



# Contract for a Healthy Future

*The role of Europe's medical technology  
industry in steering healthcare systems  
onto a sustainable path*



# CONTRACT FOR

# A HEALTHY FUTURE

**THE MEDICAL TECHNOLOGY INDUSTRY RECOGNISES THE NEED TO CHANGE HOW WE WORK** in order to meet the challenges we all face in steering Europe's healthcare onto a sustainable path.

**BUT WE CANNOT DO IT ALONE.**

All stakeholders will have to reconsider the role they play too. However, if we all play our part, we can solve our shared problems together.

## What industry will do

- Acknowledge the need for change
- Embrace, achieve and demonstrate cost-efficiency and health outcome needs of payers and policymakers
- Fulfill stakeholders' needs through value-based innovation
- Invest in knowledge transfer to optimise healthcare delivery, with healthcare professionals and institutions, for patients
- Provide medical technology innovations that ensure sustainable, accessible healthcare and healthy ageing
- Require our members to sign the Eucomed Value Charter by 2015

## What you can do

### Policymakers

- Foster access to new technology
- Build better cost models and end silo-based budgeting

### Healthcare institutions

- Work together for productivity
- Embrace bold changes to how care is delivered

### Payers

- Achieve health productivity and efficiency by prioritising value not price
- Reward innovations which address the challenges facing society

### Patients

- Play a more active role in managing their own care
- Be open to new care models and settings

### Healthcare professionals

- See technology as an enabler of change
- Embrace the power of patients and other stakeholders in health decision-making

## Table of Contents

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Executive Summary	06
Contract for a Healthy Future	07
Demographics: the price of population change	08
Changing course	11
What is medical technology anyway?	12
New models	13
Incentivising change	14
Fact check: is medical technology driving up rise in healthcare costs?	16
Value: a common goal	17
Industry ambitions: moving to a collaborative model	18
We all need to change	18
References	19



## Executive Summary

### Challenge to change

Europe has a problem. We face rising demand for health services at a time when public spending is under pressure and we have ever fewer healthcare professionals. At the root of this problem is a demographic trend that will see an expanding elderly population – in need of, and expecting, a high level of care – while the number of taxpayers contributing to the national treasury is shrinking.

*“ The medical technology sector recognises that the current business model is coming to the end of its lifecycle. It is now time to go to the next level – it is time to change. ”*

We have to rethink our healthcare system and steer it back onto a sustainable path. The medical technology sector recognises that the current business model is coming to the end of its lifecycle. It is now time to go to the next level – it is time to change.

As an industry, innovation has always been at the heart of what we do. But the future will demand a different kind of innovative thinking from all stakeholders in our economies. For the healthcare industry this means focusing on our common goal of designing a sustainable healthcare system.

In short, coming up with a slightly better way of doing what we do now and expecting to charge a premium price is no longer good enough. Similarly, our model of healthcare

delivery is also coming to the end of the line. No longer can our hospital system provide inpatient care for all of our citizens. We do not have the beds, we do not have the staff, we do not have the money.

This means patients, policymakers, payers, healthcare workers and hospital administrators, will need to do things differently. Indeed, the value of our contribution will only be realised if others recognise that it is a time of change and seek to collaborate to solve our common challenge. Together, we need to be courageous and smarter about how we use the resources we have and to direct them towards models of care that can deliver a demonstrable positive return on investment in healthy life years for citizens.

## Contract for a Healthy Future

Bold thinking is required if we are to face this shared challenge: a grand bargain to steer our healthcare system back on a sustainable path. The medical technology industry is part of the solution. By concentrating on value-based innovation, we can marry cost-efficiency with improved health outcomes.

shift towards rewarding health outcomes. New technologies which improve health productivity and efficiency should be funded in an effort to help people age healthily and tackle the shortage of healthcare professionals.

Change is never easy but it is imperative. The status quo has to go.

In return, payers and policymakers must overcome silo-budgeting in healthcare, and

### Industry ambitions: moving to a collaborative model

- 1 Build stakeholder networks to collectively establish the value of medical technology and innovation
- 2 Collect, develop and share convincing, evidence-based cases of technology supporting healthy ageing
- 3 Prove the cost saving potential of medical technology
- 4 Innovate care processes to address labour shortages
- 5 Increase the value of the industry to the European economy



