



PERTH AND KINROSS INTEGRATION JOINT BOARD

Council Building
2 High Street
Perth
PH1 5PH

2 November 2017

With reference to the meeting of the **Perth and Kinross Integration Joint Board** to be held in **the Council Chamber, 2 High Street, Perth, PH1 5PH** on **Friday 3 November 2017** at **11.00am**, I now enclose **Appendix 1** for **Item 8.2** on the agenda.

If you have any queries, please contact Scott Hendry on 01738 475126 or e-mail committee@pkc.gov.uk.

Robert Packham
Chief Officer

Voting Members

Councillor C Reid, Perth and Kinross Council (Vice-Chair)
Councillor C Ahern, Perth and Kinross Council
Councillor X McDade, Perth and Kinross Council
Councillor E Drysdale, Perth and Kinross Council
L Dunion, Tayside NHS Board (Chair)
S Hay, Tayside NHS Board
J Golden, Tayside NHS Board
S Tunstall-James, Tayside NHS Board

Professional Advisers

J Pepper, Chief Social Work Officer, Perth and Kinross Council
R Packham, Chief Officer, Perth and Kinross Integration Joint Board
J Smith, Chief Financial Officer
Dr N McLeod, Independent Contractor
J Foulis, NHS Tayside
Dr N Prentice, NHS Tayside

Additional Members

Dr D Walker, NHS Tayside
Dr A Noble, External Advisor to Board

Stakeholder Members

F Fraser, Staff Representative, Perth and Kinross Council
A Drummond, Staff Representative, NHS Tayside
H MacKinnon, PKAVS (Third Sector Interface)
B Campbell, Carer Public Partner

PERTH AND KINROSS INTEGRATION JOINT BOARD

3 NOVEMBER 2017

AGENDA

- 8.2 Perth & Kinross Technology Enabled Care (TEC) Strategy (2016-2019) – Report by Chief Officer (appendix 1 copy herewith) (**Pages 1-32**)



PERTH AND KINROSS
HEALTH AND SOCIAL CARE PARTNERSHIP

**“SUPPORTING GREATER CHOICE
AND CONTROL IN HEALTH AND
SOCIAL CARE SERVICES THROUGH
THE USE OF TECHNOLOGY”**

TECHNOLOGY ENABLED CARE (TEC)
ACTION PLAN (2016 – 2019)

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1. INTRODUCTION

The use of digital technology is playing an increasing role in our everyday lives. It has the potential to increase people's choice and control over the support that is offered and can enable individuals to self-manage their own health and wellbeing.

We know that over the coming years we are facing increasingly challenging times with decreasing budgets, increasing demands on services and a population with increasingly more complex needs. Therefore, now is the time for us to think of new ways to support and enable people to remain in their own homes, or a homely setting for as long as they are able. In order for us to deliver flexible, integrated and responsive services, we need to do things differently and more innovatively.

However, the use of TEC is not a replacement for professionals or unpaid carers. It is a compliment to this face to face interaction which can be made more accessible and appropriate for the individual at the right time when it is needed, while also targeting resources where they are needed the most. TEC can empower and motivate people to self-manage their own health and wellbeing in their everyday lives, using technology to enable people to use the right tools and information to support them to keep as active and healthy as they possibly can.

The rapid rise in digital technologies has given us the opportunity to provide innovative ways to support people within their own communities and bring a preventative approach to working with individuals, their carers and families. We can utilise this through the use of a person's own device or one which is provided to them, to support people to live more independently in their local communities and support carers and families in their caring role to receive the best care and support that they, and the cared for person, needs.

To take TEC forward across Scotland, the Scottish Government launched the TEC programme in 2014 and is a three year £30million Scotland wide programme designed to significantly extend the numbers of people directly benefiting from TEC and support in Scotland. The five priority areas for the programme include: expansion of Home Health monitoring as part of integrated care plans; innovation for Dementia; expansion of National video conferencing infrastructure; build on emerging National digital platforms and expansion of Telecare and move to Digital Telecare. Partnerships are able to bid for funding based on the above priorities with projects being funded until 2018.

2. WHAT IS TECHNOLOGY ENABLED CARE?

Technology Enabled Care (TEC) is defined as¹ :

“Where outcomes for individuals in home or community settings are improved through the application of technology as an integral part of quality cost-effective care and support. This includes, but is not limited to, the use of telecare, telehealth, video conferencing (VC) and mobile health & wellbeing (mHealth)”

Telehealth²- the provision of health services at a distance using a range of digital and mobile technologies and can include:

- Capturing and relaying physiological measurements from a person’s home or community for review by a health professional;
- Early intervention often in support of self-management, and
- Teleconsultations where technology (e.g. email, telephone, video conferencing) are used to support consultations between and among health professionals, clinicians and individuals.

Telecare - the provision of care services at a distance using a range of analogue, digital and mobile technologies and can include:

- Simple personal alarms, devices and sensors in the home;
- Complex technologies such as those which monitor daily activity patterns, home care activity, enable ‘safer walking’ in the community for people with cognitive impairments and/or physical frailties, falls and epilepsy seizure detectors and medication prompts.

Telehealthcare - is an overarching term to describe both telehealth and telecare together

3. OUR VISION

Our vision for the Health and Social Care Partnership is:

We will work together to support people living in Perth and Kinross to lead healthy and active lives and live as independently as possible in their own homes, or in a homely setting with choice and control over the decisions they make about their care and support.

¹ <http://www.jitscotland.org.uk/action-areas/telehealth-and-telecare/technology-enabled-care-programme/>

² The National Telehealth and Telecare Delivery Plan for Scotland to 2015, Appendix One, page 35

Increasing our use of TEC is one way we can do this. The eHealth Strategy for Scotland 2011-2017 reaffirms the role of telehealth and telecare technologies in delivering health and social care to individuals, their carers and families, with TEC having the potential to³:

- Support people to have greater choice, control and confidence in their care and wellbeing;
- Enable safer, effective and more personalised care and deliver better outcomes for people who use our health, housing, care and support services;
- Help generate efficiencies and add value through more flexible use of our workforce capacity and skill mix and by reducing wasteful processes, travel and minimising access delays.

TEC can help people to manage risks to their independence. If the risk is falling, then a falls monitor can detect when a fall has occurred and automatically send a response; a bogus caller alarm can enable an individual to call for assistance if they are not sure about a visitor and video conferencing equipment can eliminate the need for lengthy and costly travel to a hospital or health centre if living rurally and remotely. It will be necessary to embed TEC within a wider framework, including building increased public and professional awareness and confidence of the use of the available digital technologies and how these can make a difference to people's lives.

