

CARERS UK
the voice of carers

Future care



Care and technology in the 21st century

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Introduction

How we manage care and caring has started to reach the public and political consciousness as one of the greatest challenges facing 21st century societies, as pressing as global recession and climate change.

As we grapple with meeting this challenge in times of austerity, reform of the social care system must be accompanied by innovation which matches this century's demographic imperatives, and creates modern care solutions.

Just as online tools, social media and 'apps' have revolutionised how many of us plan our lives, socialise and enjoy entertainment – technology has the capacity to bring about a radical shift in care services and change how families care for ill, frail or disabled loved ones alongside work, family, community and social lives.

We have an opportunity to shift perceptions away from simply seeing an ageing population and rapidly increasing demand as a challenge for public services. A growing and increasingly technology-savvy older population, and younger disabled people finding ways in which technology can change their lives, present huge opportunities for innovation and growth in the technology market.

The challenges families face have existed for decades - carers struggling to find and purchase care or access information on health conditions; working families trying to manage the support of elderly parents who live at a distance; people trying to manage information on medication and treatment with different teams of medical professions.

But we have not yet fully explored the role technology could have in solving them – from care packages co-ordinated between care workers and family members using online 'apps', to reviewing and purchasing care or sharing health records online.

We have dipped our toes in the water with limited use of health technologies and telecare – which have shown us not only the life-changing impact technology can have for families, but the opportunities for efficiencies and cost-savings in service delivery.

This paper surveys this current landscape and explores ways in which we can start to build a technology-enabled vision for the future of care.



Heléna Herklots
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1. Key societal challenges

■ Demand for care

Our population is ageing rapidly. 11 million people alive today will live to 100¹. People are living far longer with long-term conditions and disabilities, and the number of working-age adults with learning disabilities will rise by almost a third over the next 20 years². This will create demand for health and social care services which simply cannot be met by our current systems.

As a result of increased demand on services due to population and health trends and of our political commitment to the health service, spending on the NHS has risen by £25 billion since 2004³. Although spending on social care has only risen by £43 million in the same period (0.1% per year in real terms)⁴, there are already an estimated 1.56 million people working in the adult social care workforce, and by 2025 it is estimated that an additional 400,000 to 1.3 million staff will be needed to support demographic demand.⁵

At the same time, demand for the unpaid care provided by families and carers is also increasing. The bulk of care is and has always been provided within families, with twice as many unpaid carers – nearly 6.5 million – as there are paid staff in the health and social care systems combined. However, it has been estimated that in the UK nearly 3.5 million additional carers will be needed by 2037⁶, and by 2017 we will reach the tipping point for care when the numbers of older people needing care will outstrip the numbers of working age family members currently available to meet that demand.⁷

■ Demand for employment

Demographic change also means that we are all juggling increasingly complex family lives with increasingly demanding working lives. There are growing numbers of families managing multiple caring responsibilities for children or grandchildren and older parents. By 2050 globally three times more people of working age will be looking after 2 billion ageing family members⁸ – and currently 3 million people in the UK combine paid work with care, many at the peak of their

¹ *Number of Future Centenarians by Age Group* (2011), Department of Works and Pensions (DWP)

² *Estimating Future Need for Adult Social Care Services for People with Learning Disabilities in England* (2008), CeDR

³ *Care in Crisis: causes and solutions* (2011), Age UK

⁴ *ibid*

⁵ *The size and structure of the adult social care sector and workforce in England 2011* (2011), Skills for Care

⁶ *It Could Be You – A report on the chances of becoming a carer* (2001), Carers UK

⁷ Linda Pickard, *Informal care for older people provided by their adult children: projections of supply and demand to 2041 in England. Report to the Strategy Unit and Department of Health* (2008)

⁸ *World population ageing* (2007), United Nations, Department of Economic and Social Affairs, Population Division

careers. However, at the moment a staggering 1 in 6 is forced to give up work to care⁹, a situation which will be unsustainable for the UK economy in the future.