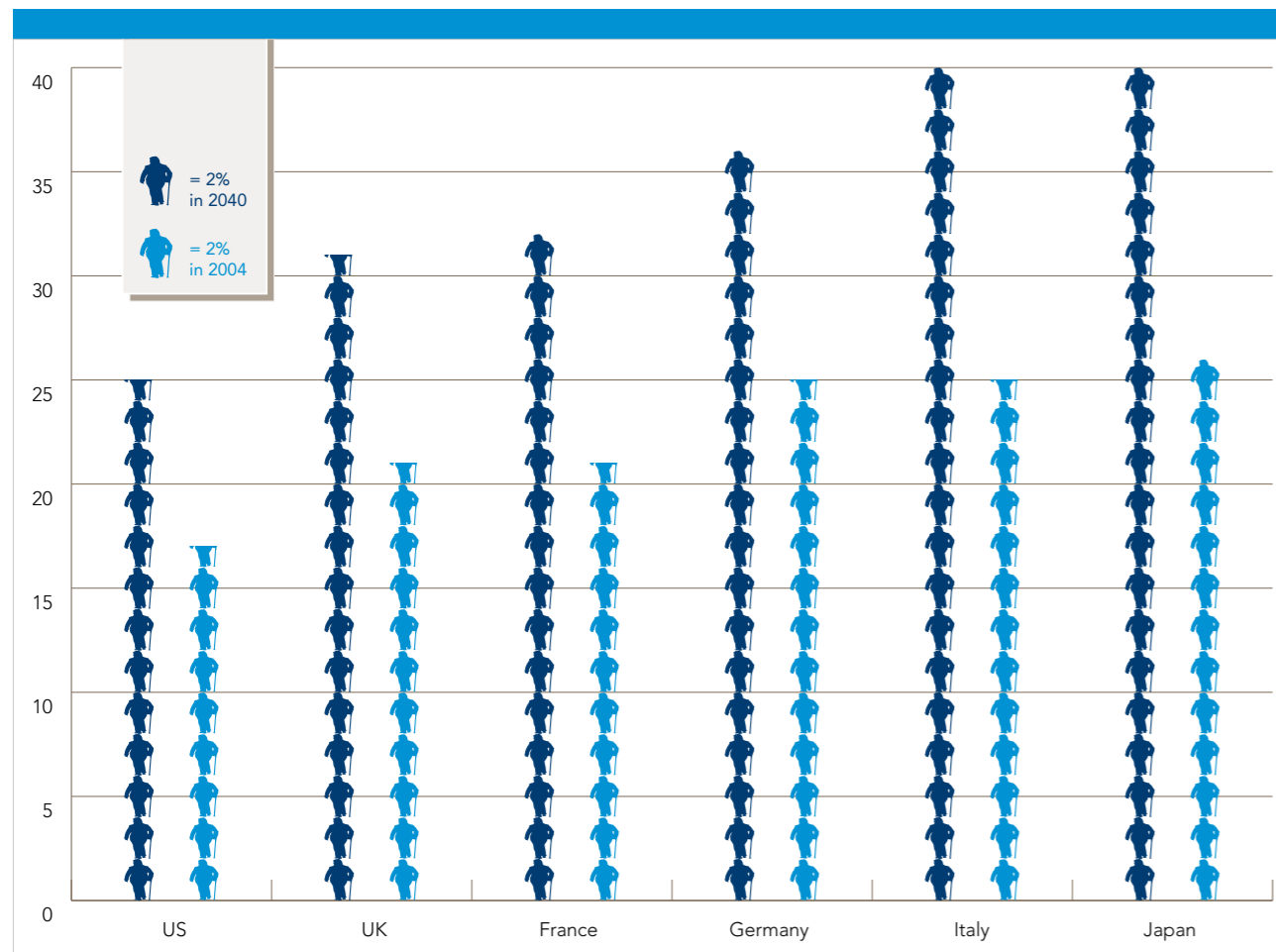


# Demographics

## the price of population change

The figures are stark. Today, the ratio of pensioners to people of working age is 4:1 – and healthcare systems are already under strain. By 2050, the ratio is expected to be just 2:1<sup>1</sup>.

