) can strike without warning. It may result from a genetic condition, after surgery, due to

DVT sometimes causes pain or discomfort as blood clots form in the legs. In serious cases, the clot can travel from the leg to the lung where it leads to

ing blood-thinning medications, which are well-known to the public. What is potential of medical technology in re-

entific panel discussion in Vito-By inserting a catheter into clot is, interventional radiologists can dissolve and extract clots before they

'Prompt action is essential.' said Dr Santi Méndez of Puerta de Hierro ment can have a major impact on the patient's future.'

according to Pepe Urbano, Coordinator of the Unit of

lives. 'The economic cost comes from the patient's reduced labour and

Mechanical thrombectomy was just series of initiatives during MedTech Week. In addition to a strong social media campaign and a series of videos highlighting the work of ing patient lives, the company showcase the value of medical technologies.

lifespan of pacemakers is vital, helping to reduce the need for replacements and lowering the risk







Diabetes: the quest For value

By focusing on outcomes that matter to patients, diabetes clinics are getting better value



or Allan Flyvbjerg is CEO Of Steno Diabetes Center

ne in 12 people in the world has diabetes. That's around 387 million. By 2035, the number of

people living with diabetes will increase by 205 million. Most will require health services for the rest of their lives and, if their condition is not well controlled, could face serious complications.

Dealing with this is a major challenge for health economists and policymakers. Value-based healthcare has been proposed as the 'strategy that will fix healthcare'. Proposed by Harvard's Michael Porter, this big idea can be summed up as 'outcomes that matter to patients, divided by the cost of achieving those outcomes'. In essence, it demands a more patient-centric care and closer measurement of clinical and quality of life outcomes.

Professor Muir Gray, Director of Better Value Healthcare and previously Chief Knowledge Officer at the NHS in the UK, says focusing on value is inevitable as resources are finite. 'Developers of medtech need to understand the whole system, not just the part their technology plays within it,' he says.

One Dutch diabetes clinic has embraced this value-based approach, using a bespoke IT system to measure outcomes that matter to patients. The Diabeter clinic founded by Dr Henk Veeze and Dr Henk-

Jan Aanstoot in 2006 has put the patient at the centre of everything they do. As a result, they have among the best glucose control rates in the country and fewer hospitalisations.

'Hospital admission rates at most clinics are around 10% while we have rates of between 1% and 3%,' says Veeze. 'That's a real benefit for patients and a big cost-saver.'

A similar patient-centric model has been adopted at the new Steno Diabetes Center Copenhagen (SDCC). 'We have to treat citizens not diseases,' says Dr Allan Flyvbjerg, CEO of SDCC. 'It's time to take a different view of the people we serve and how we do it.'

Flyvbjerg says every doctor-patient dialogue is a meeting of two specialists: 'One is a specialist in diabetes and the other is a specialist in their own life.'

Better Value HEALTHCARE





Value-based healthcare as the 'strategy that will Fix healthcare'.





The gift of sight is precious but cannot be taken for granted. Eye conditions such as cataracts, glaucoma, age-related macular degeneration (AMD) and retinal dystrophies (RD) can have a devastating impact on vision. This can have serious implications on patients' quality of life and independence.

Early intervention can preserve vision. Take glaucoma for example: by the time patients notice serious symptoms, considerable damage may have been done which can be difficult to reverse.

However, a wave of innovation in recent decades has transformed eye care. Ophthalmologists can now diagnose the early stages of disease before a patient's sight is affected, and there are now many treatment options - both medical and surgical - that avoid long-term damage.

Modern health technologies can also reduce the rate of infections and complications, while reducing recovery times for patients receiving treatment.

Ophthalmology was the focus of an event hosted by Fenin and the Technology and Health Foundation on 17 June to illustrate the role of medical technology in delivering value through innovation. The meeting, attended by 70 people, marked the celebration of the 2017 Year of the Retina in Spain. The report of the meeting was published on the Med-Tech Week website on 23 June.

'Thanks to technological innovation in ophthalmology we have more precise diagnostic methods and tools that have improved the surgical results of our patients,' said Dr Marta Figueroa, President of the Retina Plus Foundation.

This was echoed by Margarita Alfonsel, secretary of the Board of Trustees of the Technology and Health Foundation, who added that more progress is needed to improve outcomes for people with degenerative eye diseases.

A number of experts discussed advances in areas such as cataract and refractive surgery,

as well as glaucoma. 'In the coming years, advances are expected in femtosecond lasers for cataract surgery and correction of refractive defects,' said Xavier Puig, chief medical officer of Alcon Spain and Portugal. 'We also expect innovations in the field of intraocular lens design and materials, as well as in equipment that allows safer and more efficient surgery.'

Ophthalmology was presented as an exemplar of how medtech innovation can transform lives and make health systems more efficient - a vision for how other fields could respond to challenges.





Crossing mountains despite Parkinson's

Tony Seidl was shocked when, at age 39, doctors diagnosed him with Parkinson's disease. After all, isn't it something people's grandparents have?

n fact, most of the one in 500 people who have Parkinson's are over 50 but you can get it when you're younger, too. Though the cause is unknown, this neurological condition happens when a person's body doesn't produce enough of the brain chemical dopamine, a neurotransmitter that helps regulate movement and emotional responses.