With the integration of health and social care, our Joint Strategic Commissioning Plan (2016-2019)⁴ is the strategic document for the new Perth and Kinross Health and Social Care Partnership (the partnership) and outlines the commitment to changing the way we support and deliver health and social care services to meet the challenges facing individuals and our communities. A strong emphasis is the need for services to support and intervene earlier in people's lives to prevent later, longer term issues arising.

The strategic plan outlines five main priorities for Perth and Kinross which the partnership will work to achieve:

1. Prevention and early intervention
2. Person centred health, care and support
3. Working together with communities
4. Reducing inequalities and unequal health outcomes and promote healthy living
5. Making the best use of available facilities, people and resources

³ The National Telehealth and Telecare Delivery Plan for Scotland to 2015, page 4

<http://www.gov.scot/resource/0041/00411586.pdf>

⁴ Online link when available

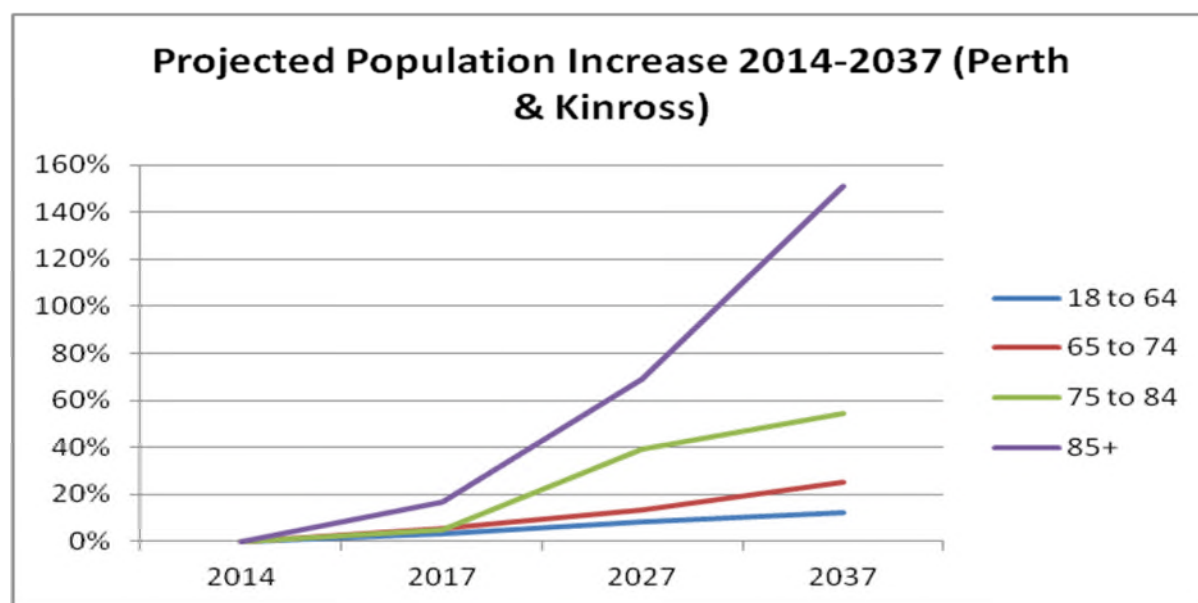
WHY DO WE NEED TECHNOLOGY ENABLED CARE IN PERTH AND KINROSS?

Demographic pressures

Perth and Kinross has a population of 147,740 living and working across 5,000 square kilometres. Over the coming decades the area is expected to experience significant demographic change, especially in relation to older people, the majority of whom are increasingly fit and active until much later in life. Advances in health care and healthier lifestyles mean that people are living longer generally and the vast majority of older people aged 65+ live healthily at home.

The projected population of people aged 65-74 (+25%), 75-84 (+54%) and 85 plus (+151%) over the next fifteen years is summarised below.

Figure 1



- Those aged 75+ are projected to double over the next 15 years, from 14,406 to 27,250
- Those aged 85+ are projected to more than double from 4,027, to 10,651 by 2037
- Based on current dementia prevalence rates for Scotland, people with dementia are expected to double over the next 25 years

Supporting vulnerable people to live in the community

There are many vulnerable people living in our communities and include people with learning or physical disabilities, substance misuse, mental health problems or multiple and complex physical and social care needs. With an emphasis on supporting people in communities, the available TEC options are flexible enough to support people with a range of needs in a variety of settings including supported living, residential and community living. Supporting vulnerable

people to remain living independently and encouraging person centred support will improve individual outcomes, independence, choice and control and has the potential to decrease the cost of unnecessary hospital admissions through home health monitoring and self-management of long term conditions.

Working more closely together through the integration of health and social care and encouraging the use of TEC across all sectors including the third and independent sectors, we can enable the best use of our joint resources and encourage people, where able, to consider TEC as part of their support package.

Tele Rehabilitation, Perth Royal Infirmary and Pitlochry Community Hospital, Scotland

In 2008, video conferencing equipment was used to facilitate inclusion in a pulmonary rehabilitation programme for people in Pitlochry. A central group of 12 people took part in the 'face to face' programme in Perth Royal Infirmary (PRI), with 3 people 'joining in' via video link from the Pitlochry Community Hospital. The programme was delivered as normal in PRI by a specialist physiotherapist and respiratory nurse specialist, with an assistant physiotherapist monitoring the class in Pitlochry.

Since 2008, the programme has expanded to include programmes facilitated from Blairgowrie and Crieff Community Hospitals, with classes run as and when the demand arises.

Outcomes:

- The video link and equipment were reliable for all 16 sessions;
- The clinical outcomes for both the PRI and Pitlochry sites showed marked similarities;
- Skill mix was successfully employed with systems of assessment and upskilling of staff;
- Patients at both ends of the link were satisfied with the use of the equipment and would be happy to use the model again;
- Staff at both ends found the model workable for the context of the service delivery;
- There is economic benefit for travel and staffing resources.

THE CASE FOR CHANGE

There are a growing number of people who have complex care needs or are growing older and would benefit from anticipatory and preventative care and a greater emphasis on community-based care. We know that people want to have care and support delivered to them in or as near to their own homes and communities and we also know that the way we deliver services at the moment is not sustainable.

