Technology and Care

Can the web transform social care?
Think-Piece by David Sinclair

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On 1st July 2010, NESTA organised an event which posed the question “Can the web provide innovative solutions to help transform care for older people”. This think piece broadly summarises the presentation given by David Sinclair at this event. Produced with thanks to Sally-Marie Bamford for comments on a draft version of this paper. ILC-UK would like to thank NESTA for giving us the opportunity to present our thoughts on these issues.
Introduction

There is recognition that we need to improve social care. Care needs to be more responsive to our needs and services must better ensure they deliver dignity. But how can care improve in the context of the spending cuts ahead?

Some argue that the internet may prove to be part of the solution. The internet is transforming the way we live our lives. It could provide cost effective, new, and innovative ways to improve the quality of care.

In this Think-Piece, ILC-UK summarise our thoughts on the issue. We explore some of the issues and present policy recommendations. We first presented these thoughts at an event hosted by NESTA on 1st July 2010.

The focus of this paper is UK although we do use some international statistics.

We would welcome comments. Please send any views to us by email at: davidsinclair@ilcuk.org.uk

Summary

- We have an ageing society and are going to need to provide more care.
- Care is in crisis today. It is likely to get worse before it gets better.
- Technology has a role to play in terms of improving care.
- But we have assumed the place of technology without addressing the barriers.
- If we are to make the most of technology in the context of the care needs of an ageing society, we must:
  - Deliver more usable and accessible technology.
  - Better motivate, engage and inspire an interest in technology by the older population.
  - Address the moral and ethical barriers to technology.
  - Get the basic’s right first.
  - Tackle digital exclusion.
  - Attempt to create and support a culture of private purchase for health and care technologies.
  - Better integrate health and care.
  - Deliver access to information and advice about new technologies.
  - Ensure there is investment for prevention and for new technologies.
Can the web transform social care?

An ageing society

In 1971 there were 52 people aged 65 and over for every 100 children under 16. In 2003 there were 81 and in 2031 it is expected that there will be 136. The age structure of the UK population has become older in the last three decades, and will become older still in the next three decades. The percentage of older people (aged 65 and over) has increased from 13 per cent in 1971 to 16 per cent in 2003 and is projected to rise to 23 per cent in 2031.¹

Life expectancy in the UK, (2005-2007) for women is 81.5 years and for men, 77.2 years. Between 1991 and 2007, life expectancy at birth improved in all counties and regions of the UK. In the same period, life expectancy at 65 increased by three years for men and two years for women. For the over 65s, the life expectancy for women is 84.9 and for men 82.2 years². Retirees can now expect to live 20 years after they first receive their State Pension and future projections suggest that the UK will become the eleventh largest country in the world, by the size of the older population.³

Care is in crisis

At the same time as the population has been growing, we have seen an increased policy interest and focus on active ageing. More people are choosing to (and able to) remain more active later into life. But there are concerns that this focus may actually hinder attempts to recognize the care crisis we are facing. Jeremy Seabrook has recently argued that the portrayal of the elderly hedonist risks hiding the reality of life for many older people.

The elderly have had a recent makeover, as appears in the 70-is-the-new-50 cliche….The impression is one of elderly hedonists –This is profoundly reassuring for the rest of us, and it conveniently dissimates the image of those who live on into their ninth and 10th decade…, those too timid to go out, who have lost confidence on the uneven pavements and dizzying shopping crowds; those afflicted by the mysterious paranoias of old age, trembling each time the doorbell rings and frightened of the unexpected telephone call; people whose days are marked by boredom and its twin, loneliness;⁴

As we get older, we are more likely to need care and support. And that care and support does not always meet our needs. Over the next 30 years, society will need to provide more hours of care⁵ and the total cost of care will increase⁶. We are more likely to suffer from dementia as we

¹ Office of National Statistics, 2010
⁴ Jeremy Seabrook http://www.guardian.co.uk/commentisfree/2010/jan/12/elderly-care-michael-parkinson
age, for example, and Wimo has estimated the cost of dementia across the world to amount to $315 billion.⁷

And yet the problem is not just one for the future. It is a very real problem today. Funding for social care has not kept pace with funding for health care. In the past decade, while the NHS budget has doubled in real terms, social care budgets have increased by only 50%. This has led to local authorities effectively ‘rationing’ care services.⁸ When care needs go unmet, it is often the NHS that steps into deal with the consequences.

Age UK have predicted that government-wide spending cuts will create a £1.75 billion black hole in funding for social care over the next two years. Whilst services are currently struggling to meet the needs of an older population, the London School of Economics has forecast that an additional £800 million above the existing planned expenditure is required simply to maintain provision at its current levels over the same period, due to the rise in numbers of frail older people.⁹

The role for the web and the new technology

The potential role for technology has grown significantly over the past 10 years. Whilst the first telephone call was made 133 years ago, by 2000 half of the world had never owned a phone. But by 2007 half the world had a mobile phone. Whilst it took 75 years for telephones to reach 50 million users, it only took the internet 4 years to reach the same number. ¹⁰ In other words, in a relatively short time period, technology has become ubiquitous, with the internet transforming the way we live our lives.