It isn't fatal but the symptoms worsen over time, and there's no cure. However, a therapy called deep brain stimulation (DBS) can vastly improve symptoms, which for Tony included inability to control his move-



ments, body stiffness and speech problems. 'I was hoarse all the time and then my upper lip suddenly refused to follow my commands, making my speech unclear,' he says.

Two years after having DBS surgery, Tony says the procedure has had a huge impact on his life. 'The first night after the device was switched on, I was able to sleep six to eight hours, which was unbelievable,' he remembers. His ability to move around has also improved immensely. 'I've almost completely got my life back.'

To show how far he's come and to inspire other people with Parkinson's, Tony recently completed an 11-day, 500 km cycling journey from Salzburg to Padua, crossing the Alps and stopping to meet with local patient groups along the way. The most memorable part of his trip was when he received a police escort into the centre of Udine, where a choir of Parkinson's patients was waiting to sing opera to him.

'It was incredibly moving. As a completely normal person, you're suddenly the carrier of hope for so many people.'



X-ray vision

New research tools are making the invisible visible



Sweden is building the brightest x-ray source in the world, allowing researchers to measure things that were once too small or too complex to study.

The synchrotron X-ray machine being developed at the MAX IV laboratory on the outskirts of Lund, will give academic and industry experts a powerful new tool to explore how materials and elements function. It may even open the door to the development of new materials and products, including the nanomedicines and drug delivery systems of the future. The MAX IV lab, along with the nearby Science Village and the European Spallation Source – the world's most powerful neutron source – is a magnet for scientific talent. The region is populated by innovative companies and researcher institutes keen to tap into the potential of its research infrastructure.

On June 20, the area attracted R&D managers and industry specialists from the medical technology sector who gathered for a study visit hosted by Swedish Medtech, the organisation of the Swedish medical devices suppliers; Medtech4Health, a SwedishVinnova-funded Strategic Innovation Program; and Invest in Skåne, the investment promotion agency for the region.

Introducing the event, Anna Lefevre Skjöldebrand, Managing Director at Swedish Medtech, said it was important for companies to know about the research infrastructure that can help unlock the next wave of medtech innovation.

Several experts explained the advantages of using the type of X-rays produced in MAX IV compared to other types of x-rays; how these technologies enable skeletal injuries to be studied at the nanoscale; and how using these new tools to understand how manganese binds to the body may help to detect cancer.

The Swedish MedTech Week which ran from 14-20 June – a little earlier than in other European countries – was packed with activities every day in different regions across Sweden.

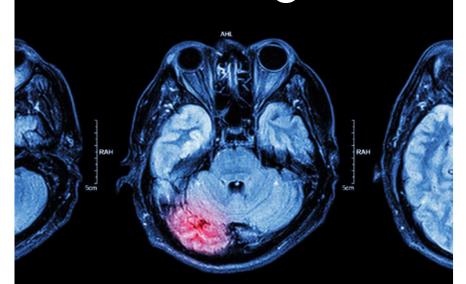
Other highlights included an exploration of health technologies in the style of a TV talkshow; a medtech careers event for students and healthcare professionals; a series of talks on the role of healthcare as a motor of economic growth; and the inauguration of a new medtech centre in Uppsala which was attended by influential players from political, business and academic spheres.

Speaking at the Uppsala event, Carl Bennet, chairman of medical technology firm Getinge, called for a doubling of Sweden's R&D budget, while government life sciences coordinator Anders Lönnberg emphasised the importance of the sector for the Swedish economy.

Together, this diverse range of events showcased the best of how medical technology improves the lives of people in Sweden and



Vital signs



Early diagnosis of brain injury could improve survival

From the moment that a patient suffers a traumatic brain injury, the clock is ticking. Experts speak of a 'golden hour' during which the patient's chances of recovery are strongest. After that, the risk of serious problems – including death – increase with every passing second.

Before surgeons can operate to stop the bleeding, they must first detect the problem. The most common method for diagnosing brain trauma is by checking alertness, neurological functions and pupil reactions. However, this is not always successful and, in some cases, diagnosis comes too

Dr Johan Ljungqvist, specialist in neurosurgery at the Sahlgrenska Hospital in Gothenburg set out to find a quicker way of detecting bleeding – perhaps even before the patient begins to show serious symptoms. They have tested and evaluated a new method using a 'helmet' packed with transmitters and detectors that analyses data from the brain and compares this with data from a healthy patient.

The new system can detect differences which help doctors diagnose potentially serious problems. In a study of 40 patients, the 'helmet' detected bleeding with 100% accuracy. Crucial-

ly, it was 25% more accurate than standard diagnostic methods.

Ljungqvist's and his research team's device was just one example of how research can save lives. The story was shared at an event at the Sahlgrenska Academy where speakers emphasised the value of near-clinical research and medical technologies in meeting healthcare challenges. This occasion was due to MedTech Week, which took place a little bit earlier in Sweden to allow for Midsummer celebrations.

