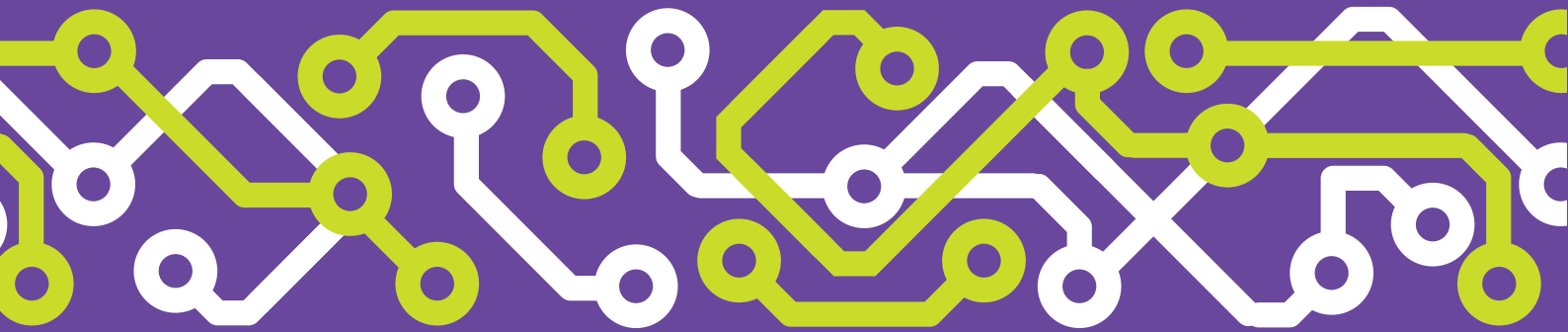THE DIFFERENCE
TECHNOLOGY
CAN MAKE

Participant's Guide

This guide contains useful information about the **difference technology can make** to help people get on with their lives.

It includes content to support the course you are attending today.

It also provides links to other resources that you can use to find out more about technologies to help support independent living.

Contents

1. **Welcome**

…and thank you for coming to learn more about the difference technology can make to help support people to live their lives independently and to the full.

Telecare and assisted living technologies are increasingly being used to help support people to live more independent lives at home and when out and about in their community.

This training resource has been developed to promote the positive contribution this technology can make to individuals' independence, well-being, lifestyle and opportunities. It aims to increase your knowledge and confidence about the opportunities technology can offer as part of health, housing and social care support in Wales. Supporting the implementation of the *Social Services and Well-being (Wales) Act 2014* it promotes a workforce who can work creatively and collaboratively to find solutions to support and achieve positive outcomes for individuals.

The training resource consist of **two half-day courses**; one on **awareness**, which offers a broad overview of assistive technology and telecare and another more advanced course covering **assessment** in more detail. Each course can be run separately or together as a full-day course. Each course is based around a set of slides which will inform you about the range of technologies that are available to support independent living and how to assess people's needs to ensure that the most appropriate technology is provided at the right time. As well as the slides, there will be an opportunity for you to discuss various topics with others in the course to help think about the issues involved. There are also a couple of exercises and plenty of case studies to help you test out what you have learned.

2. **Background information**

2.1 **Introduction**

Technology can and does make a real difference to people's lives every single day. Where would we be without all those gadgets and apps that help make our lives easier, more convenient or more fun? Stop and think for a moment about the technology you've already used today…

Maybe it started with a bedside alarm clock (or an app on your smartphone) and then perhaps you switched the light on in your bedroom, and appreciated how comforting and warm it felt thanks to the central heating. Perhaps you then had a hot shower before taking the towel off your towel heater to get nice and warm and dry. Maybe you used a hairdryer to dry your hair while checking the news and weather for the day quickly on your smartphone, and maybe flicked through some of your messages or e-mails and your calendar to see what events you had on today. A quick game of Crossy Road or Candy Crush perhaps before heading downstairs to make a cup of coffee with your shiny espresso machine which you drink with a warm piece of toast that popped out of your electric toaster…