Even without the current recession, given the rise in the older population and overall fall in birth rates we will all have to work, and work longer, to balance the books. Without changes to retirement patterns, by 2060 the dependency ratio – people working to those not working - will be only 2 to 1, compared to 4 to 1 today.¹⁰ The UK - and many other - economies will need a shrinking workforce to work longer to meet growing care and pensions bills, and action is already being taken to extend the retirement age. However, the situation is made worse by high levels of unemployment, a 'double whammy' in these tight times. Even though many people will be sandwiched between caring roles in their families, choosing between work and care will not be an option for individuals or for the economy.

■ Globalisation

We are living in a global economy which has seen the rise of services provided 24 hours a day, seven days a week, and this is both an opportunity and a threat. For consumers it makes lives easier because goods and services are available whenever they are wanted, for providers of these goods and services it places additional pressures on working and family lives. Add to this the fragmentation of traditional extended family networks which has resulted from changes in family structures and increased mobility of labour, and this creates even greater stresses within families struggling to combine work and care.

A report published in 2011 by Employers for Carers and Carers UK with Nomura highlighted the challenges of caring at a distance, an increasingly common phenomenon¹¹. As the world shrinks and business globalises, many of these carers will not only not be in the same household or town as the family member they are supporting, they will not be in the same country, with trends in migration also adding to this number.

New challenges need new solutions, and, at a time when care and caring have never had a higher public and political profile, new thinking is needed. This paper looks at how technologies can transform the way people live, work and care, can achieve sustainability in health and care and can positively contribute to the economy.

Even though many people will be sandwiched between caring roles in their families, choosing between work and care will not be an option for individuals or for the economy.

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⁹ *One million people give up work to care – Carers Rights Day*, Carers UK and Ipsos MORI (December 2009)

¹⁰ Eurostat, *Projected old-age dependency ratio*, Code: tsdde511, Source of data: EUROPOP 2010

¹¹ *Caring at a Distance: Bridging the Gap* (2011), Carers UK, Employers for Carers and Nomura

2. Opportunity through technology

“... it should be mainstream [...] with all the IT infrastructure around us I wonder why the market does not respond quicker. There's going to be massive demand in the next few years from people able to finance solutions themselves.”

Carer, Caring and Technology survey, 2012, Carers UK

New technologies offer opportunities on four fronts. First, they have the potential to transform the way health and care is delivered and managed, responding to the way people want to live their lives. They can sustain independent living, giving choice and control not only to older or disabled people but to their families and carers. As the current 'baby boom' generation ages, it will expect a very different service experience, and will take technology for granted in this space.

Second, they have the potential to make our health and care systems more sustainable in the face of demographic change, delivering cost efficiencies, supporting systems integration and transforming the way health and care professionals work.

Third, new technologies can support new and flexible ways of working in any field, and help people to better manage or extend their working lives, in particular when they are combining paid work with unpaid care.

Finally, they have the potential to open up new markets in health and care. If we accept there will be a greater demand for care, we have to transform the supply of care. There is a pay-for market in every other area of technology, and health and care should not be exceptions. Even where services are – and should remain - free at the point of delivery, Individual Budgets and the policy trend towards more personalised care will enable families to choose the solutions that are best for them. The baby boomers will not only take technology for granted in this space, they will want to buy it, for themselves, but before that, for their own parents.

This paper will first look at what we mean by technology, and will then explore its potential in the context of:

- Opportunities for health and care
- Opportunities for families and carers
- Opportunities for employers
- Opportunities for the economy

■ What do we mean by 'technology'?

In the context of health and care technology is most often associated with equipment, from the sophisticated medical technologies to which we can attribute our longer lives, to the monitoring equipment which enables older or disabled people to live more independent lives. However, there are a multitude of web-based applications – from simple information services to more complex care management tools - that can transform the delivery of health and care. The whole range of available technologies should be considered as relevant to the discussion that follows.

3. Opportunities for health and care

Health and social care systems in the UK are under increasing pressure. One of the greatest strategic issues facing the NHS is how it manages patients with long term conditions such as COPD, heart failure and diabetes. The NHS already spends 70% of its budget on the 15 million people who have one or more of these conditions, and with our ageing population, patient numbers are expected to grow by 23% over the next 20 years.¹² The Department of Health is predicting an increase of 252% by 2050 in people aged over 65 with one or more long term conditions¹³.