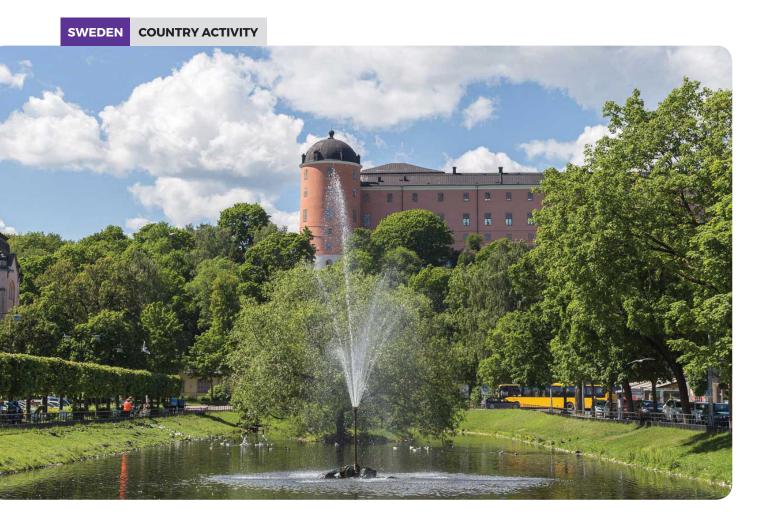
In an inspiring talk, Hospital Director Ann-Marie Wennberg highlighted the challenges posed by demographics and rising healthcare costs but emphasised that innovative medtech will play a role in making care more efficient and better for patients. Speakers offered dozens of real-world examples of how innovations can help us to live longer, healthier lives.

How Christine **Faced** cancer

hristine Raab (35) is a freelance make-up artist. In November 2014. she was diagnosed with breast cancer. This was followed by numerous examinations and an operation to remove the affected lymph nodes.

After the subsequent chemotherapy, Christine developed a lymphoedema - a long-term condition that causes swelling in the body's tissues. Since then she has to wear a compression sleeve daily, both at home and at work. Christine believes you should always make the best of things. Her positive attitude, illustrated through a series of videos she has uploaded to YouTube, provides advice and reassurance to other women.





Centre of opportunity

New MedTech centre will help to drive job creation



Europe's medical techology sector employes more than 575,000 people in over 22,500 companies. Sweden is ranked as Europe's most innovative country, according to the 2017 EU Innovation Scoreboard.

Given these two facts, it's not surprising that the Swedish medtech industry is a major source of ideas, new medical products - and jobs.

In fact, job opportunities in the Swedish life sciences sector are rising by around 2% per year. This growth looks set to continue thanks, in part, to the unveiling of a new MedTech Science & Innovation Centre in Uppsala on 14 June, part of MedTech Week – a little earlier than in other participating countries due to Sweden's Midsummer Festival.

Uppsala University - like Sweden itself - combines experience and maturity with a focus on the future, making it an ideal home for the new medtech centre. A number of new research posts will be created at the centre which will help to equip a new generation of students with the skills required to work in industry, hospitals and digital healthcare.

The event was attended by senior figures from business, politics and healthcare, including government life sciences coordinator Anders Lönnberg who empahsised the improtance of the sector for the Swedish economy. Those unable to be present on the day could follow the opening ceremony via video link.

Another of the stand-out speakers was Carl Bennet, chairman of medical technology company Getinge. He called for a doubling of Sweden's R&D budget – a bold move which he said was necessary if Sweden is to embrace new opportunities in healthcare.

With the new medtech centre in Uppsala, it looks like Sweden is determined to maintain its position as a leader in a competitive field.





Access for all

Access for all Ensuring universal access to healthcare requires a collaborative approach

ith the sustainability of European health systems at risk and equitable

access to quality healthcare at stake, it is crucial that the EU sets the tone for public health policies and patient-centred reforms for Member States and local governments.

The current debate on access to healthcare is a prime example of where coordinated action from all stakeholders is needed. Far too many patients are confronted with financial hardship as a result of healthcare costs. About 60% of respondents have faced difficulties at least sometimes due to spending on healthcare, and a shocking 36% have foregone or postponed treatments at least once in the past 12 months.



This has to change. Together with its members, the European Patients Forum (EPF) has launched a one-year campaign on Access to Healthcare, calling all stakeholders to reflect on potential avenues to ensure universal health coverage by 2030, in line with the UN Sustainable Development Goal (SDG) on health.

We are calling for the set-up of a broad framework with all interested parties, including medtech companies, to encourage equitable access to quality medical devices for patients according to their needs, not their means.

At the end of the day, ensuring universal access to healthcare products is a political choice. We urge decision-makers both at European and national levels to take positive action to show they put patients' needs first, and that the European Union's core values of equity and solidarity are not mere rhetoric but a real political priority.





Strength in numbers

New 'Swiss Medtech' association ready for **Future** challenges

'By consolidating our activities and pooling our strengths, we have Formed a competent and effective industry organisation, which speaks with one voice...'

Peter Biedermann Managing Director, Swiss Medtech

Pressuring on prices, new regulations, currency fluctuations and skills shortages are just some of the challenges facing the Swiss medical technology industry. It is against this backdrop that two established organisations - FASMED and Medical Cluster -have merged to create Swiss Medtech.

