

Telecare and Telehealth – **Drivers of Change**



"TSA members are fortunate to have both the means of contributing to the key public goal of reducing public spending and, at the same time, are delivering quality products and services to a widening range of people "

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Roy Lilley

Writer and Broadcaster on Health

Some things are very clever and some things are just not rocket science.

You do have to be a rocket scientist to put a man on the moon and bring him home safely, but you don't have to be a brain surgeon to figure out the NHS is facing some pretty stiff challenges.

Aside from all the palaver following the election and heroic promises from politicians to have NHS management sponsored by weight-watchers, reduce back-office costs by thirty percent, write on both sides of a piece of A4, turn-out the lights and cycle to work, there is the little matter of the national debt.

Since the bankers took all our money the NHS has been holding its collective breath waiting to see how much money the Government has left, after paying off the interest on the national debt, and what kind of funding it will receive in the next three year cycle, starting in April 2011.

Throughout the election campaign prospective MPs and ministers have dodged, evaded and avoided the issue. It's not made voting easy. It's a bit like going into Marks and Sparks and giving them your money in exchange for something in a bag that you are not allowed to open until you get home.

The phrase elephant in the room doesn't do it! It's more like a heard of dinosaur in the room. What we all do know is; somebody, or other, has decided we have to save £20 billion.

As if that wasn't enough to keep us awake at night there is the no little matter of the demographic 'thing'. Mention 'dependency ratio' to a health care analyst and they have a conniption, say it to an actuary and they have a heart attack. The problem is there are fewer people under 16 years than there are over 60 years. Meaning: fewer kids coming into the workplace to; earn the wages, to the pay the taxes, to fund the pensions, to keep the oldies in linctus and healthcare.

"Could we refocus resources to do more with less? Can we spot risks on the horizon and circle the wagons before the enemy of illness and disease engulfs us?"

Foreword

Added to that is the fact that by 2020 the number of older people living here, suffering some form of Dementia, will be a population the equivalent of Dubai. Are you getting a feel for the size of the problem? Two government enquiries, goodness knows how many committees and seminars later and still no one has any idea how we are going to pay for this Tsunami of healthcare demand. Just before the election an all party meeting, aimed at trying to find a consensus solution collapsed at the first go-around, with the politicians bickering.

Notwithstanding the popular perception that the NHS should be run by a man with a clip-board, a dog and a pencil, there is the serious issue about clinical manpower. Given the rise in healthcare demand there won't be enough healthcare assistants and nurses coming though our home-grown system. We will have to look to recruit overseas and we have already seen what a mess the NHS can get itself into over that.

Modern lifestyles have given us all the opportunity to eat ourselves into an early grave, drink ourselves into oblivion and sit on the sofa to watch it happen on the TV. We are all living in our own reality show.

So, there you have it. A few problems for the NHS to sort out. In truth, they are not all the NHS's problems, some of them belong to social services and a lot of them to us, as individuals, but they all end up in the in-tray marked 'health' and the NHS is going to have to take a lead in fixing them.

What do we do? At a time when public expectations of the NHS have never been higher they won't take kindly to waiting longer than 18 weeks for anything, not getting the drugs they want, struggling to see a GP and camping in A&E and end up being seen by an exhausted junior doctor. There is no going back.

If we are going to give the people, who have been stumping up record funding for the NHS (£121 billion this year), the services they have come to expect, we have to find ways of doing more with the same and that does not mean more of the same. We will have to change the way the NHS does business.

For instance:

Is it possible to promote healthier lifestyles and support people whilst they get the hang of it?

Can we show people safe ways to monitor, observe and keep an eye on their conditions and treat them like they are the real expert in how they are feeling?

Is there a way to keep people happy and content with the dignity of risk, living in their own homes, reassured by compassionate watchfulness?

Could we re-focus resources to do more with less? Can we spot risks on the horizon and circle the wagons before the enemy of illness and disease engulfs us?

And, can we help staff from all parts of social and healthcare to work, as one, by giving them 24-7 access to the information, data and records they need?

The answer to all the questions is; 'too right we can!' Welcome to the inspiring, exciting and indispensible world of tele-health and tele-care...



Roy Lilley will be chairing the National Telecare and Telehealth Conference 2010, at the Hilton London Metropole Hotel on 15 to 17 November 2010.



Dr Malcolm J. Fisk

Chair Telecare Services Association

I am very pleased to report another successful year for the TSA and am delighted that members and non-members continue to be so actively engaged in our telecare and telehealth agendas. Not a week has passed without our members celebrating the development or adaptation of products and services in ways that will reach a wider and wider range of people with support needs. As a consequence we now engage in supporting more carers and vulnerable people than ever before... so much so that I believe we have crossed that crucial threshold by which we are properly recognised as the key body and the guardian of standards for telecare and telehealth by policy makers and strategists at all levels of government.

The omens for the coming years are, therefore, very good. And I say this despite the fact that we face uncertainties that arise as a result of the recession. Our position is helped, of course, by the consequences of demographic change and the fact that our technologies and services contribute to savings in public sector spending. Indeed, telecare and telehealth are being called upon to contribute a third (1%) of the 3% year on year savings now required for adult social care in the United Kingdom. But telecare and telehealth could do a lot more. On the basis of the emerging evidence I argue that we can, with properly configured technologies and services, deliver on that 1% saving – provided that our new government has the courage to make the necessary structural reforms and is willing to implement the vision that was beginning to be shaped through the work of Lord Darzi and was evident in the Putting People First concordat.

It is our good fortune, meanwhile, that there is consensus among the main political parties regarding at least some of these matters. At the same time there is the ongoing debate regarding how support and care services will, in the future, be funded. But regardless of the outcomes of that debate, TSA members are fortunate to have both the means of contributing to the key public goal of reducing public spending and, at the same time, are delivering quality products and services to a widening range of people.

"...our journey is one that will bring immense benefit to so many, many people. We really can and will make a difference." Our strategic position at the health and social care interface is important, too. And as we address the need for the wider delivery of health (as well as social care) services in people's homes there must (I repeat, must) be further moves to shared budgets and partnership working that will bring greater concordance of view between social care, housing and health practitioners. The technologies, of course, do not recognise such boundaries. At the same time we will see further steps being made towards the establishment of that new raft of generic workers in telecare and telehealth. These will build on, and draw from, our hugely important social care workers, now probably over 5,000 in number, whose diverse skills are, for the most part, insufficiently recognised.

The question now arises regarding how the broader agenda will develop. My view is that, for us, the big issues arising from the recession will take second place behind the shift we will see in, on the one hand, the way that telecare and telehealth technologies develop; and, on the other hand, the way that users take advantage of such technologies.

We have seen some of the signals already. For telecare and telehealth technologies in the home we will begin to see the fruits being borne of a significant range of initiatives involving telephone and video-phone support. The context is one that relates to the kind of 'coaching' and guidance that can give people the encouragement they need to be able to use, with confidence, some of the technologies with which we are concerned. Some (many?) such initiatives will be available via set top boxes that, ultimately, will offer wider service menus that are as relevant and interesting (we can hope) to an 18 as to an 88 year old. And in their wider appeal, so the stigma that attaches to some of the current telecare and telehealth technologies will, in part, be overcome.

This last comment hints at the issue concerned with how people use technologies. And it is here that a second big change will occur – through mobile telephony. The context is one where there are over 2,000 'apps' (applications) for smart mobile phones that can help people to monitor their health, fitness and wider well-being. We are, furthermore, just a smidgeon away from body worn sensors that will link to mobile phones that, in turn, will give immediate feedback to the user and/or transmit information to third party monitoring services. Consider also the likely rapid increase in take up of services that will be available through individual budgets giving many vulnerable people choices and options that were previously unavailable. Telecare and telehealth will, therefore, move to a new dimension - with an increasing take-up of technologies that support mobile as well as home based support and care options.

So the future for TSA members is, I suggest, a bright and exciting one. For those readers of this Annual Report who are not members, therefore, I say "Come and join us. We're going places." Importantly our journey is one that will bring immense benefit to so many, many people. We really can and will make a difference.

Finally I wish to pay tribute to the hard work of the TSA team (both fellow Board members and staff) and to the endeavours of all TSA members. Together we'll continue to build on the successes of the past year. We will move forward in a way that must remain business-like but, at the same time, will help to shape products and services in ways that are, of course, sensitive to strategic agendas but are also sensitive to the needs of the ultimate beneficiaries of telecare and telehealth.

Mangle.



Alan Clark

Chair Telehealth Board

It had become increasingly obvious to the TSA Board that the growing emergence of telehealth in the UK was both a concern and an opportunity to the membership and that TSA needed a response. The growth in numbers of older people has fuelled demand for telecare, and the increasing numbers of middle aged is fuelling demand for health care for a range of Long Term Conditions. These different age groups and their divergent (but ultimately convergent) problems have led to the dichotomy between social care and health care, with differing funding streams, and differing outcome measures. By leading the debate on the issues, the TSA can develop the insight into the differences and thus has the potential to offer significant and far reaching solutions.

It was timely that UK-EHA had approached TSA with a view to merging, however after several months of negotiating UK-EHA decided to close down but TSA was very fortunate in being able to secure, as co-opted Directors, two of the UK-EHA Board, Dr. Nick Robinson and Prof. Russell Jones. To support this move a Telehealth Board was established by the main Board whose stated aim was to:

- Unlock the potential of telehealth and thereby champion the cause in the UK
- Advise the TSA Board on the strategic direction and development of telehealth in its own right and its integration with social care
- Help inform the Department of Health (and Nation State equivalents) policy and to provide a touchstone and supportive challenge forum – when required
- Provide a single forum for clinicians and other healthcare professionals committed to the development of telehealth
- Recognise and support appropriate convergence of telecare and telehealth

established a position of recognition and authority with external audiences in respect of the telecare sector." The key responsibilities of the Telehealth Board were to:

- Develop and implement a sustainable telehealth strategy for TSA
- Help shape and prioritise the work plan of a dedicated Telehealth Development Manager (TDM)

Alongside the establishment of the Telehealth Board was the appointment of a Telehealth Development Manager (TDM) whose initial work plan was to:

- Meet key individuals and organisations involved in telehealth
- Identify stakeholders in health and social care
- Construct a telehealth market map
- Formulate a first stage proposition as to how TSA can best serve its current membership and attract new members.

From a number of workshops run by members of the Telehealth Board it was evident that many TSA members were already involved in some form of telehealth or were busy exploring how their organisations could be involved. It was therefore decided that the TDM should, initially, concentrate on meeting as many members as possible to really understand what support they required from TSA, and this initial research indicated that TSA should:

- Be an unbiased and impartial knowledge centre
- Be the first reference point for telehealth advice and guidance
- Provide high quality networking and lead generation opportunities for system vendors and service providers
- Champion the consumer and shape service delivery mechanisms
- Support the interests of those engaged in delivering telehealth services

- Be a powerful and influential industry representative
- Provide demonstrable success in lobbying for quality standards
- Establish a credible profile with European representative agencies and representing the UK on an international platform
- Provide and monitor de-facto telehealth service standards

So what next? Despite losing the TDM to pastures new, there is a renewed determination by the TSA Board to move the telehealth agenda forward. The TSA has established a position of recognition and authority with external audiences in respect of the telecare sector. A key goal for the next year is to establish a similar position in respect of the telehealth sector.