You get the point by now… we all use technology to make our lives easier. We just take so much of it for granted, sometimes we don't even consider it to be 'technology' anymore especially when we compare it to the most recent internet connected thingamajig in our gadget collection – and the fact that it rarely goes wrong!
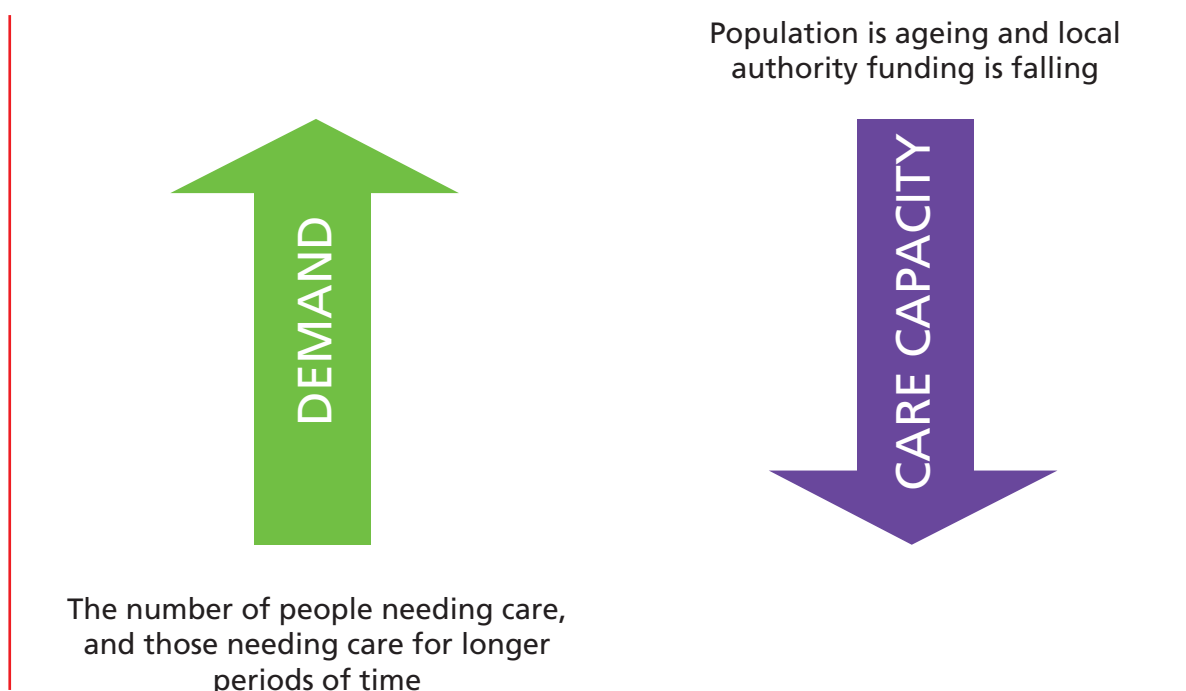
This course is called, **The difference technology can make** – only we are looking specifically at a range of technologies that are designed to help keep people with additional needs independent. These needs may be related to the person's age, a dementia, diabetes, general frailty, social isolation, a learning disability, a sensory impairment or various combinations of factors, including the environmental impact of their home. In these circumstances, technology, and any associated services built around it, is designed to help people to live their lives to the full either in their own home and/or when out an about in their local community. Sometimes the technology used will be specifically designed for this purpose – other times it may be more generally available technology that everyone uses.

2.2 The drivers for change

Why are we looking increasingly to use technology to help people to stay independent for longer? Part of the answer is because the technology is better now and offers more opportunity to support people to get on with their lives. Some people will say it is because it is cheaper than the alternative (i.e. people-powered care). There may be some truth in that, lower-cost options are always tempting in times of austerity; but technology used in isolation and without a proper consideration of the needs of the people who will use it will not produce successful outcomes.

DEMAND

The number of people needing care, and those needing care for longer periods of time

Population is ageing and local authority funding is falling

CARE CAPACITY

The truth of the matter is that demand for care is increasing but the capacity to provide that care is not able to grow accordingly. In fact, it is more likely to fall as the population ages and the number of people of working age drops as a percentage of the overall population. An ageing population will lead to increased long-term conditions such as diabetes, dementia and will consume an increasing amount of resource to keep people independent and well. The demand placed on the care system by an ageing population will be significant.

