



Canon

HEALTHCARE **VISION**

ISSUE 1

Written in co-operation with the Economist Intelligence Unit

EMPOWERING PATIENTS

Encouraging patients to take
control of their own health

SHARING AND CARING

How electronic health record
systems are improving healthcare

ALL CHANGE FOR HEALTHCARE

How innovative providers are staying competitive
in today's changing landscapes

Canon Inc
canon.com

Canon Europe
canon-europe.com

English Edition
© Canon Europa N.V.,
2012

Canon Europe Ltd
3 The Square
Stockley Park
Uxbridge
Middlesex
UB11 1ET
United Kingdom

Economist Intelligence Unit

The
Economist

Canon

Contents

Cover Stories

04 All change for healthcare

How innovative providers are staying competitive in today's changing landscapes

08 Empowering patients

Encouraging patients to take control of their own health

16 Sharing and caring

How electronic health record systems are improving healthcare

Featured

03 Flash poll results

12 Problems shared

14 The innovation imperative

20 Active ageing

23 Why your office is the new health frontier

24 Ten trends in healthcare

Final word

26 The long view on health

HEALTHCARE VISION

Healthcare Vision is a Canon magazine commissioned from the Economist Intelligence Unit.

It seeks to examine how healthcare systems in Europe are managing change, from demographic shift to data systems and patient involvement in care. All articles, except where indicated otherwise, were written by the Economist Intelligence Unit, based on interviews, desk research and a survey of more than 400 European healthcare professionals in the United Kingdom, France, Germany, Spain, Italy, the Netherlands, Denmark, Austria, Russia and Sweden. Our thanks are due to the interviewees and survey participants for their time and insight.

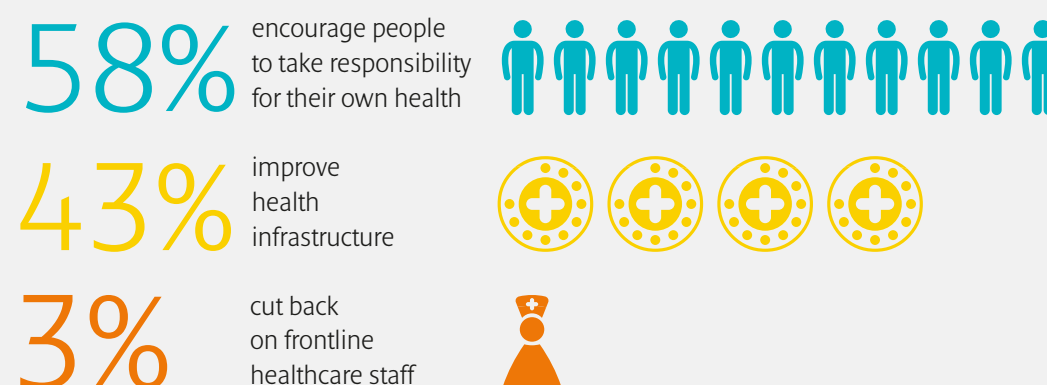
The Economist Intelligence Unit bears full responsibility for the content of its articles, and the findings expressed do not necessarily reflect the views of Canon.

MANAGING CHANGE IN HEALTHCARE

Who should be responsible for making sure citizens stay healthy?



How can healthcare policymakers improve citizens' health while controlling costs?



What are the barriers to improving your country's healthcare system?



Infographics depict the results of a survey of 405 European healthcare professionals conducted by the Economist Intelligence Unit in June 2012. Percentages may not add up to 100% as respondents were allowed to select more than one option.

Foreword

Healthcare organisations are under constant pressure to improve the quality of care; but this challenge is becoming increasingly difficult to achieve. Like businesses the world over, healthcare organisations are facing a future with shrinking budgets. IT departments must operate and integrate more systems than ever before and manage an increasing amount of patient data to ensure their organisations comply with stricter regulations concerning patient confidentiality.

eHealth, including the digitisation of patient records, has often been championed as a solution to these problems. Showing a significant commitment to technology, the European Commission is investing up to 100 million euros a year on electronic processes and communication research, with aims for these types of solutions to become widespread by 2020.

At Canon, we strongly believe that technology has a key role to play in making organisations more patient-centric and improving the quality of care. We have been working closely with healthcare organisations for over 70 years to develop innovative technological solutions to meet different needs, from better document management to dedicated eye care and digital radiography solutions.

We commissioned the Economist Intelligence Unit to develop Healthcare Vision, which brings together the views and opinions of the global healthcare community and explores the principle challenges facing the industry today. The Economist Intelligence Unit spoke with global experts and asked the industry as a whole, through a survey of 400 healthcare professionals across Europe, what policies and strategies they believe can improve citizens' health and overcome the main challenges they face.

I sincerely hope that you find the insights offered of great interest and value to your organisation.

Yoshiyuki Masuko, Senior Director, Canon Medical Imaging Group



All change for healthcare

Anyone working in a healthcare system today knows that change is one of the only constants

“Organisational change only occurs when the individual is willing and able to make the changes required in order to achieve system-wide change.”

Sharon Gabrielson, Vice-Chair of the US Mayo Clinic Health System

Reforming a healthcare system is often compared with turning around an aircraft carrier: painfully slow and logistically difficult. But all over the world, policymakers are rising to the challenge and implementing sweeping reforms of their country's healthcare.

The consequences of the UK's Health and Social Care Bill, which became law in April, and the US's Patient Protection and Affordable Care Act ('Obamacare') are likely to be far-reaching. At the very least they signal changes ahead for healthcare managers.

Bupa, a UK-headquartered, global healthcare service provider, sensed the prevailing conditions early and now employs a team of change managers. Danielle Spencer, the company's Director of Organisational Development, reports that over the last ten years the healthcare sector has had to keep pace with evolving macro-economic factors such as ageing populations, economic uncertainty and technological progress. “To remain competitive, organisations need to be agile in adapting to change,” she says.

Engaging with frontline staff

But top-level rhetoric will only be effective with buy-in from individual employees or patients. According to Sharon Gabrielson, Vice-Chair of the US Mayo Clinic Health System, change occurs on two levels, organisational and individual – and it is the latter that needs to occur first. “Organisational change only occurs when the individual is willing and able to make the changes required in order to achieve system-wide change,” she says.

In 2007, Ms Gabrielson was charged with improving the patient appointment scheduling system at Mayo Clinic, through which 1.4 million patients pass annually. Identifying a number of fundamental barriers in the way of good customer service, and armed with information gleaned from focus group meetings with staff, patients and physicians, Ms Gabrielson built a case for change.

But her primary focus was in helping frontline staff to understand that the risk of not changing was greater than the risk of change itself. “This helped us move from a state of passive to active support,” she explains.

These same staff worked with technical support teams to transfer knowledge about the re-designed system to other appointment schedulers. “Frontline staff drove the process and owned it,” Ms Gabrielson says. “They provided the requirements for design and processes of the future scheduling system. Their desire for change grew as they saw the potential for improvement in their workflow.”

The end result, she says, was that scheduling staff numbers were reduced by 40 full-time positions, 370 square metres of space were reallocated to other institutional use, and patients' waiting time was reduced by an average of 60 per cent.

Reflecting on change management generally, Ms Gabrielson believes that many mature organisations have become complacent: their external environment changes and they are not able to adapt quickly enough. Ms Spencer agrees.

“Like any ambitious organisation, Bupa needs to continue to evolve and adapt,” she says. “In our markets around the world, the cost of healthcare is rising year on year, yet we need to keep health insurance affordable. We need to deliver quality while responding to the external environment to keep our business competitive.”

“To remain competitive, organisations need to be agile in adapting to change.”

Danielle Spencer, Director of Organisational Development, Bupa

Clinical drivers

Of course, the need for change within a healthcare system is as likely to be driven by clinical issues as economic or logistical factors. In 2005, a headache centre at University Hospital, in Essen, Germany, was approached by an insurance company which wanted to address the high costs associated with treating patients with severe or chronic headaches. Problems included excessive diagnostic testing, referral to a number of specialists resulting in conflicting diagnoses, frequent visits to emergency departments, and hospital admissions.