A key part of establishing this position is the development and publication of a challenging and innovative telehealth strategy. The strategy will need the support of those members who are actively providing telehealth services, additionally the Telehealth Board will need to produce a strategy that supports the current membership but also encourages new members. To achieve this, the Telehealth Board will need to build on the past twelve month's work to ensure that it fully understands the needs of existing members but also to gain an understanding of those organisations in the telehealth industry to ensure that TSA is relevant to their needs. Another challenge for the Telehealth Board is whether or not the successful, albeit challenging, Telecare Code of Practice could form the basis of a Telehealth Code of Practice. A busy and interesting time ahead and could I extend an invitation to any member that wants to be involved in this exciting development to contact me via the TSA office.

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George MacGinnis



NHS Technology Office

The time is right

While there has been talk for many years about the huge potential of telehealth and telecare, there is now a real sense that they are set to take another step towards mainstream adoption.

Demographic issues have been brought into sharp focus by the financial crisis, making the need for change more immediate. There is now a growing evidence base internationally on the effectiveness for new models of care supported by technology and, with the results of the Whole System Demonstrators due next year, the time is right for telecare and telehealth to drive change.

The place of telehealth and telecare is not a given, and there is much still to be done to make services a mainstream reality. Telehealth adoption is still in its infancy, and a look over at the telecare world suggests that there is still work to be done. A few innovators are pushing the boundaries towards universal availability, and there are some interesting new technologies coming through, but the reality is that there remain questions about the scalability of many services, concerns about integration in the widest sense so that new services are truly part of 'the way we do things round here', and that current technologies limit rather than expand choice and personalisation.

Much of this involves a complex dynamic where suppliers require commitment from customers to grow the market before they can justify the investment needed to develop better services and technologies.

Making an impact

Realising the true potential telehealth and telecare will mean taking a pragmatic approach to implementations, rapidly building capability and capacity to meet the wider expectations for health and social care system reform. This will require:

- A vision that sets the development agenda, clearly identifying the benefits and priorities
- Laying the foundations for scalable services within the limitation of current technology
- Expanding accessibility by working collaboratively with suppliers to shape technology enhancements.

to see the industry coming together to work collaboratively on the next generation of technology standards for telecare."

Information for personalised care

Setting the stage

Deploying effective solutions requires a clear vision for who needs to be targeted, how their needs can best be met by technology and how the answers to those questions may change over time. Moving to mainstream services delivered at scale demands a longer-term approach to thinking about implementation.

An off-the-shelf approach to procurement has been a positive enabler for early adoption. Fielding a solution requires significant investment in capabilities and infrastructure. These sunk costs are often overlooked when making the initial case for investment, but they become critical when looking to expand a service. It is important to understand the risks that expedient solutions present and consider investments in the context of a longer term strategy.

Last year, the NHS Technology Office published a Telehealth Specification Good Practice Guide. The first part of the Guide is about commissioning strategies and it asks simple questions about the scope, scale and the range of organisations expected to be covered by a service as it develops, helping commissioners to understand the implications of their vision before implementing the first step.

Laying the foundations

It is often assumed that once an infrastructure is in place, it becomes easier to expand a service to include extra care pathways, new technologies and other demographic groups. Initial investments typically focus on areas where there is confidence of a return but in the longer term there may be greater opportunities in groups who would have very different technology preferences. Unfortunately, the largely proprietary nature of current solutions forces some uncomfortable choices on providers. Either they must live within the limitations of a particular solution or accept significant overheads from managing multiple remote monitoring systems.

Building the flexibility to expand a service requires a clear vision for growth, an understanding of service maturity to drive improvements and a commercial strategy for moving beyond the limitations of current technology platforms. The vision should identify short-term opportunities for incremental growth, expanding coverage by condition, demographic or in terms of overall uptake. Through this will come a sense of where the limits of existing technology investments lie, and when whole new capabilities would be required. While partnership working may be the clarion call in negotiations, unless the foundations are laid in the initial arrangements it will prove hard for individual customers to drive the agenda.

Building to scale

The quest for more flexible solutions to underpin growth points to the need for professional and technical standards to open access and enable services to work across organisational boundaries.

In telehealth there has been some significant progress. In just four years the Continua Health Alliance has grown globally to include over 230 organisations and has delivered the first iteration of its interoperability guidelines for personal health and wellness technologies. We have been working in partnership in Newham on integration of their telehealth and GP systems drawing on this standards work. While technically this is relatively straightforward, the work is exciting because it has also addressed the major clinical governance concerns and opens the possibility of more innovative and scalable service models.

The TSA has played a key role in fostering standards for telecare. It is great to see the industry coming together to work collaboratively on the next generation of technology standards for telecare. There is a real opportunity to lead thinking globally and I look forward to seeing the results of this collaboration.

Conclusions

The groundwork has been laid for telehealth and telecare to play their part in creating more sustainable health and social care services. Delivering on this early promise will mean taking bold steps in building capability and capacity, recognising the limitations of existing technologies and providing the foundations for scalable services. Central to this will be a need to develop a vision which clearly identifies the priorities and progressively drives the development of mature capabilities.

Imelda Redmond



Chief Executive of Carers UK

Social care has never had a higher profile. Often seen as a 'Cinderella' service, overshadowed by the National Health Service, it has finally been given some much needed political – and public – attention.

Building the National Care Service, the recent White Paper on care and support, is an attempt to try and make sense of how we allocate, provide and fund care for older and disabled people. This is an issue that will affect us all, especially as we live longer and more of us either need care or need to provide care for older or disabled relatives.

It is predicted that by 2026, there will be 1.7 million more adults who need care and support, and the system has to change to meet their needs. But the challenge is a huge one. In twenty years there will be a £6 billion shortfall in the funding of social care – and that is just to provide the existing level of service, widely acknowledged to be woefully inadequate. People's expectations of the lives they will lead in older age are rising, and 'baby boomers' want a different kind of service from that on offer to their parents. Younger disabled adults want independent lives that they have control over. Add to that the fact that families will increasingly be juggling the care of their loved ones with longer working lives in increasingly demanding jobs, and the need to provide flexible, affordable services fit for the 21st century becomes ever more crucial.

The effective – and creative – use of technology will be central to this brave new world of services that deliver what people want as well as need, and not simply what they are told they can have. *Building the National Care Service* asserts:

'It is safe to imagine that the pace of technological change that we have seen over the last 20 years will continue, and that by 2030 the kinds of technology that will be available to us will be far beyond anything we know at the moment. Those using the care and support system will increasingly expect technology to play a part in helping them decide what care to choose and helping to improve their quality of life, and the care and support sector will need to be positioned to take advantage of these innovations.'

"We simply cannot continue with a system that all too often stifles creativity through arcane bureaucratic commissioning processes"



Assistive technologies: a brave new world?

However, we know that there are significant blockages in the system that impede the development and mainstreaming of health and care technologies, and these will have to be tackled if we are to see this vision realised. Research carried out by the Foundation for Assistive Technology in 2007 identified a number of significant barriers to the development of assistive technology products. These included an underdeveloped market for assistive technology despite a growing potential private market of older and disabled people wanting better and more independent lives.

We know that many people are simply not aware of how assistive technology can transform their lives. Even if they are, they cannot access services other than through formal assessment processes, and even then have to accept what is on offer in a postcode lottery of local authority and health authority provision. We simply cannot continue with a system that all too often stifles creativity through arcane bureaucratic commissioning processes, and systematically settles for the lowest common denominator of 'belt and braces' technology applications rather than really innovating.

We know that there are exceptions to this rule, with examples of excellent practice across local and health authorities. The Department of Health is currently managing a two-year evaluation of the use of telecare and telehealth, and with over 6,000 participants, it is the largest randomised control trial of telecare and telehealth technologies in the world, and is expected to report in early 2011.

There will undoubtedly be much to be welcomed in its findings, and we already have additional affirmation of the cost benefits as well as enhanced outcomes resulting from use of technology in a recent report by Professor Sue Yeandle which argues that:

'Telecare offers a critically important contribution to our health and social care system, and must be more speedily adopted, on a larger scale and with greater vigour, to avoid compromising quality in our system while growing unmet demand overwhelms us'. However, she also makes the point that health and care technologies, while having the potential 'to significantly reduce avoidable pressures in the system, releasing precious financial and human resources to be deployed elsewhere and offering a 'win-win' response' are 'not yet adequately mainstreamed and exploited.'

We will not really be able to claim success until these technologies are universally available through commercial as well as statutory channels – 'tools for living' which can be bought on the High Street – and until they are seen alongside the rain shower, the iPhone, HD TV and the WiiFit as 'must haves' for a whole new generation of users.

Carers UK is a campaigning and advocacy organisation, and provides information and advice services to carers and professionals working with carers. Its mission is to improve carers' lives by:

- campaigning for change
- providing information and advice
- building an evidence base
- mobilising supporters
- transforming understanding of caring

For more information, contact:

E-mail:imelda.redmond@carersuk.org Tel: 020 7378 4933 www.carersuk.org

"It is predicted that by 2026, there will be 1.7 million more adults who need care and support, and the system has to change to meet their needs. But the challenge is a huge one."



Jonathan Wallace

Director of Knowledge & Technology Transfer, Faculty of Computing & Engineering, University of Ulster

Telehealth and Telecare (Connected Health) rollout within Northern Ireland is rapidly heading towards the much needed critical mass. This is in no small part due to the European Centre for Connected Health's procurement and implementation of a region-wide, end-to-end, remote telemonitoring service. The procurement of this service should be in place in the near future and will, by 2011, ensure that the care given to 5,000 people with chronic disease is supported by the provision of a daily remote monitoring service.

Given the efficiency gain targets placed upon all government departments, including those within the Northern Ireland Assembly and particularly the Department of Health, Social Services and Public Safety and the corresponding five Health and Social Care Trusts, the rollout of this region-wide service is definitely opportune.

Our experiences of utilising telehealth and telecare services, combined with the fact that Health and Social Care in Northern Ireland are provided as an integrated service, means that even with the benefit of the Whole System Demonstrator pilots, the rest of the UK can learn some valuable lessons from their colleagues in Northern Ireland.

Officially launched in January at the 'open+health' international conference and summit in Belfast, this year has also seen the establishment of BCS Health Northern Ireland as a new regional forum for multidisciplinary engagement across the stakeholder groups including:

- Health and Social Care Professionals
- HSC Informatics and Records Professionals
- Government
- Industry
- Academia
- Service Users.

This multidisciplinary group aims to promote the development and utilisation of Connected Health in Northern Ireland to support effective, evidence based, efficient health and social care in areas of research, education, practice, and management decision making.