Unnecessary hospital admissions remain high, particularly for the older age group, as are the number of re-admissions, including people readmitted within 7 days of discharge. The

pressures of people waiting to be discharged from hospital to appropriate community or residential setting remain; and the number of people entering residential care is increasing and projected to continue to increase if we do nothing. In addition, there is pressure on home care services, with rising demand and waiting lists for services.

Deprivation is a major factor in health inequalities, with people in more affluent areas living longer and having significantly better health. Many of the people suffering the greatest negative health effects relating to mental health, obesity and long term disease are those experiencing poverty and social disadvantage. Whilst Perth and Kinross has a relatively affluent population compared with the rest of Scotland, there are significant areas of deprivation and in our rural communities there are inequalities in relation to access to services. Deprivation affects communities in different ways and those people living in North and South Perthshire and Kinross are 'accessed deprived' i.e. they struggle to access services because they live in predominantly rural areas.

Additionally, through the community consultation 'Join the Conversation' which took place in 2015 across all localities, people told us that they wanted:

- Services closer to their own homes
- Access to local health services to reduce the long distance travel needed to attend sometimes short appointments in PRI or Ninewells Hospitals
- Different options available for people to remain living locally, including in residential care if needed
- More information available to support unpaid carers who are feeling unsupported

Changing the way we deliver health and social care services for people of all ages is paramount. The use of TEC can help to support these changes and help to address issues identified in 'Join the Conversation' by helping people in a number of ways. For example:

- Support to self-manage long term conditions with telehealth equipment, including TEC options within a wider package of care,
- Putting people in contact with services remotely where possible by using video conferencing to reduce travel time to access services
- Upskilling people through digital inclusion classes to be able to use digital technology to access services and support online.

WHAT OUTCOMES WILL BE ACHIEVED

We are now working, planning and delivering services more locally to take account of the expertise of people who live and work in each locality and their skills and knowledge of what is

needed within their local communities. We envision the use of TEC as a tool to support people to live at home for longer and have identified the following outcomes that can be achieved:

1. Increased independence of individuals and their carers
2. Increased feeling of reassurance and support to individuals and their carers
3. Improved access to services for people living in rural and remote areas
4. Increased confidence in the self-management of health and wellbeing issues
5. Reduction in the level and need for care at home where this is appropriate
6. Delayed need for long term admission to residential care

How we will do this:

- Increase the range and use of technology enabled care and equipment available to individuals, families and carers across all client care groups
- Develop a range of training and awareness sessions for:
 - Existing and potential users of TEC
 - Staff working across the partnership and partner agencies within all sectors and localities
 - Assessors of TEC
- Develop a partnership approach towards the future use of TEC to ensure it is more widely accessible, acceptable and understood by all people who could benefit from it
- Promote and expand digital inclusion programs in all localities
- Implement initiatives to trial the use of TEC to improve the lives and outcomes of individuals and carers, including within the housing and care home sectors and also to support people coming out of hospital

Mr X, Edinburgh⁵

Mr X is 50 years old, lives alone and has Multiple Sclerosis (MS). He uses a wheelchair and had home care visiting five mornings a week to assist with his personal care. He was being considered for additional care in the evening as he found he was getting very fatigued and struggled to get ready for bed. His condition also affected his memory and he could no longer use a pen to make lists. Mr X's mood was low and he was anxious about leaving his house.

What was done to help Mr X:

⁵ Health, Care and Housing Committee, 'Assistive technology for digital inclusion and enhanced rehabilitation', Edinburgh, January 2015

The Occupational Therapist supported Mr X through the use of an iPad with a range of applications (apps) to:

- Provide prompts/alarms to attend to tasks throughout the day including taking medication, drinking fluids, rest and pace activities to reduce fatigue
- Using on-line anxiety management apps and information on his condition with improved health, better medication compliance and frequent rests
- Using social media to communicate with others in a similar situation for peer support and exploring the use of banking and online shopping, reducing his dependency on friends and family

Outcomes:

Mr X now has a more structured day and is no longer as tired in the evening. He has no need for an evening care visit, potentially saving the council five, half hour weekly evening visits (approximately £2,000 annually).

POLICY CONTEXT

Over recent years there has been a growing rise in the use of technology and changes to the political and social context we now live and work in. This has led to many national policies, strategies and initiatives which support the use of technology enabled care in meeting people's needs.

National Context

- The National Telehealth and Telecare Delivery Plan for Scotland to 2015
- eHealth Strategy 2014-2017
- Scotland's Digital Future: Delivery of Public Services
- TEC Programme (2015-2018)
- Technology Charter for people living with dementia in Scotland (2015)

Local Context

Alongside national policies and strategies, this strategy and action plan is also complemented by and is consistent with the following Perth and Kinross local plans and strategies including:

- Joint Strategic Commissioning Plan (2016 - 2019)
- Perth and Kinross Joint Strategy for Carers (2015-2018)
- Perth and Kinross Physical Disability and Sensory Impairment Strategy (2014-2017)
- Perth and Kinross Neighbourhood Services and Homelessness Strategy (2014-2015)
- Autism Action Plan (2011 – 2021)
- Perth and Kinross Gypsy/Traveller Strategy (2013-2018)

- Perth and Kinross Joint Mental Health and Wellbeing Strategy (2012-2015)
- Alcohol and Drugs Partnership (ADP) Strategy and Delivery Plan (2015-2020)
- Perth and Kinross Local Housing Strategy (2016-2021)
- Perth and Kinross Older People's Strategy (2016-2018)
- The Community Plan/Single Outcome Agreement (2013-2023)
- Perth and Kinross Corporate Plan (2013-2018)
- NHS Tayside Local Delivery Plan (2015-2016)

TEC IN ACTION

There are many examples of new and emerging TEC to support individuals and their carers to remain healthy, to self-manage long term conditions and continue, for as long as possible, to remain in their own homes. Some technologies have been around for a number of years, growing and evolving, and others are in the beginning phases of this new and exciting area. We need to start thinking more broadly about the use of these and other technologies to benefit our local communities and think about their application across Perth and Kinross..

Mobiles Phones

These once small devices have come a long way in the last decade and with the rise in smart phones and their ability to “ combine computing power that could steer a spacecraft, a connection to the internet, a host of sensors for health-relevant data like movement and location tracking, plus a touch-screen interface”⁶, some of us simply can't live without them. The health and social care use of these smart phones is not yet fully realised and what we might think of as a simple device can be a powerful tool for individuals to support their own health and wellbeing.