At the same time, the German government had created a new reimbursement system for integrated care for chronic diseases. Sensing an opportunity, clinical teams at the hospital established an integrated headache care system, boosting its capabilities further by hiring neurologists, behavioural psychologists, physical and sports therapists, headache nurses and consultants from psychosomatic medicine, psychiatry and dentistry.

The results have been remarkable, in terms of improved treatment outcomes, patient satisfaction, patients' adherence to sport, and relaxation therapies – and in costs. Total annual costs per patient treated in integrated headache care dropped as low as €2,750 per year, whilst for other patients costs were above €4,400.

On the Flying Trapeze

Huge amounts of time and energy are spent on planning change, but many organisational change initiatives still fail to deliver to expectations. Ursula Franklin, a change management and leadership coach, explains why – and how to be a star acrobat in the arena of change.

Ursula Franklin, founder of f4 Leadership Development, a European organisation focused on the human change process, points out that around 65 per cent of all change initiatives in organisations fail to deliver on expectations, and the single biggest reason for this is people issues. “Change derails people. It takes effort to alter habits that have formed over many years and replace them with new behaviours,” she explains.

According to Ms Franklin, one of the secrets to effective change management is helping people understand why they need to change. As dramatic as it sounds, painting a picture of a near-crisis scenario can be extremely effective. “If people are going to put the effort into change, then they need to perceive the rationale as worthwhile,” she says. “They must also be absolutely clear on the vision for the future and their individual role in it. Effective communication with employees at every level in the organisation is critical to successful change.”

One reason change is so difficult to manage is that even when it is positive, it involves a loss for someone.

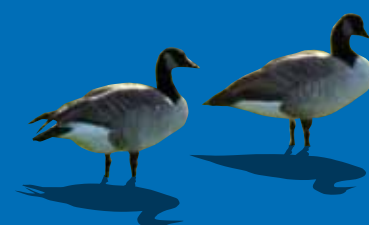
Imagine, Ms Franklin says, that you have just been promoted to your first management role, and how that feels: “You’ve desperately wanted it, you’re finally promoted, but when you enter a room the people who used to be your team-mates stop talking. Also, you used to be regarded as the expert in your field but now you’re the new kid on the block.”

If that is a positive change, imagine the effects of a perceived negative change. The emotions people go through during change can mirror a grieving process, Ms Franklin says. A person may experience a sequence of events: denial, anger, bargaining, depression and finally acceptance. Effective change management requires managers to anticipate potential losses for each individual affected by the change. They need to think about the potential impact on, for example, job content, work-relationships, autonomy, authority, status, job satisfaction, incentives and career prospects.

“When you implement a change, you need to get involved at an individual level to anticipate, acknowledge and then help people deal with these losses,” Ms Franklin adds.

When a change is announced in an organisation, people are desperate for communication to find out how their personal situation will be altered. “Lack of information leads to speculation, and if uncertainty exists, there is an inevitable dip in productivity despite the typical ‘business as usual’ instruction from the top,” Ms Franklin explains. During this period of uncertainty, managers must support their people, and then, as the road ahead becomes clearer, provide inspirational leadership to embed the new behaviours in the organisation for successful change.

Ms Franklin visualises the change as an individual going through a flying trapeze act. The person undergoing the change is the acrobat. “You let go of one trapeze and fly through the air in an ‘oh no!’ moment before you grasp the next trapeze, when you are safe again,” she says. “The clearer the problem is in terms of the rationale for the ending, and the clearer the vision of the future, then the faster people can move more effectively through the period of transition and deliver successful organisational change.”



Empowering patients

When it comes to the relationship between healthcare systems and citizens, the hardest thing is letting go. That has to change



“All industrialised nations currently run healthcare systems focused on disease management. A radical change to focus on health maintenance is imperative.”

The idea that patients should be empowered to take control of their own conditions – improving their own health as well as helping to take pressure off healthcare systems – is being actively pursued around the world.

Healthcare professionals themselves are keen on the idea. According to a survey conducted by the Economist Intelligence Unit in June 2012, nearly 60 per cent of European healthcare professionals believe policymakers should encourage citizens to take more responsibility for their own health.

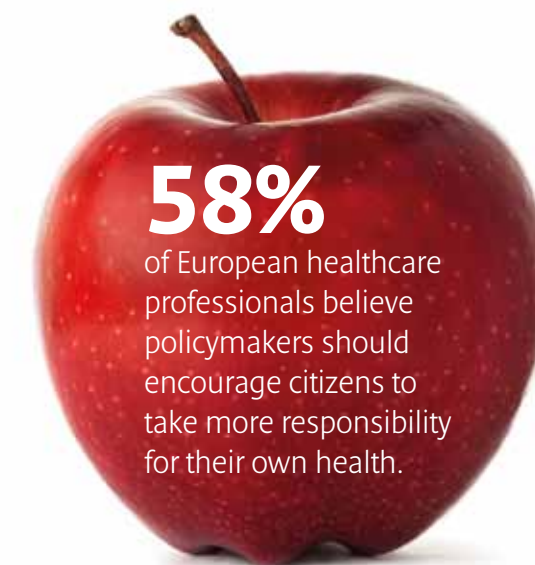
Easier said than done

Despite this will, patient empowerment has not always proved easy to achieve, at least on a wide scale. The European Union is attempting to address that problem by funding the European Patients Forum, which represents 150 million people with chronic conditions across the continent. The forum aims to provide comprehensive information – not only about medication and therapy, but also self-management, quality of life, social and peer support, and reimbursement options. The initiative is required not least because without it health services are at risk of imploding under the sheer burden of demand.

Responsibility is certainly needed. An increasing number of Europeans are living longer, with one or more chronic diseases. One-fifth of the population of Europe will be older than 65 within the next decade. There is a need to keep more people fit and working in later life, to pay for those unable to do so.

“Healthcare costs can no longer be covered by insurance or taxes,” says Wolfram-Arnim Candidus, President of the Deutsche Gesellschaft für Versicherte und Patienten (DGVP), a thriving patient group. “Patients must be educated from childhood that they are responsible for the maintenance of their own bodies, and offered incentives to maintain or restore health. Unfortunately, all industrialised nations currently run healthcare systems focused on disease management. A radical change to focus on health maintenance is imperative.”

In America, the National Health Council (NHC), a powerful patients’ advocacy agency, is campaigning for better health education, as well as individualised care plans, greater patient support in making treatment decisions and incentive payments to organisations which try to co-ordinate care. “Patients are much more engaged in their own healthcare when they have more information, says Myrl Weinberg, NHC President. “There is plenty of evidence that can be given electronically, but at the same time it is not helpful to tell them their health problems are all their fault.”



58%

of European healthcare professionals believe policymakers should encourage citizens to take more responsibility for their own health.

Jo Groves, the CEO of the International Alliance of Patient Organisations, which operates in 60 countries, insists that education about the link between lifestyle, behaviour and disease has to be the answer to truly empowering patients to manage their own health. “Schools are a massive gap for us,” she says. “Little or nothing is taught in any education system about the importance of diet and exercise, or where non-communicable diseases such as diabetes, heart disease and cancer actually come from.”

Preventive care

But how much information do you need in order to make a difference? A plethora of authoritative websites already provide advice for patients on how to reduce the severity of their symptoms. Innovative, entrepreneurial organisations such as Patients Like Me and Health Consumer Powerhouse provide comparative information on treatment options or outcome-based data, and the efficacy of different treatments.

Despite all this, citizens do not seem inclined to take more charge of their own health – possibly because healthcare systems are characterised by their curative culture. Duke University’s Global Health Institute estimates that 42 per cent of Americans will be classed as obese by 2030, driving up rates of chronic and debilitating illnesses such as type 2 diabetes, heart disease, stroke, cancer and sleep apnoea.