The new organisation, formally introduced on 12 June, gives the industry the combined power needed to work with national and international stakeholders to secure the sector's future. The press release and a photo of the new Board of Directors were also published on MedTech Week website on 19 June.

The move, which was flagged at last year's Swiss MedTech Day, represents the interests of around 600 members, 1,350 companies and 54,600 employees. Peter Biedermann

will serve as Managing Director, with Urs Gasche and Rubino Mordasini as co-presidents in an executive board made up of eight members from industry, medicine, and science.

'By consolidating our activities and pooling our strengths, we have formed a competent and effective industry organisation, which speaks with one voice,' Mr Biedermann said.

A key project for the new organisation will be managing the implementation of two new EU regulations – one on medical device (MDR) and one on in vitro diagnostics (IVDR). In addition, the implementation of the Swiss Medtech Code, corporate tax reform, labour market deficits and the strength of the Swiss franc are seen as potential threats to Switzerland's strong export-driven medtech sector

Life lines

Safe use of catheters can save lives and reduce infection

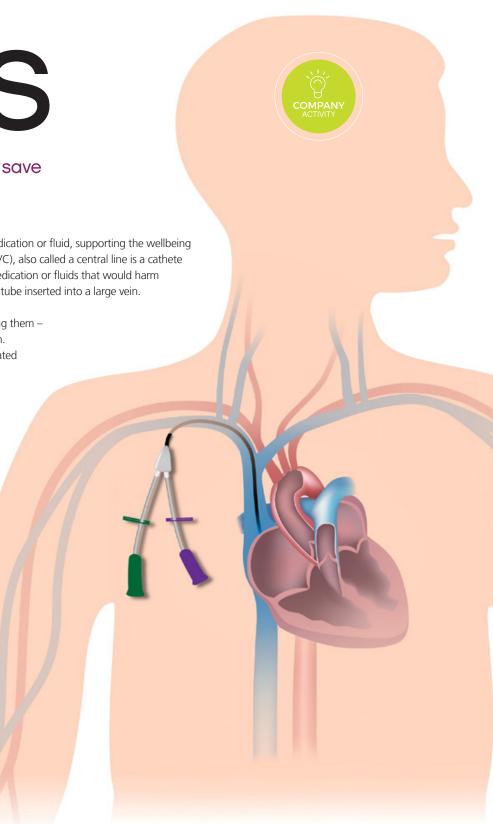
Intravenous catheters can be used to administer medication or fluid, supporting the wellbeing of vulnerable patients. A central venous catheter (CVC), also called a central line is a cathete placed into a large vein and is used to administer medication or fluids that would harm a smaller peripheral vein. This is a long, thin, flexible tube inserted into a large vein.

However, putting catheters into veins – and removing them – comes with a risk of potential blood stream infection. These preventable infections, known as catheter-related bloodstream infections (CRBSI) are responsible for significant illness, death and costs.

Reducing the infection risks associated with catheters was the focus of an educational symposium for specialists in infection control and intensive care units on 23 June in Geneva.

The event, hosted by 3M during the International Consortium for Prevention & Infection Control (ICPIC), addressed modern approaches to reducing CRBSI in line with the latest guidelines. State-of-the-art technologies, such as disinfecting caps that disinfect prior to line access and act as a physical barrier to contamination between accesses, can help to curb infection risks. Raising awareness of the benefits of these innovations is essential to saving lives and resources.

The event was attended by over 50 delegates and featured the contributions of leading experts from Germany, France, the UK, and the Netherlands.



Operation Smile!

Access to safe and well-timed surgery can fix common birth defect in resource-poor countries

Every 3 minutes, a child is born with a cleft lip and cleft palate – a gap in the lip or roof of the mouth. If left untreated, children with cleft conditions may suffer from torments, malnourishment and difficulty with speech.

It takes surgeons as little as 45 minutes to repair a cleft lip and/or cleft palate, allowing children to live normal and healthy lives. However, in resource-poor countries, access to treatment can be a major challenge.

That's where Operation Smile comes in. This international medical charity works with doctors, hospitals and governments worldwide to treat children with cleft lip, cleft palate and other facial deformities. Johnsons & Johnson has partnered with Operation Smile since 1998, helping to bring smiles to the faces of more than 100,000 children.

'As a global healthcare company, we consider it our responsibility to bring safe, effective and well-timed surgeries to the most vulnerable in our world, while placing particular importance on the wellbeing of children,' said Michelle Brennan, Company Group Chairman, Johnson & Johnson Medical Devices.

In 2015, Johnson & Johnson pledged a fiveyear, \$25 million commitment, including surgical supplies, to help Operation Smile continue to improve the lives of children and their families.

Employees are playing their part. On 23 June, around 300 staff of DePuy Synthes – part of the Johnson & Johnson family of companies in Switzerland, took part in the company's annual Move for Charity sponsored event.

The half-hour run along the banks of the Aare River attracted sponsorship from family, friends and colleagues, raising funds for Operation Smile. The money will be used to create priceless smiles where they are needed most.







Cancer vaccines and 'lung-on-a-chip' catch the eye on Swiss MedTech Day



Medical researchers have known for years that boosting cancer patients' immune systems helps them to fight the disease. However, there was a problem: delivering the right dose of 'therapeutic vaccines' to where they are needed most is very challenging.

