Workforce Development for Assistive Technology, Telecare and Telehealth: what is the current landscape?

Research Feedback
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Executive Summary

Assistive technology (AT), telecare and telehealth are increasingly part of the range of solutions practitioners offer to maintain independence and quality of life at home. Work is ongoing to strengthen the evidence base for AT, telecare and telehealth (e.g. Whole Systems Demonstrator) and indications suggest that an important factor in successful delivery of telecare and telehealth is a workforce confidence and skills to engage with available technology. Developing the social care workforce is the remit of Skills for Care and work to date has included the development of learning for the new Qualifications and Credit Framework. It is clear however, that given the potential scope of workforce involvement more information is needed about existing and future learning and development needs. This report sets out the findings from a rapid scoping exercise which aimed to consolidate current UK policy in this area, map current practice in workforce development in England and inform the future direction of work in this area.

Policy in the field of AT, telecare and telehealth

Policy in England is moving towards the delivery of services which can offer greater control over lives, promote enjoyment of a good quality of life tailored to focus on prevention, individual needs and low level support from social care and health when possible. AT, telecare and telehealth have an obvious role to play and this is supported in documents like the Adult Social Care Workforce Strategy, vision for adult social care (DH 2009) and Capable, Confident, Skilled: A workforce development strategy for people working, supporting and caring in adult social care (SfC 2011). Also, national initiatives (e.g. DALLAS) are working to support assisted living at scale, part of which includes examination of service redesign and workforce development.

In Scotland, policy has been strong in this area and has resulted in the establishment of the Scottish Centre for Telehealth and Telecare. The workforce is supported through the Telehealthcare in Scotland: An Education and Training Strategy (JIT 2010), which sets out action to continue to strengthen skills in the workforce. In addition, Scotland are involved in DALLAS and will have one site located across five NHS Boards with £10 million of funding.

As with other countries, policy in Wales recognises the role of AT, telecare and telehealth. Recently, the government has announced an “All Wales” subscription to the Telecare Equipment Prescription Guidance which is an online tool to provide prescription guidance for telecare and related electronic assistive technologies. The guide is supported by training for the workforce from ‘experts’ in the field.

In Northern Ireland, the focus is on future priority skills areas and the increasing role of technology and growth in social care has been noted. Earlier in 2011, a 6-year contract for telemonitoring in Northern Ireland involving all 5 health and social care trusts was signed. This will provide service requirements, a joined up service and solutions and appropriate technology over the course of the contract. Training, coaching and education solutions are part of the contract delivered by the suppliers.

Existing approaches to workforce development

A number of strands of work were identified that currently support workforce development:

- Strategic developments and frameworks
- Education and training opportunities (e.g. academic courses, individual modules and units of training, training courses)
- Professional associations and networks
- Consultancy support by commercial organisations
- Online forums and updates
- Smart homes and equipment demonstration centres
- Online resources
- Journals and publications.
Key themes emerging from the research

A number of themes emerged from discussions with academics, training providers, practitioners and policy-makers that have relevance for workforce development in this area.

- An England-wide approach to workforce development is important which takes into consideration a field where service delivery is different and those involved in delivery vary.
- Service redesign and new roles/types of workers are an inevitable part of moving AT, telecare and telehealth into the mainstream but the fast moving nature of the technology make these difficult to predict.
- The challenge presented by the diversity of delivery models and subsequent implications for learning and support given the range of roles and professionals involved.
- The opportunities for pre and post qualification support for professionals and practitioners.
- Suppliers have a role to play in workforce development but they only meet part of the training needs.
- ‘Experts’ are emerging who offer consultancy and advice for commissioners and individuals/families and should be considered in workforce development plans.
- Carers and individuals should be aware of AT, telecare and telehealth as part of the potential workforce in this area.

This report has outlined the challenges facing the sector and it’s supporting bodies in the workforce development needs surrounding the use of AT, telecare and telehealth. It is clear that the quality of any service is driven by the knowledge, skills and behaviour of the workforce that deliver it. Therefore without an improvement in these areas, workforce development will continue to be so fragmented and variable that AT, telecare and telehealth will continue to underachieve in reaching its full potential in sustaining and improving people’s quality of life.
Introduction

Increasingly assistive technology (AT), telecare and telehealth, have become a part of the range of solutions that can be offered to maintain independence and quality of life at home. As with any change in choices available and delivery models used, there will be a direct impact on the skills, knowledge and abilities of the workforce to deliver the best quality care using AT, telecare and telehealth. This report aims to provide a rapid over view of the policy approaches in England and other parts of the UK and to build a picture of the current learning and development opportunities in England regarding AT, telecare and telehealth.