Graph 1: Demographics Driving Demand for Healthcare



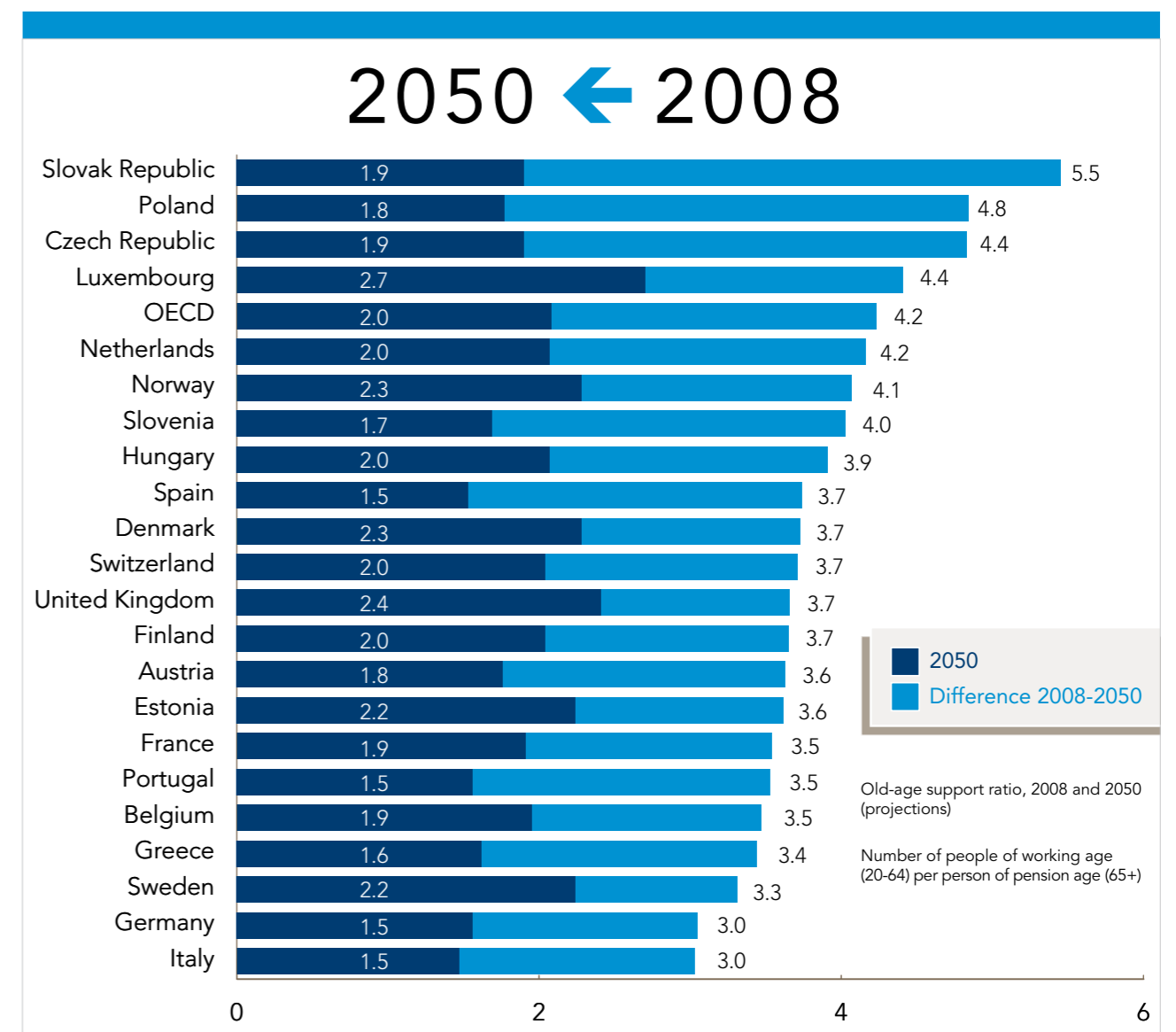
Source: The Silver Book: Chronic Disease and Medical Innovation in an Aging Nation Partnership for Solutions 2004, Chronic Conditions: Making the case for ongoing care

<sup>1</sup> Guerzoni B. and Zuleeg F. (2011). Working away at the cost of ageing. Brussels: European Policy Centre.

We know that after the age of 55, the amount of healthcare resources we consume doubles every ten years. So, at a time when the absolute number of elderly people in need of care is rising fast, the proportion of taxpaying citizens is narrowing. A recipe for sustainability, it is not.

At the same time, the European Commission is warning that by 2020 the EU will have a shortage of one million health workers. This doubles to two million, if you include long-term care and ancillary health professionals, and means almost 15% of demand for care will go unmet<sup>2</sup>.