So with the capacity of informal care being reduced and the ability of local authorities to provide sufficient care, there is a clear need to better manage the resources that are available more effectively and one of the mechanisms by which this may be achieved is with technology.

The aim for most people is to remain as independent as possible. This means having choices regarding where they live, how they live and when they need more practical help from formal carers. The *Social Services and Well-being (Wales) Act 2014* entitles them to an assessment of

needs, and local authorities may have to provide them with direct services or commission services on their behalf together with working to identify the best way to support individuals and carers. However, these will be limited to those priorities identifed during the assessment process which support the individual's personal outcomes, or how they want to live their life. Many may not be eligible for services but may be directed to organisations that can provide support and assistance. Increasingly, possible solutions will involve the use of equipment or technology which people and their families can purchase and install privately.

It may be clear that everyone needs to know about technology and about the services that can be wrapped around individuals to enable them to maximise the benefits of using items of technology. You will need to understand the potential of some of these devices and systems, so that you refer on or recommend them to people who could benefit.

It is important that local services are re-structured to take advantage of the opportunities that technology can provide. Bolting technology enabled care around existing service models may not be enough. However, it is important to remember that technology is not a universal panacea. It must be used responsibly and ethically and its benefits must not be oversold. There are some things that technology does very well but there are countless of instances where real-life carers are, and always will be, the best option.

2.3 The Social Services and Well-being (Wales) Act 2014

The *Social Services and Well-being (Wales) Act 2014* (the Act) came into force in April 2016 and brings together and modernises social services law.

Figure 1

Well-being

People

Partnership & Integration

Prevention
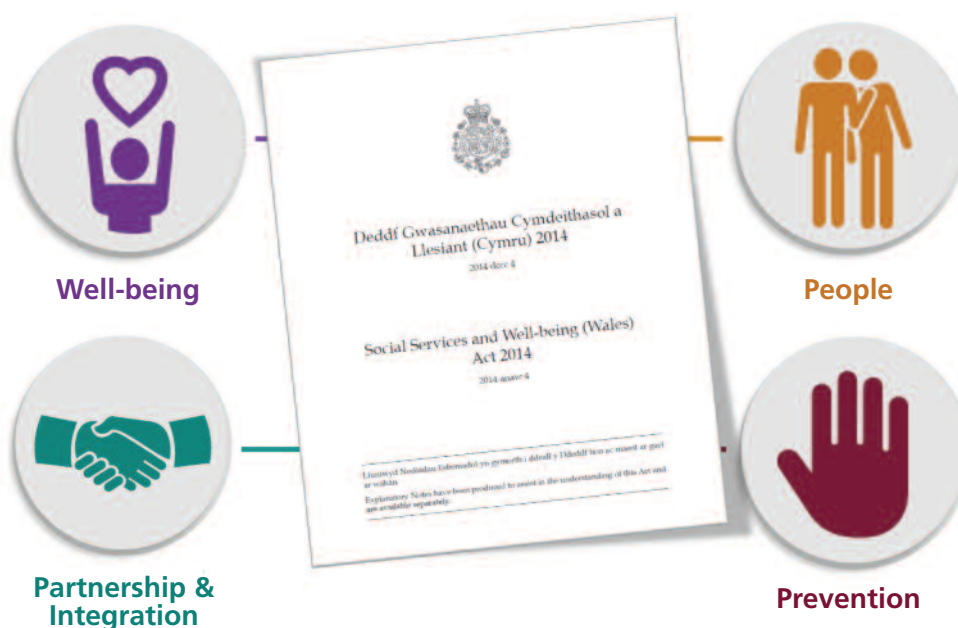
The main principles of the Act are:

- Supporting people who have care and support needs to achieve **well-being;**

- **People** are at the heart of the new system by giving them an equal say in the support they receive

- **Partnership** and co-operation drives service delivery

- Services will promote the **prevention** of escalating need and the right help is available at the right time