Now, a solution may be at hand. Dr Dimitri Goundis, CEO of MaxiVAX, a biotech company, and Prof. Nicolas Mach of Geneva University Hospital, have teamed up to develop an innovative drug-delivery capsule loaded with genetically-engineered cells.

The cells are loaded into a small bio-compatible capsule which, when placed under the patient's skin, allows continuous release of the cells which help the patient to fight tumours.

The breakthrough won the prestigious CTI Swiss Medtech Award - an annual prize given by Switzerland's federal innovation promotion agency.

The vaccine MVX-ONCO-1 is now being tested on 40 head or neck cancer patients in a trial conducted at several hospitals. 'MVX-ON-CO-1 is personalised medicine and has the potential to fight all types of cancer,' Dr Dimitri Goundis said.

The project was one of three projects shortlisted for the prize. One of the runners-up was 'lung-on-a-chip' technology from the University of Bern in collaboration with AlveoliX AG. Their system allows researchers to test potential new medicines on lung cells under conditions which closely replicate real-world conditions.

This is an alternative to conventional testing using cells in a petri dish or in animal trials. The developers hope the system will accelerate the development of new treatments by allowing more rapid and more accurate testing.

The third project, developed by Balgrist University Hospital, the University of Basel and Lutz Medical Engineering AG, is a new rehabilitation system for neurological and orthopaedic patients. Patients are fitted with a harness which supports their body weight, leaving their arms and legs free and allowing therapists a full view of the body.

All three finalists were worthy of the CHF 15,000 prize, accordingtoSwissFederal Councillor Johann N. Schneider-Ammann. 'Their ideas and developments are driving progress in their sector and are helping to make medical technology an important industry in the Swiss economy,' he said, when unveiling the winner before 600 guests in Bern.

The winner was unveiled at Swiss Medtech Day on 12 June organised by CIT and Swiss Medtech. The event also featured presentations of promising research projects, poster presentations and expert talks on trends in medical technology and entrepreneurship. A summary of the event was published during MedTech Week.



Even heard of sickle cell disease?

ickle Cell disease (SCD) is a group of disorders that affects haemoglobin. the molecule in red blood cells that delivers oxygen to cells throughout the body. Poor blood oxygen levels and blood vessel blockages in people with SCD can lead to chronic acute pain syndromes, severe bacterial infections and tissue death.

Chantelle believes raising public awareness is of the utmost importance to help SCD sufferers to be more successful in school, at work, in hospital and in life. That's why she is sharing her own story and encouraging others to do the same.

'Only by spreading the word will we dispel the myths surrounding SCD,' Chantelle says. 'One is that it only affects black people. This is not true. It can affect people of Asian and Mediterranean descent.'

Since SCD became a serious problem for Chantelle a few years ago, she has been hospitalised once a month on average. After she has had morphine, Chantelle has blood tests that check her haemoglobin and infection levels, and x-rays to see if there is any inflammation around the painful area.

This has given her new insights into the kinds of medical technology innovations that could improve the patient experience. 'It would be useful to have small, portable machines that can detect veins when I am having blood tests or getting a cannula put in,' says Chantelle. 'Because my veins have been used so often, it is now harder for nurses, doctors and anaesthetists to find them, so a machine such as this would prevent me from becoming a pin cushion!'

'I think Sickle Cell is misunderstood because it's not a visible condition and it affects everyone differently,' says Chantelle Pierre, who was diagnosed with the genetic blood disorder at six months old as part of a routine blood test.

'Only by spreading the



Making surgery safer

Life-saving surgery can come with the risk of infection

In the EU alone, more than four million people per year suffer from hospital-acquired infections. In fact, more people die from HAIs than road traffic accidents.

Among the most common types of HAIs are surgical site infections (SSIs) – infections that occur in the part of the body where the surgery took place. Patients who contract SSIs are more likely to be hospitalised, twice as likely to be hospitalised in an intensive therapy unit and twice as likely to die.

The additional costs associated with SSIs in the European Union amount to €7 billion euros per year. However, the burden on patients and the health systems can be significantly reduced: 40-60% of SSIs are avoidable when infection control measures are complied with and when prevention guidelines are adopted.

As a matter of fact, more than 1,000 experts, surgeons and health professionals gathered in Geneva on 22 June for the fourth International Consortium for Prevention and infection Control (ICPIC). Two of the hottest topics on the agenda were preventing HAIs and controlling microbial resistance.

'We want to see surgical site infections drastically reduced to relieve unnecessary suffering and reduce the associated costs for healthcare systems...'

Silvia De Dominicis, Ethicon Franchise Vice President For EMEA

'Not only do they have a significant impact on patients in terms of delayed wound healing, increased need for further surgery and longer hospital stays, but prescribing antibiotics to combat surgical site infections contributes to the growing problem of anti-microbial resistance,' said David Leaper, Professor of Clinical Sciences at the University of Huddersfield.

The Geneva event was broadly publicised through eight original articles and 44 picks-ups of an Ethicon press release on the issue, helping to reach an audience of up to 940,000.