'Florence', Lanarkshire, Scotland⁷

Florence is primarily a text messaging service that links patients' mobile phones to clinicians' computer systems and can be based in almost any healthcare setting. Florence is used in GP Practices, hospitals, community and mental health settings, as well as by social care professionals, education and public health.

Graham Murray, from Lanarkshire, is currently benefiting from the use of Florence which enables him to continue running his own IT business serving major clients in Europe, America and Asia.

Graham was diagnosed with having heart failure which is managed with medication and now with the additional text messaging service available through Florence. He's able to continue

⁶ www.kingsfund.org.uk/publications/articles/eight-technologies-will-change-health-and-care

⁷ www.nhslanarkshire.org.uk/print.aspx?sid=1709e995-b7d9-4b9c-986e-4682fd8d0d66&wid=cd577454-e5e4-4563-a024-2a2498905713&lid=c305da6f-d912-46e1-a448-412057bfbeb2&liid=f7aefcce-8a3c-45f7-96c0-4de574f0993f

working and travelling, self-monitoring his weight and blood pressure and texting the details to an automated system which has been programmed by specialist nurses with his specific health information. Florence replies with advice and information including medication reminders, all based on the latest readings.

Crucially, the Florence system can identify flare ups at the earliest stage. If any anomalies are detected with the readings, like a rise or drop in blood pressure, the person receives an automated alert and a specialist nurse is also alerted - allowing them to respond to offer advice or help by phone, text or arrange medical assistance as necessary.

“Every Wednesday, wherever I am in the world, I send in my readings. So far I’ve sent information from Paris, Milan, Hanoi and New York.

I see the system as a safety blanket and an international lifeline, all in one. I know it’s there and I can get on with my life - with experts in the background keeping an eye on me.”

Websites and Apps

Websites and various apps can be accessed using laptops, tablets, iPhones and iPads and have grown over recent years. Using our own digital device, we can be connected at any time to the many helpful websites and apps to help us self-manage, monitor our conditions or gain the necessary information instantaneously.

Living it Up website, Scotland⁸

Living it Up is an online self-management hub which aims to inspire and help people to improve their health and wellbeing, by accessing innovative and trusted health, care and wellbeing services, local information, volunteering opportunities, peer support and new hobbies, helping to make communities feel better connected and more in control of their own health - no matter where they live. Living it Up is currently being piloted in five areas in Scotland, with the hope to bring it across all of Scotland in the future.

Use of Video Conferencing (VC)

Video conferencing has the potential to support individuals and staff living in rural and remote areas from sometimes lengthy journeys to appointments and meetings and also reduces our carbon footprint. With increased demands on services and less resources available, video conferencing with the use of simple tablets and iPads also has the potential to support staff to see more individuals who may also live in an urban or rural area, or for other reasons, are unable to travel to attend their appointment.

⁸ www.livingitup.scot

Various devices around the home

There are many devices available for use within the home to support independent living. For example:

- Front door video entry devices to see who is at the door before opening it
- Door sensor with voice prompts to remind people to take their keys before exiting the house or for use on the fridge to remind someone of their dietary requirements
- Environmental controls to control the lights and TV
- Bath plug which changes colour if the water is too hot and automatically let's water out to prevent overflow.

Gaynor, Lorraine and Amanda, England⁹

Initially, staff were required to provide night time support to ensure basic safety if something unforeseen occurred. This gave them a sense of being over protected. They wanted the independence of not having staff around 24/7 but needed the reassurance that help could be called if needed.

Solution:

A suite of sensors to monitor fire, smoke, and carbon monoxide, as well as both personal and communal (bathrooms, front door) panic alarms linked to a telecare call centre so that staff can respond should an alert be triggered. They also use a Big Picture Phone which enables them to contact family and friends independently and a specialised doorbell and a vibrating pillow alert linked to the smoke sensors for people with a hearing impairment.

What changed:

Gaynor, Lorraine and Amanda know what the equipment does and feel in control. There has been a noticeable increase in their confidence and self-esteem since using these devices and they are proud to no longer require a staff presence overnight, secure in the knowledge that help is on hand if needed.

WHAT ARE WE DOING

TEC Programme Funding

Through the national TEC Programme, we have been awarded funding to progress TEC across Perth and Kinross. We will do this through the following projects:

⁹ www.hftsmarthouse.org.uk

Upgrade the Server - From an Analogue to Digital Platform

We will upgrade our current analogue server to a digital platform to enable a digital telecare system to operate across Perth and Kinross. The benefits of this include:

- The ability to obtain an increase in the quality of data thereby ensuring best practice and value for people using telecare services;
- Improved sharing of information between partner agencies as appropriate;
- Increase in the ability to monitor and record incidents;
- The ability to undertake digital assessments creating the opportunity for a more complete record of service provision, both past and present;

Bariatric/Complex Care Pilot

The Bariatric/Complex Care pilot is researching and implementing TEC solutions to assist to better meet the needs and improve the outcomes of individuals with complex needs across Perth & Kinross. The pilot is testing the use of TEC to support bariatric patients and those with complex needs to achieve their outcomes. It supports staff to engage with individuals as this has proven difficult in the past due to a lack of resources and/or intensive resource support.

This pilot is also testing TEC in:

- Reducing the effects of social isolation amongst bariatric patients and individuals with complex care needs
- Tackling the effects of access deprivation in rural Perth & Kinross.

The bariatric/complex care pilot is currently focusing on a relatively small number of individuals. The key findings and learning areas from this pilot will then be rolled out to other groups including people with COPD, diabetes, heart disease etc, with a significantly larger number of individuals.

TEC Development Officer Post (Fixed Term until March 2017)

Perth and Kinross was awarded funding to temporarily employ a TEC Development Officer to examine the needs of the three localities within Perth & Kinross determining the TEC requirements for each locality. The worker will engage with locality teams to embed TEC as preventative and supportive solutions to assist people to remain in their homes for as long as possible, enhancing their independence and enabling them to proactively manage their health conditions.