The Act changes the social services sector:

- People have control over what support they need, making decisions about their care and support as an equal partner

- New proportionate assessment focuses on the individual

- Carers have an equal right to assessment for support to those who they care for

- Easy access to information and advice is available to all

- Powers to safeguard people are stronger

- A preventative approach to meeting care and support needs is practised

- Local authorities and health boards come together in new statutory partnerships to drive integration, innovation and service change

The Act is supported by Codes of Practice – guidance to help people and organisations to work within the law. You can find out more about the Act and the Codes of Practice here: http://www.ccwales.org.uk/the-act/

2.4 **A note on terminology**

This course is not about assistive technology (AT) in the traditional sense. Assistive technology is such a broad field, that it encompasses many different uses and types of technology. Figure 2 shows four quadrants, where we have split AT into four different groups:

1. **Fixed AT** – this includes products such as grab-rails, walk-in baths and stair lifts – i.e. physical products that are fixed to the home.

2. **Portable AT** – this includes tap turners, kettle tippers and walking frames.

3. **Electronic AT** – including products such as environmental control systems to help individuals to automate or control various items in their home; and

4. **Connected AT** – this includes products which tend to link with others such as fall alarms, epilepsy alarms, gas alarms, medication dispensers and other digital care and telecare applications/services.

Figure 2

It is this final quadrant that this course is mainly focussed on (shaded in blue), although due to the nature of AT, there is a small overlap with the other areas occasionally. Unfortunately, there are so many sub-categories of product or service and various different ways of categorising them that the terms used to describe these technologies can sometimes be a little confusing.

It is important not to get too hung up on all of these terms but at the same time, it is probably a good idea to be aware of them and what some of the differences are. We have developed a glossary of terms to help with this and you will be provided with a copy in your participant's pack. **The two most commonly used terms to be aware of are:**

Telecare[1] 'Telecare is support and assistance provided at a distance using information and communication technology. It is the continuous, automatic and remote monitoring of users by means of sensors to enable them to continue living in their own home, while minimising risks such as a fall, gas and flood detection and relate to other real time emergencies and lifestyle changes over time.'

Telehealth[2] 'Telehealth is the remote exchange of data between a patient at home and their clinician(s) to assist in diagnosis and monitoring typically used to support patients with Long Term Conditions. Among other things it comprises of fixed or mobile home units to measure and monitor temperatures, blood pressure and other vital signs parameters (and the answering of targeted questions) for clinical review at a remote location using phone lines or wireless technology.'

Both of these can be considered under the umbrella term 'Technology Enabled Care' (TEC) which is a relatively new term. Often, the word 'services' is appended to this term to form TECS, although this does not then cover products that work in a stand-alone fashion where there is no on-going service component.

2.5 Models of Technology Enabled Care

There is a broad spectrum of technology enabled care which ranges from medical alarms through to the ability to easily obtain information or receive entertainment with plenty of others in-between! The courses will provide plenty of examples of the types of technology that are available and should give you the opportunity to have a hands-on session with some equipment.