The pressures on the social care system are just as great, with demographic demand estimated to require an increase in the social care workforce of between a third to two thirds by 2025¹⁴. The squeeze on public services is unlikely to change, and it is clear that our current systems of health and care are simply not sustainable. Public health is increasingly focusing on prevention as the best way to reduce demand for acute services, and reablement as the best way to reduce demand for community care. If the ultimate goal is the reduction of whole life health and care costs, it makes sense to maximise the potential of technology to achieve that goal.

■ What part can technology play in transformation?

The potential of health and care technologies, both in terms of effective service solutions and cost efficiencies, has been flagged up in the headline findings of the UK's Whole System Demonstrator programme¹⁵. This was the largest ever randomised control trial of telecare and telehealth, set up by the Department of Health to identify their benefits.

The initial findings for telehealth show that, delivered properly, it can substantially reduce mortality, reduce the need for admissions to hospital, lower the number of bed days spent in hospital and reduce time spent in A&E, with clear gains in terms of service and cost effectiveness. Health think tank 2020 Health believes that properly scaled up, the use of telehealth across the NHS could lead to up to £1 billion in annual savings with hundreds of thousands of patients' lives improved significantly¹⁶.

If the ultimate goal is the reduction of whole life health and care costs, it makes sense to maximise the potential of technology to achieve that goal.

¹² John Cruickshank, *Healthcare without walls: A framework for delivering telehealth at scale* (November 2010), 2020 Health

¹³ *Research and development work relating to assistive technology 2010-11* (2011), Foundation for Assisted Technology for the Department of Health (DH)

¹⁴ *Estimating Future Need for Adult Social Care Services for People with Learning Disabilities in England* (2008), CeDR

¹⁵ *Whole system demonstrator programme: Headline findings* (December 2011), DH

¹⁶ John Cruickshank, *Healthcare without walls: A framework for delivering telehealth at scale* (November 2010), 2020 Health

The case for telecare is just as compelling. The Scottish Government's evaluation of its own £16.35 million investment in telecare made available under the Telecare Development Programme from 2006-2010 showed health and care service efficiencies with a gross value of £48.4 million¹⁷. The Welsh Assembly Government's £7.3 million investment in telehealth and telecare announced in advance of the Digital Wales strategy in 2010 was expected to cut costs by £14 million a year and save £64 million over the long term.

The NHS Operating Framework includes incentives to improve discharge arrangements and reduce emergency readmissions through integrated care, with £646 million allocated to primary care trusts for 2011/12 to work with social care on services such as 'telecare, community directed prevention (including falls prevention), community equipment and adaptations'¹⁸.

So the evidence shows that telehealth and telecare are good value for money and well accepted by their users - an obvious win-win - and the Westminster Government's innovation review of the NHS¹⁹ has flagged up the need to integrate these technologies into mainstream care and services. With this in mind, the Department of Health has launched the 'Three Million Lives' campaign, in which it plans to work with industry, the NHS, social care and professional partners in a collaboration aimed at reaching three million people with long term conditions or social care needs who could benefit from using telehealth and telecare.

However, health and local authorities must be ambitious about what can be achieved and how, and invest to realise the full potential of today's and tomorrow's technologies.

Innovations in housing design are seeing homes with the capacity to support technology solutions built in, and centres of excellence are now routinely using a 'living lab' approach with researchers, practitioners and users to co-produce the latest technology applications that can be used in them. Statutory agencies will only see the maximum return if they adopt the whole range of technologies that can transform services and quality of life, and properly embed them in their mainstream services.

That process has to involve promoting public awareness, and not only of what technology can offer in public services, but how it can be used for self-care. From the multitude of self care websites and home health monitoring applications to widely popular devices such as the WiiFit, technology also has the potential

¹⁷ *An assessment of the Development of Telecare in Scotland 2006-2010* (Oct. 2010), Scottish Government

¹⁸ *The Operating Framework for the NHS in England 2011/12* (2010), DH

¹⁹ *NHS Chief Executive Innovation review*, (June 2011), DH

for improving sustainability in health and care by helping people to take more responsibility for their own health, and thus make fewer demands on the system as a result of acute or chronic conditions related to lifestyle choices.