The two main aims of the scope were to:

- consolidate knowledge of the current UK policy context for AT, telehealth and telecare
- conduct a rapid scope of current practice in workforce development in relation to AT, telehealth and telecare.

Research methods included desk work to identify and analyse policy, training courses currently developed or available, frameworks and strategies currently available. In addition, contact was made with 78 interested policy-makers, academics, practitioners and employers (via phone and email) to assess current learning and development opportunities and identify challenges and facilitators in the area. This report is a short summary of the key themes from the research and sets out recommendations for future consideration.

Background

The evidence base for the increasing role of AT, telecare and telehealth is growing. At the time of writing, comprehensive research on the effectiveness and impact of telehealth and telecare in particular is being gathered through the Whole System Demonstrator (WSD) evaluation funded by the Department of Health (DH). This large scale evaluation includes over 6,000 service users across three demonstrator sites. While awaiting the publication of the final findings, initial feedback from service users and carers is positive, and there is some indication that savings are being realised. Emerging evidence also indicates that an important factor in successful delivery of telehealth and telecare is workforce confidence and skills to engage with available technology.

However, it is difficult to get a measure of the extent of the workforce involved in delivery of AT, telecare and telehealth partly because service delivery models vary across England. This means the range of professionals and practitioners involved in assessing, installing and reviewing AT, telecare and telehealth needs differ by locality. Trying to understand the learning and development needs of the workforce which is currently undefined is therefore challenging. However, there is a real and current need to address this situation as the number of people requiring social care and health support continues to increase and there are fewer people in the ‘caring professions’ to meet the demand (NMDS-SC). Analysis of data from NMDS-SC enables Skills for Care to predict with assurance that the role of assistive technology will be key to providing choice and quality in a future care environment.

Work to date has embedded competences and knowledge of AT, telecare and telehealth in appropriate areas of learning for the new Qualifications and Credit Framework (QCF). Other courses and qualifications are available however, it is fair to say that learning and development in this area is fragmented. This report sets out current practice in AT, telecare and telehealth workforce development to inform future work in the area. It should be noted however, that while the term AT, telecare and telehealth are used, much of the discussion focused on telecare and

telehealth as this appears to be where the challenges lie and where most interest in learning and development opportunities seem to be.

Assistive technology, telecare and telehealth policy across the UK

England
Policy in England is moving towards the delivery of services which can offer greater control over lives, promote enjoyment of a good quality of life tailored to focus on prevention, individual needs and low level support from social care and health when possible. This is demonstrated through a range of policies and policy agendas (e.g. personalisation, re-ablement, self care and management, efficiencies, independent living, extra care housing, QIPP, housing).

The role of AT, telecare and telehealth is obvious in this agenda and is supported at local authority level through a range of associated services. Each local authority has the discretion to design the most locally appropriate delivery mode which has resulted in a range of approaches to service set up. To add to the diversity in this field, associated costs of services also vary, for example, some social care services offer a free service, or free for a period of time, others charge for the services but not the equipment, some charge for both equipment and services.

While the advancement of AT, telecare and telehealth is supported in policy, and there is recognition of the importance of a supported and skilled workforce, there is less detail on how to develop and maintain practitioners in this area. Four key documents set out the indicative behaviours for a trained workforce, the role of the workforce in promoting understanding of technology, the role of management and the need for strong leadership to drive change and the broader context of skills required to implement technology:

- **Common Core Principles to Support Self Care: a guide to support implementation** (SfC and Skills for Health 2008)
- **Adult Social Care Workforce Strategy, vision for adult social care** (DH 2009)
- **Capable, Confident, Skilled: A workforce development strategy for people working, supporting and caring in adult social care** (SfC 2011)
- **Qualifications and Learning** (Skills for Care and Development 2011).

A number of funded initiatives are in place which support workforce development, for example, the Assistive Living Innovation Platform (ALIP), WSD, the National Catalogue of Equipment for Independent Daily Living, Firststop Advice, the national **Telecare, Telehealth and Telecoaching Framework Agreement**. Of particular significance is a programme of work funded by ALIP who are in the process of commissioning a programme of work to examine the delivery of assisted lifestyles at scale (DALLAS²). This will have important lessons for workforce development and systems redesign.