Graph 2: Working versus old population



Source: OECD

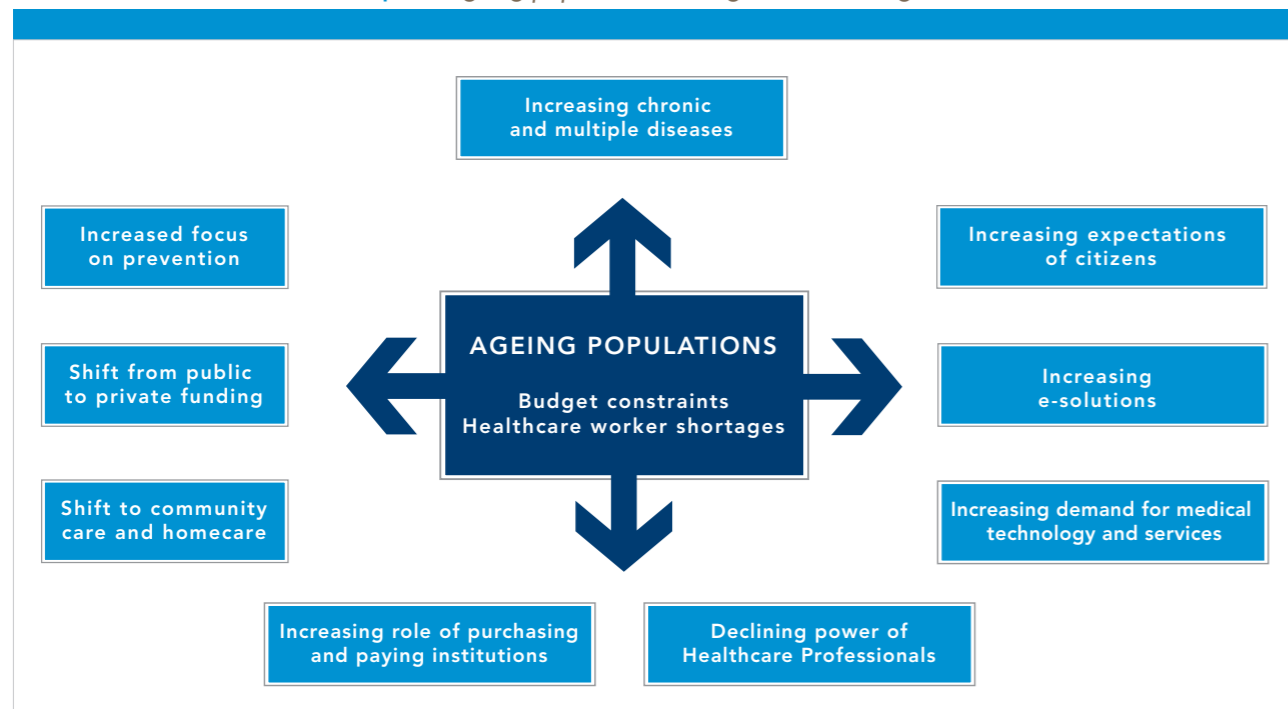
<sup>2</sup> Testori Coggi, P., 2010. Health Trends and Challenges in the European Union. Connaissance & Vie. Antwerp 23 November 2010.

The twin problems of increased demand and personnel shortages require a solution. Under the current model of healthcare, having millions more elderly people leads to millions more hospital appointments, more days in hospital, more interventions, more medicines and more medical devices.

Other trends, such as the increase in chronic diseases and rising expectations of citizens, put even more pressure on already-squeezed health budgets.

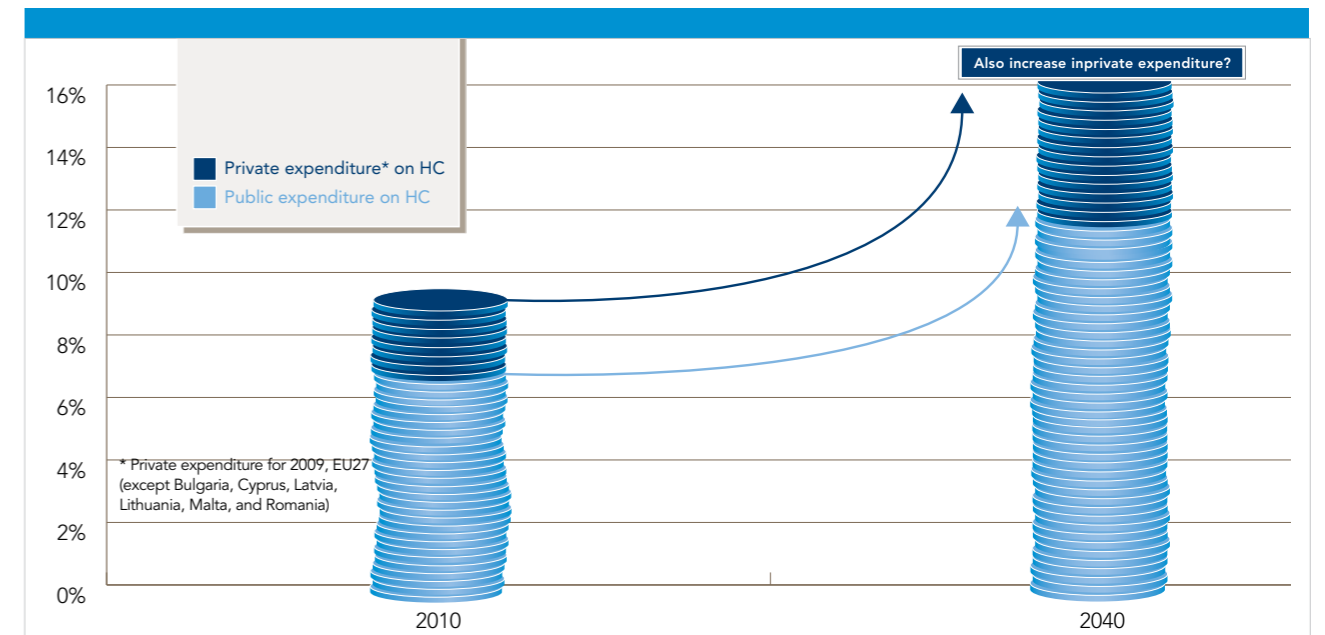
Shifting more activity away from hospital-based care towards community care will help make better use of limited resources. The value of technologies that facilitate this change, while preserving a high quality of care, must be recognised as being a central part of the fundamental changes that are required. Programs, systems and therapies that support prevention of disease are also crucial if we are serious about keeping people healthier for longer.

