TECHNOLOGY ENABLED CARE

tec
CYMRU

Telecare Services in Wales

DISCOVERY

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August 2021
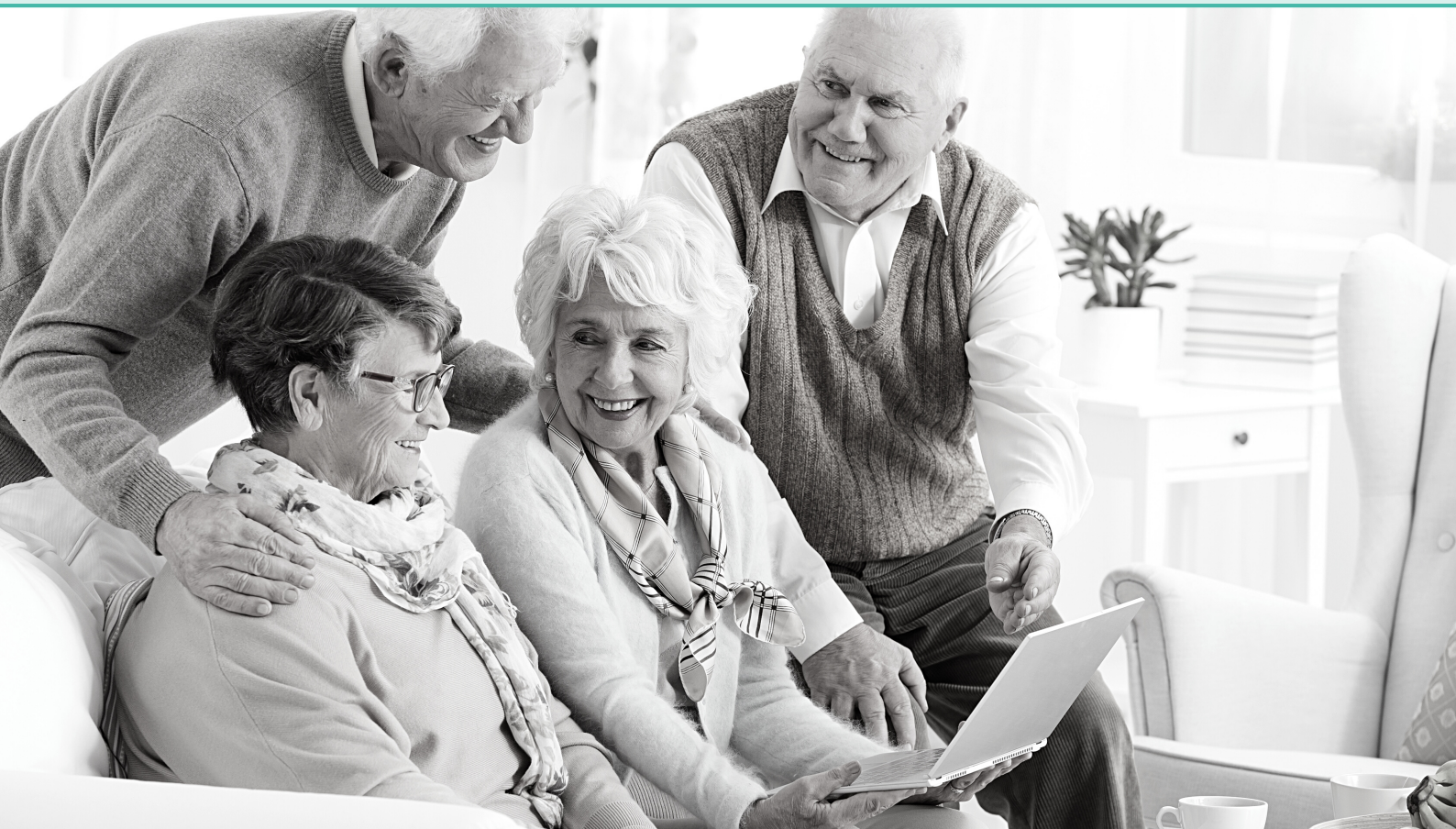
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EXECUTIVE SUMMARY

TEC Cymru, working with technology consultancy, FarrPoint, has completed a discovery exercise to collect and collate information to provide an understanding of telecare services across Wales. Information for the study was collected using a combination of questionnaires and meetings/workshops with stakeholders.