World Health Organisation (WHO) global guidelines on SSI prevention suggest using sutures coated with antimicrobial agents that reduce the risk of infection. Ethicon is working with surgeons to highlight the value of these products in protecting patients.



'We want to see surgical site infections drastically reduced to relieve unnecessary suffering and reduce the associated costs for healthcare systems,' said Silvia De Dominicis, Ethicon Franchise Vice President for EMEA. 'We believe that all possible measures must be taken to help patients avoid SSIs and we are dedicated to partnering with the healthcare community to raise awareness, review the latest advancements and implement tactics to address this critical issue.



'I Felt that I had Failed my child'

This is what **Julia Seugling kept** telling herself after her baby had been delivered by emergency **C-section at** 28 weeks.

weeks into her pregnancy, Julia had seen her gynaecologist with complaints of 'bloating' due to water retention, but the doctor couldn't find anything wrong. When Julia fell seriously ill at 28 weeks, she was rushed to hospital. A day later, Julia was a mother.

t about 24

She had been unaware that she had pre-eclampsia, a potentially life-threatening complication in pregnancy that is marked by high blood pressure and high protein levels in a woman's urine.

'The worst thing was that it was so unexpected, suddenly having to hear that I was a timebomb waiting to explode. And coming out of the anaesthetic with an empty belly. My little girl weighed just 700 grams, was covered in tubes and didn't really look like a proper baby,' says Julia, who nearly lost her daughter as well as her own life.

'My daughter had to stay in the hospital for ten weeks – that's 70 days during which I felt that I had failed my child every evening when I left the hospital,' she remembers.

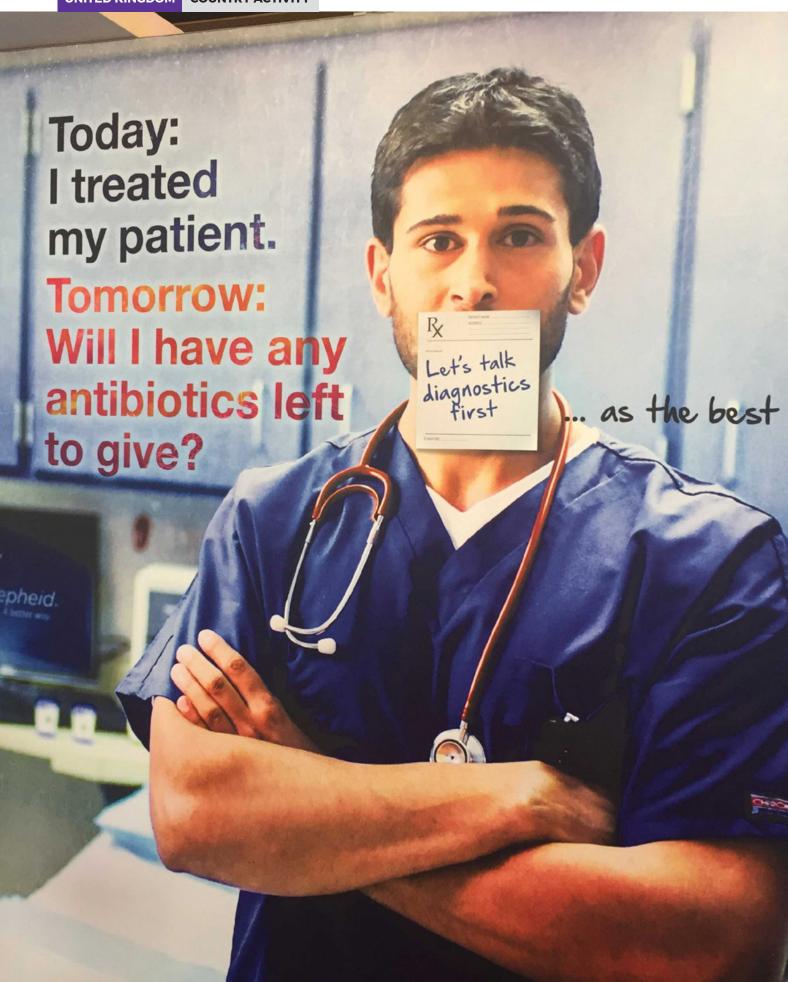
For her second pregnancy, however, doctors were prepared. They used newly-developed blood tests that allow clinicians to decide within

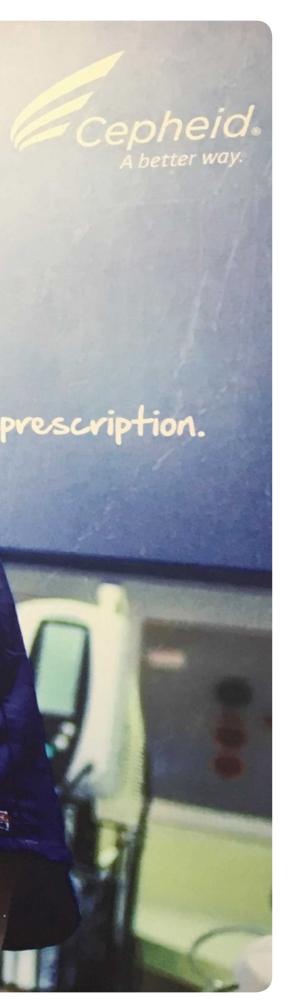
hours whether a woman showing symptoms of pre-eclampsia needs to be hospitalised.