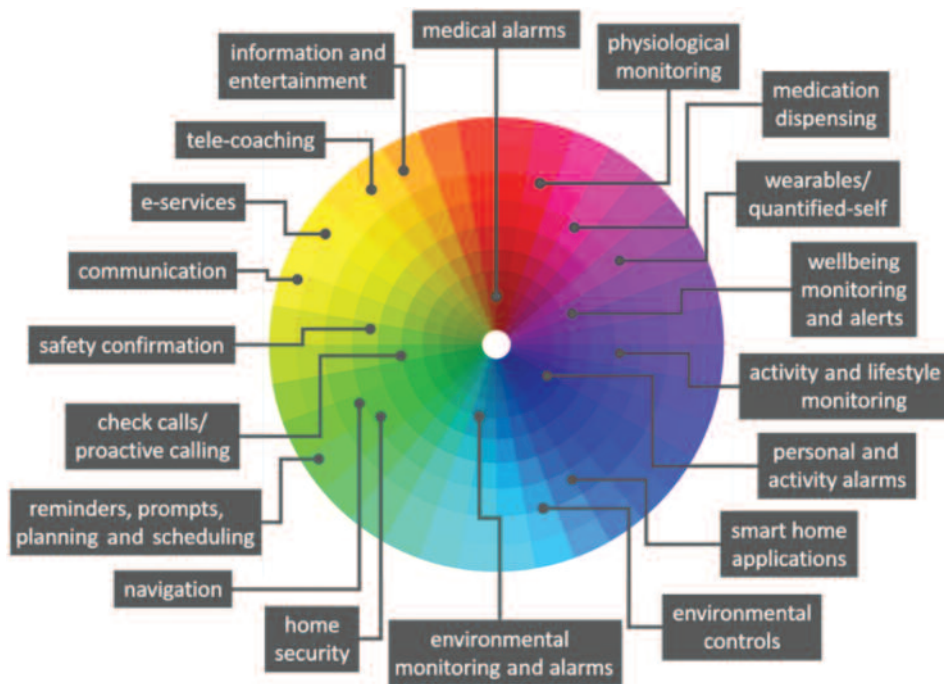These applications of technology enabled care can be considered as being related to one of two main groups:

1. **Support and assistance** – applications which help people to get on with their lives by making things easier; and

2. **Safety and well-being** – applications which help to keep people safe and which will contact appropriate responders automatically in the event of a problem or perceived problem.

[1] https://www.tsa-voice.org.uk/consumer-services/what-is-telecare
[2] https://www.tsa-voice.org.uk/consumer-services/what-is-telehealth

Figure 3

The former includes systems that provide a simplified user interface for accessing web-based services perhaps on the television and for using video communication with loved ones or care professionals. It could also include reminder devices, special clocks for individuals with dementia to help them know the time of day in a format which makes sense to them or it could include a GPS tracking device which could guide them home if they get lost. Perhaps a simplified mobile phone which is easy to use with very simple options would provide the necessary confidence to support independence, knowing that help could be raised if the need arises.

The latter includes both active and passive systems i.e. systems which require the interaction of a person to initiate a response and those that will automatically raise an alarm if there is a potential problem. They can also be split into reactive and predictive which means system that raise an alarm after a problem has occurred and those which raise an alert prior to a significant problem occurring based on an interpretation of current data and events when compared with historically established norms.

It may be evident that the nature of the technology deployed will vary greatly depending on the individual circumstances of the person/people being assessed. For instance, the type of equipment deployed for an individual with only a single issue that requires the intervention of technology and who has a live-in carer available at all times might be very simple. In such circumstances, a single sensor paired locally with an alerting device might be all that is required. However, for an individual with complex needs who lives alone, a more intricate package may be required.

All these issues, and more, will be covered in the courses.

3. Course information

3.1 Part 1: Awareness course

This course aims to increase your knowledge and confidence, engage and excite you to the opportunities technology can offer as part of health, housing and social care support in Wales. It is appropriate for workers with little or no knowledge of the subject. This course is intended for anyone who is involved in the health, care and housing whether as frontline staff delivering care and support to vulnerable people, managers who have to organise resources, or advocates who need to understand the increased choice and availability of suitable technology. The course will include basic information about the telecare and community equipment services that are available in your region.

3.1.1 Course programme

The course is split into four sessions as follows:

- **Session 1** – Introduction and the Welsh context

- **Session 2** – Assistive Technology and Technology Enabled Care

- Break

- **Session 3** – Example applications with case studies

- **Session 4** – Keeping up to date and future trends

- Review, questions and answers

3.1.2 Learning objectives

- Realise that technology is all around us and is used to make life safer and easier for everyone

- Understand why we need to consider the use of technology to help people to live fulfilling lives

- Be inspired by the ways that different services and products can be used to support independent living

- Be able to recognise different options for support using technology based on a person-centred approach

- Find out about local service provision and referral routes

- Be aware of future developments and how to keep up to date with the latest developments

3.2 Part 2: Assessment course

It is assumed that people attending this course will already be familiar with the topics covered in the awareness course. This course is specifically intended for anyone who will be responsible for undertaking an assessment of needs for care and support, support for carers and preventative services. Assessors will need to be aware of the range of technologies that are available to help support people and will need to understand how to assess a person's needs and circumstances to establish their suitability for technology-based support – whether this is in the form of a product, set of products or a technology enabled care service. The course will include information about the telecare and community equipment services that are available in your region and the procedures for assessing for telecare/technology enabled care.