Additional ways we are currently already using TEC across Perth and Kinross includes:

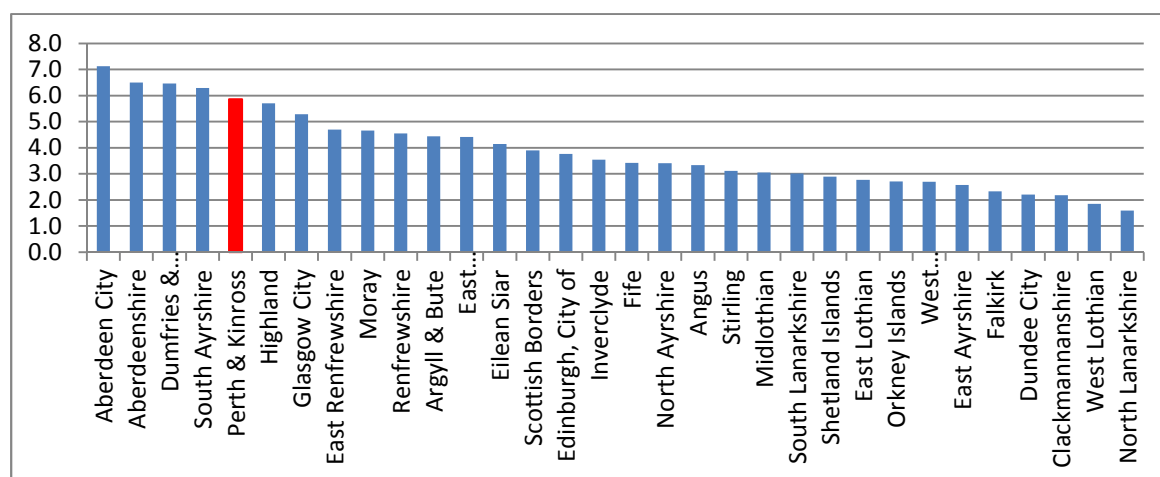
Increase in the use of Telecare equipment

As of February 2016, 3,549 people currently have Telecare equipment¹⁰ across Perth and Kinross; a 5.6% increase in the number of people using Telecare since 2013. In January 2016, 7,256 calls were made to the community alarm service in relation to the Telecare equipment in this one month alone, highlighting the high volume of calls and pressures on the service to manage the demand of the service.

Training for new and existing staff in the availability of telecare equipment is undertaken at the SMART House four times a year. In 2015/2016, 144 people have been trained across the partnership.

The table below highlights that Perth and Kinross have approximately 6 people per 1000 of the 75+ population who currently receive telecare services in Perth and Kinross, the fifth highest local authority across Scotland.

Figure 2 – Local Authority Telecare Provision. Telecare clients – rate per 1000 of the total population aged 75+



Source: Social Care Statistics (revised December 2015)

Video Conferencing Equipment – Community Hospitals

All community hospitals across Perth and Kinross (Aberfeldy, Auchterarder, Blairgowrie, Crieff and Pitlochry) and the Kinloch Rannoch and Aberfeldy GP surgeries have video conferencing (VC) capabilities to enable them to join in any VC session including Jabber Guest sessions. This allows someone from outside NHS Scotland to make a video conference (VC) call to a specified device. Jabber Guest Access is primarily intended for participants out-with the NHS,

¹⁰ Telecare equipment includes community alarm, smoke and flood detectors

using their own internet-connected device. Guest Access can be used for a range of clinical and non-clinical purposes such as:

- Patient consultations
- Meetings with family members or carers
- Meetings with 3rd party organisations
- Job Interviews

Digital Inclusion

In 2013, LEAD Scotland were commissioned by Perth and Kinross Council to deliver one to one and small group digital learning sessions to the most vulnerable and excluded people in communities across Perth and Kinross. This included young people and adults with learning disabilities, homeless and carers to support the greater demand for people to be able to confidently use digital technology more easily. With increased skills and confidence when using technology, people will then be able to more readily access information, complete e-forms and use many forms of digital communication which is increasingly becoming the norm.

Between July - September 2015 the project has supported 35 people to use technology, with the same number of people stating they have increased their digital literacy skills through engagement with the programme.

Lead Scotland Case Study, Perth, Scotland

From September to December 2015, Lead Scotland ran a group session with five people with different disabilities and learning needs, at Lewis Place Day Centre in North Muirton, Perth. The weekly 1 ½ hour class was supported by the LEAD Scotland worker, three members of staff and a volunteer.

Lewis Place had a loan of three iPads for the duration of the course provided by Lead Scotland and the course involved using a device, finding apps, taking photos and making videos. Various subjects were accessed online including baking, local history and craft.

The iPads were left during the week for the Day Centre to use as learning tools, with other residents also given opportunities to try the devices and enhance their own use of technology. Skype has become very popular with residents and Lewis Place are now considering available options to purchase their own tablets and enable WiFi throughout the building.

Outcomes:

One person purchased a tablet for herself and arranged to get WiFi at home;

Two participants had asked family members for tablets for Christmas;

“Gail gave me confidence to use my tablet” – Anne

“Gail helped us become more adventurous in trying things as before we were apprehensive about using technology, frightened to make mistakes, I have really enjoyed the course and wish she could come again” – Eugene

“My family are getting me an iPad for Christmas as they are impressed by how much I have picked up here” - Mary

SMART House

The SMART House is equipped with various telecare devices and is available to anyone interested in viewing the equipment and options available to increase or maintain independent living. The SMART House has devices including community alarms, flood detectors, bed sensors, medication dispenses, bogus caller alarms and much more and is used throughout the year to train new and existing partnership staff of the options and developments in telecare equipment. However, with the increase in TEC, the SMART house is in need of upgrading to include WIFI which would then enable demonstrations of a person’s own device (e.g. mobile phone, iPad or tablet) and how they can be used to promote independent living.

Self-Assessment – Occupational Therapy Equipment

Easy to use online assessments for Occupational Therapy (OT) equipment are now available in Perth and Kinross. The new OT online assessment tool, 'Ability Options Perth', is now available to help people get the OT equipment to meet their individual needs. The tool can be found at www.abilityoptionperth.org.uk and can be used by people who need help, or by family members and carers.

People can take more control of their lives by ordering equipment that will help them live independently. Based on the answers given, it will provide ideas to make tasks easier and give details of equipment or adaptations that can be made to a person’s home to help them remain independent. A wide range of products are available, including bathing, showering and toileting equipment, bed and chair raisers. Small adaptations such as grab rails and hand rails can also be arranged.