This is intended to benefit the health of individuals, communities, and populations that receive health and social care services and the staff and organisations that deliver health and related services.

"Functionality, interoperability of products and services and most importantly good usability, are not, nor should they be, mutually exclusive."



Northern Ireland Connected Health – the state of play

Functionality, Interoperability and Usability

As technologists, we all share the guilt as to how a large proportion of the telecare and telehealth products on the market, whilst having great functionality, can often leave much to be desired in relation to usability. In the early years of developing these products and services it was understandably all about proving that the technology worked. Well, the technology does work; the issue that still permeates a lot of service offerings is that focus is still largely on functionality. Unfortunately, this technological determinism has been one of the major stumbling blocks in the uptake of connected health service solutions. Functionality, interoperability of products and services and most importantly good usability are not, nor should they be, mutually exclusive.

Thankfully due to the ongoing standards development work of the likes of IMIA and industry proactively now agreeing on common standards, such as those developed by the Continua Health Alliance, the lack of interoperability that has plagued the proprietary offerings is finally starting to be actively addressed.

TRAIL – a Living Lab approach

Usability or the lack of it however, still remains a significant issue. This is why one aspect of our connected health research at the University of Ulster, based within the Translating Research And Innovation Lab (TRAIL), adopts a multidisciplinary open innovation living lab approach with colleagues from Health, ICT, Design and Business supported by Lead Users. The University of Ulster is the largest university on the island of Ireland and one of the largest in the U.K., and has a reputation as a modern, progressive, entrepreneurial university. It also has significant internationally recognised research across the key areas that constitute Connected Health service solution development. These range across the continuum from the fundamental development of new sensor technologies and the software diagnostic algorithms to accompany these; through advanced genomic and proteomic research for the development of biomarkers, truly personalised medicine and new drug delivery mechanisms; to significant strengths in the user-centred design and usability assessment of connected health product and service solutions.

From Connected Health to Connected Wellbeing

The focus for Connected Health is currently on addressing the needs of the Level 1 Self Care/Supported Self Management clients identified by the Kaiser Permanente Triangle (c.f. see diagram) which consist of 70 - 80% of chronic disease patients.

However as we go forward we must not forget that the largest percentage of the triangle (often not shown when the triangle is presented) and therefore where the largest cost efficiencies/ savings can be made is Level 0 - Population Wide Prevention.



This is why we must look beyond Connected Health towards Connected Wellbeing. The greying of the boundaries between health and sports and lifestyle products and their use by the 'worried well' is already underway in facilitating this.

Sustainable Health

Finally, again reinforcing the truly multidisciplinary nature of our research collaborations in this area, another particular focus we have had for a while and I know researchers at BRE Innovation Park are now also engaging in, is in relation to Sustainable Health and the impact of the Built Environment.

It should never be just about the technology it has to always be about balanced perspectives.

If you are interested in finding out more about our work in TRAIL, specific projects the lab or the University are engaged in, or would be interested in collaborating with us to help drive the future provision of health and social care in your region then please feel free to contact me at jg.wallace@ulster.ac.uk







Moira Mackenzie

Telecare Programme Manager Joint Improvement Team. Scottish Government

Although telecare and telehealth started out in Scotland from within different organisational structures, there is rising recognition that by working together we can better achieve our shared outcomes,

- Ensuring better, local and faster access to public health and care services
- Improving the quality, delivery and efficiency of public health and care services
- Better supporting the citizens and carers of Scotland
- Connecting the population of Scotland to appropriate, timely care

In Scotland, 'telehealthcare' is being increasingly used to describe the areas where telecare and telehealth activities overlap. Not because we particularly like the term, but simply because we haven't come up with anything snappier or more acceptable! The following diagram illustrates the current areas of convergence, with an acknowledgement that new opportunities will undoubtedly present themselves over time.

TELEHEALTHCARE - areas of Telehealth & Telecare convergence, 2010-15

Convergence will occur At the same time there will around services delivered be parallel developments in and around people's in the separate fields telecare Environmental controls own homes • Activity & lifestyle monitors Self caring/preadmission Supported Mobile sensors and GPS locators Discharged/self caring convergence (telehealthcare) Remote LTC monitoring • Falls monitoring

telehealth

• Digital imaging

Rehabilitation

As technology • Unscheduled, anticipatory & develops new planned triage & consultations opportunities for convergence will arise

As organisational cultures become more attuned new opportunities for convergence will arise

The role of telehealthcare in supporting the delivery of strategic initiatives such as Shifting the Balance of Care¹; Better Health, Better Care²; and Reshaping Care for Older People is being increasingly referenced by the Scottish Government, Health Boards and local health, housing and social care partnerships. Indeed, as health and care policies emphasise the importance of developing services which have the 'person' at their core, the role of telehealthcare as a tool for delivering integrated services is likely to grow.

¹ Scottish Government (2007): Shifting the Balance of Care Framework (On-line , Edinburgh)http://www.shiftingthebalance.scot.nhs.uk/

² Scottish Government (2007). Better Health, Better Care: Action Plan (On-line, Edinburgh)http://www.scotland.gov.uk/publications/2007/12/11103453/

Telehealthcare in Scotland



lain Hunter

General Manager, Scottish Centre for Telehealth NHS24

Evaluation research is also showing that telecare and telehealth can offer a way to square the circle of meeting rising service aspirations, and demands on the growing numbers needing care in a context of increasing pressure on public spending. (The publication in December 2009 of the CIRCLE research 'A Weight off Your Mind' commissioned by Carers Scotland, was particularly welcome, showing the significant impact technology supports can make on outcomes for unpaid carers). We regard Scotland as being well placed to capitalise on this with about 19% of people over 65 in Scotland already having a 'first generation' telecare service, about 3.5% with a 'second generation' service, and around 1% already accessing telehealth support. This provides us with a robust platform from which to grow a more integrated and comprehensive approach.

We have seen benefits from adopting a clear strategic focus to our activity on telecare from an early stage - a national strategy was published in Scotland in May 2008. This received Ministerial endorsement and contained a short Action Plan for 2008-10 detailing specific tasks, responsibilities and timescales. As we reach the end of this period, clear progress has been made. The extent to which the mainstreaming of telecare has been achieved by local partnerships can also be seen, including a greater integration of social and healthcare services in the process. The detail of this is contained in 'A Summary of Telecare Services in Scotland' published by the Joint Improvement Team in April 2010. This records for example, that 61% of partnerships are now delivering some degree of home based health monitoring (COPD, diabetes, falls management, medication prompting) and that in many of these the lead role within the partnerships has been taken on by health - 10 further areas anticipate start dates for telehealthcare projects in 2010/11. A review of progress on the strategy along with the results of this summary have been useful for informing our strategic approach for the future.

Recent changes on the telehealth front have also been progressed, with the Scottish Centre for Telehealth (SCT) moving into NHS 24 from April 2010. The move brings the Scottish Centre into a 'national delivery organisation' and offers the potential for full-scale deployment of telehealth solutions. The recently published Strategic Framework for Telehealth gives clear focus to a limited number of areas or conditions where it is believed that adoption of telehealth will bring benefit to patient, carer, clinician and organisation alike and will make Scotland a leader in the field of national adoption of telehealth. The move to NHS 24 will result in a stronger, more delivery focused approach to the national roll-out of telehealth applications. To continue to build momentum and evidence the benefits of working together, Joint Improvement Team (JIT) and SCT have agreed to develop a joint strategy for their convergence activity over 2010/11. In addition to specified areas of delivery (e.g. remote monitoring of Long Term Conditions, Education & Training), the joint strategy will include actions designed to strengthen the underpinning support structure for telehealth and telecare, and develop a Business Case to resource joint activities over the longer tem. Momentum has been further supported by the Ministerial decision to provide an additional £4m to support the development of telehealthcare across Scotland over 2010/11, with indicative allocations of £120,000 being offered to all 32 local partnerships across Scotland (subject to securing match funding).

It is recognised that a strong partnership between the national Telecare Development Programme and the Scottish Centre for Telehealth will be vital to the successful development of telehealthcare in Scotland. In particular, the joint work undertaken over the last year by both programmes has resulted in a very close and mutually supportive relationship, with an increasingly integrated approach to the planning and implementation of development work. A joint work programme for 2010/11 includes the following work streams;

- Publication and implementation of Telehealthcare Education and Training Strategy 2010/12 (with associated 7 workstreams)
- Agreement to develop a code of practice for Telehealth (including ethical, clinical infrastructure and monitoring standards)
- Developing more effective procurement arrangements
- Developing a robust and cost effective framework to enable local partnerships to assess mainstreaming progress
- Identifying and pursuit of EU funding opportunities and partnerships which link to the emerging telehealthcare strategy workstreams
- Developing a simple, agreed set of definitions and terminology

All of this will be supported by a programme of events and activities, including a more integrated network of champions across Scotland representing telecare and telehealth interests.

Further information on the above is available on the Joint Improvement Team and Scottish Centre for Telehealth website.



Professor John Cleland

University of Hull

Heart failure is common and debilitating, affecting more than a million people in the UK. Heart failure is caused by the inability of the heart to pump blood around the body effectively, leading to excess fluid in the legs and lungs, which in turn results in ankle swelling and breathlessness.

Heart failure care has taken huge strides forward in the last few years, with new medications and the introduction of sophisticated pacemakers that co-ordinate the beating of the heart. However – despite these advances – people with heart failure still often have severe symptoms, recurrent hospital admission and a much reduced life expectancy.

In addition to the personal burden on patients and their carers, heart failure also places a great strain on the resources of the National Health Service. An estimated 2% of the total NHS budget is spent on heart failure management, with much of the cost attributed to the hospital care required when symptoms worsen.

Telehealth can play an important part in reducing the burden of heart failure on patients, their loved ones, and the taxpayer. Remote monitoring ('telemonitoring') of heart failure patients provides an early warning of deterioration, allowing quick intervention by the community health team that may prevent admission and save lives. A study published in 2005, led by the Department of Cardiology at the University of Hull, showed that telemonitoring of heart failure patients substantially reduces mortality in this population. Subsequent work has provided additional evidence that telemonitoring saves lives, and can also help to avert hospital admissions.

"Telehealth systems will increasingly become integrated into the normal daily lives of patients with long-term conditions."

6

David Barrett

Lecturer in Telehealth, University of Hull

Telehealth in Hull: Saving lives, improving care.

In Hull – and other areas of the country – this research is being put into practice on a daily basis. NHS Hull supports a telemonitoring programme for heart failure care that has benefited nearly 200 patients since 2008. Participating patients have monitoring equipment installed in their homes following hospital discharge, initially for a period of four months. The equipment includes a television set-top box or stand-alone unit, in addition to weighing scales and a blood pressure monitor. Each day, patients record their blood pressure and pulse, weigh themselves, and answer questions about symptoms. These data are transmitted to a server, from where they can be viewed by a 'telehealth nurse'. The telemonitoring system is programmed to alert the nurse to any substantial changes in the patient's condition. The nurse views the alert and - if necessary - contacts the patient directly or arranges intervention by the community health team. The service has already had a substantial impact on the lives of heart failure patients and their carers.