Current Telecare Services

The review found that the telecare services offered across Wales provide services to an estimated 77,000 people. Telecare service users are overwhelmingly older adults, with 91% of service users being over the age of 65, and 38% being over 85.

The services are delivered by Council bodies, housing associations and charities across Wales. The scope and approach of the telecare service offering varies between Council areas with providers using different operational processes, technology and data recording.

Telecare services are typically reactive, providing alarm monitoring and response mobilisation, although some proactive services are also offered, these largely being introduced as part of the response to Covid19. Five Councils offer a response service (with a further 3 Councils offering this to some service users as part of the Delta Connect project).

The extent of telecare service uptake varies significantly, with a difference of up to a factor of 4 in the proportion of over 65s using the service between Councils. A range of potential factors explaining this difference were identified by the review, and include service cost, availability of a response service, and the level of service promotion.

Providers deliver telecare from one of 9 alarm receiving centres, 7 of which are located in Wales. These vary from large, shared facilities serving multiple Councils' service users, to standalone facilities serving a single Council. Providers all use similar in-home telecare alarm and peripheral (sensor/monitor) equipment, sourced from a relatively small range of suppliers with Tunstall being the most widely used equipment supplier.

Service charges vary between Councils, ranging from £1.10 to £4.50 per week for a basic service. The average weekly charge is £3.16.

Although there is a widespread view that telecare services deliver a range of benefits to service users, their families, and the health and care system, there is limited evidence currently collected or available to demonstrate or quantify these benefits.

Future Telecare Services

Two thirds of providers surveyed are planning to change their telecare service offering. Drivers for this change include:

- The need to move to digital technology to ensure continued service reliability once the UK's analogue telephone network is decommissioned in 2025;
- The increasing range of Technology Enabled Care technology becoming available;
- The desire to improve the quality and range of services, including the delivery of preventative and proactive care services and closer integration of health & care.

The 2025 deadline for the transition to digital telecare due to the telecom analogue switch off is something all Councils surveyed were aware of. However only 3 Councils stated that they currently use digital alarms as part of their operational service, only 19% have a plan to migrate their services to digital, and 67% are worried about the digital transition.

Providers highlighted a range of challenges to implementing change to their telecare services, which include the need for evidence of the benefits, lack of digital skills and resource, market immaturity, and the need for a national strategy.

The Role of TEC Cymru

TEC Cymru potentially has an important role to play in improving and developing Welsh telecare services. This includes:

- Representing telecare in Wales, engaging with telecare providers, partner organisations, service users and industry to ensure that the existing and potential future scope and benefits of the service are understood and communicated.
- Supporting providers through the process of transferring their services to digital technology. Using this as an opportunity to implement a more common approach to service delivery, improving services and simplifying the implementation of both the current digital shift and any future telecare developments.
- Promoting and supporting TEC development to ensure that telecare services continue to evolve, taking full advantage of digital technology as part of a wider integrated TEC offering.

REPRESENT TELECARE IN WALES

- Collecting and promoting evidence on the benefits of telecare
- Linking to other digital public service developments
- Engagement with the telecare industry

SUPPORT THE SHIFT TO DIGITAL TELECARE

- Development of standards
- Sharing of Best Practice
- Providing specialist resource
- Establishing procurement framework(s)

PROMOTE TELECARE/TEC DEVELOPMENT

- Ongoing research into TEC developments
- Supporting TEC service integration
- Producing a Welsh telecare/TEC strategy
- Practical support to telecare/TEC development

This recommended role for TEC Cymru in supporting telecare aligns with the original definition of the organisation as contained in the TEC proposal to Welsh Government, an extract from which is contained at Annex B, for information.