Supported Living

Across Perth and Kinross a variety of initiatives support people to live independently in their own homes using TEC equipment alongside support workers in supported living arrangements. Some examples are:

Housing with Additional Support

This initiative involves the development of enhanced support for older people in specific sheltered housing complexes, as an alternative to residential care for those who wish and are able to live in this type of setting. The model aims to support older people remain in a homely environment, with the housing and support they need to help them live independently. The support offered includes the use of TEC such as community alarms, smoke and flood detectors and also any adaptations and/or equipment which might need to be installed to facilitate independence.

Supported Living for people with Learning Disabilities

Turning Point Scotland offer supported living accommodation for six people with learning disabilities with forensic backgrounds. Each resident has their own flat with front door and a variety of TEC equipment is located within each individual flat and also within the wider building. All equipment is linked to computer software which clearly and easily displays the devices in individual flats which may have been triggered, with staff able to respond as appropriate. The software records all alerts and an identifiable pattern can easily be seen for each flat and the resident living within that flat. Within this supported living accommodation, the TEC equipment enables risk to be managed – both of the individual and wider public.

Some of the TEC installed within this supported living accommodation includes:

- CCTV cameras in walkways and the external building;
- Mat sensors under the carpet in front of windows;
- Door sensors on individual flat doors and the front entrance door. This includes a time delay of twenty seconds on the front door to exit the building, enabling staff to reach the front door and stop any individual exiting without the appropriate support if that is needed;
- PDA's (personal digital assistant), a hand held device for staff, which displays identical information to that on the computer screen, enabling staff to walk freely around the building rather than be based in the office, and therefore be notified and respond as needed to any alerts;
- For those residents able to independently access the community without staff support, residents also have iPhones which enables increased independence and the ability to call staff at designated times to 'check in' as needed.

FUNDING RESOURCE

The financial resource for TEC for 2016-2017 is:

Community Alarm Budget	£553,000
Carry Forward TEC Programme Funding – 2015/2016	£20,000
TEC Programme Funding – 2016/2017	£40,000
TOTAL	£613,000

**Perth and Kinross Health and Social Care Partnership
Technology Enabled Care (TEC)
Action Plan (2016-2019)**

STRATEGIC PLAN PRIORITIES:		NATIONAL HEALTH AND WELLBEING OUTCOMES:					
Prevention and early intervention & Person centred health, care and support		People are able to look after and improve their own health and wellbeing and live in good health for longer					
OBJECTIVES	NO	ACTIONS	MEASUREABLES, DELIVERABLES, TARGETS	TIMESCALE TO BE COMPLETED	RESOURCE & COSTS	LEAD	RAG
Increase awareness, education and knowledge of TEC across the partnership and the general public	1.1	Review the use of the SMART House and explore other options to showcase to staff the developments in technology alongside known and existing equipment.	Report into options for use of SMART flat and alternatives to be produced. Linked to L&D strategy below	Nov 16	Within existing resources	Paul Smith (PKC)	G
	1.2	Conduct an agreed number of awareness and education sessions – both within the SMART House and across all localities - to showcase what technology enabled care devices and options are currently available including the PKC Smart Assist to all Partnership staff and the general public.	Training/awareness resources currently being produced. L&D strategy to be devised. Trial sessions conducted. Deliver strategy	Ongoing Nov 16 Feb 17 ongoing	Meeting with Moyra Gill (learning and development) to be arranged.	Paul Smith (PKC)	A
Support carers across Perth and Kinross in their caring role through	1.3	Ensure TEC options are considered	Identify key assessing	Ongoing	Within existing	Locality	A

the use of TEC		in all assessments across the partnership and are embedded in all major pathways.	workers for TEC awareness training.	resources	Leads (PKC & NHST)	
1.4	Liaise with and support digital inclusion projects which support the general public and staff across the partnership to use and gain confidence in various digital technology devices and options.	Increased numbers of people who are digitally included.	ongoing	Within existing resources	Kenny Ogilvy (PKC)	A
1.5	Increase the use of TEC among particular client groups with low uptake including people with learning and physical disabilities and victims of domestic violence.	Review TEC usage and identify gaps, research opportunities and potential. Use learning from others	ongoing	Within existing resources	Locality Leads Paul Smith (PKC & NHST)	A
1.6	Promote direct access to telecare packages and the Perth and Kinross Council SmartAssist online assessment tool on the Perth and Kinross Council website.	Write up process to enable direct access via online SmartAssist tool. Meetings with PKAVs and Digital Inclusion Officer to raise awareness of SmartAssist	Sept 17 Oct 17	Within existing resources	Avril Alexander-Parr (PKC)	A
1.7	Improve joint working with housing colleagues to support the progression of digital inclusion to all council tenants and the general public.	Meeting with PS and KH to agree joint approach Meeting with Housing Management team	Sept 16 Oct 16	Within existing resources	Paul Smith (PKC) Kevin Heller (PKC)	G
1.8	Increase the use of TEC by carers to support them in their caring role	Increased awareness and uptake of TEC by carers.	ongoing	Within existing resources	Karyn Sharp (PKC) Lindsey Miller (NHST)	A
1.9	Use the PKAVS Carers Hub to	Meeting with PKAVs to	Sept 16 and	Within existing	Karyn Sharp	A

		promote TEC and digital inclusion classes to increase the number of carers accessing TEC and having increased confidence of using digital devices including laptops, tablets, smart phones, internet and iPad's.	establish common goals, explore use of TEC training resource in engaging carers in TEC	ongoing	resources	(PKC) Lindsey Miller, (NHST) Paul Smith (PKC)	
		STRATEGIC PLAN PRIORITIES:	NATIONAL HEALTH AND WELLBEING				
		Working together with communities	OUTCOMES:				
			People, including those with disabilities, long term conditions, or who are frail, are able to live, as far as reasonably practicably, independently and at home or in a homely setting in their community.				
OBJECTIVES	NO	ACTIONS	MEASUREABLES, DELIVERABLES, TARGETS	TIMESCALE TO BE COMPLETED	RESOURCE & COSTS	LEAD	RAG
Explore new ways for localities to support TEC within their communities in both rural and urban areas	2.1	Liaise with Locality Steering Groups to ensure TEC is an integral part of all locality plans, to be able to respond to the different needs of each locality appropriately.	Regular review of plans and benchmarking performance by locality to identify opportunities	ongoing	Within existing resources	Kenny Ogilvy (PKC) Jane Dornie (NHST) Paul Smith (PKC)	A
	2.2	Identify current and future requirements for TEC, including existing telecare equipment and increase usage across all localities.	Links established with Scottish Government Link to Locality plans Develop baseline and Dashboard for TEC usage	Sept 16 & ongoing Sept 16 & ongoing	Within existing resources	Paul Smith (PKC)	A
	2.3	Put in place the provision of Telecare equipment to assist in Community Safety Initiatives such as bogus caller and supporting victims of domestic violence with a view to	Meeting with NR and PS to explore opportunities	Oct 16 & Ongoing	Within existing resources	Nicola Rogerson (PKC) Paul Smith (PKC)	A