Finally, technology can only be embedded in service delivery by a health and care workforce that is empowered and not threatened by it. This technology is not designed to, and never should, replace people. Its adoption and use should in fact see more time dedicated and more value given to the irreplaceable interpersonal elements of health and care, much as the adoption and use of domestic appliances allowed our grandmothers to spend more time with their children and less on housework.

New service models could see new and exciting hybrid community care roles supported by technology – from the use of applications to share data and support case and care management to remote monitoring and consulting for complex long term health conditions. The transformation of health and care is as much about social and systems innovation as technological innovation and it is people who will ultimately deliver it.

New technologies should be an enabler, supporting the integration of health and social care roles, streamlining processes, providing information and training, supporting delivery of services and ultimately transforming the systems that will serve us for generations to come.

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4. Opportunities for families and carers

If we recognise the unsustainable pressures on the health and care systems that help older, sick or disabled people, so we have to recognise the unsustainable pressures on the families who so often make up the shortfall in their services. We all care or will have to care at some point in our lives, most often for a family member.

That may mean providing early hands-on care for a disabled child, and then managing their education and support needs as they grow up. It may mean helping ageing parents just a little at first then providing or managing increasing support to enable them to live independently. Or it may mean providing emotional support to a sibling with a mental illness, or a partner with a health condition. Whatever the situation and whether the care is provided hands on or at a distance, that care will increasingly have to be combined with other family responsibilities such as childcare, or external responsibilities such as paid employment.

Caring is 'everybody's business', and cannot continue to generate the financial, health and social penalties experienced by so many families and carers. The current estimate of the value of the contribution of unpaid care in the UK is £119 billion²⁰ and with the demand for unpaid care set to rise by nearly 50% in the next 25 years²¹ that contribution will continue to grow.

However, the benefits of that contribution are currently offset by the costs of caring. Carers UK's survey of over 4,000 carers for Carers Rights Day 2011²² reported that:

- 4 in 10 people were in debt as a result of caring, and 1 in 2 had been adversely affected by the stress of money worries related to caring.
- Of those who had given up work or reduced working hours to care, 45% were more than £15,000 a year worse off.
- Over two thirds of respondents had suffered physical ill-health, and over three quarters mental ill-health (such as depression or stress-related conditions) as a result of caring.
- Over half reported that the pressures of caring had taken a toll on family relationships, with over 65% saying their relationships with friends were worse.

Technology has a vital part to play in supporting families to care, in supporting health and care services to enable them to do so without penalty, and in supporting employers to help people combine work and care.

²⁰ Dr Lisa Buckner and Professor Sue Yeandle, *Valuing Carers 2011* (2011), University of Leeds and Carers UK

²¹ *It Could Be You – A report on the chances of becoming a carer* (2001), Carers UK

²² *The Cost of Caring: How money worries are pushing carers to breaking point* (2011), Carers UK

■ What part can technology play in supporting families?

Realising the potential of technologies has to begin with promoting awareness of what they are and can do, where they can be found and how they can be paid for. An as yet unpublished survey by Which? in 2009 found that the public had little understanding of the terms assistive or assisted living technologies, a catch-all often used to refer to technology solutions. 46% of carers in the State of Caring Survey 2011²³ said they were not aware of or did not know how to access technology solutions which could support their caring role.

First, families and carers must have access to or be signposted to the internet, the principal provider of information on what technology products and services are available, both through statutory services and in the private purchase market, and which also offers access to services through online marketplaces and one-stop shops. However the web is also the delivery mechanism for many of those services – for example telehealth monitoring or remote consultation - so access to high speed broadband is an even greater imperative.

Primary care practitioners then have a critical role to play, first in recognising the impact of caring on families and then offering them or directing them to technology solutions, within statutory services and from the market in health and care technologies. For GPs, this means using systems that ‘flag’ carers, recognising the potential of new technologies to offer the kind of flexible support that can help them manage different and sometimes conflicting responsibilities, and using their commissioning role to ensure that technology solutions are widely available.

However, the technology is not enough in itself. Technology solutions have to be the right solutions, genuinely offering choice, independence and control to individuals and families, and taking account of their lifestyle needs. A telecare package that requires a personal response from a family member is not going to work if that person lives at a distance, works or studies. 54% of people in a research study on carers and employment said they did not work because the services on offer were not flexible, reliable or affordable²⁴, and this applies as much to a technology package or application as it does to home care.