Scotland

In Scotland the financial context is slightly different to England in that personal care is free at the point of contact which could mean that take-up has potential to be greater and local authorities may be better placed to oversee and drive the use of technology in a more co-ordinated and cohesive way.

As in England, telecare and telehealth are supported in policy. For example, **Managing Long Term Conditions** (Scottish Executive 2007), **Better Health, Better Care: Action Plan** (Scottish Executive 2007), **Seizing the Opportunity: Telecare Strategy 2009-2010** (Scottish Government 2008), **Caring Together: The Carers Strategy for Scotland 2010-2015** all of which seek to extend

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² The DALLAS (Delivery of Assisted Lifestyles at Scale) programme will establish 3-5 communities of 10,000 people or more in the UK to demonstrate how AT and services can promote wellbeing, provide quality social care and health services, and promote independence.
the use and impact of telecare throughout Scotland. In addition, The NHS eHealth Strategy (Scottish Government 2009) emphasises the need to address the increasing demands on service provision resulting from demographic changes in the population and the need to develop innovative models to encourage and promote self-care and self-management.

Policy is supported through a range of initiatives including the Scottish Telecare Development Programme, additional funding, guides to telecare, e.g., Implementing Telecare – An Action Guide 2009 (Scottish Government 2009) and the establishment of a Joint Improvement Team (JIT) action area for telecare with a dedicated team to take the work forward.

In parallel, telehealth in Scotland was supported through the establishment of the Scottish Centre for Telehealth (SCT). The SCT set out to provide a centre of expertise to define and disseminate good practice, develop inter-operable standards, protocols and processes to support telehealth solutions. The Centre also supported telehealth projects in Scotland and co-ordinated their evaluation, drawing together the impact of telehealth solutions on service redesign. The JIT and SCT two have now combined to form the Scottish Centre for Telehealth and Telecare which sits within NHS 24 (the Scottish equivalent of NHS Direct).

As part of workforce development, Telehealthcare in Scotland: An Education and Training Strategy (JIT 2010) was published. This framework for action sets out a two-prong approach to integrate telehealthcare into pre-qualification education and ongoing CPD. Key areas for action in Scotland include:

- a continuing national (Scotland) programme of awareness raising for key stakeholders
- working with regulatory bodies to establish a National Occupational Standards (NOS) framework for telehealthcare in Scotland;
- working with academia to promote the inclusion of telehealthcare within the core curriculum of existing vocational training courses for professional staff;
- working with regulatory bodies and Higher Education Institutions (HEIs) to develop a range of new accredited training opportunities for telehealthcare staff;
- exploring funding opportunities, including European funding, to support the delivery of training to the telehealthcare workforce;
- scoping the development of different delivery mechanisms to address the needs of a 21st century workforce e.g. interactive online training tools, etc.

The strategy has moved forward, in particular competences and training modules have been drafted for inclusion in the SQV/QCF and are in the process of being finalised.

**Wales**

As in England, public funding for care and support is means-tested but nonetheless, policy supports and promotes the use of telecare and telehealth. The Framework of Services for Older People (Welsh Government 2011) focuses on how services can work together to promote independence of older people in their own homes or other homely settings. Telecare is a key feature of this framework and the Welsh Government are currently producing updated guidance to promote the strategic development of telecare services. This will take into account previous learning and aim to direct service providers toward closer integration of linked services. There is a view that telecare sustainability depends on:

- the development of a care strategy that embeds telecare into health, housing and social care services
- better and more consistent training for users, referrers and assessors
- dedicated assessors
- telehealth and telecare co-ordination at regional level.

The work in this area is supported by an ‘All Wales’ subscription to Telecare Equipment Prescription Guidance (EPG) announced in 2011 (www.telecare-epg.co.uk). The Telecare EPG is an online resource tool that provides independent and impartial expert-validated prescription
guidance for telecare and related electronic assistive technologies. It is more than just an equipment catalogue as it guides service professionals to select the most appropriate equipment to meet the wide ranging needs of individual service users. Subscription to the service enables all 22 local authorities and respective telecare service delivery partners to benefit from access to a large database of equipment, associated decision support tools and product group comparison reports.

The guide has been developed by T-Cubed³ in partnership with the Centre for Usable Home Technology (CUHTec) at the University of York. Alongside the guide, T-Cubed have developed bespoke Telecare prescription training courses and associated resource manuals and guidance for staff. In addition, they offer training to tie in with the Telecare EPG.