		aiding crime prevention, victim support and fire safety schemes.						
STRATEGIC PLAN PRIORITIES:			NATIONAL HEALTH AND WELLBEING OUTCOMES:					
Reducing inequalities and unequal health outcomes and promoting healthy living			Health and social care services contribute to reducing health inequalities					
OBJECTIVES	NO	ACTIONS	MEASUREABLES, DELIVERABLES, TARGETS	TIMESCALE TO BE COMPLETED	RESOURCE & COSTS	LEAD	RAG	
Ensure TEC development includes the incorporation and promotion of home health monitoring and telehealth to further assist people to remain at home for longer.	3.1	Ensure TEC developments include the incorporation and promotion of home health monitoring and telehealth equipment to further assist people to remain at home for longer.	Monitor trials of 'Florence' across Tayside, look to adopt successes ASAP. Bariatric trial initially for 5-6, looking for 150 by end of year 2	Sept 18 Feb 17	Florence monies allocated to Tayside from National TEC fund	Jane Dernie (NHST)	G	
	3.2	Undertake the Complex Care/Bariatric pilot as a small test of change with a view to rolling out the pilot to other groups across the partnership e.g. COPD, diabetes, heart disease	Initial 16 week pilot of cohort of 5-6 to start in Nov. Use learnings to develop future projects	Feb 17 ongoing	National TEC fund	Jane Dernie (NHST)	A	
	3.3	Increase the use of home health monitoring to increase opportunities for self-management of long term conditions to reduce health inequalities.	Use learning from current health monitoring to inform potentials for clinical models	Regular updates during Florence trial concluding Sept 18	Within existing resources	Jane Dernie (NHST)	A	
	3.4	Using Jabber Guest, increase communication between community hospitals, communities and individuals through video conferencing to support people to remain living in their homes for longer.	Establish baseline for current usage Set target for improvement by sector	Jan 17 Feb 17	Within existing resources	Aileen Tardito (NHST) Paul Smith (PKC)	A	

	3.5	Support GP's in practices and communities to have an increased awareness of the TEC agenda, and support them to increase their knowledge and use of TEC across all localities.	Inform GP clusters of potentials of technology and supporting applications within current clinical models	Mar 17	Within existing resources	Jane Derrie (NHST) Paul Smith (PKC)	G
STRATEGIC PLAN PRIORITIES:		NATIONAL HEALTH AND WELLBEING OUTCOMES:					
Making the best use of available facilities, people and resources		<p>People who use health and social care services are safe from harm;</p> <p>People who work in health and social care services are supported to continuously improve the information, support, care and treatment they provide and feel engaged with the work they do;</p> <p>Resources are used effectively in the provision of health and social care services, without waste.</p>					
OBJECTIVES	NO	ACTIONS	MEASUREABLES, DELIVERABLES, TARGETS	TIMESCALE TO BE COMPLETED	RESOURCE & COSTS	LEAD	RAG
Establish appropriate infrastructure and asset management of TEC equipment across the partnership	4.1	Ensure robust procedures regarding procurement, storage, delivery and installation of all TEC equipment across the partnership.	Best value re TEC procurement.	ongoing	Within existing resources	Mike Law (PKC)	A
	4.2	Review the current community alarm and telecare procedures including call handling and response procedures; develop and finalise operational guidelines and protocols to incorporate all TEC within this.	Digital switchover by end of 2016. Develop protocols and guidelines for new systems, possible pilot funding	Dec 16 Jan 17	Within existing resources	Graham Kilby (PKC) Paul Smith (PKC)	A

<p>Review the resource requirements and the capacity of the Community Alarm and Rapid Response teams to meet the current and future needs of the service along with TEC across Perth and Kinross</p> <p>Develop a robust governance framework</p>	4.3	Review resource capacity and implement recommendations.	bid	Streamlined, efficient and effective service.	ongoing	Within existing resources	Kenny Ogilvy (PKC)	<p>A</p>
	4.4	Monitor and engage with national TEC developments and bid for funding appropriately	Initial meeting with Scottish Government Establish links with national networks Scope funding opportunities	Sept 16 Ongoing ongoing	Within existing resources	Kenny Ogilvy (PKC) Jane Dernie (NHST) Eileen McMullan (PKC) Paul Smith (PKC)		
	4.5	Implement the governance framework and the financial reporting processes and requirements to allow reporting locally and nationally as required.	Reporting on TEC is encompassed within the Joint Performance Framework where all reporting development and delivery is managed across the partnership. The Performance Framework sits within an established governance framework within the Partnership and within Community Care. The Joint Performance and Improvement team, with members from Finance, Performance and Improvement is responsible for the development,	Ongoing	Within existing resources	Sandy Strathearn (PKC)		

			management and maintenance of the indicators that will underpin reporting			
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NEW ACTIONS ARISING SINCE NOVEMBER 2016

STRATEGIC PLAN PRIORITIES: Prevention and early intervention & Person centred health, care and support		NATIONAL HEALTH AND WELLBEING OUTCOMES: People are able to look after and improve their own health and wellbeing and live in good health for longer					
OBJECTIVES	NO	ACTIONS	MEASUREABLES, DELIVERABLES, TARGETS	TIMESCALE TO BE COMPLETED	RESOURCE & COSTS	LEAD	RAG
Increase awareness, education and knowledge of TEC across the partnership and the general public	1.1	Raise profile of TEC locally through internal and external communications.	Increased awareness of local TEC projects and initiatives through communication channels such as social media and internal newsletters.	Ongoing	Within existing resources	Andy Davidson (PKC) Paul Turner (PKC)	A
	1.2	Explore the role of TEC in assisting the hospital discharge process	Deliver TEC training sessions to staff from Hospital Discharge and Early Intervention & Prevention Teams. Display TEC equipment at PRI Discharge Unit	June 17	Within Existing Resources	Bruce Sutherland (PKC) Paul Smith (PKC)	A
Support carers across Perth and Kinross in their caring role through the use of TEC							