Graph 3: Ageing populations driving need for change in healthcare



The share of GDP spent on health (including private expenditure) could double in the coming decades if we fail to change course. Governments may turn to citizens to subsidise the shortfall via co-payments or top-up fees leading to reduced societal solidarity.

Graph 4: Public and private healthcare as % of GDP in EU27

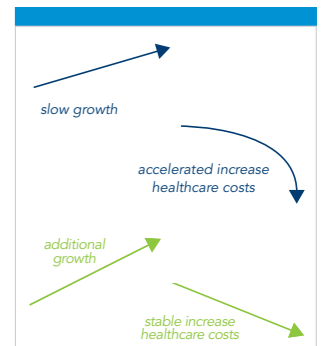


Source: European Commission, EPC; OECD, Eucomed calculations

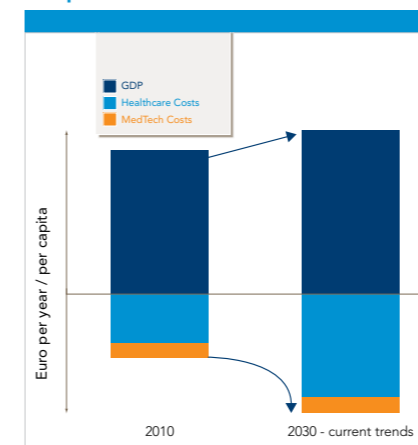
## Changing course

Less than 5% of healthcare spending goes on medical technologies, whereas spending on medical care delivery - including hospital staff and internal processes - accounts for 70%<sup>3</sup>. Plotting a smarter course for healthcare delivery will mean radical changes and increasing investment in innovations proven to improve the productivity and efficiency of the healthcare system.

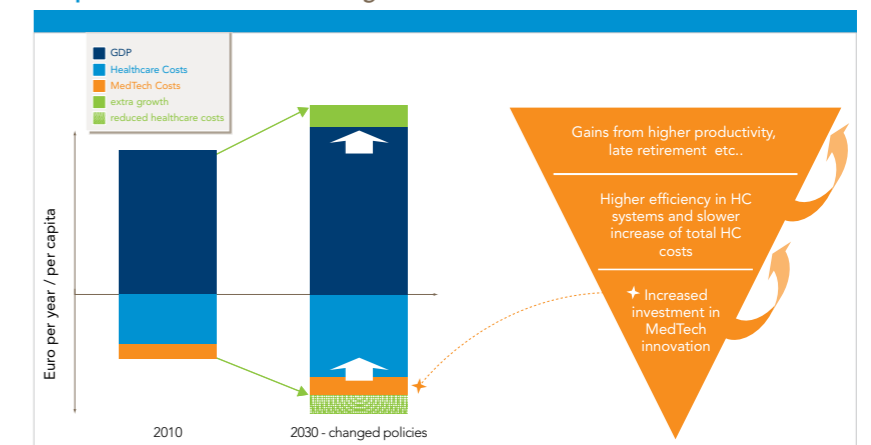
The right technologies can improve healthcare efficiency, reducing labour shortages, containing costs, and give citizens more healthy years in which to be economically active.



Graph 5: Current trends



Graph 6: Benefits of embracing innovation



<sup>3</sup> MedTap, the Value Group, 2004. *The Value of Investment in Health Care: Better Care, Better Lives*

# What is medical technology anyway?

Medical technology is used to prevent, diagnose, monitor or treat every disease or condition that affects us. Everyday examples include drug-eluting stents, MRI scanners, pacemakers, blood glucose testing kits, wound and incontinence management, and minimally-invasive surgical technology. It is the technology around us that maintains our health. To be clear, medical technology does not include medicines, biologics or vaccines.

Innovative technologies are improving the quality of healthcare delivery and patient outcomes through earlier diagnosis, less invasive treatment options and reductions in hospital stays and rehabilitation times.