Locally, a number of areas have produced a strategy for telecare in the area. This typically includes a summary of current practice, a vision and priorities for future work, partnership working, links to AT or telehealth, user involvement and ethics.

**Northern Ireland**

In Northern Ireland policy recognises the importance of AT, telecare and telehealth. Indeed, the growth of social care and the important and increasing role of technology in social care and health have been identified as part of the strategic analysis and advice on current and future priority skills areas by the Minister for Employment and Learning (Northern Ireland Advisor on Employment and Skills 2011). Further support is found through the McKinsey Report (2010) *Reshaping the System: Implications for Northern Ireland’s Health and Social Care Services of the 2010 Spending Review*. The report outlines the importance of investing in the future to take forward productive and sustainable health and social care services. One strand of the report focuses on developing technology both to support professionals (e.g. integrated records etc), but also to improve self-care and illness management at home.

The approach to the delivery of social care and health services differs from the rest of the UK. The province is divided into five health and social care trusts, providing integrated health and personal social services to the population. AT, telecare and telemonitoring fall within the remit of the trusts and although there are five trusts, there is scope for province-wide work given the scale and structures in existence.

Earlier this year the Public Health Agency awarded a 6-year contract for remote telemonitoring service for Northern Ireland which includes all 5 trusts. The ‘end to end’ managed service will offer services to approx 3500 people per year and will be delivered by the TF3 consortium (Tunstall, S3 Group and The Fold). Contractors are responsible for providing service requirements, a joined up service and solution, appropriate technology over the course of the contract and are incentivised to generate service delivery efficiencies. The service elements include clinical triage, service desk support, online clinician portal, patient portal, referral to discharge, clinical activity and service level reporting, ICT infrastructure and service integration. Training, coaching an education is an important aspect of initiation and ongoing service delivery. This is part of the contract rather than delivered or directed by commissioners or skills sector partners.

**Existing strategies for workforce development across the UK**

Across the UK there is support for AT, telecare and telehealth in policy and initiatives. In Scotland they have developed a strategy to co-ordinate the overall approach and through the course of this research, other frameworks were identified in this area.

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³ T-cubed is an independent consultancy that offers strategic and operational support to telecare services and commissioning bodies in the UK to plan, design and implement telecare services.
Strategies
As stated above, this research identified one national level strategy across the four UK countries. In Scotland the *Telehealthcare in Scotland: a strategy for education and training* (Scottish Government 2009) identifies strategic action points to support a skilled and flexible telehealthcare workforce, offered clarity on the scope of the workforce and engaged with stakeholders to ensure buy-in to implementation. The strategy details a two-pronged approach to see the inclusion of training in telehealthcare in the core curriculum of the emerging telehealthcare workforce and the development of SQA accredited training and CPD opportunities for staff already working in the area. It is worth noting that actions to establish and promote the inclusion of telehealthcare within core curriculum of existing vocational training courses has proven challenging and efforts have shifted to insert nuggets of telecare and telehealth into existing courses.

Frameworks
A number of competency frameworks were identified including the Scottish competences (linked to the strategy) National Occupational Standards (NOS), proposed competences from FAST, and the Trusted Assessor Programme. Further work is needed to compare these frameworks and extract the main themes for workforce development to feed into any future work.

Other frameworks that have relevance in this area include:
- Dementia Skilled Practice Level: a Scottish framework outlining the skills needed to work with people with dementia and includes telecare and telehealth
- The *e-Health Competency Framework: Defining the Role of the Expert Clinician*: a Scottish framework that sets out skills, knowledge and behaviours needed for clinicians to understand the role of telehealthcare
- West Midlands Competences: The strategic health authority have set out agreed competences in telehealthcare following a series of local workshops
- *Guidelines for Lifelong Learning in Assistive Technology* (2007): published as part of the European Keeping Pace with Assistive Technology Project the focus is on structuring training for practitioners in this area.

In addition, the Telecare Services Association has produced a code of practice and are working with government to develop a similar code for telehealth. This is connected to the TEleSCoPE (Teleheath Services Code of Practice for Europe) which is due to report in April 2013 and has a view that adoption of the code will be across all member states.

Education and training
Social care and health education and training programmes were identified through the research, which fall into the following categories: academic courses, professional qualifications, modules contributing to awards and short courses, commercial training and learning portals.