“... the potential of all this stuff is fantastic, it’s so great, but in reality I can’t find all the information about products that I want...”

Carer, Caring and Technology survey, 2012, Carers UK

²³ State of Caring survey (Sep. 2010 - June 2011), Carers UK

²⁴ Sue Yeandle, Cinnamon Bennett, Lisa Buckner, Gary Fry, Christopher Price, *Managing Caring and Employment* (2007), University of Leeds for Carers UK

Families need technology tools not only to provide care but to manage it, alongside tools to manage work.

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Above all, technology-enabled services have to reflect the way that people live and work. Given modern society's more complex family structures, the increase in the labour market participation of women, the trend towards mobility of labour, and longer working lives, families need technology tools not only to provide care but to manage it, alongside tools to manage work.

Finally, these tools will increasingly be required to combine care not only with work but with other family responsibilities – 'sandwich' caring - and with the kind of voluntary participation and contribution that binds our communities together - the PTA, local council, scout troop or charity shop.

5. Opportunities for employers

The demographic pressures on employment discussed earlier – a shrinking workforce contributing into a tax and pensions system that will be supporting growing numbers of people in retirement – will have an impact not only on individuals struggling to juggle multiple work and caring responsibilities, but on the employers seeking to recruit and retain them. The peak age for caring is 45–64 when people are very often at the height of their working lives. Employers who have invested in their professional development will be hard pressed to support the costs of their replacement, to say nothing of the knowledge and experience lost to an organisation if they are forced to give up work to care.

We know the costs to individuals are high – a survey carried out in 2007 found that carers who give up work or are forced to reduce their working hours lose more than £11,000 a year²⁵, and that does not include the costs of a reduced pension in retirement. The costs to employers can also be quantified, with employers saying that the costs of replacing an employee – including recruitment and retraining, and lost productivity – equals a full year’s salary. This can mean significant savings to an employer if they can support a carer to stay in work. At 2006 figures, a major utility company reported savings of more than £1million per year as a result of retaining carers through workplace support²⁶.

However, it is not only workplace support that carers need to sustain their dual roles. Reflecting the findings of the Carers, Employment and Services Report Series²⁷, and doing for care what they did for childcare more than 10 years ago, employer members of Employers for Carers²⁸ are arguing that in the same way that a good system of childcare is seen as a condition for employment, so must a good system of care and support. Individuals, families and employers have a right to expect an infrastructure of support for care which enables people to sustain care within families and relationships while maintaining productive working lives.

Technology is critical to delivering not only the workplace support that can assist people to juggle work and care, but flexible care services fit for a 21st century economy.

“I have recently decided to give up my job in London [...] employers seem to be compassionate with employees in respect of childcare needs but not with employees who have responsibility for an elderly parent.”

Carer, Caring at a Distance: Bridging the Gap (2011), Carers UK, Employers for Carers and Nomura

²⁵ *Real Change, not Short Change: Time to deliver for carers* (2007), Carers UK

²⁶ Sue Yeandle, Cinnamon Bennett, Lisa Buckner, Lucy Shipton, Anu Suokas, *Who Cares Wins: The Social and Business Benefits of Supporting Working Carers* (2006), Centre for Social Inclusion, Sheffield Hallam University for Carers UK

²⁷ Sue Yeandle, Cinnamon Bennett, Lisa Buckner, Gary Fry, Christopher Price, *Carers, Employment and Services Report Series* (2007), University of Leeds for Carers UK

²⁸ Employers for Carers is a membership forum providing a service to employers seeking to develop and deliver workplace support to carers. It is chaired by BT, and supported by the specialist knowledge of Carers UK (www.employersforcarers.org)

■ What part can technology play in transforming work?

Delivering workplace support for people combining work and care has to begin with awareness – of the challenges it can present, the support that can be offered, and the bottom line benefits that result. Technology is best used here to reach as many people in as many different ways as possible. 2.3 million people move in and out of caring roles each year, and until it happens have rarely given thought to what that might entail. A supportive workplace culture that brings caring to the fore as an issue allows people who can find their lives turned upside down when a parent has a stroke, or a partner is diagnosed with MS, to come forward and seek the support on offer without fear of negative consequences.