Although her blood flow was abnormal, everything went smoothly as doctors were able to regularly monitor the pre-eclampsia markers in Julia's blood. This meant Julia was nearly fullterm when her second daughter was born at 35 weeks.

'She weighed more than twice as much as her sister and she was able to come home after just two and a half weeks,' explains Julia.







Join the Fight!

We all have a role to play in Fighting superbugs

Antimicrobial resistance (AMR) is one of the biggest public health challenges of our time, according to the World Health Organisation. 'Superbugs'- bacteria which have become resistant to antibiotics - threaten to undo major gains in healthcare.

Early and accurate diagnosis can help to combat hospital superbugs, such as those resistant to Carbapenems, a class of last-resort antibiotics used to treat complicated infections.

Every hospital department has a role to play in the collective fight against AMR and modern laboratory diagnostics are a vital weapon against infection. That was the message of the Cepheid Xperience, a mobile virtual laboratory showcasing innovative diagnostics to hospital and health institutions across Europe.

The rolling diagnostics laboratory toured the UK from 21 June to 18 July, visiting hospitals and sites in Torbay, Basingstoke, Birmingham, Carlisle, Kilmarnock, Newport and Bolton. Around 200 people boarded the Cepheid Xperience, where they learned about infection control, antimicrobial stewardship and the latest in rapid diagnostic testing.

The express diagnostic testing is recognised as a vital measure to limit and help prevent the emergence and spread of AMR. The Cepheid Xperience is an opportunity to bring together all relevant hospital stakeholders to celebrate the work of the laboratory and highlight their role in combatting AMR.

By curbing superbugs and controlling viral infections especially during the winter months, on-demand diagnostic tests can reduce the cost of unnecessary treatment, decrease pressure on emergency departments and improve patient outcomes

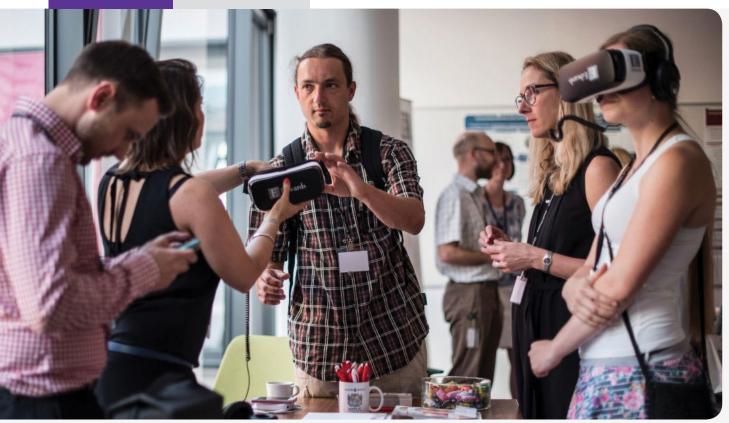


Express diagnostic testing is recognised as a vital measure to limit and help prevent the emergence and spread of AMR



UNITED KINGDOM

COUNTRY ACTIVITY



Healing hearts Students see their Puture in a life-saving industru





Until the second half of the 20th century, a serious problem with a heart valve was often fatal. The invention of replacement heart valves was a game-changer for cardiac care, saving millions of lives in the years that followed.

Central to the history of heart valve replacement was Lowell Edwards, an engineer. Together with Dr Albert Starr, a cardiac surgeon, Edwards developed and refined heart valves in the US. His company, Edwards Lifesciences, helped bring these innovations to patients around the world.

Today, the story continues more rapidly than ever, with a range of patient-focused innovations for structural heart disease and critical care monitoring. The company is writing the next chapter for its UK operation with the opening of new offices at the Newbury Business Park on 23 June.

To mark the occasion, the company invited firstyear A-Level science students from the nearby Park House School, as well as local Member of Parliament, Richard Benyon, to visit their new base. It was an opportunity for the company

to demonstrate its latest transcatheter and surgical replacement heart valves and its state-ofthe-art haemodynamic monitoring devices, as well as to promote the medtech industry as a career option for young people.

'Science students know about the pharmaceutical and chemical industries, but we wanted them to consider the benefits of working in the medtech industry when they are qualified, 'said Nick Walker, UK Country Manager, Edwards Lifesciences.'Medical devices are saving and transforming lives every day within the health service, which makes it an exciting and rewarding industry to join.'

The medtech sector employs more than 90,000 people in the UK and contributes £17 billion (€19 billion) to the country's economy. In addition to the industry's role in improving health outcomes, politicians value the high-quality jobs that companies bring. 'I am delighted to see Edwards extending its 17 years' history in Newbury,' said Richard Benyon MP. 'It is good for employment prospects in the town and the region that we are able to attract and retain innovative medical companies like Edwards.'

With you every step OP the way

Medical technologies are transforming the patient journey



From preventing bed sores and improving urine testing to clearing blood clots and monitoring home dialysis, medical technologies play a role at every step of the patient pathway. The Association of British Healthcare Industries (ABHI) launched a social media campaign to showcase innovative medtech during the month of June.