“ Why would you bother to eat the right food and stop drinking alcohol if you are being encouraged just to pop a pill to counter the effect of your poor lifestyle?”

In the face of the rise of ‘lifestyle’ diseases, healthcare providers will find themselves more often having to navigate the treacherous waters around personal responsibility and blame. Paul McArdle, a spokesman for the British Dietetic Association, acknowledges that up to 90 per cent of type 2 adult diabetes are weight-related. “It is perfectly feasible to prevent the symptoms of diabetes by losing weight, but not many people can achieve that level of weight control,” he says.

Many frontline health workers are sceptical that patient empowerment will have an impact on this situation. “People are having blood pressure drugs and cholesterol-lowering treatment pushed at them every week,” says one American primary care nurse in Seattle. “Why would you bother to eat the right food and stop drinking alcohol if you are being encouraged just to pop a pill to counter the effect of your poor lifestyle?”

Incentives to stay healthy

Ann Smith, a primary care nurse in the village of Cookham, west of London – one of the best-educated and most affluent communities in the UK – is equally pessimistic. “A lot of our patients want everyone else to own their health problem and make it better for them,” she says. “They are isolated, don’t have family networks any more, and they like coming to their general practitioner for advice. Of course, they could easily take control of their own blood pressure monitoring, but they don’t want the responsibility. It will take decades for current attitudes to change.” Indeed, when asked who should be most responsible to ensure citizens stay healthy, half of respondents to our poll point to national governments and 39 per cent to primary care workers.

42%

of Americans
will be classed
as obese
by 2030



However, more than 40 per cent believe that citizens should be responsible for their own health, and only 16 per cent identify citizens’ resistance to change as a barrier to improving their country’s healthcare system.

Vanessa Bourne has more experience than most of patient empowerment. As Chairman of the British Patients Association and as a Chairman of three health authorities, she has spent almost three decades travelling the world and observing different approaches. Some of the systems in place in America, she notes, lead the world in efforts to genuinely put the patient first and ensure there is consultation on every step of the treatment. But she agrees that there is still little real encouragement or motivation offered to make people take more responsibility not to get sick in the first place, and to look after minor complaints themselves. “There is much that could be done in terms of incentives to stay out of the healthcare system and to offer education about illness and nutrition, but it’s just not happening,” she says. “We need to encourage responsible use of health services, including the use of small payments up front.”

The hip pocket approach has been put to work in France and Germany, among other countries, which have introduced co-payments systems. A €25 fee for a doctor’s consultation can be claimed back, but will discourage the time-wasting patient. But getting this form of incentive right is not a straightforward matter. Research has shown that the downside of the deterrent effect may end up costing the healthcare insurer more, because an untreated trivial problem becomes an expensive serious one later.

Nonetheless, financial incentives to stay healthy may prove to be the best way forward, particularly when combined with concerted efforts to educate children about health maintenance. Without that knowledge, the lack of personal responsibility will persist.

“It’s as if I had just woken up”

Most people’s lives, says Walter Zolnacz, are out of control. They eat and drink too much, watch TV instead of moving about, and hope they will somehow escape the ill health which almost inevitably follows.

When they become ill they resentfully put themselves in the hands of healthcare systems which often lack the organisation, enterprise or funding to offer optimum treatment. As disempowered patients, people often become truculent and difficult, and are subject to all sorts of subtle forms of discrimination by equally irritated medical staff.

Mr Zolnacz, 52, who runs a large kitchen installation business in the North of England, is one of a growing minority who have demonstrated that people do not have to resign themselves to being the unquestioning recipients of healthcare directed and dictated by the medical industry.

He had already suffered three heart attacks and a heart by-pass operation. He weighed more than 120 kg and had recently been diagnosed with type 2 diabetes, but instead of resigning himself to a slow death as one of the world’s burgeoning population of more than 285 million overweight diabetics, he spent a holiday at a health farm in Spain.

Within a month, the diet and exercise treatment prescribed meant he was able to give up the ten different medications he previously needed to control his soaring blood sugar and blood pressure rates. He had lost more than 18 kg. In the intervening six months, he took up swimming and yoga and got two puppies. Walking the dogs every day led to a steady continuation in weight loss.

“It’s as if I had just woken up. I have so much more energy I can’t believe it,” he says. “I monitor my blood pressure and blood sugar at home and only discuss it with the doctor about every three weeks. I am determined to keep it up. If every sick or unfit person could just have one day of being fit, energetic and healthy, they would know what that gain feels like and have something to aim for.”



Problems shared

Reaching out more to customers will make it easier, not harder, for healthcare organisations to manage their reputations

Patient Opinion aims to give policymakers a way to become more effective, by providing them with a chance to respond to issues quickly.

Things can go wrong in healthcare. The same is true for any system – so why does healthcare see itself as a special case when it comes to reputation management? The fact that lives are at stake can equally apply to a range of industries, but healthcare has a reputation as one of the sectors most likely to pull up the barricades in response to a crisis.

That culture, however, is being forced to change. Traditional complaints mechanisms are becoming increasingly irrelevant in the brave new world of faster, louder social media. According to a recent Pew Internet survey, 80 per cent of Internet users have searched for health information online, making it one of the most searched topics. But fewer than half of respondents to that survey said the information they found was of any help. Can healthcare organisations take advantage of this to manage their reputation, devolving responsibility for answering complaints to frontline staff and empowering them to make the changes demanded by the public?

Raised stakes

When any system undergoes reform, its practitioners can be exposed to risks, including to their reputation. The seismic changes now taking place in healthcare systems, aimed at meeting the twin challenges of an ageing population and tightening public finances, have raised the stakes. A 2009 Economist Intelligence Unit survey of medical professionals in the UK and Germany found that 33 per cent of the former and 60 per cent of the latter thought that healthcare in their countries had grown less efficient in recent years, compared with 20 per cent and 10 per cent respectively who thought it had improved.

In a 2009 guide to reputation management, David Stout, the Deputy Chief Executive of the NHS Confederation (which represents organisations operating under the umbrella of the UK's National Health Service), said: "The public and healthcare workers alike are often sceptical about the value of healthcare reforms, and worried about the prospect of closing hospital departments. If you lose your local staff and public, then you have no chance of implementing changes." Traditionally, healthcare systems have at times seemed to take an overly defensive stance in the face of risks to their reputation. But signs are that a new way of thinking is coming into play, in which the experience of patients within healthcare systems is seen as crucial to reputation management.

British hospitals, for example, are considering implementing a 'friends and family test', asking patients whether they would recommend the hospital as a place to receive treatment. The US is well ahead of Europe in this regard, meanwhile – the medical sector has had to evolve to address a small explosion in the number of 'rate my doctor' sites.

"The cost of having a public voice has fallen to zero, and power is transferring from big hierarchical organisations to citizens."

Dr Hodgkin, Sheffield GP

Some practitioners regard these sites as the bane of their existence. But Dr Paul Hodgkin, a Sheffield GP, saw value in making what he calls "the wisdom of patients" available to the NHS, and established an online forum, Patient Opinion, to capture their experiences. "The cost of having a public voice has fallen to zero, and power is transferring from big hierarchical organisations to citizens," he says. "But the costs for organisations have not dropped as they still have to listen. It's difficult for them to respond to conversations happening across social networks." And it is likely to become even harder – according to the European Commission, the whole of the EU population is expected to have access to some kind of commercially viable broadband service by 2013.

Ongoing financial pressure on healthcare systems caused by the eurozone crisis is not helping, Dr Hodgkin says: "There is likely to be extreme tension between the public voicing their dissatisfaction with disintegrating public services and the ability of big hierarchical organisations to respond to that."

Competing on quality

Patient Opinion aims to give policymakers a way to become more effective, by providing them with a chance to respond to issues quickly. Encouragingly, 250 healthcare organisations around the UK have now paid to tap into the insights it has gathered from 40,000 opinions, and help to manage their reputations accordingly. "It's about using transparency to drive staff towards responding and making service improvements," Dr Hodgkin explains. "People don't want a letter from a heartless bureaucrat –

they want to know something has happened as a result of their comments."