Hull is also at the forefront of evolving new concepts in telehealth, partly funded by two substantial EU/FP7 grants in partnership with research support from Philips, Tunstall, Medtronic and other technology providers. The research agenda includes new deployment strategies, educational and motivational content in telehealth systems, more sophisticated decision support software and the creation of new sensor and teletherapy technologies. These ideas are being brought together to create a virtual 'Centre for Telehealth' – led by the University of Hull – that should evolve into a physical entity in the next few years.

The model of care utilised in Hull to support heart failure patients can be applied in other geographical locations and for other clinical conditions. Though the evidence base for telemonitoring in other long-term conditions such as Chronic Obstructive Pulmonary Disease (COPD), diabetes and hypertension is less robust than in heart failure, there are reports of similar success. The Department of Health funded Whole System Demonstrator (WSD) project is assessing the effectiveness of telehealth for a number of long-term conditions, and the results are awaited with interest. Telehealth is already having a huge impact on the lives of patients in Hull and beyond, but this is only the beginning. Telehealth systems will increasingly become integrated into the normal daily lives of patients with long-term conditions. Not only will their conditions be monitored remotely, but telehealth will support them in the use of medication, provide them with motivational and educational resources to enhance their lives, and reduce visits to healthcare institutions. This technology empowers patients to manage their own illness, and enables personalised healthcare for a broad range of people.

These developments are more than just exciting technological advances: they are innovations that will enhance the management of long-term conditions, improve and extend the lives of patients, and help the NHS to provide more effective, affordable services.

"Telehealth is already having a huge impact on the lives of patients in Hull and beyond, but this is only the beginning. Telehealth systems will increasingly become integrated into the normal daily lives of patients with long-term conditions."



Maartje Schermer, MD, PhD

Associate Professor of Medical Ethics and Philosophy of Medicine ErasmusMC Rotterdam, The Netherlands

Telecare services are quickly developing and may revolutionise the care for patients with diabetes, COPD, heart failure and other chronic diseases. In this contribution I will focus on telemonitoring systems that also aim to educate the patient, such as the HealthBuddy[®] produced by Health Hero Network, and the Motiva[®] developed by Philips.

Self-management, compliance and concordance

One of the stated goals of such telecare systems is enhancing independence and self-care of patients. Telemonitoring and patient education are said to enable the individual to cope better with his condition and to improve patient self-management. However, these claims about the positive impact of telecare on empowerment or self-management of patients usually fail to define these goals very precisely.

In order to develop systems that truly help and empower patients, it is important to make a distinction between two kinds of self-management: compliant self-management and concordant self-management. Compliant self-management means the patient learns to manage his condition in an almost professional manner. The patient becomes a 'proto-professional' who follows medical guidelines and knows and does what is best for him from the medical-professional perspective.

In concordant self-management, by contrast, the patient is enabled and stimulated to find his own way of living with his condition, by enhancing the relevant knowledge, understanding and practical abilities of the patient. The patient can make his own decisions and choices, which may not always be the most prudent from a medical or cost-effectiveness perspective, but may enhance the patient's over-all quality of life or enable him to fulfill important life goals. In concordant self-management the clinical expertise of professionals is integrated with the concerns, priorities and resources of the patient himself.

should address the whole person, not just his bodily functions."

Telecare and self management: from compliance to concordance

Big Brother

Current telecare systems mostly promote a form of self-management in which compliance to medical prescriptions and instructions is paramount, not a concordant form in which the patient's own perspective is empowered. In the near future, further development of telecare technology is to be expected. It is likely that equipment will become both smaller and smarter; sensors or cameras may be used to monitor health related behavior or detect deviant behavior patterns. The analysis of data can be further automated and personalised, and by combining electronic patient records and patient data with evidence based guidelines, feedback to the patient (e.g. lifestyle instructions) may also be further automated. These developments could well result in new telecare systems that enable more intense, more continuous and more unobtrusive monitoring of health status and health related behaviors, as well as enable more constant and more personalised feed-back on health related behaviors. Such systems are perfectly suited to support a strict enforcement of compliance. Sanctions could be imposed when the telemonitoring system shows that the patient deviates from his doctor's prescriptions or the recommended lifestyle. It is easy to imagine a Big Brother scenario in which telecare systems support and enforce a paternalistic health regime. That should not be our aim.

Future vision

I propose a different route. Further development of telecare systems should emerge from a paradigm of concordant care rather than from a paradigm of compliance. The aim should not be to promote strict compliance, but to enable patients to integrate lifestyle advice and instructions into their own way of life, to set their own priorities and be guided by their own goals and values.

This means, first of all, that we should look for ways to enhance the interactive possibilities of new, developing telecare systems in such a way that more room is created for the patients' own views, experiences, questions and life-style choices and for exchanging and discussing these with a professional. The telecare system should address the whole person, not just his bodily functions. Second, telecare systems ought to be flexible enough to adapt their built-in standards of behaviour, or of symptom control, to individual patients, and flexible enough to leave a reasonable room for deviance from prescriptions and life style advice.

Finally, much more use could be made of ICT based possibilities for sharing experiences with fellow patients, and for exchanging solutions for everyday health-related problems. Systems could encompass social, educational and recreational elements in a way that truly helps patients to integrate their disease into their lives. Involving patients in the development of systems is a requisite to attain this.

Conclusion

Existing and emerging telecare systems promise to enhance patient self-management.

In doing so, instead of reproducing an outdated paradigm of compliance, the new technological possibilities should be seized to develop and implement a new paradigm based on concordance and empowerment of the patients own perspective.

"In the near future, further development of telecare technology is to be expected. It is likely that equipment will become both smaller and smarter; sensors or cameras may be used to monitor health related behavior or detect deviant behavior patterns."



Professor June Andrews

Director of the Dementia Services Development Centre, Applied Social Science, University of Stirling

Telehealth and telecare are essential elements in the response of the developed world to the challenge presented by increasing numbers of people with dementia.

The Dementia Services Development Centre (DSDC) celebrates its 21st anniversary in 2010. Dedicated to research and teaching, the DSDC was set up to help the improvement of services for people with dementia and their carers. After more than two decades the need for research and teaching has not diminished.

'Dementia' is the umbrella term for the symptoms of a range of conditions which are more common in older people. The most common of these conditions is Alzheimer's Disease (AD). AD accounts for over half of the people with dementia in the UK, who now number over 800,000. Strategic interest in dementia has increased exponentially in the last few years. The reasons for this include the discovery of a narrow range of medications that, in some cases, help with symptoms, and economic pressure. The medication only works at earlier stages so patients and families are much more likely to seek a diagnosis, to benefit from the medication as long as possible. The economic pressure arises from the ageing population. Dementia currently costs us more than cancer, heart disease and stroke put together, and we won't have the resource to provide care and support unless we start to do things differently. It will get more difficult.

The person with dementia can have two possible journeys. The first is one where the person, armed with the knowledge of what they need to stay well, maintains their independence for as long as possible, living at home with a range of personal and carer supports. We know what facilitates this path. It includes exercise and social interaction, good nutrition and in some cases, medication. It is also facilitated by good design and technology in the place where you live.

The second journey is where the person very quickly descends into a position where they need complex and expensive care packages at home, which break down and lead more quickly to expensive institutional care.

nome, the capacity to be ndependent is a precious hing for the well being of the individual."

Change across the health and social care sector

These divergent paths are echoed in the journey within institutional care, where the person may either maintain a degree of independence within the supported setting, or quickly lose their living skills. Even within a care home, the capacity to be independent is a precious thing for the well being of the individual. It also makes a financial difference because it reduces the 'burden of care' – which has been roughly translated as 'the cost of staffing', but more imaginatively means how the paid carers spend their time. Undertaking exercise and meaningful activity is impossible if staff are constantly undertaking unnecessary tasks which could be avoided by good design and the use of technology.

So we are currently in a position where we know that the most economically sound path is also the one that people with dementia and their carers would prefer. This is the path that allows for maximum independence and living, as long as possible, in the home that you have created for yourself. Of course some people reach a stage where they want to be looked after and if they can afford it, they should be able to make that choice. Public funds also should be available to allow some choice, but it is extremely worrying where public services appear to be using their resources to usher people with dementia towards a greater state of dependence, against their wishes.

Dementia friendly design and technology has a crucial role to play in this. Simple and inexpensive devices already exist in the market to help people to compensate for impairments of dementia that would once have automatically resulted in institutionalisation. The person with dementia often has memory problems and difficulties in working things out. They may have the more common sensory impairments of ageing and a reduced capacity to cope with them. The stress that this causes and their communication difficulties may give rise to behaviours that others find disturbing. Their apparent self neglect may cause a risk averse response in carers, so that restraints are put in place which are out of proportion to the level of risk. There are actual or potential technological solutions to all of these challenges. The technology is not instead of human caring. It is a vital and underexploited resource which offers freedom and independence for longer to people with dementia, and support for their carers. It makes financial sense. Development and increased utilisation are now a matter of urgency.



"Dementia currently costs us more than cancer, heart disease and stroke put together, and we don't have the resource to provide care and support unless we start to do things differently. It will get more difficult."



"the case for investment in AT workforce development is founded on the requirement to build the capacity of the workforce to embrace technology more effectively..."



Dr. Gillian Ward

Coventry University

Telecare continues to expand across health and social care within the UK supporting many older and vulnerable people to live within their own homes.

Doughty (2009) identified the areas for training required by staff working within telecare services as being: an awareness of telecare, prescription, home survey, installation, alarm call handling and physical response. In addition to this, there is a growing need to offer a career pathway within the field of assistive technology (AT) to enable a comprehensive approach to workforce development and retain skilled staff whilst offering the opportunity for further continuing professional development (Foundation for Assistive Technology, 2007). However, a lack of AT relevant education is common across sectors, formal training opportunities and qualifications to support assistive technology workforce development are scarce and these are mostly aimed at post graduate level (Foundation for Assistive Technology, 2005). At the same time it must be acknowledged that workload pressures and diminishing budgets make it difficult to release staff from the workplace.

Foundation Degrees are designed with employers and combine university based study with workplace learning to equip people with the relevant knowledge, understanding and skills to improve performance and effectiveness of service delivery (Foundation Degree Forward, 2009).

A foundation degree in assistive technology, aimed primarily at health and social care, independent and third sector support workers, is being developed at Coventry University. This course will develop knowledge and skills in the use and delivery of assistive technology services including telecare and offer much needed continuing professional development opportunities. The proposed course will also provide a crucial component in the development of a career pathway from NVQ2 supporting users of assistive technology, for example, through to an MSc in Assistive Technology.