STRATEGIC PLAN PRIORITIES: Reducing inequalities and unequal health outcomes and promoting healthy living		NATIONAL HEALTH AND WELLBEING OUTCOMES: Health and social care services contribute to reducing health inequalities					
OBJECTIVES	NO	ACTIONS	MEASUREABLES, DELIVERABLES, TARGETS	TIMESCALE TO BE COMPLETED	RESOURCE & COSTS	LEAD	RAG
Ensure TEC development includes the incorporation and promotion of home health monitoring and telehealth to further assist people to remain at home for longer.	3.1	<p>Liaise with third party providers to explore the role of TEC in supporting Care at Home clients. For instance, encouraging increased physical activity and the use of tablets to reduce social exclusion.</p> <p>Research and explore Apps that encourage and support the self-management of care.</p>	<p>Carry out qualitative surveys to measure how TEC has benefited this care group.</p>	Sept 17	TBC	<p>Paul Smith (PKC) Andy Davidson (PKC)</p>	A
	3.2		<p>Increased number of individuals and care groups who are supported to self-manage their condition through the use of Apps. Carry out qualitative survey with individuals using the "Brain in Hand" app.</p>	Ongoing	<p>Many apps are free and can be used on devices many people already own. Initial ten licences for "Brain in Hand" funded via PKC Angels Share Programme.</p>	<p>Paul Smith (PKC) Andy Davidson (PKC) Zoe Robertson (PKC)</p>	A

STRATEGIC PLAN PRIORITIES:		NATIONAL HEALTH AND WELLBEING OUTCOMES:					
Making the best use of available facilities, people and resources		<p>People who use health and social care services are safe from harm;</p> <p>People who work in health and social care services are supported to continuously improve the information, support, care and treatment they provide and feel engaged with the work they do;</p> <p>Resources are used effectively in the provision of health and social care services, without waste.</p>					
OBJECTIVES	NO	ACTIONS	MEASUREABLES, DELIVERABLES, TARGETS	TIMESCALE TO BE COMPLETED	RESOURCE & COSTS	LEAD	RAG
<p>Establish appropriate infrastructure and asset management of TEC equipment across the partnership</p> <p>Review the resource requirements and the capacity of the Community Alarm and Rapid Response teams to</p>	4.1	Scope ways in which the upgrade from an analogue to digital community alarm receiving centre will deliver increased efficiency, reliability and functionality for the service.	Increased uptake of telecare and number of services offered.	Dec 17	PKC has applied to be part of Scottish Government led pilots exploring the transition from analogue to digital telecare	Paul Smith (PKC) Bruce Sutherland (PKC)	A
	4.2	Explore the potential for increasing the call handling provision at Beechgrove House to include telecare monitoring from other Partnership areas.	Increased number of clients connected to the alarm receiving centre at Beechgrove House.	June 17	Potential to generate revenue and employment opportunities for P&K in	Paul Smith (PKC) Bruce Sutherland (PKC)	A

<p>meet the current and future needs of the service along with TEC across Perth and Kinross</p> <p>Develop a robust governance framework</p>	<p>4.3</p>	<p>Scope how video-conferencing platforms (e.g. Attend Anywhere) can be best utilised across health and social care.</p>	<p>Findings from the pilot projects with local care homes to inform future video-conferencing projects</p>	<p>Oct 17</p>	<p>future. Within existing resources</p>	<p>Paul Smith (PKC) Andy Davidson (PKC) Dave Henderson (PKC) Carolyn Wilson (NHS)</p>	<p>A</p>
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NATIONAL CONTEXT

The National Telehealth and Telecare Delivery Plan for Scotland to 2015

The National Telehealth and Telecare Delivery Plan for Scotland to 2015¹¹ was launched in 2013. It sets out the Scottish Government, CoSLA and NHSScotland's commitment to embed technology-enabled options in the redesign of health, care and support services across Scotland, build confidence in how it can be used to make a difference to people's lives and ensure it is reliable and easy for all to use. The ambitions include:

- Telehealth and telecare will enable choice and control in health, care and wellbeing services for an additional 300,000 people;
- People who use our health and care services, and staff working within them, will proactively demand the use of telehealth and telecare as positive options;
- There is a flourishing Innovation Centre where an interacting community of academics, care professionals, service providers and industry innovate to meet future challenges and provide benefits for Scotland's health, wellbeing and wealth; and,
- Scotland has an international reputation as a centre for the research, development, prototyping and delivering of innovative telehealth and telecare services and products at scale.

eHealth Strategy 2014-2017

The 2011–2017 eHealth Strategy included a commitment to undertake a review and refresh of that document in 2014. Since 2011 there have been significant developments, with the Scottish Government's 2020 Vision now providing the key context for health services and for the implementation of the Healthcare Quality Strategy¹². Together they set the strategic framework for NHSScotland and for eHealth.

Scotland's Digital Future: Delivery of Public Services

The publication of Scotland's Digital Future: Delivery of Public Services¹³ has set out a collaborative public sector approach to digital technologies and a focus on the needs of individuals. More recent developments have increased the emphasis placed on health and social care integration.

¹¹ The National Telehealth and Telecare Delivery Plan for Scotland to 2015 - <http://www.gov.scot/resource/0041/00411586.pdf>

¹² <http://www.gov.scot/resource/doc/311667/0098354.pdf>

¹³ <http://www.gov.scot/Resource/0040/00407741.pdf>

TEC Programme

The TEC programme was launched in 2014 and is a three year £30million Scotland wide programme designed to significantly extend the numbers of people directly benefiting from technology enabled care and support in Scotland. The five priority areas for the programme include: expansion of Home Health monitoring as part of integrated care plans; innovation for Dementia; expansion of National video conferencing infrastructure; build on emerging National digital platforms and expansion of Telecare and move to Digital Telecare. Partnerships are able to bid for funding based on the above priorities with projects being funded until 2018.

Technology Charter for people living with dementia in Scotland (2015)

The development of the Charter was funded by the Technology Enabled Care (TEC) Programme. It calls for:

- All people to work together to actively promote the use of technology in health and social care and to benefit the increasing number of people living with dementia in Scotland and their families;
- To be a mandate founded on a common set of core values and principles so that people living with dementia in Scotland benefit from technology to help them live a healthy life safely, securely and confidently as full citizens in society;
- It seeks to raise public and professional awareness of how technology can enhance lives, promote independent living and assist and complement care and support.