The model has been adopted in France, Italy, Spain and other regions. It has not always worked – the Spanish site, for example, was abandoned in 2011 when too few hospitals signed up to make it financially viable. "We managed to get the patient feedback but not the business model," says Dr Oriol Ramis, a Spanish consultant who works with community-based groups. "Hospitals were not prepared to pay. They found it very difficult to get the funds and felt this kind of feedback was better if it was in their control."

But it can also be seen that patients are reluctant to be coerced into making their voices heard. The Netherlands has a well-established infrastructure of formal patient councils and focus groups to gather patient experience, backed by a healthy social media network. All well and good – but it is becoming increasingly apparent that Dutch patients are weary of being asked for their stories and opinions.

"Patients are saying 'we are research tired'," says Sam Adams, an assistant professor at Erasmus University Rotterdam. "They do not have the energy to join another group or tell their story. Every time we ask patients to do this, it demands time and effort from an already vulnerable group of people who are telling us that they just want to sit back and get better."

Yet there are encouraging signs of patients engaging with health practitioners across Europe, rather than just being asked for their feedback. Andrew Spong, a social business developer focusing on health communication, launched a self-edited directory of European professionals, which includes their specialty, location, twitter handle, and blog or website. The directory now has over 70 professionals from all across Europe. Mr Spong is also the man behind the healthcare social media Europe Tweetchat sessions (using the hashtag #hcsmeu), which every week get patients and practitioners talking about current healthcare challenges in Europe.

Dr Hodgkin believes that the era of the patient voice as an influencer of services is here. Knowing how to listen and respond to that voice will be crucial for healthcare providers to manage their performance and improve patient care.

According to a recent Pew Internet survey, 80 per cent of Internet users have searched for health information online, making it one of the most searched topics. But fewer than half of respondents to that survey said the information they found was of any help.

THE INNOVATION IMPERATIVE

The story of healthcare is a story of innovation. So why is it so hard to innovate within healthcare systems themselves?

As asked to name the most important innovations in healthcare, people would more often than not opt for technological answers – penicillin, for example, or X-rays, or genomics. It's true that these and other such breakthroughs have saved millions of lives, but often overlooked are the innovations in health services that have allowed them to be implemented. As Miles Ayling, Director of Innovation and Service Improvement at the UK Department of Health, puts it: "People think about innovation as the very latest genomic drug or robotic surgery, but if only we did more of what we already know works then things would be far better."

Every crisis needs a hero, and in health systems right now the big hope is pinned on less-lauded kinds of innovation. In national and Europe-wide forums, academics, industry and healthcare managers are joining forces to talk about how innovation gives them the opportunity not just to do more for less, but to do something radically different that will make health systems sustainable, produce better health outcomes and stimulate economic growth.

"People think about innovation as the very latest genomic drug or robotic surgery, but if only we did more of what we already know works then things would be far better."

Miles Ayling, Director of Innovation and Service Improvement at the UK Department of Health

Out of the way, leaders

Health systems are notoriously bad at nurturing innovation. Shortcomings in funding are identified as a concern by a poll of European healthcare professionals conducted by the Economist Intelligence Unit in June 2012, in which 44 per cent of respondents blame the lack of money as the biggest barrier to improving their country's healthcare system. A report published by the European Commission in 2011, "Innovation in Healthcare: from Research to Market", found that Europe is lagging behind the US in terms of patient groups and venture philanthropy, which play a significant role in financing research and development.

Ineffective leadership was also cited as a barrier by 38 per cent of respondents. Take the development of new anticoagulants prescribed for people who have had a stroke. The old drug, warfarin, has been around for decades but is difficult to administer; troublesome side-effects often lead to hospitalisation among users. The newer drugs are much simpler to administer, have fewer side-effects and could be managed in the community. But in local health authorities, there is no incentive for hospitals to redesign the service and lose an income stream.

The system does not know how to respond, says Stephen Whitehead, Chief Executive of the Association of the British Pharmaceutical Industry. "Spreading innovation is not just a matter of new drugs and technologies getting the green light from regulators more quickly, but also one of aligning the incentives and tackling vested interests," he explains.

Much of healthcare spending is still directed towards treating diseases after they occur rather than trying to prevent them from occurring. According to the Organisation for Economic Co-operation and Development (OECD), only 3 per cent of current health expenditure in Europe is invested in prevention and public health programmes. Focusing more on prevention will be key for healthcare systems to remain cost-effective.

Industry groups recognise that healthcare systems that are better at adapting and adopting innovations will be better for business in the long term.

"Spreading innovation is not just a matter of new drugs and technologies getting the green light from regulators more quickly, but also one of aligning the incentives and tackling vested interests."

Stephen Whitehead, Chief Executive of the Association of the British Pharmaceutical Industry

Joined-up thinking

European countries are now embarking on a strategy to support faster adoption of innovation. The German government has been tackling chronic lifestyle diseases by subsidising more integrated care. This has created 6,000 integrated care contracts in the country and significantly improved patient outcomes, while cutting costs. In France, new regional healthcare arrangements aim to create a highly co-ordinated healthcare system, with agencies responsible at the regional level for almost everything relating to health.

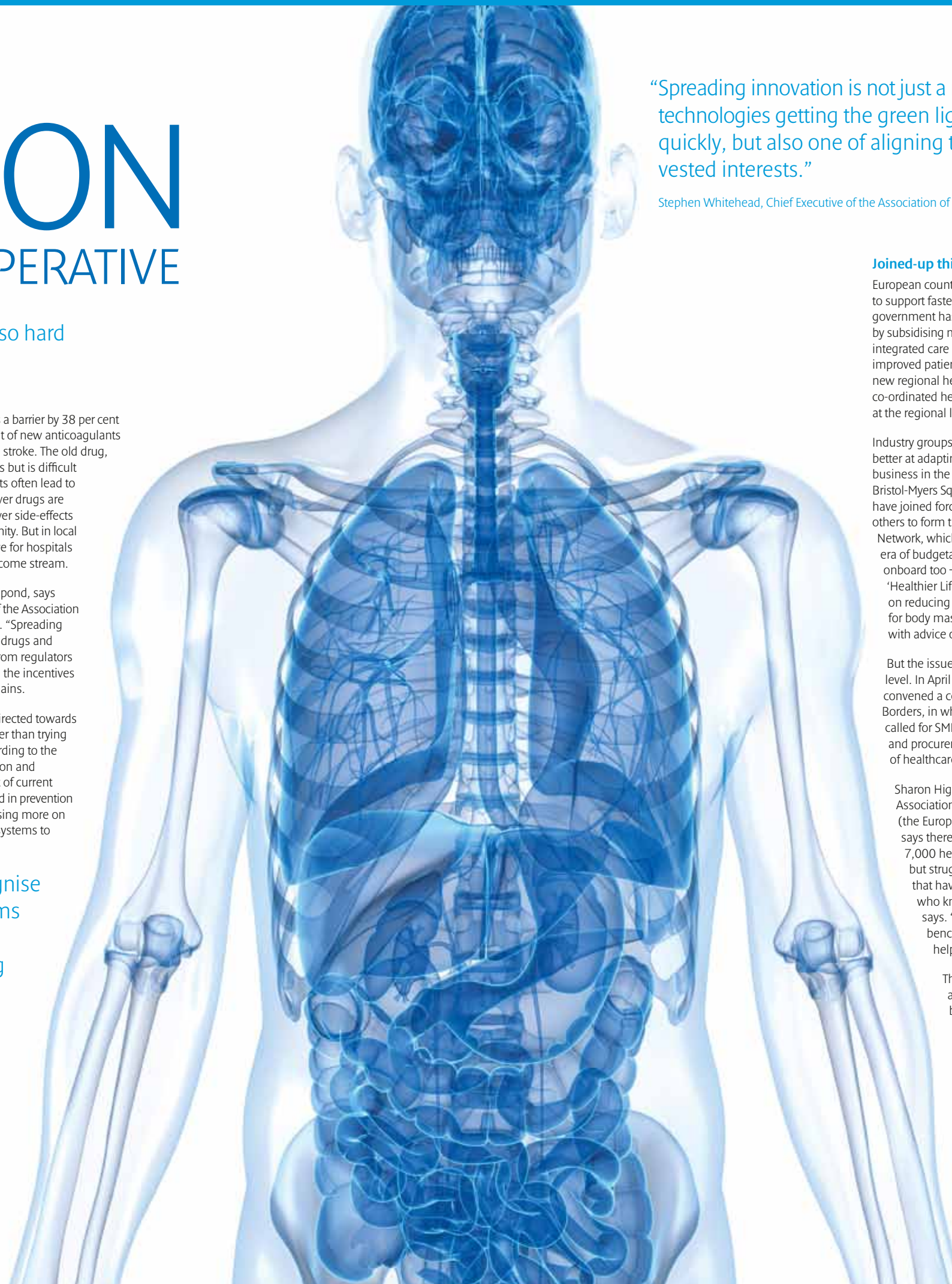
Industry groups recognise that healthcare systems that are better at adapting and adopting innovations will be better for business in the long term. Pharmaceutical firms AstraZeneca, Bristol-Myers Squibb, GlaxoSmithKline and Johnson & Johnson have joined forces with policymakers, patient groups and others to form the European Healthcare Innovation Leadership Network, which aims to drive healthcare innovation in an era of budgetary pressure. Non-healthcare firms are getting onboard too – French railway operator SNCF launched 'Healthier Life' in 2012, a new healthcare scheme focusing on reducing absenteeism. It screens workers for body mass index and provides those who need it with advice on diet and exercise.