3.2.1 Course programme

The course is split into four sessions as follows:

- **Session 1** – Assessment of individual's care and support needs and identify hazards and obstacles to positive outcomes

- **Session 2** – Linking conditions, issues and risks; using technology to confirm lifestyle and unmet needs

- Break

- **Session 3** – Models of service provision including m-care; additional assessment considerations

- **Session 4** – Case studies and exercises; preparing for the future

- Review, questions and answers

3.2.2 Learning objectives

After attending this course, you should be able to:

- Appreciate how a person centred approach to assessment changes priorities and outcomes that are possible through innovative support measures

- Recognise that people need individual support from technology – new models are needed to meet their preferences, lifestyle and home

- Have the skills to relate issues to the technologies that work for people with different experience of IT

- Be able to perform robust risk assessments to show how telecare can reduce the likelihood of accident and the extent of harm to individuals

- Know how to help people to discover new ways of supporting themselves or family using technology

3.2.3 Exercise – Have a Go! Card Game

The objective of this exercise is to help you reflect on what you have learned during the course. You will be given a set of cards:

- **Case study cards** – each one outlines the backstory of a fictional person;

- **Issue cards** – describe a set of issues that people may have and for which they may benefit from having some technology enabled care; and

- **Product cards** – a set of technology enabled care products that you can select to build up a package of support for the person in the case study to help with their identified issues.

This exercise will help you to consider various case studies and identify issues that need to be addressed and practice thinking through the issues that need to be considered when recommending technology-based solutions to meet their needs.

The Issue cards and Product cards feature QR codes like the following:

The codes will take you to a page on Vivo that will provide more information on the Issue or Product described in the card. If you do not have a QR reader on your phone or tablet, you can download a free app for your device. Here are some examples:

Norton Snap	Download on the App Store	https://itunes.apple.com/gb/app/norton-snap-qr-code-reader/id471928808
Norton Snap	ANDROID APP ON Google Play	https://play.google.com/store/apps/details?id=com.symantec.norton.snap&hl=en_GB
QR Code Reader	Windows Phone	https://www.microsoft.com/en-gb/store/apps/qr-code-reader/9wzdncrfj1s9

4. **Finding out more**

If you want to find out more about telecare and other Technology Enabled Care products and services, these websites might be useful:

- TelecareAware (**www.telecareaware.com**) – General news and information about the telecare, telehealth and related industry.

- TSA (**www.tsa-voice.org.uk**) – the industry body for Technology Enabled Care.

- UK Telehealthcare (**www.uktelehealthcare.com**) - a membership based organisation for Telecare and Telehealth professionals, service providers and service commissioners.

- Disabled Living Foundation (**www.dlf.org.uk**) – a national charity providing impartial advice and information.

- Care Council for Wales (**www.ccwales.org.uk**) - for further resources in this training and relevant information

Vivo

Vivo is an independent on-line resource that helps people to find the right technology enabled care solution to meet their needs. You can access Vivo here:

www.vivoguide.co.uk

Vivo is designed to be used on desktop, laptop, tablet and smartphones. It is currently optimised for use with a web browser running on a desktop or laptop computer.

Enter the following log-in details to access the site:

Username: vivobeta
Password: V1v0betag0!

Please note that the password is case sensitive and must be entered exactly as shown above.

Vivo has two levels of access:

1) **Standard** – free access to basic information about technology enabled care products and services; and

2) **Pro** – a subscription based service that provides detailed product selection guidance and in-depth reviews.

Vivo allows you to search using an intelligent search engine with filters that allow you to tailor the search to the features you require in the products. You can initiate a search using a free-text search or use a guided search according to conditions, issues or a particular product group of interest.

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