Academic courses
Provision for pre and post-registration curricula are limited, and it is difficult to fully establish provision across higher education institutes and colleges as the work is fragmented. However, a number of courses were identified at different levels and included:
- Masters: University of Coventry offers a masters in Assistive Technology
- Undergraduate: University of Coventry offers a foundation course in AT available as distance and work-based learning
- Certificates:
  - BTEC Professional Certificate in Healthcare and AT
  - BTEC Advanced Award in Provision of Community Equipment

More information on a broader range of courses available can be found at www.fast.org.uk
o Certificate in Supporting Users of AT\(^5\) (offered through City & Guilds)
  o Certificate in Telecare Services
  - ONC: ICT, Enabling Technology and Disabling Conditions

**Individual Modules or Units of Training**

A number of modules or units are available to post qualification professionals and practitioners including:

- QCF Units (*Contribute to Supporting Individuals in the Use of AT*: Level 2, *Support Individuals in the Use of AT*: Level 4, *Support the Use of AT*: Level 5)
- Online Assistive Technology Learning Tool (organised by Coventry University)
- Telehealth and Telecare modules which contribute to Masters or degree programme (e.g. University of Hull)
- Virtual College *An Introduction to Telecare and Telehealth* module
- RCN Telehealth module.

**Work in development**

Some work that is in development was noted:

- Modules being developed in Scotland with input from Middlesbrough Council to tie in with SVQ system
- Installer module under development by Hereward College on behalf of the Centre for Housing Studies as part of a City and Guilds Level 2 Vocationally Related Qualification, supported by the TSA.

**Training courses**

From discussion, it would appear there are different training courses providers including employer in-house training, academic training courses, supplier or manufacturer training, commercial and Third Sector organisations. Modes of delivery include face to face or online training.

Other sources of professional support include:

- Telecare Prescription Guide developed by the Centre for Usable Home Technology
- Consultancy support by commercial organisations
- Train the trainers courses
- Professional associations and networks
- Online forums and updates
- Smart homes and equipment demonstration centres
- Online resources
- Journals and publications.

**Themes emerging from the research**

A number of themes emerged from discussions with academics, training providers, practitioners and policy-makers that have relevance for workforce development in this area. They are presented below in no particular order.

**Delivery models and implications for training and education**

There were different approaches to the delivery of AT, telecare and telehealth described through contact with the field. For example, in some areas telecare specialists were at the core of service delivery responsible for assessments, installation, review etc. In other areas, assessments were integrated into holistic assessments. This indicates there will be varying workforce needs according to the roles that professionals are assuming within these models of delivery. This ranges from a ‘universal’ role (where an individual worker is responsible for the whole process

\(^5\) Currently under review as licence expires end August 2011
from identification of need through to review) to a more specialised approach, which sees individual roles having responsibility in certain parts of the process (e.g. assessment of need).

The implication for workforce development is that there is likely to be different learning and development needs as well as differing levels of skills required across a wide variety of job roles. For example, directors and commissioners as well as front line managers and staff, requiring learning and development support. In addition, there was a level of agreement among participants that all social care staff should have an understanding and awareness of the potential of AT, telecare and telehealth to support independent living.

Pre and post qualification training and education

Following on from the point above, the introduction of AT, telecare and telehealth at differing points in practitioners’ and professionals’ careers was raised. There was a sense that in order to raise interest and awareness of the area, students should have some level of exposure to information through their education. In Scotland, telehealthcare is woven into different aspects of social care and health courses not as a stand alone module but as another way of delivering a package of care. This is delivered through digital stories, discussion points, real-life scenarios etc, for example, when discussing management of long term health conditions. In terms of planning for the creation of a skilled future workforce, there is a clear need to embed knowledge of AT, telecare and telehealth within pre registration training across a number of professions. Equally important is the need to update skills and knowledge to those professions who are committed to continuing professional development, using the frameworks applicable in various professions.

England-wide approach

There was good support for the development of a co-ordinated approach to workforce development and used at an England-wide level. Concerns around fragmentation of approach, lack of transferability, lack of consistency and, by implication, quality, and were sited as reasons to strongly consider an approach with England-wide standards. Within this sort of approach levels of training required and appropriate practitioners and professionals to work with could be identified. There was further concern that the lack of a standard approach meant there was potential for a lack of standards in training itself. This support came from different quarters including, academia, training providers, practice and policy.