But the issue is also being taken seriously at senior policy level. In April 2012 the European Commission (EC) convened a conference, Innovation in Healthcare without Borders, in which industry, healthcare and political leaders called for SME-friendly regulation, reimbursement policies and procurement practices that would support the spread of healthcare innovation.

Sharon Higgins, director of the Irish Medical Devices Association and Chair of the SME taskforce at Eucomed (the European medical technology industry association), says there is clear evidence that Europe's estimated 7,000 health technology SMEs are driving innovation but struggling to spread it. "These are small companies that have the relationships with individual clinicians who know what problems need to be solved," she says. "The sector is very much about bedside to bench, not bench to bedside – that is, clinicians helping SMEs, not the other way around."

The industry points to a range of frontline-led achievements, from new prostheses designed by orthopaedic surgeons, to forceps developed by obstetricians, to patient-monitoring software designed by doctors. But it complains that tough regulation coupled with complex reimbursement systems and procurement practices often inhibit wider uptake of innovation or growth of SMEs.

There is clearly a growing recognition in Europe of the need to promote innovation in healthcare, but without concerted action from policymakers, healthcare providers and private companies on a wider scale, innovating efforts to innovate will go in vain.



Sharing and caring:

How electronic health record systems are improving healthcare

YOSHIYUKI MASUKO,
Senior Director, Canon Medical Imaging Group

When patients arrive at the hospital emergency department, the time it takes for doctors to build a picture of their lifelong medical history can have a major impact on their treatment. This makes electronic health records, which can be accessed instantly from any location, a key medical tool. Over the last decade the European Union's eHealth Initiative and the EPSOS (European Patients – Smart open Services) pilot scheme have made considerable progress in making instant access a reality. The benefits of web-based data-sharing are largely agreed on: making relevant healthcare

information available whenever and wherever it is needed reduces medical errors, prevents doctors from repeating diagnostic procedures that have already been undertaken and provides life-saving documentation when a patient is unable to communicate. This is backed by the findings of a poll conducted by the Economist Intelligence Unit in June 2012, where respectively 43 per cent and 31 per cent of Austrian and German healthcare professionals think making patient data more fluid and secure is the best way to improve citizens' health while controlling costs.

As well as improving patient care, it also has the potential to improve efficiency and reduce healthcare costs. A 2009 eHealth Initiative Survey of health information exchanges in the US found that clinicians using the data-sharing system reported improved access to test results, fewer problems in finding information, and a reduction in administration time spent handling lab results, radiology reports and clerical tasks. The same survey in 2010 found that more organisations had achieved savings through reduced staff admin time.

The ultimate data-sharing objective of the EU's eHealth Initiative is for national EHR systems to support cross-border interoperability.





Crucial to the development of data-sharing systems is the technology that allows different health IT systems to co-operate and talk to each other.

“Without embracing eHealth, our health systems will simply not work tomorrow.”

Neelie Kroes, Vice-President of the European Commission for the Digital Agenda

Concerted action

European countries committed to improve data-sharing in 2004 by signing up to the eHealth Action Plan, endorsed by the European Council. It included an objective to address common challenges such as the interoperability of health information systems and electronic health records. Up until 2004 most projects in Europe had been small-scale and hospital-based, but the Action Plan showed that national governments were motivated to develop nationwide health data-sharing initiatives, and ultimately to share data across borders in Europe.

The 2010 eHealth Strategies Report summarises progress across the member states since 2004 and offers some promising examples of data-sharing and electronic health record (EHR) initiatives. In Scotland, a central Emergency Care Record (ECR) was set up in 2007 and is automatically updated twice a day by GP systems throughout the country. It covers nearly all of Scotland's five million citizens and totals 200,000 views per month.

The Czech Republic has a national web-based EHR system called IZIP63, which provides information on lab results, radiology reports and emergency care, among other data. Twenty per cent of the population are currently included in the scheme.

Sweden's National Patient Summary (NPÖ) was launched in 2008 and contains personal information, emergency contact details and information on allergies, current diagnostic test results and a list of dispensed drugs.

The ultimate data-sharing objective of the EU's eHealth initiative is for national EHR systems to support cross-border interoperability. The aim is to improve the safety and quality of patient care for citizens travelling or working within Europe, by making it possible for an EU citizen's health history to be accessed by any relevant medical centre in Europe. Twenty three member states are currently involved in EPSOS, a large-scale project to design, build and evaluate a data-sharing infrastructure.

In its first phase, EPSOS is testing the use of a 'Patient Summary,' which gives access to important medical data for patient treatment. As well as improving patient care it aims to boost the competitiveness of European health solutions globally and strengthen the internal European health market. As Neelie Kroes, Vice-President of the European Commission for the Digital Agenda, stressed earlier this year, “without embracing eHealth, our health systems will simply not work tomorrow.”

Crucial to the development of data-sharing systems is the technology that allows different health IT systems to co-operate and talk to each other. In its most comprehensive form, the lifelong medical record is a library of different bits of data from many different systems and vendors, such as an X-ray from a radiology department at a hospital, a referral letter from a GP or a dental scan from a dentist.

Improving shared information

Integrating the Healthcare Enterprise (IHE) is an international initiative by healthcare professionals and IT vendors to improve the way that healthcare computer systems share information. IHE promotes the co-ordinated use of established standards such as DICOM and HL7 and is now focusing on the development of systems to share documents between multiple organisations.

IHE recently defined an architectural infrastructure for data-sharing, the Cross-Enterprise Document Sharing (XDS) integration profile. The XDS architecture lets multiple health IT systems share patient information in the form of documents, while the XDS-I integration profile enables the sharing of images and reports. XDS is based on a central registry which maintains metadata describing every published document. The registry is responsible for answering queries about documents meeting specific criteria but doesn't

actually store the documents. Instead, its metadata includes information about where to retrieve documents, which are stored by the separate health IT systems or repositories.

Several XDS-based projects are currently underway in Canada and Europe. Canon recently acquired Netherlands-based medical solutions specialist Delft Diagnostic Imaging, which specialises in XDS for sharing digital images and medical records and will be developing new Healthcare ICT solutions including XDS solutions.

Once an EHR system is in place, data-sharing technology creates opportunities for healthcare institutions to work in a more efficient way. The practise of 'shared workflow' means that clinicians and administrative staff from different sites can use medical databases and electronic health records at the same time and share their workload between geographical locations.