New opportunities in education and training to support telecare staff development

As FAST (Foundation for Assistive Technology, 2007) highlight, the case for investment in AT workforce development is founded on the requirement to build the capacity of the workforce to embrace technology more effectively and improve service provision for a wide range of disabled and older people, in order to achieve this education providers must ensure publicly funded education clearly responds to sector specific needs and requirements.

The foundation degree in assistive technology curriculum is being developed in consultation with key stakeholders, including the TSA and employers to ensure that it will meet the needs of the workforce in terms of its content and the method of delivery. A recent stakeholder event at the Health Design & Technology Institute, Coventry University and a workshop with a range of assistive technology practitioners held at the Recent Advances in Assistive Technology Conference (Raate, 2009) to inform the curriculum content, and structure, identified the need for flexible learning and a range of option modules to meet the needs of employers within the field of assistive technology. To accommodate this, fifty percent of the course will be carried out by work based learning to provide the hands-on experience of AT in order to build confidence and competence and the majority of the other modules will be delivered online. It is anticipated that the course will commence in January 2011.

Recognition must also be given to the training needs of those staff that Doughty (2009) identified as requiring a level of training designed to make all health, social care and housing frontline and management staff aware of the technology, and of its potential for use with different client groups, but where a formal qualification is not required. To meet this need, a flexible online training tool (The Assistive Technology Learning Tool – ATLT) has been developed in partnership with the College of Occupational Therapists and the Health Design & Technology Institute. The tool provides an interactive online learning environment that offers the opportunity to gain an understanding of AT by exploring case scenarios, utilising resources such as videos, presentations and reading materials and posing critical questions to encourage the exploration of potential solutions to each case scenario. The tool covers a range of electronic AT, including stand alone AT, systems such as Telecare, lifestyle and activity monitoring, environmental controls, communication devices and smart home technology. Once the individual has purchased the tool, the site will be activated for the learner and remain available for 60 days. It is estimated that the tool will take 20 hours to complete. The ATLT will be launched in spring 2010. These new learning opportunities in assistive technology education support FAST's vision "that a career development framework can be put in place that is applicable across the UK, with integrated vocational and academic educational pathways" (Foundation for Assistive Technology, 2007).

For further information about the Foundation Degree in Assistive Technology please email Dr. Gillian Ward g.ward@coventry.ac.uk

For further information about the Assistive Technology Learning Tool (ATLT) please email Darren Awang d.awang@coventry.ac.uk

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"... a career development framework can be put in place that is applicable across the UK, with integrated vocational and academic educational pathways"



Dementia Sheffield City Council

M is a 58 year old lady with a diagnosis of early Alzheimer's disease. She lived alone, supported by her sister. M became accutely ill with psychosis and her sister became unwell and could not care for her any more. M was admitted to respite care for treatment for the psychosis. She scored only 8 out of 30 on the Mini Mental State Examination, a widely used tool for assessing cognitive function. (A score of 17 or less usually indicates severe impairment). She remained in respite care from November 2009 to January 2010.

M had always maintained that she wanted to go back home. When the telecare champion in Sheffield's Dementia Rapid Response Team suggested a trial at home, with a care package and using the Just Checking activity monitoring system to help assess how she was managing, M jumped at the chance. Her sister thought activity monitoring was 'a wonderful idea', especially if it helped to get M back home. There were questions from health professionals about M's ability to cope at home, and concerns that she would leave the house and 'wander' at night. But with the potential to use the system to assess for safety, the multi-disciplinary team decided to go ahead with a trial.

Just Checking was installed in the property. M was introduced back to her home in a staged approach, one hour first day, two hours second day, building up to an overnight stay and eventual return home.

The familiarity of home clearly helped M to function. With the support of a package of care, M displayed a pattern of activity which was considered normal, and stayed in the property each night. Just Checking helped swing the opinions of some professionals about the decision to be able to keep M at home, as well as providing evidence of how M was responding to the package of care. The alternative would have been residential care.

Just Checking is a simple on-line monitoring system which uses movement sensors to provide a 24 hour chart of activity of a person living alone.

Case study provided by Chris Ludford, RHN, Telecare Champion, Dementia Rapid Response Team, and forwarded by Jonathon Sibbles, Telecare Lead Manager, Sheffield City Council.

Northern Ireland Service Innovation Exemplars

TRAIL has significant ongoing local, national and international research in connected health and some of these with Northern Ireland based TSA accredited organisations such Fold Housing Association and McElwaine Smart Technologies.

Two current project exemplars from the range of projects ongoing are NOCTURNAL and MyHealth@Age.



Funded by the EPSRC and TSB under their Assisted Living Innovation Platform, the NOCTURNAL (Night Optimised Care Technology for UseRs Needing Assisted Lifestyles) project addresses the needs of people with the early stages of dementia at night.

The project is focusing on how the use of technology can enable discreet monitoring to detect risks at an early stage; encouraging and prompting the client to self manage within their own limitations.

Whilst employing complex algorithms at the back end, it is evaluating therapeutic interventions such as the use of lighting guidance, simulated presence and verbal instruction, to assist those with dementia during the hours of darkness.

MyHealth@Age is funded by Europe through its Northern Periphery programme. Health service providers, ICT companies and universities in Sweden, Norway and Northern Ireland are collaborating to develop new mobile-phone based products and services that will support older people to live more active and healthy lives both in their homes and in the community.

Using a standard commercially available mobile smartphone, the team has developed location based specialist services that older people can access from almost anywhere including applications for mobile safety alarms and prescribed self healthcare practices, such as monitoring their own blood pressure or blood glucose levels and use the smartphone to record and transmit the data back to their Health and Welfare Organisation/care provider.

Moreover, the older people are also able to engage socially using the project's mobile social networking service. This can help them to stay in touch and also to arrange social events within the community to help them remain socially and physically active for longer, thereby also improving their emotional health and wellbeing and addressing the issue of social isolation prevalent in the elderly living alone in rural communities.



CASE STUDY

Mrs B is an 85 year old lady living alone.

In July 2008 Mrs B experienced a fall at home and was admitted to hospital where she remained for eleven weeks. Her family were concerned about her safety if she returned home and consideration was given to long term care. However, Mrs B had no wish to live in a care home and so a care package was organised for her return home. A lifestyle monitoring system was installed for fourteen days to help with the assessment process by establishing Mrs B's normal daily living pattern.

Although Mrs B, at this point, had been registered blind she retained some vision and, following the assessment to identify risks, passive telecare sensors were introduced to support the overall care package. Installed and linked to the basic Lifeline 400 unit was a bed monitor linked to lights that come on when Mrs B rises from her bed. Also installed was a chair monitor that operates on the same principle as the bed monitor.

Over the last 18 months there have been a number of alarm calls triggered by the passive sensors resulting in visits by the responder service. This has highlighted the unobtrusive nature of the sensors and has reassured Mrs. B and her family that although she lives alone there are systems and people in place to react immediately to any difficulties.

Without the telecare and care package it would be reasonable to assume Mrs B could easily have been admitted to a care setting. An admission to care would have been less related to her care needs than to her own, and her family's, anxiety about potential rather than actual problems occurring. Mrs B is much more confident in her own home, her general demeanour is positive and she states that she feels able to try to do things for herself knowing help is available when she needs it.

Mrs B's family are delighted that their mother is at home and their own peace of mind has increased.

telecare and care package it would be reasonable to assume Mrs B could easily have been admitted to a care setting.

Telehealth in Scotland

Renfrewshire

In recognition of the growing demands on acute sector services and to test the use of remote monitoring in the management of long term conditions, Renfrewshire Council established a pilot as a means of trialling telehealth technology.

A number of patients with varying degrees of Chronic Obstructive Pulmonary Disease (COPD) were identified, by the host general practitioner (GP), for participation in the pilot. Subsequently, twenty of these patients were recruited to the field trial. Each patient had a teleheatlh pod installed at their home and were given an induction on how to use it.

The intention was that the GP would be able to monitor patients more closely and deliver anticipatory and preventative care to minimise acute illness, reduce emergency hospital admissions and generally improve the patient's quality of life.

Mr. A was one of the patients recruited by his GP to test the telehealth equipment.

Mr A

Mr A has acute COPD and lives at home with his wife in a 3rd floor flat in Paisley. In discussion, Mr A and his wife confirm that having telehealth equipment at home has been beneficial to them for monitoring and managing Mr A's condition. They evidenced this by explaining the regular contact they have with the GP when Mr A's data is abnormal. Indeed, it would appear that on at least one occasion the GP's early intervention has prevented a hospital admission for Mr A. Mr A and his wife also reported that they both felt a greater reassurance about Mr A's wellbeing by having the equipment at home. Regarding, the practical use of the equipment Mr A and his wife reported that once they understood how the equipment worked they had no problem using it. In addition, patients are confident that the GP is monitoring their condition and know that either they will be contacted if any problems arise, or that they can quickly contact the surgery if they are unsure about results from the home pods.

The trial has been successful in evidencing the benefits of telehealth in the treatment of patients with COPD. The host GP has stated that the home pod has been useful in helping to treat patients more effectively. There is evidence of a patient's symptoms being identified early and treated before their condition worsened, thus avoiding a hospital admission. Indeed, the GP has been particularly proactive in encouraging the patients to use the pods, and diligently uses the incoming health data to manage their conditions and wellbeing. This has led to patients being contacted or visited when intervention has been required.

In discussion patients have confirmed that having the equipment at home has been beneficial to them for monitoring and managing conditions and there was a view that the use of the pod is no more than a mild intrusion in daily life. Not only can telehealth facilitate greater anticipatory care, including avoidance of emergency hospital admission, it can also deliver increased confidence and wellbeing to patients by providing them with knowledge and reassurance about their condition.

Argyll and Bute

In 2007 Argyll and Bute council partnered with NHS Highland embarked on their telehealth project. Funded through Scottish Government Telecare Development Fund, a key aim was to reduce unplanned hospital admissions.

The project had several pilot sites but unique to all home based Telehealth pods was the focus on patients with COPD, the third most common reason for hospital admission in Scotland. Pods in patients homes take readings daily and ask condition specific questions. The results are transmitted via wireless technology to the local district nursing (DN) team.

One patient lives on Luing, a ferry journey away from his surgery. After discussion with Mr. D and his wife, Telehealth for COPD was installed for him as the team were confident it was possible to manage his condition proactively with the assistance of technology.

On one occasion Mr. D's readings were showing that he was becoming unwell. His oxygen saturation and activity level were falling each day and he was becoming more breathless.

This change in his condition would have gone unnoticed before the Telehealth Pod, as the DN team would have been unaware. Mr. D said himself that the symptoms were insidious and he just thought he was having a few 'off days'.

After discussion with the GP and the patient, alternative medication was prescribed. Within 24 hrs Mr. D's readings were improving and he felt much better. This contributed to a more positive approach by the patient to his self management in recognising symptoms earlier and being supported by the DN's to develop a greater awareness of his own condition.

Had this exacerbation gone unnoticed, Mr. D could have become acutely unwell and may have resulted in admission to hospital. Had this been during the night it could have involved a helicopter transfer off the island.