The varied roles that technologies play in the health system was illustrated by putting the spotlight on products and services from some of the many companies working to solve a broad range of healthcare challenges: 3M, Smith & Nephew, Forte Medical, Medtronic, Cardinal Health, Renfrew, CR Bard, Baxter and Ingenica.

The campaign was divided into five themes - prevention, diagnosis, treatment, recovery and management - with Twitter and LinkedIn posts developed for each.

The public learned how modern wound care systems can improve the lives of patients and reduce their risk of complications. An implantable heart monitor for people suffering from unexplained fainting attracted interest on Twitter while the role of eHealth systems in managing everything from hospital patients' data to community continence care was also highlighted.

'We were delighted to be able to engage members in this way and showcase a variety of products form small companies to multinationals,' said Jonathan Evans, Communications Manager at ABHI. 'We achieved 63,000 tweet impressions and over 10,000 LinkedIn impressions over a one-month period.'

The take-home message from the initiative was clear: medtech plays a vital role in transforming lives throughout the health system.

Nicolas' near miss

icolas Lewandrowski (17) is a student at a vocational training college. He was born with a heart defect and has had open heart surgery three times already.

In 2013, he had a cardiac arrest when playing football and had to be resuscitated in the playground. After that Nicolas had an implantable cardioverter-defibrillator (ICD) fitted which protects him from sudden cardiac death and gives him a greater feeling of security.

Today there are no real limitations to his quality of life. In fact, he enjoys showing people of his own age 'that you can live just as well with a heart defect and an implanted piece of metal as any healthy person'.



MedTech Week 2017 Communications



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Morning Health Care Newsletter

Health Care Section
Banners

Homepage Takeover 1

POLITICO

Total
Exposure

4.5 MILLION+
views

#MedTechWeek used

Partnering

with

European

Media

3000+

& sharing
the perspectives
of healthcare
professionals
& patients

4 weeks presence **60,000+** views



New fans & followers **8500+** Engagement **52,000+**

Giving sound & vision to the video message



700+ views

















B. Braun Medical @bbraun_fr - 19 jun. La #MedTechWeek commence aujourd'hui! Suivez toutes les actus via Twitter jusqu'au 23 juin #DM #innovation #health Wertalen uit het Frans tl 6 🛡 5 0







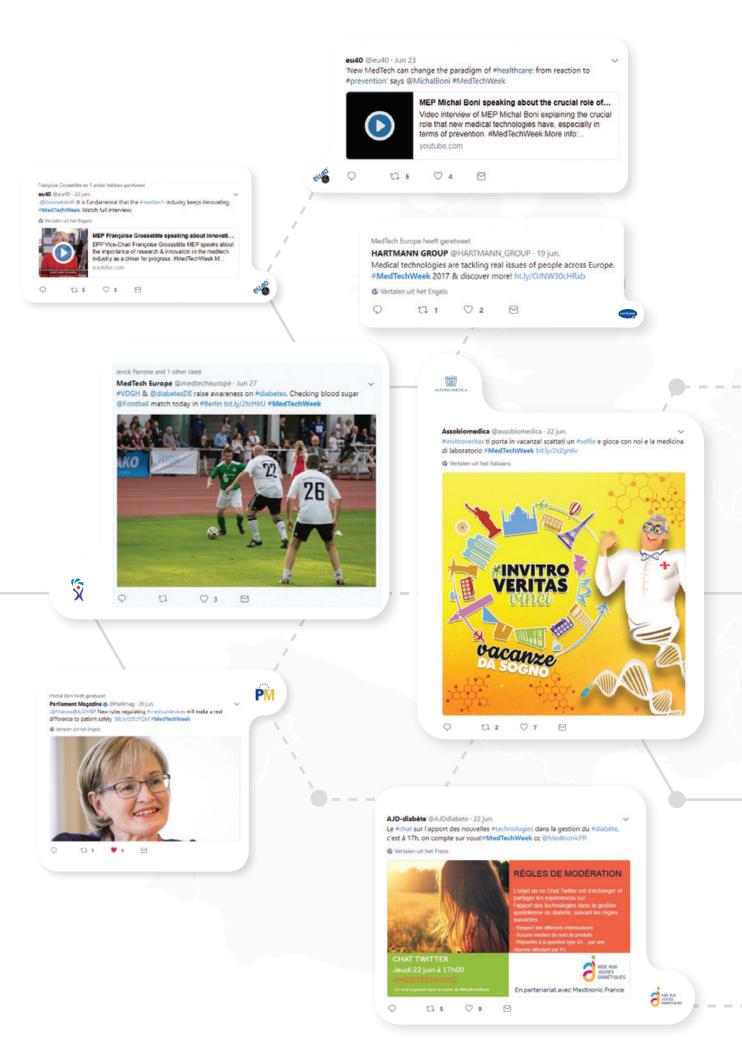
































Join us next year!

4-8 June 2018

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"MedTech Europe is the European trade association representing the medical technology industries, from diagnosis to cure. It represents Diagnostics and Medical Devices manufacturers operating in Europe. Other European medical technology associations are welcome to join the Alliance, established to represent the common policy interests of its members more effectively and efficiently."