Publicity on workplace policies and practices has to be regularly recycled if it is to reach people at the point when they need it, and use a range of media if it is to reach them in the right place. Information should not only focus on employees - well informed line managers can make the difference between someone disclosing their caring role or not, and making the most of what support is on offer. Technology can be a real enabler when time is tight and employers can benefit from a wide range of online resources to get the right information at the right time to employees and their managers.

Employers can also contribute to a carer-friendly workplace culture by using technology to support working carers in their professional development, offering flexible training opportunities such as online training or webinars.

Carers in surveys repeatedly say that access to targeted information on support and services is what they need most when caring hits them. Employers can signpost to information through intranet or internet sites, provide it directly or through employee assistance programmes, or through innovations such as virtual carers networks, webinars, virtual 'lunch and learn' sessions and specialist knowledge calls which can be joined remotely. Working carers are often time poor, and the more information that is tailored to their circumstances, the better.

The same principle applies to care management tools that can support people caring at a distance, using web based and mobile technologies.

With support to work as vital as support to care, technology is also transforming the way we work and progress through our careers, enabling remote working, supporting professional development through flexible online training, keeping people connected and supporting health and wellbeing strategies. We take our laptops, tablets and smart phones for granted in managing how and where we work, and the line between work and family is more blurred now than it has ever been. Forward thinking employers are looking at productivity rather than presenteeism as the best measure of someone's performance, even in non-professional or office-based roles.

Finally, it is essential that the bottom line benefits of supporting working carers are recognised and promoted, by employers to employers, but also more widely to policy makers. Employers who use all the resources available to them, including technology, to enable people to manage their complex caring and working lives will be rewarded tenfold by benefits for retention, resilience and recruitment, and results in improved productivity, increased morale and reduced absenteeism.

BT, which chairs Employers for Carers, reported in 2006 that the average increase in productivity for people enabled to work flexibly and remotely was 21% – worth at least £5-6 million on the company bottom line. BT's annual staff turnover was below 4% at a time when the sector average was 17% and sickness absence among remote workers averaged below 3 days per person per annum, with stress related absence reduced by 26%. Add to that the huge cost savings in terms of accommodation and support systems – nearly £1 billion in BT's case – and the pay back in terms of staff loyalty and motivation – 'worth its weight in gold' – and you have an irrefutable business case for supporting people to work in new ways²⁹.

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²⁹ Based on a speech given in London in October 2005 by Caroline Waters, BT Director of People Networks, to the Working Families Conference 'Is Less More?'

6. Opportunities for the economy

The pressures on the UK's health and care systems detailed above constitute perhaps one of the greatest public policy challenges to national and local government. This paper has already discussed how technology can deliver significant cost savings in statutory services, but increasing the sustainability of health and care systems could equally create new growth and market opportunities for ICTs and health and care technologies that might be a different good news story for the economy.

The Westminster Government's innovation review of the NHS³⁰ has flagged up the need to integrate these technologies into mainstream care and services, and looks towards a transformation of the way services are delivered through the use of appropriate technology to give individuals and families choice and control. In Scotland the Scottish Telehealth and Telecare Centre has been repositioned within NHS 24 to ensure technology is embedded in strategic objectives for mainstream health and care delivery.

If we look beyond statutory services to the supply of health and care services to a consumer population, this becomes an opportunity for business growth, and the Treasury's Plan for Growth³¹ identifies innovation as a key driver of long-term growth in the sector. It includes as one of Government's measures to improve the take up of assisted living technology an investment of £18 million by the Technology Strategy Board in DALLAS (Delivering Assisted Living Lifestyles At Scale), a UK wide programme to help local and health authorities and businesses to deliver assisted living services at scale through collaboration, innovation and interoperability of service models.

How we manage care alongside paid work is also fundamentally an issue for the economy if we are to keep people working, and working for longer - not only to contribute to the population's care and pensions bills, but to maintain the UK's global economic competitiveness.

■ What part can technology play in transforming the economy?

There is consensus that sustainable health and care is a challenge that can only be met by the emergence of new models of service delivery. In this context, technology can drive innovation in service delivery, with gains in quality, efficiencies and cost effectiveness, as evidenced not only in the headline findings of the Whole Systems Demonstrators, but also by innovation at local level across the UK.