Mr. D is one of many case studies that are demonstrating the benefit of telehealth within Argyll and Bute. This project is being evaluated by a team from the Centre for Rural Health and early indications are very positive.

CASE STUDY

simple to use and means that there is no need for the nurse to visit daily"

Central Essex Community Services – Provider arm of Mid Essex PCT

Central Essex Community Services (CECS) have been providing a telehealth service since May 2008. It is provided by Carecall – CECS own careline, and the long term conditions clinical team who deal with people who have Chronic Obstructive Pulmonary Disease (COPD) or Chronic Heart Failure <u>(</u>CHF).

One of the participants was interviewed on 11th November 2009 about the telehealth service:

Lisa is a 41 year old woman with 2 daughters aged 13 and 9. She has a diagnosis of COPD and has been using telehealth since March 2009 to monitor her own health at home (including blood pressure, oxygen levels (SpO2) and pulse rate) and download the results daily to the clinical team.

In January 2009 Lisa had an acute hospital admission due to pneumonia and has regular chest infections (approximately one per month). Lisa stated that on two occasions her condition was so bad she almost died. One of these times her daughter called an ambulance as she was unable to do so. Lisa and her mother both stated that her condition has caused the whole family a lot of concern.

Since having the telehealth system Lisa has been able to see for herself on a daily basis what her readings are and has been able to use this information to make decisions about the severity of her condition and what action she should take that day. Her daughters have also learned what is not a good Sp02 reading for Lisa and will take action accordingly. Lisa's Mother stated that she asks Lisa on a daily basis what her Sp02 levels are and is reassured by this knowledge.

Lisa also described the great sense of reassurance she has from this and from knowing that her results are viewed by the nursing team. She reported that several times they have called to check her condition when her results have been poor and have visited, often within just a few hours.

Lisa told this story to one of Carecall's Telecare Development team: 'I woke up one night feeling breathless and dizzy. I was going to call an ambulance but I decided to take my Sp02 first. I was reassured to see that they were within my normal limits so I took medication and returned to bed'. She described feeling very reassured by this and stated she was very happy with both the telehealth device and the service she received from the COPD team. She felt that both the knowledge of her own condition and the response of the nursing team had helped not only her but her whole family gain some peace of mind.

Dudley Metropolitan Borough Council

Sunderland City Council

Dudley Metropolitan Borough Council's alarm service commenced in 1986, with the provision of simple pendant and pull cord alarm products. It has since grown and developed into a holistic service that delivers a full range of telecare products supporting the dignity, independence and well being of the individual.

The Dudley Telecare Service currently has 7719 alarms in service users homes, enabling people, with a range of needs, to retain their independence in a variety of ways:

Hospitalisation: The Dudley Telecare Service in conjunction with supportive home care services replace the need for hospital admission in up to 15% of patients aged 70 years and over. In addition the average hospital stay for such patients can be significantly reduced, in many cases. The service is also used to support intermediate care, where people are discharged from hospital, with the telecare solutions being withdrawn incrementally as rehabilitation progresses.

Reminder systems: The Dudley Telecare Service are used as a useful and guaranteed reminder service. Short term memory loss is a natural part of the ageing process, but for some people, particularly those in the early stages of dementia, it can rapidly curtail their independence. Help can be provided to manage medication preventing adverse reactions resulting from poor compliance with medical regimes.

Preventative: The Telecare Service, if provided early enough, can provide support to service users to prevent loss of independence. For example service users with early signs of dementia benefit from the support provided by a telecare solution, which is often more successful if provided as soon as a diagnosis is confirmed, in order to encourage familiarity, whilst mental capabilities are still strong. Similarly, people at risk of falls as a result of failing vision or frailty may need supportive telecare solutions installed early on, when the problem is first identified.

Telecare solutions are often used to develop care pathways and are changing the lives of service users and their carers, enhancing their wellbeing, independence and choice:

Ceri is 21 and has spina bifida and cerebral palsy. She uses a wheelchair and lives at home with her family, whilst studying at university. Ceri has a range of telecare products installed in her home which has made life easier for her and her family. Ceri says:

"The Dudley telecare service has given me a real sense of independence. Before I couldn't really be left on my own at home. Now my family are happy to leave me alone when they go out and feel reassured that help is at hand if I do need it. Telecare really has made a big difference to my quality of life."

Dudley Metropolitan Borough Council is very proud of its Telecare Champion's Forum aimed at engaging with telecare service users and carers and supported by representatives from care related staff teams. Sunderland City Council is one the largest providers of telecare in the country, providing support to around 22.000 people, and receiving 310,000 calls relating to telecare through its Customer Service Network during the last year.

As part of its continual development, Sunderland Telecare has successfully piloted a range of innovative telehealth technology in partnership with the Sunderland Teaching Primary Care Trust.

The pilot was developed to provide an alternative for people requiring frequent hospital admissions for long-term conditions such as chronic obstructive pulmonary disease (COPD) or congestive heart failure and diabetes.

In total, 51 vulnerable people with chronic conditions living in Sunderland opted for their illnesses to be managed through telehealth technology, thereby enabling them to avoid repeated visits to GPs or hospital by having their blood pressure, weight, temperature and blood oxygen saturation levels tested within their own homes, with their results being assessed by health professionals through this technology.

John Fisher, Head of Adult Services said, "Using this type of innovative technology has enabled many vulnerable people to have much greater control of their lives."

One user of the service, for example, who has been troubled by COPD for the last 15 years, welcomed the pilot.

The 63-year-old noted that he 'found visits to his General Practitioner or hospital difficult because of his condition and that prior to using the telehealth equipment he had to be admitted into hospital for observation and treatment'.

After training and consultation with health professionals, a telehealth system was installed in his house and he now has the ability to take ownership and manage his own long term condition.

"The equipment is simple to use and means that there is no need for the nurse to visit daily", he said.

"The new system has been very worthwhile and there is the reassurance that I'm being looked after all the time, with help on hand immediately if it is needed."

Sunderland Teaching Primary Care Trust have also identified that there has been a significant reduction in hospital admissions for those people receiving a telehealth service, resulting in significant cost benefit.

The review of the pilot scheme has confirmed the benefits both to Sunderland City Council and the Sunderland Teaching Primary Care Trust, and recommended the service be continued and developed.

CASE STUDY

Hilda Davis, Project Manager for Halton and St Helens Community Health Services, explains how joint working has provided enhanced quality of life for patients with long-term conditions

Pioneering Telehealth Partnership

Delivers Real Benefits to Patients

Over 17.5 million people in the UK live with a long-term condition, and there is a growing acceptance that telehealth can enhance quality of life for people with conditions such as COPD (chronic obstructive pulmonary disease), chronic heart failure and diabetes.

Thanks to a new partnership between Halton and St Helens Community Health Services and Sefton Careline, a pioneering telehealth project that enables patients' health to be monitored remotely by nursing staff has delivered real benefits, helping to avoid hospitalisation and delivering care in people's homes.

Telehealth reduces anxiety and stress for patients and their carers by helping them to better understand and manage the condition. It also enables improved medication compliance.

As part of the partnership sixty telehealth systems from Tunstall Healthcare were installed in the homes of heart failure, COPD and stroke patients. The units can accurately measure the individual's health in the comfort of their own home. Patients are given training to use the monitor and then take their own blood pressure, oxygen levels, weight and temperature, as well as answering a series of health related questions, on a daily basis.

The information is automatically transferred in real time from the system to Sefton Careline's monitoring centre, where the information is checked and any problems can be raised with the community matron or service lead.

Following feedback from staff the initial phase of the project was successful. Early indications show that Community Matron visits are reduced, allowing for a greater working efficiency, and GP visits were also reduced. Patients and carers have also given positive feedback via an evaluation questionnaire.

In the case of one 67 year-old heart failure patient who had previously been admitted into hospital four times in the past year, the use of telehealth has improved his quality of life, and has led to no hospital admissions in the past four months. He said: "I have felt at ease being able to monitor my health daily, which would have been impossible under normal circumstances. Without the telehealth system I would have been admitted to hospital again."

Telehealth monitoring supports the ability to provide the most appropriate and effective, proactive care in people's homes. It is not just about the products, but the whole service provision, and this project builds on these principles.

For more information on telehealth solutions at Halton and St Helens Community Health Services please contact Hilda Davis at hilda.davis@hsthpct.nhs.uk

"Without the elehealth system would have been admitted to hospital again."

Celebrating and supporting senior independence in New Zealand

St John provides a range of programmes and services to support the health and wellbeing of New Zealanders, including running ambulance services covering 85% of the country. In 2010 we celebrate serving New Zealand communities for 125 years.

St John Lifelink[™] medical alarms

For those who live alone, are elderly or disabled, St John markets St John Lifelink[™] medical alarms.

Because St John Lifelink[™] medical alarms are connected directly to St John, clients who activate their alarm feel reassured that they will receive direct and immediate assistance from St John at any time -24 hours a day, seven days a week, 365 days a year.

Sunflower Month

The St John telecare team has been investigating new ways to support our elderly clients, and those who live alone, and are working to expand services beyond the current provision of a medical alarm service.

In March 2009, St John launched 'Sunflower Week', in partnership with around fifty medical clinics, and reaching over 4,000 seniors. Sunflower Week was intended to help seniors who wanted to be able to look after themselves in their own homes to learn how to do so both safely and successfully.

Sunflower Week was a great success and medical clinics began contacting St John straight after the event to ask about being involved again in 2010.

St John expanded the programme and ran 'Sunflower Month' during March 2010 in partnership with over 100 medical clinics around New Zealand, connecting to over 12,000 seniors.

Each clinic that participated in Sunflower Month invited their senior patients to a 'Living at home safely' meeting where a range of information was shared in a fun way over a cup of tea.

St John invited other organisations who provide care for elderly citizens to speak about their services during the workshops. Speakers from New Zealand Fire Service and NZ Police and many others presented information during the workshops.

Sunflower Month has included an element of fun and competition each year. In 2009, a competition was run to identify and name five Mr or Mrs Sunflower's based on profiles of nominees, and in 2010 a photo competition was arranged and seniors had their photo taken in a Sunflower Month photo board. St John Commercial Director Gerry Fitzgerald says, "We are pleased to see that Sunflower Month has quickly become an important event on both seniors' and medical practices calendars."

"We recognise this is an important opportunity to connect with this group and provide them with information and support so they can successfully and safely live independently," says Gerry.

Other St John services supporting seniors

St John also provides Caring Caller which is a friendship telephone service. St John volunteer callers make regular (usually daily) phone calls to clients who are not able to get out and about to make sure all is well and provide them with some friendship. Over 1,000 volunteers are now involved and assist St John to provide this service.

A Health Shuttle service is also operated by St John in a number of locations. This provides transport to medical appointments for those who do not have access to transportation. This service is also run by St John volunteers and made over 32,000 client trips to assist New Zealanders in the year ended 30 June 2009.