A number of participants expressed the view that any approach should focus on skills not specifics of technology. So the phrase often used was that “technology should not lead the training” for two reasons, the focus is taken off individuals and their needs, it would be impossible to develop a framework to keep pace with technology changes. This was supported by Cruickshank et al 6 (2010) who recommended staff be enabled to deliver telehealth (in this instance) through appropriate service delivery models and within a governance framework. Indeed the authors called upon central government to develop and accredit a set of competences in this area to support providers in developing a high quality workforce. However, any framework would need to be flexible and adaptable and ready to respond to the ever changing nature of technology which is the added challenge in this area.

There would appear to be in developing an approach to workforce development in this area which is applicable and consistent across England, to assist employers and training providers to offer consistent and transferable opportunities to develop. This would also promote a ‘career pathway’ in this field, something which is lacking due in part to the under development of roles and education in this field. It is also clear that any approach developed would be ‘person-centred’, enabling staff, employers and commissioners to develop skills and knowledge of AT, telecare and

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6 Funded by Accenture BT, isoft, Medtronic, Pfizer, Tunstall, TPP and Vodafone
telehealth within a context which demonstrates that they are tools to be manipulated to best suit the needs of the individual, not promoted as an end in itself.

**Role of suppliers and manufacturers in the learning market place**

There was a concern voiced from some participants that while supplier training had obviously an important role it was limited in what it could offer. For example, issues like consent and ethics were not thought to be well covered in this type of training, and indeed may not be considered appropriate for this training. This reinforced the importance of education and training options available for staff depending on particular needs. The workforce implications of training needs being serviced by suppliers are that the workforce is delivered ‘product-based’ knowledge, instead of developing their existing skills to include the use of AT, telecare and telehealth. It is not a strategic solution to a large-scale issue, though suppliers are stakeholders and offer insight into this area.

**The role of ‘expert advisors’**

In an increasingly independent market the role of ‘expert advisors’ (i.e. consultants and brokers) is growing. These experts can provide advice and support at an organisational level. For example, *Choose Independence* offers assistance with telecare and telehealth strategy development, change management, procurement advice etc to organisations. T-Cubed is another telecare consultancy that offers strategic and operational support to telecare services and commissioning bodies, with a particular background in innovative telecare technologies.

At an individual level, Martin (2010) highlighted current developments that are stimulating a cultural shift in how people expect to receive social care and health services. Agencies are responding to this change and are able to offer support and advice to individuals considering telecare and telehealth e.g. Carers UK. In Scotland, the organisation has developed training in telecare for users, carers and families. Increasingly, service users or carers funding their own care are approaching and using these advisors for expert guidance. Development in the workforce therefore needs to take account of their skills and knowledge needs.

**Service redesign and new roles/types of worker**

The advancement of assistive technologies, telecare and telehealth and the delivery of such at scale introduce the opportunity for service redesign and new ways of working through modification of existing roles or introduction of new roles. There was a sense among some participants that delivering telecare and telehealth as an addition to existing services for a smaller number was manageable but to make the anticipated savings, telecare and telehealth would need to be delivered at scale. DALLAS² will go some way toward marking the path for this work to happen but it requires service redesign to allow for example, workers to take on a substantial caseload of telecare or telehealth users. Parallel working may be required in the initial stages to develop new operating protocols based on higher caseloads and reduced visits. All are dependent on organisational structure and process including learning and development opportunities, awareness, data sharing, new approaches to record management, development of new roles in order etc for this to happen (see Goodwin and Clarke 2010 for more information). Cruickshank et al (2010) suggested additional factors such as sharing of expertise, better procurement, improved industry readiness and adoption of interoperability standards would also facilitate the use of telehealth.

The opportunity for new roles and types of workers emerged through desk research and discussions. For example, Skills for Care through the *New Types of Worker* programme identified new roles for AT. For example, an ‘assistive technology champion’ that blends understanding of the technology with knowledge about personalisation. In Norfolk, through the NTOW programme the role of assistive technology support worker exists to promote the use of AT as a primary source of support through working with colleagues from health and social services.
Skills for Health also modelled some future health-related occupations reported in *Rehearsing Uncertain Futures- New roles and occupations* (Skills for Health 2010) For example, generic community workers who have the capacity to straddle social care, health and education. There is evidence that this role has started to emerge e.g. South Staffordshire PCT, North Yorkshire County Council, and Skills for Health are in the process of putting the role into a transferable role template for wider use.