For example, in medical imaging, the process of getting a patient X-rayed – which involves a referral letter from a GP, records of previous scans, the examination, the X-ray images and report and possibly a second opinion – may originate from different locations, but all of these sources are saved to a central health IT system, which everyone can access.

Shared workflow platforms can be developed to include capacity management, where activities can be assigned to groups of clinicians based in different locations. For example, some teleradiology service companies use an automatic capacity management platform to share X-ray exams amongst a group of radiologists based on the urgency of the exam, its complexity, and who has time to undertake it.

Using this system speeds up reporting time and helps service-level management and monitoring ensure that quality targets are being met.

Let the patients choose

Clinicians are not the only ones to benefit from shared workflow systems. Systems that support cooperation between a greater number of locations mean patients could have greater choice over where they are treated. The XDW (cross-document workflow) profile will keep track of all stages in a clinical journey so that a referral can happen in one place, treatment and reporting in another, and follow-up treatment at still another location, while the central health IT system remains completely up-to-date.

Freedom of choice may soon extend not only to hospitals within a patient's local area or country but across Europe. Pan-European healthcare is the goal behind the European Union Directive on cross-border healthcare, which was released in 2008. Its aim is to create a framework for cross-border healthcare and remove the obstacles that patients face if they wish to travel for treatment in other EU countries.

In addition to giving patients greater choice, data-sharing and shared workflow systems make it easier for patients to access their own data. This gives the patient more control making it less difficult, for example, to get a second opinion from a separate provider if they are unhappy about a proposed treatment. It can also speed up the treatment process. Nearly three-fifths of respondents to the EIU poll think policymakers should encourage citizens to take more responsibility for their own health. In Estonia, a data-sharing system is currently used by

47 per cent of citizens and 95 per cent of doctors. Citizens can log on to the ePatient portal using an ID card and access their medical records, radiological images and appointments, request appointments and reminders, and make payments.

Giving patients access to their own records fits within a wider open-data agenda enabled by technology and driven by citizens and governments across Europe to make public services as transparent as possible. While citizens should always retain their right to opt out of medical data-sharing and define the geographical boundaries within which their data can be shared, true sharing and instant access by citizens and clinicians to patients' lifelong medical history has the potential to revolutionise the quality of healthcare and the way it is delivered.



Active ageing

Policymakers worry about how to pay for the healthcare of ageing citizens. But they should focus instead on how to keep citizens active as they age.

People are living longer, happier, healthier lives than at any time in human history. Considering the medical and societal leaps that have engineered in order to make that possible, perhaps at least a little self-congratulation would be allowed. But the language used to describe ageing societies today is incendiary: 'demographic time-bomb'; 'growing burden'.

“We are going to have to take care of twice the number of people with a falling budget, and telehealth is the way to do it.”

Mark Blatt, Global Medical Director at Intel

There is no doubt that demographic shift has created growing numbers of people who are dependent on others for care. By some measures, this is expected to create pressure on healthcare budgets. The Organisation for Economic Co-operation and Development (OECD) estimates that overall healthcare costs between 2005 and 2050 in the eurozone – one in four Europeans will be over 65 by 2030 – will rise by almost 4 per cent of GDP, long-term care costs by more than 2 per cent of GDP, and public pension costs by 3 per cent of GDP, as a result of population ageing. Meanwhile, longer life expectancy means that people are surviving long enough to develop dementia.



One in four Europeans will be over 65 by 2030

The Alzheimer's Research Trust estimates that 800,000 people in the UK now have a formal diagnosis of dementia, and the UK's Office for Budget Responsibility has predicted that looking after this group will raise the national debt to over 100 per cent of GDP by the middle of the century.

Standard & Poor's (S&P), an international credit rating agency, predicts that colossal government debt will be generated by healthcare costs associated with ageing in the G20 economies. Other predictions indicate that output in the high-growth markets of China, India, Brazil and Russia may also be stalled by demographic shift. S&P warns that many countries will have to find "ways to encourage their people to remain active members of the labour force for many more years than is the norm today," if they are to avoid financial catastrophe.

Changing perceptions

But Sarah Harper, Director of the Oxford Institute of Population Ageing and a professor of gerontology, believes that view is too simplistic. Falling birth rates and a chronic skills shortage in Europe and the West are equally to blame. She points out that even if developed countries allowed free migration, people with the required skills would not want to come. Europe is not as attractive as it used to be to the educated youth of Asia, who take the view they can have a better life in the new and vibrant cities emerging in their own region of the world.

“We just have to change people's attitudes,” she says. “We retire because we live in a society which allows us to withdraw and funds us to do so. We need to foster an environment where active healthy adults are expected to contribute by working, whatever their age.”

It is an attitude shared by Nortin Hadler, Professor of Medicine at the University of North Carolina and author of Rethinking Ageing, who argues that elderly Americans have been encouraged to take seriously their most trivial ailments, as the natural effects of ageing are pathologised, to the benefit of the medical profession. As a result, many retire from work unnecessarily. “We should actually be viewing this population ageing as a demographic miracle, not a disaster,” he says. “For the first time in human history we have a generation of people who can hit 60 and ask themselves what they want to do for the next 25 years. To me this has the potential to be a tremendous advance.”

Even if, over the next few years a society can be created where people will still be welcome in the workforce in their 80s, there still remains the problem of keeping out of what Mr Hadler calls the costly 'warehouses' of nursing homes. The number of over-85s in America is set to rise rapidly from 6 million now to at least 19 million by 2050. Most of us want to die in our own homes, but many of us will end up in institutions because there is simply not the support structure to allow anything else.

Retaining autonomy

Of course, many people simply fail to look after themselves as they get older. To address this, technology – such as self-tracking devices, telemedicine, and helper robots – is seen as being important in helping people to retain a sense of autonomy.

In a 2012 survey of doctors and executives from payer organisations conducted by the Economist Intelligence Unit for PwC, 60 per cent of respondents said they see widespread adoption of mobile health – healthcare supported by mobile technology – as inevitable in the near future.

It is envisaged that social networks will begin to emerge as a telehealth spin-off: people with similar conditions will support each other and exchange healthcare information. In time, there will be fully functioning interfaces in homes, so that elderly people can be readily connected by videoconferencing any time they want company.

However, Mark Blatt, Global Medical Director at Intel, a computing firm, warns that implementing the telehealth revolution will not necessarily be easy. Medical and nursing

workforces will need to be retrained in the technology, as well as learn how to support the patients using it. “The point is that we can't afford healthcare in the way we have been delivering it. We are going to have to take care of twice the number of people with a falling budget, and telehealth is the way to do it,” he says. “The technology is available, cheap and ubiquitous, but it requires a completely different mindset.”

Ageing populations plus tighter healthcare budgets do not necessarily add up to a bleak future. More people will remain fitter and able to keep working as they age, and technology will increasingly provide solutions to keep those in failing health in their own homes. The question will be how long it takes for older people to experience a change in mindset, and to feel a social pressure to stay at work.

“For the first time in human history we have a generation of people who can hit 60 and ask themselves what they want to do for the next 25 years. To me this has the potential to be a tremendous advance.”

Nortin Hadler, Professor of Medicine at the University of North Carolina

Doing more than keeping busy



Every morning Edward Gerjuoy, a 94-year-old emeritus professor of physics, goes to his office at the University of Pittsburgh. At the moment he is putting together the material for an undergraduate course in physics and society. The course has never previously been taught so Mr Gerjuoy is preparing the content from scratch. In between times, he is actively campaigning for the rights of dissident scientists in repressed regimes of the world, and writing valedictory obituaries of deceased colleagues for an American physics journal.

In the 1980s, when Mr Gerjuoy was approaching retirement age, universities could still force their staff to retire. So at 59 he embarked on a law degree to extend his working life.

Edward Gerjuoy, 94 year old Professor of Physics, University of Pittsburgh.