National Telecare and Telehealth Conference 2009

The National Telecare and Telehealth Conference 2009 took place on 16-18 November at the Hilton London Metropole Hotel, and was the most successful conference yet. With 814 attendees, the event achieved an impressive growth of 26% on 2008 attendance – maintaining its status as the most significant gathering of telecare and telehealth professionals in the UK. Over 70% of attendees were key decision makers (CEO's, Presidents, Directors, Heads, Managers) and our delegate evaluation forms indicated that 41.8% of individuals who responded were from health, or a combined health and social care role.

Conference was opened by Dame Joan Bakewell, and the plenary programme was enhanced by expert speakers on topics ranging from the needs of UK carers to the impact of telehealth on American veterans. Delegates were able to customise Conference, to make it as relevant to their own personal needs as possible, with a full programme – three days of plenary sessions, a choice 26 workshops, and a vibrant Exhibition Zone featuring 40 exhibitors and an all new Internet Café. Exhibitors ranged from global brands to new market entrants and the new-look Exhibition Zone was well received by both exhibitors and delegates.

Conference continued into the evening. At the Networking Dinner thirty seven organisations received their Code of Practice Award, with twelve of these organisations achieving accreditation to the 2009 TSA Telecare Code of Practice.

"Very busy exhibition Zone... Workshops I slipped in on were full of practical experience, which was excellent... Overall, this conference had a real buzz, really well organised by the super TSA team, who were helpful and cheerful in the run up and during the entire conference."

"Congratulations. I have attended several TSA and ASAP conferences over the years but found this to be the best I have ever attended as it was the most informative and appropriate to me as a service provider."

"The conference far exceeded my expectations – an extremely useful event! The venue, entertainment and food were excellent too. Well done and thank you."

"...the most significant gathering of telecare and telehealth professionals in the UK."

THE NATIONAL TELECARE TELEHEALTH CONFERENCE



Dame Joan Bakewell

Broadcaster, Journalist, and Author

Dame Joan opened Conference, and was our host for the afternoon session. She toured the Exhibition Zone, and posed for photographs with newly accredited organisations to the TSA Telecare Code of Practice.



Imelda Redmond

Chief Executive, Carers UK

Exploring the Changing Role of Carers in an Ageing Society. A thought provoking insight into the needs of carers, and how telecare can help carers and the people they care for lead more independent lives.



Simon Roberts

EMEA Ethnographic Research and Innovation, Intel Digital Health

Older Generations And Their Interface With Technology. A fast moving presentation into how we can do better by creating environments of choice using simple user-friendly technologies that can

help patients keep physically and mentally active.ttp://www.telecare.org.uk/files/48270/FileName/SimonRobertsplenary.pdf



Stephen Wey

Senior Lecturer, York St John University, CEEAT

From Tele-Care To Tele-Partnerships

explored the challenge of enhancing the quality of telecare services through usercentred involvement in their design and

delivery. http://www.telecare.org.uk/files/48269/FileName/ StevenWeyplenary.pdf



David Behan CBE

Director General for Social Care, Local Government and Care Partnerships, Department of Health

Individual Budgets. A detailed overview of the strategy for personalisation and its potential impact on the telecare market.

Conference Keynote Speakers

Tim Ellis

Whole System Demonstrator Programme Manager, Department of Health

Whole System Demonstrators – an update on this high-profile project that will impact on the future for telecare and telehealth. http://www.telecare.org.uk/files/48271/ FileName/TimEllisplenary.pdf



Janice E Knoefel, MD, MPH

Professor of Medicine (Gerontology) and Neurology, University of New Mexico, Albuquerque, New Mexico

Management Of Chronic Medical Conditions Via Telehealth – the US Department of Veterans Affairs' experience. This detailed presentation outlined the benefits and

burdens of remote monitoring for health professionals and service users over considerable distances http://www.telecare.org.uk/ files/48265/FileName/JaniceKnoefelplenary.pdf

Richard Foggie

Assistant Director, Electronic Innovation, Department of Business, Innovation and Skills (BIS)

Digital Britain detailed the opportunities for telecare and telehealth providers and users – high quality, high speed, high capacity voice and data transfer will help transform

health and social care. http://www.telecare.org.uk/files/48267/ FileName/RichardFoggieplenary.pdf

Clive Evers

Head of Professional Liaison, Alzheimers Society

Working Smartly With Assistive Technology And Telecare considered the present and future opportunities offered by telecare in the delivery and implementation of the National Dementia Strategy. http://www.telecare.org. uk/files/48264/FileName/CliveEversplenary.pdf





Marian Preece

Operations Manager, Telecare Services Association

2009 was another year of development and achievement for the Association, with unparalleled consolidation and growth across all areas of the Association's activity. Membership of the Association was at a record high of 350, attracting a number of global brands. The latest version of the national quality standard for the delivery of telecare in the UK, the 2009 TSA Telecare Code of Practice, was launched to great acclaim and accreditations to this rigorous standard have continued to rise.

Representing Members

Good relationships with the Department of Health in England, the Scottish Government and Welsh Assembly Government continued to pay dividends, and both the Labour and the Conservative policy department teams contacted TSA to gain a closer insight regarding the role that telecare can play in managing health and social care costs through service redesign.

TSA continued to work closely with the Telecare Advisory Network (TAN), the Technology Strategy Board (TSB), the Department of Business, Innovation and Skills (formerly BERR) and with the Chief Fire Officers' Association (CFOA), on behalf of members, to raise the profile of telecare and telehealth. In addition TSA developed strong links, during 2009, with the University of Coventry in relation to an educational framework for those working in the delivery of telecare.

Our work with BT and Ofcom towards a 21CN national roll out proved invaluable to the industry via our dedicated technical consultant support throughout 2009. In addition, dialogue was opened with the alternative telephony providers to identify and resolve potential problems.

ALIP (Assisted Living Innovation Platform) funded a technical workshop for manufacturers (and others) to understand the need/benefit for future Internet Protocol (IP) communication in this market, and TSA has worked closely with PASA (now Buying Solutions) to communicate the new Telecare Framework Agreements.

During 2009, TSA continued to raise the profile of its member organisations and the role of telecare and telehealth in the delivery of social care and health by participating in high profile events across the UK and overseas. Here is just a selection:

- Royal College of Nursing Research Conference in Cardiff
- Wireless and Mobile 09 Conference in London
- European Association of Service Providers for Persons with Disabilities Conference in Nottingham
- Asia Pacific Economic Collaboration Conference in Taipei
- International CIB Workshop in Bruges
- Med-e-Tel Conference in Luxembourg
- Continua Alliance Conference in Canada

Membership

2009 saw increased membership at a time of economic gloom – a clear sign of the vibrancy of the industry and the widespread interest in telecare and telehealth service delivery.

Membership Category	2005	2006	2007	2008	2009
Service Providers with Alarm Receiving Centres	214	223	222	227	229
Service Providers without Alarm Receiving Centres	36	38	46	51	63
Supply Sector	23	27	31	38	44
Related Professional Interest (RPI)	-	3	8	14	14
Customer Representative	0	0	0	0	0
TOTAL	273	291	307	330	350

TSA Telecare Code of Practice

January 2009 heralded the launch of the modular Telecare Code of Practice which communicated the Referral to Response (R2R)® telecare service blueprint. Throughout the year, Commissioners across the UK consistently identified the TSA Telecare Code of Practice as the standard required for the delivery of telecare, and interest from telecare service providers wishing to achieve accreditation to the Code of Practice was very high. Within the R2R[®] blueprint, the modules for Service Set Up, Monitoring and Response were issued and work will continue during 2010 to complete the remaining modules. One of the main components in bringing the Telecare Code of Practice to the marketplace was the high attendance and contribution of telecare service providers at our pre-launch consultation events and the large responses to consultation exercises throughout the process – this ensured that the TSA Code of Practice remained the only bespoke, and current, guality standard for telecare delivery in the UK. TSA was supported in this journey by Choose Independence Ltd.

The Department of Communities and Local Government continued to engage with TSA on the final stage of the journey to achieve recognition for the Code of Practice as a Passport to the Supporting People Quality Assessment Framework. Agreement was reached with the Scottish Government's Telecare Programme Board and the Care Commission Scotland to deliver a Passport between the TSA Telecare Code of Practice and the Self Assessment of Housing Support Services and Support Services (Care at Home).

The Telecare Code of Practice was (and remains) independently audited by Insight Certification Limited, a UKAS (United Kingdom Accreditation Service) accredited organisation, bringing a 'firm but fair' approach to the inspection process which has definitely benefited TSA and our accredited organisations. The Code of Practice Management Board, which played a pivotal role in the delivery of the 2009 Telecare Code of Practice, with representation from the Scottish and Welsh Governments and the Department of Health, continued to oversee the development of the Code during 2009.

Code of Practice Statistics

Code of Practice 2005	2005	2006	2007	2008	2009
Part One – Telecare Calls Handling Operational Requirements	48	62	82	105	104
Part Two – Telecare Installation Operational Requirements	17	36	59	80	91
Part Three – Mobile Response Operational Requirements	1	15	32	44	51
Number of Accredited Member Organisations					115
Code of Practice 2009					2009
Monitoring					14
Tailoring					8
Installation					15
Response					11
Number of Accredited Member Orga	anisation	IS			18
Total Number of Accredited Membe	r Organi	sations			133

The 133 organisations who were accredited, by the close of 2009, to the TSA Telecare Code of Practice have been early adopters of the need for quality within the provision of telecare services. This accreditation figure represented 46% of Service Providers in membership of TSA at year end. With many more organisations seeking accreditation, service users across the UK can be assured of continued excellent service.

Technical Issues

The Common Protocol BS8521, designed to be 21CN compliant, was approved by British Standards Institute (BSI) following co-ordination of the development process by TSA on behalf of the industry. Manufacturers of telecare equipment are now committed to its implementation in their equipment and software systems.

Following a survey of member views, TSA submitted a response to the Ofcom consultation on Next Generation Networks, including a focus on consumer/migration issues and alarm systems incompatibility.

Work commenced with Supply Sector members on the potential for an IP Protocol.

Telehealth Work Stream

Work began in earnest on telehealth during 2009, with the establishment of a TSA Telehealth Development Board, whose purpose was to advise the TSA Board on the strategic direction and development of telehealth both in its own right and its integration with social care. A Telehealth Development Manager was recruited, and work began on the delivery of a TSA telehealth work stream. Focus was on the development of a telehealth offering to members and on a convergence not divergence, shared learning and compatibility, with the telecare work stream.

Membership Events

TSA delivered a range of events throughout the year:

Regional Member Forums

The Member Forum Programme for 2009 continued to include presentations from Service Provider and Supply Sector members and included a Telecare and Telehealth Clinic during which attendees were able to raise operational issues relating to the delivery of telecare and telehealth.