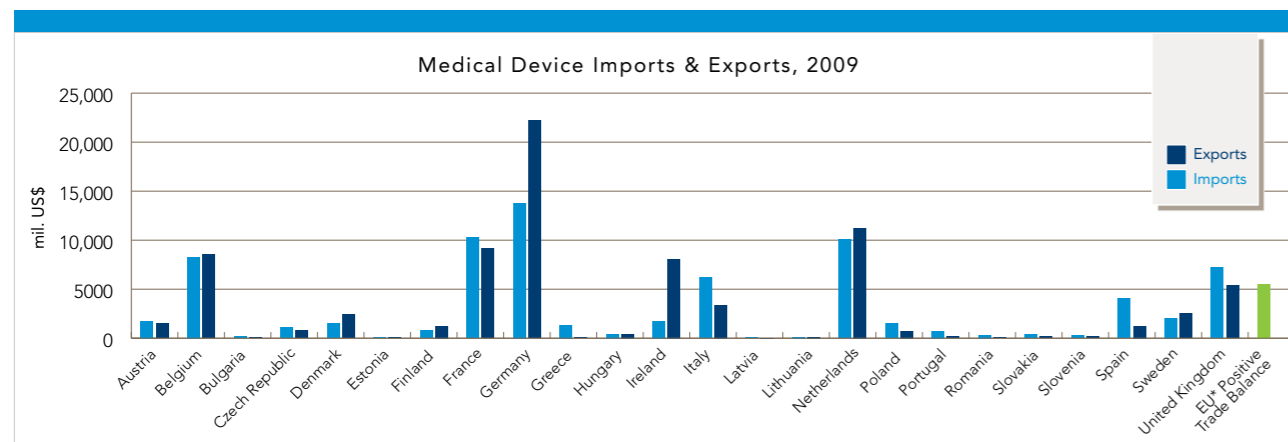
Innovation is the lifeblood of our sector. As a research-based industry, we are leveraging advances in computers, communications, and genomics to deliver better outcomes at lower costs<sup>4</sup>.

## MEET EUROPE'S MEDICAL TECHNOLOGY INDUSTRY

Europe is home to some of the biggest global names in medical technology, accounting for 30% of global sales (in 2009). In addition, we have a burgeoning ecosystem of innovative small businesses producing both niche products and the innovations of tomorrow for local and global markets. 500,000 people are employed by 22,500 medical technology companies – 80% of which are SMEs. Our sector files one new European patent every 38 minutes.

Eucomed's members provide high-end jobs in Europe by re-investing in R&D and employing thousands of people in their advanced manufacturing facilities. Our economic impact can be seen in the sector's positive trade balance of more than \$5 billion.

Graph 7: Europe's Medical Device Trade Balance



\* EU 27 (except Malta, Cyprus, and Luxembourg)

Source: ESPICOM

<sup>4</sup>Eucomed, 2011. *The Medical Technology Industry in Europe*.

# New models

It's often said that prevention is better than cure. Yet our health services have traditionally been designed to focus on caring for sick patients, often devoting resources to the difficult task of undoing damage caused by a heart attack or diabetes.

If we are serious about rethinking our health system we need to steer our funding towards preventative, early intervention and less-invasive treatment models. We must direct our creative energies towards innovation in this area. Remember: by the time the first signs of ill-health are obvious, the scope for intervention may be severely limited.

From a public policy perspective, getting more "bang for your buck" means more than finding the cheapest solution to today's ailment – it means reducing demand for cost-intensive services, satisfying demand more efficiently, helping carers care and giving people more time to be healthy and productive. Health technologies can help us intervene less often and, when we must intervene, to do so in a way that soaks up less costs overall.



## CASE STUDY: Telemedicine - saving lives and money

Remote monitoring of implantable cardiac devices could help save Europeans billions of euros, according to research which looked at remote care applications for chronic heart disease.

Regular monitoring can help protect the patient from entering acute heart failure, leading to emergency admission to hospital. Traditionally, this required frequent visits to a doctor's office or an outpatient clinic. Now, thanks to our innovation, the patient can be monitored in their own home. This can be done by phone or by using information technology to transfer data collected via external monitors or from the patient's cardiovascular implant.

Analysis of 21 randomised-controlled trials comparing traditional management of heart failure with remote monitoring over a one year period found that 42% of patients in the first group were admitted to hospital compared with 29.5% in the second group.

Looking at the costs, it was found that over a one year period, a patient in the remote monitoring group saves an average of €450, with this figure rising as high as €1,000 in some countries.

The researchers concluded that the main barrier to widespread adoption of this more effective and efficient care option is the lack of appropriate reimbursement systems to cover the costs.

**Eucomed has submitted remote monitoring of implantable cardiac devices as one of four proposals to the Active and Healthy Ageing Innovation Partnership under the European Commission's Innovation Union Strategy.**