A number of commentators in the area highlight the ever changing nature of technology in this area and stress that core skills for workers include the ability to adapt and learn about new technologies quickly, and to focus on where the gaps will be. Given the direction of travel, some argue that technology will be able to assess homes in future to determine the package of care required and so skills in data interpretation are where the focus should be. Whether this is the future or not, the principle remains that skills in data interpretation will be key, not just amongst professionals but by individuals, family and carers.

The changing roles that AT is creating need to be captured and analysed for what they mean for the development needs of the workforce. Future work should look to predict workforce needs in various roles and settings as well as reflect what is already happening.

**Working with individuals and carers**

Participants were concerned that part of the training agenda should include raising awareness of AT, telecare and telehealth among other stakeholders including: individuals themselves, carers and families. While detailed knowledge may not be required, there was a view that the path to telecare and telehealth mainstreaming would be facilitated if there was greater awareness of the range help on hand and understanding of the role of telecare and telehealth.

Carers UK Scottish team are developing a reference framework for patients, users, carers. This will go some way to increasing awareness of assistive technology, telehealth and telecare, but also start to provide skills for users, their family and carers to start to take responsibility for interpreting the information collected through for example, telehealth monitoring devices.

There was also a sense that there should be basic awareness among the general public to increase understanding of AT, telecare and telehealth. Some examples of existing work were identified including: a media campaign in London; and, work with universities in Nottingham to have a slot with health students to introduce telecare.

*Capable, Confident and Skilled* (SfC 2011) acknowledges the wider workforce of carers and the importance of their contribution to the delivery of quality care and support. The information and guidance given to carers on AT, telecare and telehealth is an important way to empower carers and the cared for person to make the right choices for them. Future developments should acknowledge the needs of this wider workforce and work with partners to establish the best means of ensuring carers are kept involved in this area.

**Considerations for future work**

The following were extracted as considerations when taking the work forward:

- Recognition that barriers still exist among professionals and practitioners that will impact on the acceptance and adoption of AT, telecare and telehealth
- Awareness that the current debate on funding for social care (Dilnot report) which could impact on the roles which evolve as a result
- Consideration of the importance of proper risk management and ongoing review as part of any approach developed
• Careful thought to the methods used to gain consensus on the content of standards, knowledge and skills while building on existing work
• Recognition that the fast moving nature of technology makes it difficult to predict new roles, new skills and ethical challenges that will emerge
• Awareness that professionals within social care, health, academia and training providers will all have differing perspectives on different aspects of AT, telecare and telehealth
• Following on, recognition that different professions have different drivers e.g. National Occupational Standards are important in health
• Thought as to the links between informatics, telecare and telehealth
• Full consideration of the options for common induction standards across the board in this area
• Inclusion of citizen-level awareness as part of the way forward as well as professional awareness
• Thought as to how to develop an approach in a field where service delivery is different and those involved in delivery vary.

Recommendations and Next Steps

This small-scale piece of research has highlighted the strategic importance of AT, telecare and telehealth as set out in policy but also that this area is fragmented and fast-moving. This combination presents a series of challenges for the workforce, and there is a need to support the workforce through an England-wide approach to skills and development. The recommendations are therefore as follows:

• A deeper understanding of the diverse delivery methods used and therefore roles of staff involved in delivering the service (including which types of AT are most commonly used) is required to better understand the appropriate response to these development needs
• That the full range of workers and individuals involved in AT are supported in their learning and development needs by any framework(s) or products produced, including commissioners, service users and carers
• That any plans to develop support and frameworks in this area addresses pre qualification, post qualification and continuing professional development
• That a transferable, consistent framework of skills, knowledge and behaviours is developed in partnership with key stakeholders across England.
• Any framework developed comes from a person centred approach and is not driven by the technology itself. In this way, any framework would include reference to issues such as risk management and ethics
• That alongside this work, runs the need to monitor and promote the new or emerging roles that will occur within AT.

Conclusion

This report has outlined the challenges facing the sector and its supporting bodies in the workforce development needs surrounding the use of AT, telecare and telehealth. It is clear that the quality of any service is driven by the knowledge, skills and behaviour of the workforce that deliver it. Therefore without an improvement in these areas, workforce development will continue to be so fragmented and variable that AT, telecare and telehealth will continue to underachieve in reaching its full potential in sustaining and improving people’s quality of life.