Member Forum	Attendance	Rating (out of 4)
Midlands	65	2.9
North West	46	3.2
Northern	48	2.8
Wales + COP Launch	54	3.4
South West	29	3.1
Scotland + COP Launch	75	3.4
London + COP Launch	52	2.7
Eastern	36	3.1
2009 Programme	TOTAL 405	3.1
2008 Programme	TOTAL 300	3.1

The learning outcomes from the Member Forums are what have made the 2009 Programme of events so invaluable, borne out by the comments of attendees:

"The Telecare issues raised by other members allow everyone an input and to share experiences and advice"

"The clinic, just to sit and hear peoples real everyday experiences and issues, just confirmed my belief that we can make a significant contribution to the Telecare/Telehealth industry"

Premium Member Events

The Premium Member category of membership is available to all Service Provider members who achieve TSA accreditation in all services they deliver. The Premium Strategy Group (PSG), which also includes the supply sector and RPI members, has a clear strategic focus centred on the future of telecare and telehealth and is a 'think tank' created for strategic debate about the future development and deployment of telecare and telehealth.

Two PSG events were held, the first at the BRE Innovation Park in Watford and the second at the O2 Headquarters in Leeds. The following comments indicate the value of these events:

"Excellent. The TSA has done much to move us away from the old Silo way of operating. Seeing other industries visions, can translate into useful ideas for your own. I had a fabulous day" "A greater insight into customer satisfaction and knock on effects of achieving the best possible outcomes for customers"

Annual General Meeting (AGM) and Spring Conference

The AGM saw record numbers of members attending this one day event – 165 attendees from 87 Member Organisations. They came to listen to what TSA had achieved during 2009 and to learn of the Association's aspirations for the future. Richard Foggie, Department of Business Enterprise and Regulatory Reform (BERR), spoke about the prospect of a Digital Britain and the impact of that for telecare and telehealth. Twenty seven organisations received their Code of Practice Awards at the AGM Awards Ceremony, and the attendees were given a choice of three workshops after lunch.

Future Priorities Meetings with Supply Sector members

In order to gain a deeper understanding of the needs of the Supply Sector members two fact finding events were held with discussions centred around:

- The TSA offering to Supply Sector members
- How Supply Sector members value this support/ how could it be improved
- What other forms of support should the Association be considering
- Ideas for improving support to Service Provider members

These events were very well attended and resulted in a greater understanding of the role and activities of the Association with a number of outcomes agreed for implementation in 2010.

TSA Communications

2008 Annual Report – Telecare and Telehealth in Action

The TSA Annual Report continued to be a showcase for excellence in Telecare and Telehealth across the UK and widely respected as an independent strategic review, reflecting the best of *what is happening* in the industry at a strategic level, together with clear case studies to 'bring home' the reality of the telecare and telehealth solution to the end user. As in previous years, it was well-received with more than 6,000 copies distributed via TSA members to their key contacts, and to partners in Health, Housing and Social Services, local MPs, Councillors and other interested parties. In addition, the annual report was distributed via the TSA website as a pdf, and this is becoming an increasingly important distribution channel.

The Link Magazine

The quarterly magazine continued to develop through 2009, with increased content from members. Readership grew, with an increase in copies distributed to interested parties, to facilitate the spread of the telecare and telehealth message.

E-news Bulletins

As a supplement to the Link, e-news bulletins were issued to all member organisations providing a valuable resource, with timely news items, ideas and innovations.

TSA Website – www.telecare.org.uk

Efforts during the year were focused on the Members' Area of the website, in particular on increasing the usage of Discussion Area. The Discussion Area facility is an easy and accessible way for Members to seek out and share best practice within the telecare and telehealth arena.

TSA Board Structure

The TSA Board is the principal policy and decision-making body of the Association, a company limited by guarantee. All members of the Board serve as directors of the Company and are bound by Company Law to make all decisions in the best interests of the Association. Other than the Chief Executive, members of the Board serve in a voluntary, non-executive capacity.

During 2009 the following individuals served on the Association's Board:

Representing
Supply Sector
Service Provider – England
Supply Sector
Service Provider – England
Supply Sector
Service Provider – England
Supply Sector
Service Provider – Northern Irelanc
Service Provider – Scotland
Service Provider – Wales
Co-opted
Co-opted
Co-opted
Co

Code of Practice Accredited Services Providers

2009 Code of Practice Accredited Members as at 31 December 2009

ORGANISATION	PARTS	PREMIUM
Aid Call Ltd (Age Concern)	Installation + Monitoring	Premium
Cardiff County Council	Installation + Monitoring + Response	
Central Essex Community Services	Tailoring + Installation + Monitoring + Response	Premium
Chester & District Housing Trust Ltd	Tailoring + Installation + Monitoring + Response	Premium
Durham County Council (Durham)	Installation + Monitoring + Response	Premium
Helplink South	Installation + Monitoring	
Invicta Telecare Ltd	Tailoring + Installation + Monitoring + Response	Premium
Johnnie Johnson Housing	Monitoring	
Places for People Group	Monitoring	
Red Alert Telecare Ltd	Installation	
Renfrewshire Council	Tailoring + Installation + Response	Premium
Riverside Carlisle	Installation + Monitoring + Response	Premium
South Essex Homes	Tailoring + Installation + Monitoring + Response	Premium
Sovereign Housing Association	Tailoring + Installation + Monitoring	Premium
Testway Housing Ltd	Tailoring + Installation + Response	Premium
Trent & Dove Housing Ltd	Tailoring + Installation + Monitoring + Response	
Tunstall Response Ltd	Monitoring	Premium
Worthing Homes	Installation + Response	Premium

2005 Code of Practice Accredited Members as at 31 December 2009

ORGANISATION	PARTS	PREMIUM
Affinity Sutton	1, 2	
Argyll and Bute Council	2	
Ashfield Homes Ltd	1, 2, 3	Premium
Ashford Borough Council	1, 2	
Aspire Housing Ltd	1	
Barnsley MBC	1, 2, 3	Premium
Bield Housing Association	1, 2	Premium
Birmingham (City of)	1, 2	Premium
Blackpool Borough Council	1, 2, 3	Premium
Bolton at Home	1	
Boston Mayflower Ltd	1, 2, 3	Premium
Bracknell Forest Council	1, 2	
Bradford Metropolitan District Council	1, 2	
Brighton & Hove City Council	1, 2	Premium
Bristol City Council	1	
Bromsgrove District Council	1, 2	Premium
Broxbourne (Borough of)	1, 2, 3	Premium
Caerphilly County Borough Council	1, 2	Premium
Call 24	1, 2	Premium
Cannock Chase District Council	1, 2	Premium
Carmarthenshire County Council	1	
Casa Support Ltd (East Sussex)	2, 3	Premium
Cheshire Peaks & Plains Housing Trust	1, 2, 3	Premium
Chesterfield Borough Council	1, 2	
Chichester District Council	1, 2, 3	Premium
Cirrus Careline Ltd	1	
City of Lincoln Council	1	
Coast and Country Housing	1, 2, 3	Premium
Community Gateway Association	1	
Community Housing Group, The	1, 2	Premium
Conwy County Borough Council	1	
Cross Keys Homes	1, 2, 3	Premium
Derby City Council	1, 2, 3	Premium
Dudley Metropolitan Borough Council	1, 2, 3	Premium
Durham County Council (Derwentside)	2, 3	Premium
Durham County Council (Sedgefield)	1, 2, 3	Premium
Eldercare (Newchurch Housing Ltd)	1, 2, 3	Premium
Enfield (LB of)	1, 2, 3	Premium
Flagship Housing Group Ltd	1, 2	Premium
Fold Housing Association	1, 2	Premium
Grosvenor Telecom	2	
Guildford Borough Council	1	
Hanover (Scotland) H.A.	1, 2	Premium
Hanover Housing Association	1	Premium
Hanover in Hackney Housing Association	3	
Harlow District Council	2	

2005 Code of Practice Accredited Members as at 31 December 2009 continued

Herefordshire Housing Limited	1	
High Peak Community Housing	1, 2, 3	Premium
Housing Pendle Ltd	1, 2, 3	Premium
Hull City Council	1, 2, 3	Premium
Kirklees Metropolitan Council	1	
Lambeth (LB of)	1, 2, 3	Premium
Lewisham (LB of)	1, 2, 3	Premium
LHA/ASRA Group	1, 2, 3	Premium
Magna Careline Ltd	1, 2	
Manchester City Council	1	
Mansfield District Council	1, 2	Premium
McElwaine Smart Technologies Ltd	1, 2	Premium
Merton (LB of)	1	
Middlesbrough Council	2, 3	Premium
Milton Keynes Council	1, 2	
Mole Valley District Council	1	
Mouchel	1	
New Progress Housing Association	1, 2	
North East Lincolnshire Carelink	1, 2	Premium
North Hertfordshire District Council	1	
North Lanarkshire Council	1, 2, 3	Premium
North Somerset Council	1, 2, 3	Premium
Northampton Borough Council	1, 2	Premium
Nottingham City Homes	1, 2, 3	Premium
Nottingham Community Housing Association	1, 2, 3	Premium
Orbit Group Ltd	1, 2	Premium
Oxford City Council	1	
Plus Dane Group	2, 3	Premium
Poole Borough of	1, 2, 3	Premium
Purbeck Housing Trust	1, 2	
Redbridge (LB of)	1, 2, 3	Premium
Redditch Borough Council	1, 2	
Richmond-Upon-Thames LB of	1	
Ridgeway Community Housing Association	2	Premium
Riverside Group	1	
Rotherham Metropolitan Borough Council	1, 2	
	122	Denter
Sandwell Homes Ltd	1, 2, 3	Premium
Setten Council	1,2,5	Premium
Selvered Lewise Cosists Ltd	1, 2	Premium
Service Librarian Create	2, 5	Fremium
Severaside Housing	1.2	Promium
Shepway District Council	1,2	Premium
South Dorbushim District Council	1.2.3	Promium
South Typeside Council	1, 2, 3	Premium
Southampton City Council	1,2,3	Premium
St Coorgos Community Houring	1.2.3	Promium
Stockton On Tees Borough Council	1	Treman
Stoke on Trent City Council	1	
Sunderland (City of)	123	Premium
Tameside Metropolitan Borough Council	, 2, 3	riemun
Tamworth Borough Council	1	
Taunton Deane Borough Council	1.2.3	Premium
Three Valleys Housing Ltd	1	Tremail
Torbay NHS Care Trust	12	Premium
VNC Lifeline Ltd	1.2	Premium
Wales & West Housing Association	., 4	Tremain
Walsall Metropolitan Borough Council	1	
Warwick District Council	1.2.3	Premium
Wealden and Easthourne Lifeline	1 2 3	Premium
Weaver Vale Housing Trust	1,2,5	Premium
West Lancashire District Council	123	Premium
West Lothian Council	1	rieman
Wiltshire Council	12	Premium
Winchester City Council	1,2 3	Premium
	1, 2, 5	rieman
Wirral Partnership Homes Ltd	1	
Wirral Partnership Homes Ltd	1	Premium
Wirral Partnership Homes Ltd Worcestershire TeleCare Your Homes Newcastle	1 1,2 1,2 3	Premium





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