He pursued a successful career as an attorney specialising in environmental law until he was 85. By that time the rules on retirement had changed and he was able to return to his old job.

He can see and hear well, and keeps fit by climbing the stairs to his fourth floor office, leaving his young students to take the elevator. "I am lucky enough to be at the extreme end of the fitness curve for people my age and as long as I'm still capable and accomplishing something that's of some value to society, I will continue to work," he says.

It is less exceptional now for people still to be working into old age. Moreover, not only are older people staying in work, but increasing numbers are also sufficiently energetic to embark on entirely new ventures.

In the UK, a charity, the Prince's Initiative for Mature Enterprise (PRIME), is helping thousands of older people with advice on setting up a new business. One beneficiary is Valeri Bennett, 68, a former art teacher from Cornwall who found herself without an adequate pension when her marriage ended in late middle age. She was faced with the prospect of either enduring the decades ahead in miserable poverty, or doing something about it. Now with a new partner, who is 57, she has channelled her skills into Farne Designs, a fabrics and craft business. Now in its third year of trading, it is on track to turn over £25,000 and is growing steadily. "Neither of us has a pension, but in ten years time we hope to be rich," Ms Bennett says. "The business is going from strength to strength, and it is pushing me to do things I wouldn't otherwise do."

Source: The Center for Technology and Ageing of the SCAN (Senior Care Action Network) Foundation, Oakland, California.

Technologies to maintain health and independence:



Smart phones: managing dispensing and adherence using messages to provide timely reminders about what medication should be taken.



Remote patient monitors: weighing scales, glucose monitors and blood pressure monitors may stand alone to collect and report health data, or they may become part of a fully integrated system for collecting, analysing and reporting data.



Assistance technology: voice recognition software to provide monitoring and alert systems to detect and report environmental hazards or personal crises.



Remote training and supervision for care workers: use of Internet, interactive videoconferencing and satellite to provide distance learning, simulation exercises for practical tasks, and video-guided tutorials, so that more low-skilled home assistants can be trained and remotely supervised.



Disease management: use of data mining to identify high-risk patients, use of evidence-based guidelines to support and treat patients, co-ordinated outreach, feedback and response.



Brain training: to prevent or delay Alzheimer's and other forms of dementia by using computer or Internet-based thinking games and cognitive challenges, including an assessment or tracking component.



Social networking: creation of online communities to help older people communicate and share information and interests.

Why your office is the new health frontier



Employers should play a bigger role in improving society's health, writes Lise Kingo, Executive Vice-President and Chief of Staffs at Novo Nordisk.

There is a word for the capacity to deal with change and continue to develop: resilience. Simply put, it is the 'bounce-back' ability of humans and nature. Any system is subject to all kinds of pressures. Sometimes it is robust enough to withstand and recover from stress, but often it will have to adapt.

Human resilience is being put to the test. Globalisation and growth have come at a price. In our pursuit of wealth and prosperity, today more than half of the world's population live in urban environments and people have adopted a Westernised lifestyle of consumption, diet and lack of physical activity. This is putting our health under pressure. Most often we are able to bounce back from unhealthy lifestyles (smoking, over-eating, under-exercising), but increasingly, people's health is being destabilised to the extent that they develop chronic conditions such as diabetes, cardiovascular diseases and cancer. When that happens, their health will not bounce back, but remain de-stabilised.

Change starts from within. Healthy and sustainable habits at work inspire healthy and sustainable living.

Along with other organisations in healthcare, Novo Nordisk is working to address the diabetes pandemic in all parts of the world. But this is not just about what is happening elsewhere, to others. We can do a lot as an employer, and so can other companies. More than half of the world's population are working, and therefore employers play an important role in promoting health and well-being.

Good for business

The first step is to promote healthy living in the workplace. Being absent from the job (absenteeism) or underperforming at work (presenteeism) are estimated to cause productivity losses worth US\$389 billion due to cardiovascular disease, and US\$1.6 trillion due to mental health conditions.

Workplace wellness is not only good for people, it is also good for business.

This is a strong financial argument, but also a moral imperative for business to do something about the burden of chronic diseases.

Most people spend many hours every day at work. The workplace environment we offer influences how people get to work, what they eat at work, how they move around in the workplace and so on. For employers, this is a great responsibility – and also an opportunity to promote health and well-being.

NovoHealth is our global employee health programme. We have four global standards that apply to our workplaces: a smoke-free environment, access to healthy food, access to exercise, and bi-annual health checks. The programme, currently covering about 80 per cent of our global workforce of 33,000 people, has been extremely well received by our employees. It engages them in sports activities and has inspired changes in what we serve and eat at our workplaces, which also sets an example for our guests.

There are dilemmas involved in designing such a programme. Will it be perceived as interfering in people's private lives? Will local management support and encourage time spent on exercise during work hours? Will waistline measures be applied in connection with recruiting or promotion? To successfully implement such a programme, as any other change, you will need to prepare well and engage employees, as well as management, throughout the process. And you will need a strong culture of mutual trust and respect. In our case, we spent a lot of time with our employee unions, and we learnt from the good ideas brought forward by employees, such as banning bottled water and sweet soft drinks.

Inspire, don't dictate

Change starts from within. Healthy and sustainable habits at work inspire healthy and sustainable living. We must encourage integrated

solutions that have a positive impact on all dimensions of sustainable development. So how can we promote sustainable living in a broader sense? We cannot dictate how people choose to live their life, but we believe we can offer an enabling environment that inspires healthy and sustainable living.

Cycling is an obvious example of a means of transportation that is both healthy and environmentally sound. At our offices we have company bikes to take people around our campuses, and we do our best to be a bike-friendly workplace in those countries where biking is a safe way of getting to work. It may be a drop in the ocean if you look at the scale of the global sustainability challenges, and yet these are the kind of initiatives that are scalable and can get traction across sectors and geographies.

The good news is that resilience can be enhanced. And, importantly, we, the people, have it in our hands to make it happen. The recent report of the UN High-Level Panel on Global Sustainability, Resilient People, Resilient Planet: A Future Worth Choosing, shows how the notion has gained prominence. And it was reassuring to note that the outcomes document from the Rio+20 summit recognises this and the opportunities inherent in changing mindsets.

Is resilience a buzz-word or a true game changer? Surely, it is a very broad term that may not be intuitively understood by everyone. If it is only about bouncing back into old habits, it may have less value in the long term. If, on the contrary, it defeats linear, silo thinking, it has potential to enhance value creation defined more broadly. And this may well hold the key to achieving global sustainability.

Novo Nordisk facts

Core Business: Diabetes care

Employees: 32,700 in 75 countries

Market: 190 countries globally



Didget blood glucose monitor

TEN TRENDS in healthcare

The future of care looks exciting, as key trends converge to potentially offer consumers more choice and free up resources. Here, we identify ten of the best.

Prevention

Benjamin Franklin was not talking about healthcare when he said that, "an ounce of prevention is worth a pound of cure". But his aphorism is at the heart of healthcare reforms, as policymakers work to keep citizens healthy and care cost-effective. Chronic care accounts for up to 80 per cent of European healthcare costs, but medical experts believe much of the disease burden can be prevented through a healthier lifestyle, early diagnosis and early intervention (see 'Empowering patients', page 8). Preventive strategies go beyond traditional health provision: companies as diverse as Marks & Spencer, a retailer, and BMW, a car maker, have launched health screening programmes which provide their employees with information on diet and exercise.

Patients at the centre

As they shore up healthcare systems, policymakers and healthcare providers are putting patients at the centre of service delivery; asking citizens to take better care of their own health. But, assisted by an explosion in social media, citizens are also taking back control for themselves. Websites such as PatientsLikeMe and Patient Opinion allow patients to share experiences, which in turn help policymakers, drugmakers and other groups with valuable insights into patient behaviour and an opportunity to improve services (see 'Problems shared', page 12).