³⁰ *NHS Chief Executive Innovation review* (June 2011), DH

³¹ *The Plan for Growth* (November 2011), HM Treasury

Technology can also support a health and care workforce to work smarter, and presents opportunities for new skills in new roles as health and care become more integrated, as there is less focus on acute care and as new joint community care services emerge. A transformed health and care sector – and a growing care economy – will need a different kind of workforce with different skills.

Finally, the shift from acute to community services will see more people funding their own care, not only because local authorities are tightening their eligibility criteria, but because people will want different services to support all elements of their family, community, caring and working lives. While there must always be paid-for services for people who should not or cannot fund their care, there must also be a recognition that families who do pay – such as the ‘baby boomers’ providing for themselves or for their parents - are currently poorly served.

There are new markets to be developed for care and support services that reflect the way people actually live and new opportunities as our expectations change in a high-tech world. The market for health and care technologies – both ICTs and hardware - is currently underdeveloped and still largely targeted at statutory agencies such as health and local authorities. There are real opportunities for the private purchase market, but it needs incentivising and shaping, and investment not only in products but in end-to-end services, and above all in marketing them to the consumer.

The Government has already announced improved backing for small business, with Treasury committing £20 million in its Plan for Growth³² over the next two years to the Small Business Research Initiative, including £10 million from the Department of Health for specific competitions to address healthcare challenges. It has also pledged improvements to the Enterprise Investment Scheme. The first will encourage small and medium-sized businesses to invest in developing new technology, including health and care technologies. The second will see greater incentives for investment in small business. The Plan for Growth also targets social care micro-enterprises with measures to reduce unnecessary regulatory barriers to market entry and flexible service delivery. These could also be helped by changes to procurement and commissioning processes that currently work against new or small business.

For the kinds of flexible services that families will increasingly demand we need the innovation that will see technology and service chains brought together to offer a service proposition rather than just a piece of kit. We need incentives not just for developing technology, and not just for developing flexible care services, but for developing them together to maximise their impact. This could grow

“**...there are relatively large markets which aren't being targeted [...] as a sector it is still providing a relatively traditional response to people's care needs.**”

Interview with voluntary organisation professional, 2012, Carers UK

³² *The Plan for Growth* (November 2011), HM Treasury

new service models that might turn the challenges of an ageing population into a driver for economic growth – with new opportunities for existing providers, small scale start-ups and health and care technologies.

Programmes such as DALLAS in the UK are leading on delivering this innovation, with an ambition to scale up existing technologies in health and care, and to lay the ground for those to come. This approach is mirrored in Europe by initiatives such as the Innovation Partnership on Active and Healthy Ageing, which has as its objective a triple win for Europe: improving the health status and quality of life of European citizens, particularly older people; supporting the long-term sustainability and efficiency of health and social care systems; and enhancing the competitiveness of EU industry through business and the expansion of new markets.³³

Both programmes are seeking to work through partnerships of key stakeholders - researchers, businesses, policy makers, providers, regulators and end users – to achieve the common goals of delivery at scale. However, there are still real challenges to face in stimulating, creating and growing a real market for these innovations, and until that happens there will be gatekeepers of services and an artificial market meeting the demands of commissioning rather than the demands of consumers.

Service transformation through technology could also see families getting the support they need to carry on working while they care. The cost benefits of people being enabled to remain in work, and for longer, while caring, are rarely factored in when assessing the outcomes of using new service models (the WSDs are a case in point – they included outcomes for carers, but not in terms of opportunity costs or cost benefits relating to work).

New research has set out for the first time the economic as well as social benefits of investing in social care services, and has also highlighted the risks to families. If we do not provide people with the support they need, those family members at risk of providing substantial care will be less likely to be in work and will lose between £750 million and £1.5 billion in earned income - simply assuming earnings at national minimum wage levels³⁴. So that would be lost to the economy, along with their tax and their pensions' contributions, and the benefits system would have to meet the considerable costs of paying unemployment, income or care related benefits.