Yet it could be argued that social care sector has yet to make the most of the potential of new technology including the internet. This short discussion paper will explore some examples of potential services which could be developed as a result of new technologies and set out some of the reasons why we believe they have not yet appeared.

Potential care technologies

Fantastic innovation and the growth of location based services, alongside increasingly ubiquitous smart phones offer much potential for developing personalised care solutions for older people.

There are many developments in new technology which have the potential to be transformative for the care needs of older people. The examples set out below are simply used to highlight the potential and some of the barriers. There are many other examples and ideas.

The potential for a “Tripadvisor” for care homes, which allowed individuals to comment on and rate their care home on the internet has been much talked about for a number of years. But whilst there are some organisations testing out the model and whilst there could be

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¹⁰ Emerson, Jopling, Rowley, Rossall, Sinclair (Eds), (2008) Future Communities. Help the Aged
significant benefits to the end user, those who have tried have faced significant challenges. People are reluctant to criticise a care home if they think they or their family might be identified (and many care homes are relatively small) and those who want to push forward the idea are worried of the threat of legal action from the care home sector. It could also be argued that we may need a large company to come in and develop this product, otherwise the risk is that there will be lots of competing services offering similar products, all with relatively few people looking at the site. There is also the problem that the majority of over 75s are not online and at the moment, only a small proportion of care homes help residents get online. And of course, one of the reasons Tripadvisor works for hotels is that many of them have tens of thousands of visitors per year and they only need a very small proportion to leave comments. With a hotel, if you aren’t satisfied you can leave and go to another one, the same mobility doesn’t as easily apply to a care home resident.

In a world of personalised care, an online “Ocado/supermarket shopping” model for home care could become a reality. This could be a web based service which offered you homecare at different prices at different times of the day\(^\text{11}\). The user could specify the sort of care and support required (and even the person you wanted to do it). A highly personalised service which met the expectations of the user and found ways of incentivising end users to use services at different times could be very popular and could work (particularly in urban areas).

Of course there are countless other potential ways in which the internet and new technology could support the care and support needs of older people. The web could also help better facilitate active ageing through providing and supporting volunteering opportunities, supporting gradual retirement (e.g. see http://www.sliversoftime.com/), and providing new ways for people to participate in society. The web has already begun to facilitate better access to information and advice and undoubtedly this trend will continue. The development of new crowd-sourced websites can help ensure that information is available at a very local level.

New web based technology will also help facilitate more confident consumers of care. There is much talk of increased expectations and the creation of the care/health consumer. There are an increasing number of monitoring and self diagnosis tools available on the internet and through smart-phone apps.

**Making the most of new technology**

For new web based technologies to take off in social care, there are a large number of barriers. Most of these are not new but it is surprising that more effort has not been put into tackling them.

1) **Usability and accessibility.** Web based services and the technology we use to access them, frequently fail in terms of usability and accessibility. If new web based technologies are to deliver significant benefits to the older end user, much more must be done to deliver usable and accessible technology. The technology simply won’t take off without a step change in this area.

\(^{11}\) Some online supermarkets charge less for delivery at off peak times (or when a van is already planned to be in the area).
2) Motivating and inspiring the older population. In 2008 the author participated in a series of focus group of older people to talk about attitudes to technology. It was clear that whilst some were enthusiastic about the potential for new technology, others saw limited advantages.

“Why don’t they come up with a clever telly then, [so] that it comes up on the telly?
Yeah, “Time for your tablets”.
“I don’t want to live in a smart-home – I’d rather be dead”

It is inevitably the case that some people are going to be more enthusiastic about technology than others. But it is also the case that if we want to convince significant numbers about the potential of the web to improve the provision of care and support, we must do more to motivate and inspire.

3) The moral and ethical barriers to technology: The I-pot is a combined electric kettle and health monitoring device available in Japan. It allows a carer to be sent emails, for example, when the recipient of care has used the device. The device gives some comfort to the older person and provides assurance to the carer. But it is also a good example of a technology which highlights the moral and ethical issues which new technology including the web may result in. What happens if the recipient of care doesn’t want to use the kettle one day? What if they don’t want the carer to know they have used the kettle? What if the carer visits less often because he/she knows the recipient of care has used the kettle? What does the recipient of care think about having his/her meals monitored (and are they even aware)?

New web based technology creates the potential for new moral and ethical issues. And these go beyond the debate about whether technology will result in reduced personal care and contact. Yet whilst these are increasingly being recognised as issues (see the occasional tabloid debate about dementia tagging for example), both designers and care providers need to recognise and address the moral and ethical issues. We must find ways of helping older people choose technology when it is right for them. Part of this involves encouraging people to think about this and ensuring that people give consent early.