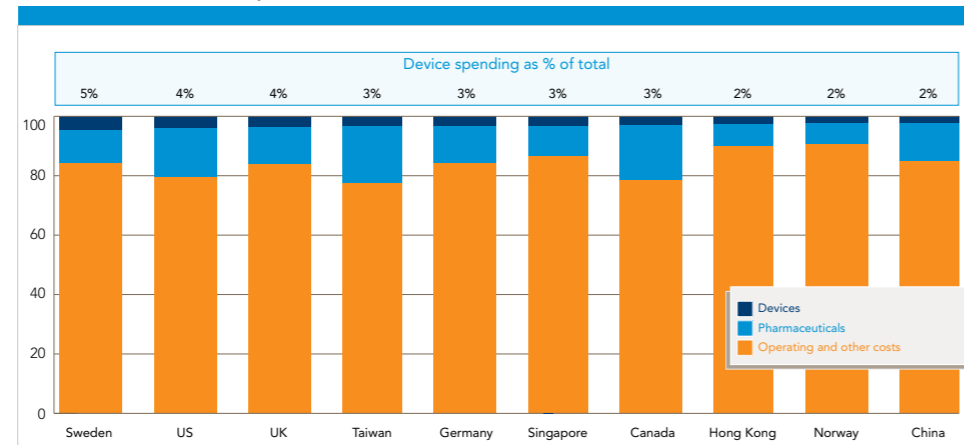
# Incentivising change

“ 70% of health spending is consumed by personnel and hospital organisation costs. Compare that with medical technology which accounts for less than 5%. ”

One common knee-jerk reaction when health budgets are squeezed is to avoid the tough decisions on staff and resource cuts and instead seek to cut back on medical technologies. This is short-sighted. 70% of health spending is consumed by personnel and hospital organisation costs. Compare that with medical technology which accounts for less than 5%. It would be wiser to spend on the right technologies that bring better outcomes and allow smart resource reallocation through efficient hospital reorganisation.

Medical devices are enabling technologies: they are our best opportunity to improve efficiency, effectiveness and productivity, putting healthcare on a sustainable footing for the future. In our factories, our schools, our offices and in our own homes we all invest in technology. Why? Because technology and innovations help us do more things more efficiently and at lower overall costs. Why should we abandon this wisdom when it comes to our health systems?

Graph 8: Healthcare spend by use of funds in 2008



Source: Espicom Health-care Intelligence. Medical Market Forecasts to 2011. Chichester, UK.

Price cuts have consequences. If profitability is down, investment in innovation suffers, which in turn reduces our scope for tackling the grand challenges posed by demographic shifts. Couple this with the new economic climate where sources of private venture capital have dried up, and an unappealing scenario of no new innovation to face mounting and impossible health challenges emerges.

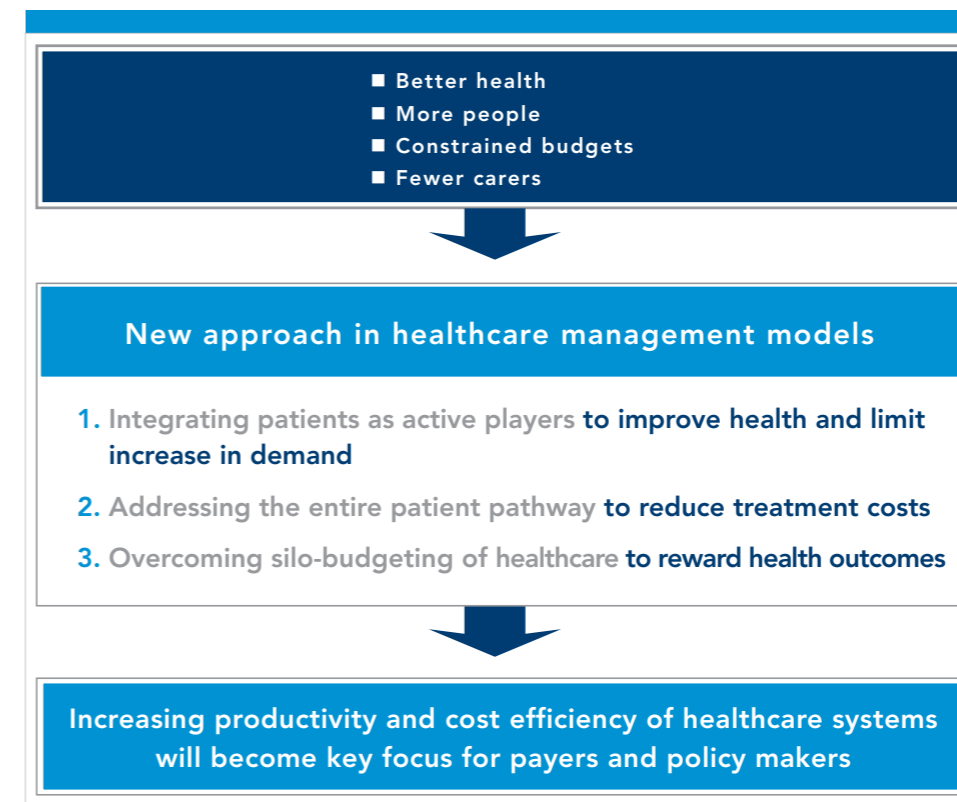
Another force which undermines the potential of medical innovation is the rigid, silo-based structure of financing and funding healthcare, and more specifically the reimbursement of technologies. In our view, this obstacle to efficiency must be removed and replaced with value-based pricing that rewards long-term health-economic outcomes. If we agree that adding more healthy life years in a cost-effective way is

our collective goal, then we must fund new technologies that can deliver.