³³ *Guidance paper for the steering group of the pilot European innovation partnership on active and healthy ageing*, SEC (2011), 589 final, European Commission Staff Working Paper

³⁴ Prof Jon Glasby, Prof Chris Ham, Rosemary Littlechild, Prof Steve McKay (2010), *The case for social care reform - the wider economic and social benefits*, HCMS and IASS, University of Birmingham

If we can make the wider economic case for services – including technology enabled services - that deliver not only on health and care outcomes but labour market participation, we have a greater chance of unlocking greater Treasury investment in their development and delivery, not only within the statutory sector, but in a mixed economy of service provision that would enable families to buy them in a private purchase market.

Finally, investment in the kinds of technologies described in this paper will quite simply be essential if the UK is to maintain its productivity and competitiveness. We have already described the challenge an ageing population presents, not only to the UK, but to the rest of Europe and beyond, but it also presents opportunities for developing innovative solutions which could see new markets emerging and expanding. This is a global challenge, and it presents an opportunity to compete on a global stage.

7. Making it happen

There are already some identified barriers to realising the potential for transformation in the areas discussed above – challenges in integrating services, lack of awareness of technologies and what they can deliver, a fragmented market. In addition these are challenging times, and the squeeze on public services, tight labour markets, slow growth and pressures on families call for even greater creativity. If we are to make the most of the opportunities presented by technology we need some serious joined up thinking – and action.

Carers UK is calling for the creation of a Health and Care Technology Taskforce, with independent expert leadership, which will bring together UK Governments and key stakeholders - researchers, developers, businesses, policy makers, providers, employers, employer organisations, regulators and end users - to lead on actions to unlock the potential of technology. Its strategy for action should include:

1. Identifying the benefits of health and care technologies across different areas of government

- DH with regard to the health and wellbeing of the population.
- BIS with regard to the growth of technology business, reconciliation of work and care and economic productivity.
- DWP with regard to labour market participation, use of the benefits system, and meeting the future pensions bill.
- DfE with regard to skills, workforce and sector developments.
- CLG with regard to meeting the needs of whole local populations, in a mixed economy of care.

2. Building a coherent evidence base across different areas of interest and different government departments

- UK Governments and key stakeholders should commission and collate existing research to build an evidence base promoting the wider benefits of health and care technologies, to support implementation and unlock investment.

3. Public and professional awareness of technologies

- UK Governments across all areas must promote collaboration between relevant stakeholders to develop and disseminate widely available, clear and accessible information on health and care technologies for the general public.
- Sector Skills Councils, their equivalent in devolved nations, and professional bodies must lead on training for health and care professionals to help them understand the potential of health and care technologies, both for them as service providers and for individuals, families and carers, and to support their use in service delivery.

4. Advice and information, promotion and marketing

- Organisations providing advice and information on services should ensure that they include technology as an option for support.
- Technology providers should promote and market health and care technologies beyond statutory agencies, to support the private purchase market.

5. Collaboration to develop and implement innovation

- UK Governments should continue to lead on collaborative delivery of technology solutions.
- Collaborative programmes, including those outside the UK, should be widely publicised to promote maximum engagement.

6. Mainstreaming technology through government policy

- Innovation in service delivery through technology should be implemented through existing policy, for example in England:
 - NHS Operating Framework
 - Public Health White Paper
 - Localism Act
- The potential for technology should be acknowledged and embedded in new policy, maximising opportunities for change, for example in England through:
 - White Paper on adult social care
 - Growth Review (BIS/DH initiative resulting from the refreshed National Carers Strategy)
 - Modern Workplaces consultation

7. Incentivising service development and business growth

- Resources should be unlocked to help embed technology in mainstream service delivery.
- Business start-up and growth should be incentivised to realise the economic and social potential of technology in health and care.

A coherent strategy for action will enable public and political interests across the UK to join together in tackling one of our greatest societal challenges. At its heart will be the fundamental issue of how we unlock the full potential of technology to deliver a new future for care.

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Carers UK is a charity registered in England and Wales (246329) and in Scotland (SC039307) and a company limited by guarantee registered in England and Wales (864097).
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Publication code: UK4050 © Carers UK March 2012

This report has been produced with support from the
Technology Strategy Board's Assisted Living Innovation Platform

Technology Strategy Board
Driving Innovation

www.innovateuk.org