4) The need to get the basic’s right first. It is debatable as to whether technology can solve fundamental structural issues or funding issues of care. If a service is fundamentally bad, it is hard to believe that using technology will make it inherently good. As Bill Gates once said “The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency”. 12

At the same time, we are currently slow to provide basic home adaptations such as bath rails, and there are waiting lists for the Disabled Facilities Grant. If we are failing to deliver the basics, it is hard to believe that the state will find money for advanced technology/a web enabled smart-home for anyone except the most vulnerable. Key to making technology and the web work in terms of care, is ensuring that we get the basic’s right first.

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12 http://www.saidwhat.co.uk/quotes/business/bill_gates/the_first_rule_of_any_technology_4279
5) Digital Exclusion: It is still the case that the majority of over 65s have never used the internet. The latest ONS statistics\(^{13}\) revealed that more than six in ten over 65s were not internet users. Unless significant progress is made in terms of tackling digital exclusion, it is hard to see the web playing a major short term role in terms of direct care and support for older people.

6) Limited culture of private purchase: There has arguably been a limited culture of private purchase of health and care technologies. Certainly compared to countries such as Japan where some health technologies are often sold through mainstream retailers. In the UK we have in the main relied on the state to support our health and care needs. Mainstream retailers have not provided such products through retailing for example. And for the designer or company involved, it can be very difficult to identify and then reach the end user directly.

That said, the move towards personalisation of care and health could change this picture with more direct payments and personal budgets resulting in individuals wanting to choose new technology. The introduction of electronic health records which could be accessed and updated through new technology could also drive change. And it is worth noting the significant growth in health based smartphone ‘apps’\(^{14}\).

7) Integration of health and care and the case for preventative technologies: It could be argued that the biggest gains to be made from the use of new web based technologies is in terms of prevention and early identification. Using web based services for prevention and health promotion offers fantastic potential. There is growing evidence of the case for preventative services. The Popps evaluation found that for every £1 spent on prevention projects, £1.20 was saved\(^{15}\). At the same time, there is increasing evidence of the impact and value of telecare.

But whilst the costs of these services are likely to fall on health, the benefit falls to social care. Better integration of health and social care is vital.

8) Access to information and advice. People will not buy new web based services to support their care and health needs if they do not know they exist. For new services and products to flourish, there needs to be demand from the end user. But we also need to find ways of reaching and informing the consumer. At the moment the market is fragmented and there are hundreds if not thousands of ideas, products and services which could potentially support the care needs of an older population. But we must find better ways of helping people know what is available.

9) Is the money or incentive to innovate there? Although Government has invested in pilots and the Whole System Demonstrator, there can be no denying that the spend on many new technologies remains relatively small. The projected telecare spend in 2009/2010 (by social care authorities in England) is under £80million and represents a tiny proportion of total care spend\(^{16}\). In other words, if local authorities are spending relatively little on existing and

\(^{13}\) ONS 2010, Internet Usage, Individuals
\(^{15}\) See http://www.pssru.ac.uk/pdf/rs053.pdf
\(^{16}\) http://blog.ilcuk.org.uk/2010/04/01/building-a-national-care-service-white-paper-%e2%80%93-technology-and-care/
reliable telecare services, it is hard to imagine large companies seeing a major financial incentive for investing in the R&D in new web based services, particularly given the other challenges highlighted above.

**Conclusion**

The web does offer the potential to improve the care and support provision for older people. But there are major challenges to be tackled if we are to make the most of the potential. A combination of Government, industry, the voluntary sector and older people must address some of these challenges if the quality of care will improve as a result of new technology.

**Policy recommendations**

- Government should find ways of incentivising and supporting the private sector to introduce new products and services which meet the highest standards of usability and accessibility. There may be a case for further regulatory initiatives to force compliance. At the same time the private sector should better recognise the extent to which poor usability and accessibility contributes to poor sales.
- We must all look to ways to motivate and inspire the older population to engage with new technology. This isn’t necessarily a role for Government but for all of us. However Government should consider compelling older people to use new technology for certain products and services (whilst protecting the most vulnerable of course). The stick (and not just the carrot) must play a part in getting more older people to engage with online services.
- Individuals and families should be encouraged to discuss their own attitude towards the use of technology to support their care needs. More discussion and informed consent could help address some of the ethical concerns about new technologies.
- Government must continue to work on “getting the basic’s right”. We must continue to invest in prevention and in those low level technologies which are proven to be effective.
- Much more needs to be done to tackle digital exclusion. Government must consider digital exclusion as a major barrier to delivering more and better services through technology. Government needs to invest in tackling digital exclusion.
- Government should continue with progress to ensure health and care budgets are integrated and that they incentivise the use of preventative technologies.
- There is a gap in terms of information and advice for end users. This could be a gap partly filled by the voluntary sector (e.g. Which?) but there is also a role for carers and professionals to help signpost people to appropriate technology.