Games and health

Pharmaceutical companies and health campaigners are increasingly learning from games manufacturers to design products that help patients to stay healthy. They are harnessing basic human instincts, such as playing and learning, to help patients better understand their illness and cope with their treatment, by practising useful thought patterns and behaviours. The Didget blood glucose monitor, manufactured by a German drugmaker, Bayer, can be plugged into a Nintendo DS and rewards players for regular updates by adding points and features.

Data management

The growing importance of outcomes management in healthcare has led to an explosion of data. This creates a challenge for the healthcare sector, which needs to modernise its IT infrastructure and create opportunities for data sharing. Electronic health records (EHRs) are seen as a way to optimise operational efficiency, reduce healthcare costs and improve patient care, by making clinical processes safer – as well as potentially giving citizens more control (see 'Sharing and caring', page 16).

The \$1,000 Genome

The US\$1,000 genome

In 1990, the project to first decode the human genome cost around US\$3bn. Shortly afterwards, the quest began to sequence the entire genome for just US\$1,000. That milestone is likely to be reached in 2012, opening new doors for personalised medicine in which the availability of an individual's genomic data could help guide diagnosis, treatment and prevention. But another barrier remains: national databases will be needed in order to properly deliver genomic medicine in the future.

Better design for living

As the world's population ages, designers and marketers are developing products and services that allow older people to remain engaged in their own health and active in society (see 'Active ageing', page 20). Products from pharmaceuticals to potato peelers are being modified to better suit older users. A growing number of monitoring and tracking devices allow users to manage their own conditions at home. Social networks and smartphone apps are being marketed at older people. Whole cities could get a makeover: the WHO has launched a programme, the Global Network of Age-Friendly Cities, to explore ways in which outdoor spaces, buildings, transport and housing could be made safer and more welcoming for older citizens.

Technology and care

Touted for years, developments in technology now appear certain to deliver a revolution in care. Telemedicine technology can connect doctors with patients in remote areas through videoconferencing, while self-tracking devices are used to monitor patients with chronic conditions (see 'The innovation imperative', page 14). Expensive equipment may not be required – the camera on a new smartphone offers better resolution than those found in many medical labs. And technological solutions need not be complicated – the Bill and Melinda Gates Foundation supports a programme that delivers advice and reminders via mobile phone to pregnant women in places such as Ghana.

Electronic health records

Looking after number one

Privacy and transparency

With the development of EHRs and as patient data is being made more accessible, individuals will want to know their privacy is respected and control what information they wish to disclose. The other key focus for healthcare providers is transparency on their own performance. David Cameron, the UK Prime Minister, has pledged to make data freely available, allowing people to analyse the performance of public services.

Crossborder healthcare

For years, EU citizens have enjoyed freedom of movement across borders. The same cannot be said of their access to basic health services that they might enjoy at home. In February 2011, European MPs adopted a healthcare law which seeks to eliminate obstacles to patients receiving treatment in another member state. Rules for receiving crossborder healthcare, and reimbursement of these costs, remain less than crystal clear, but will improve. Meanwhile, the EU's eHealth Initiative aims to make it possible for patients to access their medical records wherever they are in the EU.

Innovation from South to North

Under pressure to reduce costs and improve outcomes, European and US policymakers are looking to the developing world for ideas about how to offer cheaper, effective health solutions. Aravind, an Indian eye-hospital chain, uses a tiered pricing structure that charges wealthier patients more, which means the firm can subsidise free care for the poorest. Not all health services need to be delivered by Rolls-Royce, says Tim Brown, the head of IDEO, whose product designs include medical devices: "In healthcare, as in life, there is a need for both Ferraris and Tata Nanos."

The long view on health

What will European healthcare look like in 20 years? We asked Mark Pearson, Head of the Health Division at the Organisation for Economic Co-operation and Development (OECD), to look to the future.

“Much of today’s media coverage makes people more worried about things they shouldn’t be worried about, rather than making a more educated health consumer.”

If you looked back, 20 years from now, and told the triumph of healthcare provision in Europe, what would be the story?

It would be that we finally managed to move on from a healthcare system oriented around acute care. Primary care must have more focus. That is the biggest thing that health services have to do. Primary care doesn’t have to be done by physicians – it should require a different mix of workforce. Payment systems are another difficult area. And we are running, at the moment, to catch up with chronic diseases even when the epidemiology has moved on to multiple morbidity [co-occurring diseases].

Medical education will have to move on. It takes a long time to have an effect. We need to train physicians in teamwork: how to co-ordinate [with other physicians], how to manage a number of people trying to care for the same person with multiple problems.

Biomedical research takes 25 years before it affects practice, if you consider the time it takes to do the research and time it takes to diffuse it. Today, a lot of clinical trials still exclude those with pre-existing chronic conditions, but the vast majority will have those conditions in 20 years’ time. We are excluding the people we will be most concerned about.

There are an awful lot of things that need to change. Many – such as research and medical education – will require change now to have an effect in 20 years.

There are still an awful lot of countries worrying about the internal organisation of the system. The more important problem, though, is to get value for money in a system that can’t use market signals to set prices or identify appropriate investments. Value for money is poor at the margins of what we do in health systems. Why do we invest so little in dealing with mental health, given the burden of the disease? Why do we spend so little on prevention? Value for money is a far more important issue than the public-private split.

One of the weaknesses in how we react to multiple morbidities is that we do not have much clue as to how we should respond. We don’t know how we should be paying for this. What can we design that makes sense, that gives incentives to co-ordinate care properly, to give high-quality care? We may have a few more ideas on how to change behaviour, but we have very few good ideas on paying for multiple morbidity care.

Do you see budget constraints as having a long-term effect?

The way countries initially coped with healthcare costs is through wage freezes, deferred investment, and unilateral changes in how they pay for pharmaceuticals. That is not a bad set of ways of dealing with having to make immediate cuts: it essentially protects quality and access to care. Some of what has been done has been knee-jerk, emergency stuff. More recently, unfortunately, we have seen increases in co-payments and reductions in services. These will inevitably affect health outcomes. As countries recover, they will need to look at what they want to spend in the next 10 years. There will be a continued need to keep spending down with a more rational payment structure. The guiding principle should be to pay according to the value of the services provided. Payment system experimentation has to happen very soon.

You mention conditions associated with ageing, such as co-morbidities, but you never actually mentioned the word. Was that conscious?

It was conscious. Ageing is an issue for the workforce, and an immediate problem in some countries. They will be losing a lot of skills when people leave the workforce – France is an obvious example. More generally, ageing is not a huge driver of health costs; it is a driver of changes in the morbidities we are dealing with. What do we even mean by old? Sixty-five years old is not old in any medical sense any more. What matters are the illnesses that we have. Because we are good at keeping people alive, we are going to have more diabetes, Alzheimer’s disease, cancer and heart disease. That is a consequence of our ability to keep people alive.

What is your greatest hope for healthcare in Europe?

My greatest hope is that people might actually take prevention seriously. It is always difficult to know how much should be read into the attention that senior officials pay to an issue. There are encouraging signs, though. Previously, when there have been cuts in spending, prevention has been in the front line. This time around, that doesn’t seem to have happened – generally speaking, governments have tried to protect prevention spending. They may be buying into the idea that prevention is a cost-effective approach. I think there is some hope that in 20 years’ time prevention will be much more central to what health ministries do.

A fear is that something like swine flu will receive so much attention that health systems move back to focussing excessively on dealing with infectious diseases, or that a lot of effort will go into making sure that we have enough beds to deal with a problem that is relatively minor compared to other conditions. The media’s interest in health is sometimes helpful, but much of today’s media coverage makes people more worried about things they shouldn’t be worried about, rather than making a more educated health consumer. A more educated consumer is great for prevention.



Mark Pearson is Head of the Health Division at the Organisation for Economic Co-operation and Development (OECD), where he helps countries to

improve their health systems by providing internationally comparable data, state-of-the-art analysis and appropriate recommendations on a wide range of health policies. Among OECD incentives are its Better Life Index, which allows users to compare their health and well-being across countries.

“We finally managed to move on from a healthcare system oriented around acute care. Primary care must have more focus.”