21<sup>st</sup> century and that adding value must be at the heart of what we do. We know that more data is needed to illustrate the value of our technologies.

However, we acknowledge that our innovations should reflect the needs of the

Graph 9: Healthcare management models need to change



## Fact check

### is medical technology driving up rise in healthcare costs?

Thanks to advances in medical science, we can now expect to live longer but also healthier than ever before. This achievement has not come without cost, but on a fundamental level it is agreed that there is no going back. Since 1948, when the Universal Declaration of Human Rights established healthcare as a right, patient expectations have grown in line with population growth.

Running a modern healthcare system requires resources, but it would be a mistake to think that medical devices are the main driver of costs. In fact, innovative technologies are helping to slow the pace at which health spending is rising. There are hundreds of examples but here is a selection:

- Between 1980 and 2000, medical technology reduced hospital stays by 56% and dramatically cut costs<sup>5</sup>;
- Technology to control blood glucose levels reduces diabetes-related complications, such as blindness, by up to 76%, and nerve disease by up to 69%<sup>6</sup>;
- Inserting drug-eluting stents reduces the requirement for repeat revascularisation procedures and incurs lower average costs for follow-up<sup>7</sup>.
- Hospital stays<sup>8</sup> for minimally-invasive treatment of aneurysms are nearly three days shorter than those for craniotomy and surgical clipping (4.5 days versus 7.4 days);

“ It would be a mistake to think that medical devices are the main driver of costs. ”

### CASE STUDY: Innovations save Germany €22bn

“ We must not look at health expenses as a cost factor only, but we need an overall approach. ”

This is the view of Ernst Burgbacher, Parliamentary Secretary of State in the German Federal Ministry of Economics, when presenting a study which highlights the potential to save billions by investing in health technology.

The economic report, “*Innovation impulsion of the healthcare industry*”, shows that increasing health spending by €101 billion between 2002 and 2008 was more than compensated for by a gross added value of €123 billion over the same period - a positive

balance for the economy as a whole, according to the government’s analysis.

The study shows that investing in medical innovation resulted in a decrease in lost working years, thus preserving productivity. Such is the belief that embracing cutting-edge technologies can have a positive effect on the economy that Germany’s Federal Government is commissioning further work to highlight obstacles to innovation. Officials are looking at the creation of a dedicated innovation pool within the statutory health insurance system as part of its efforts to get the most out of technology.

<sup>5</sup> MedTap, the Value Group, 2004. *The Value of Investment in Health Care: Better Care, Better Lives*

<sup>6</sup> American Diabetes Association 2003 pp917-932; *Diabetes Care*, V26, #3

<sup>7</sup> Bakhai A, Stone GQ, Mahoney E. Et al. 2006 Cost effectiveness of paclitaxel-eluting stents for patients undergoing percutaneous coronary revascularization: results from the TAXU-IV trial. *J Am Coll Cardiol.* 48(2), pp253-61

<sup>8</sup> Higashina, R. Treatment of unruptured intracranial aneurysms: a nationwide assessment of effectiveness. *AJNR.* 2007;28:146-151

## Value

### a common goal

For too long, stakeholders in healthcare have pulled in opposite directions – even though we all want a better, more sustainable system. If we are to deal with today’s challenges, we all must make difficult – but necessary – changes, and begin to pull in the same direction.

People deserve to be healthy, active and productive for their entire life. We need to reduce the demand for human resource-intensive health services at a time of healthcare worker shortages. One answer to this challenge is to see technology as an essential part of the solution. It is in the interests of all stakeholders to support technologies and innovations which improve the health of patients, economic productivity and efficiency of healthcare systems.

The medical devices industry knows the game is changing. The old model of maximising volume and prices has run its course. The new game places **value over volume**.

We accept the need for a shift in mind-set right across the industry and we know this will not be painless. We know too that change for other stakeholders is not easy either – but we must embrace these challenges.

“ We accept the need for a shift in mind-set right across the industry and we know this will not be painless. ”



# Industry ambitions

*moving to a collaborative model*

- 1 Build stakeholder networks to collectively establish the value of medical technology and innovation
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# We all need to change

**TO SUCCEED, WE NEED TO WORK TOGETHER WITH ALL STAKEHOLDERS.**

Together we need

- to commit to bold reforms;
- to abandon old fixed positions where evidence suggests a radical change is required.

**IF ALL STAKEHOLDERS PULL TOGETHER, THE FUTURE OF EUROPE'S HEALTHCARE SYSTEM CAN BE IMPROVED FOR EVERYONE.**

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Tel. : +32 (0)2 772 22 12 ■ Fax : +32 (0)2 771 39 09  
info@eucomed.org ■ www.eucomed.org