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INTRODUCTION

Scope and Background

Telecare services are offered to citizens across Wales by Local Authorities and Housing Associations. The nature of the services offered and the benefits they provide vary between providers, with data on services being held locally, meaning there is limited visibility of telecare at a national level.

TEC Cymru, working with technology consultancy, FarrPoint, has completed a discovery exercise to collect and collate information to provide an understanding of telecare services at a Wales level, highlighting best practice, service offerings and variations, and existing data availability.

This report presents the output of this discovery exercise. It provides a baseline of existing telecare services, against which future developments can be planned and measured. It also highlights how the TEC Cymru telecare programme can support the uptake and development of services.

Methodology

The information contained in this report has been collected using a two-stage process: Initially, questionnaires were sent to all Welsh Councils to obtain details on the scope and nature of their current telecare services and plans for future developments. The responses included details of Housing Associations' service users where these are provided via a Council. Differing numbers of responses were received to each of the questions, this report provides details of the number of responses any figures quoted relate to.

Once the information from the questionnaires was collated, a series of stakeholder workshops and interviews was completed to obtain further detail on:

- Existing services;
- How services are delivered;
- The benefits the service provide;
- Planned service developments;
- Opportunities and challenges;
- How TEC Cymru can support service improvement and development.

TELECARE LANDSCAPE

Telecare services typically offer a standard package, with an alarm, pendant and smoke detector, or a complex package comprising a range of sensor peripherals tailored to a service user's needs

Average telecare service charges are £3.16 per week

Alarm monitoring services are reactive, 10 Councils stated that they also provide proactive telecare services

Two thirds of Councils are planning to change their telecare service offering. This change is driven by the digital shift, availability of new technology and the desire to provide proactive and preventative services

Telecare Service Offering

The scope of the telecare service offered to service users varies between Council areas, though there are several commonalities. Typically, service users will be offered either a standard or complex telecare package.

The standard package usually provides the service user with a telecare alarm device and pendant and a small range of sensor peripherals, most often a smoke/heat detector.

The complex package will use an assessment to tailor the technology used to a service users' care needs. In addition to the equipment provided in the standard package, the complex package will usually involve the installation of a larger number of sensor peripherals, often including:

- Fall detectors;
- Flood detectors;
- Bed/chair sensors;
- Carbon monoxide/gas detectors;
- Door/motion sensors;

- Panic/Bogus caller alarm;
- Epilepsy alarms;
- Daily reminder clocks;
- Medication dispensers.

These devices connect to an Alarm Receiving Centre (ARC) solution provided by, or on behalf of, the Council (see Telecare Call Handling section of this document for further detail).

In addition to the telecare alarm and peripherals, some Councils' telecare service also offer services based on standalone equipment (i.e. they do not connect to the in-home telecare alarm or ARC) such as:

- GPS devices, such as those offered by Buddi, which are often used to help locate service users at risk of wandering and getting lost, and to provide telecare services when outside the home.
- Just Checking, an activity monitoring service which is often used for a short period as part of assessing a service user's care needs, or to provide in-home activity monitoring over the longer term.

Current telecare services delivered are largely reactive, with the telecare service providing some form of response in the event of an alarm being triggered by the service user or a sensor peripheral.

The most common form of alarm response provided is to notify a service user's nominated contact, typically a friend or family member. In the event that they cannot be contacted, or if the alarm call is as a result of an injury, serious medical problem or suspected fire, then the emergency services will be called.

As shown below, five Councils offer a response service as part of their telecare offering (sometimes this is an additional cost option). This means that a team of Council staff, or private domiciliary care agency staff commissioned by the Council, will visit a service user's home in the event of an alarm being triggered. This response can be used in place of an ambulance where a fall has not resulted in an injury, reducing ambulance call outs. In addition to the Councils offering a permanent response service, three Councils are offering a response service to a subset of their service users as part of Delta Wellbeing's Connect project.

Figure 1: Councils Offering a Response Service as Part of their Telecare Offering
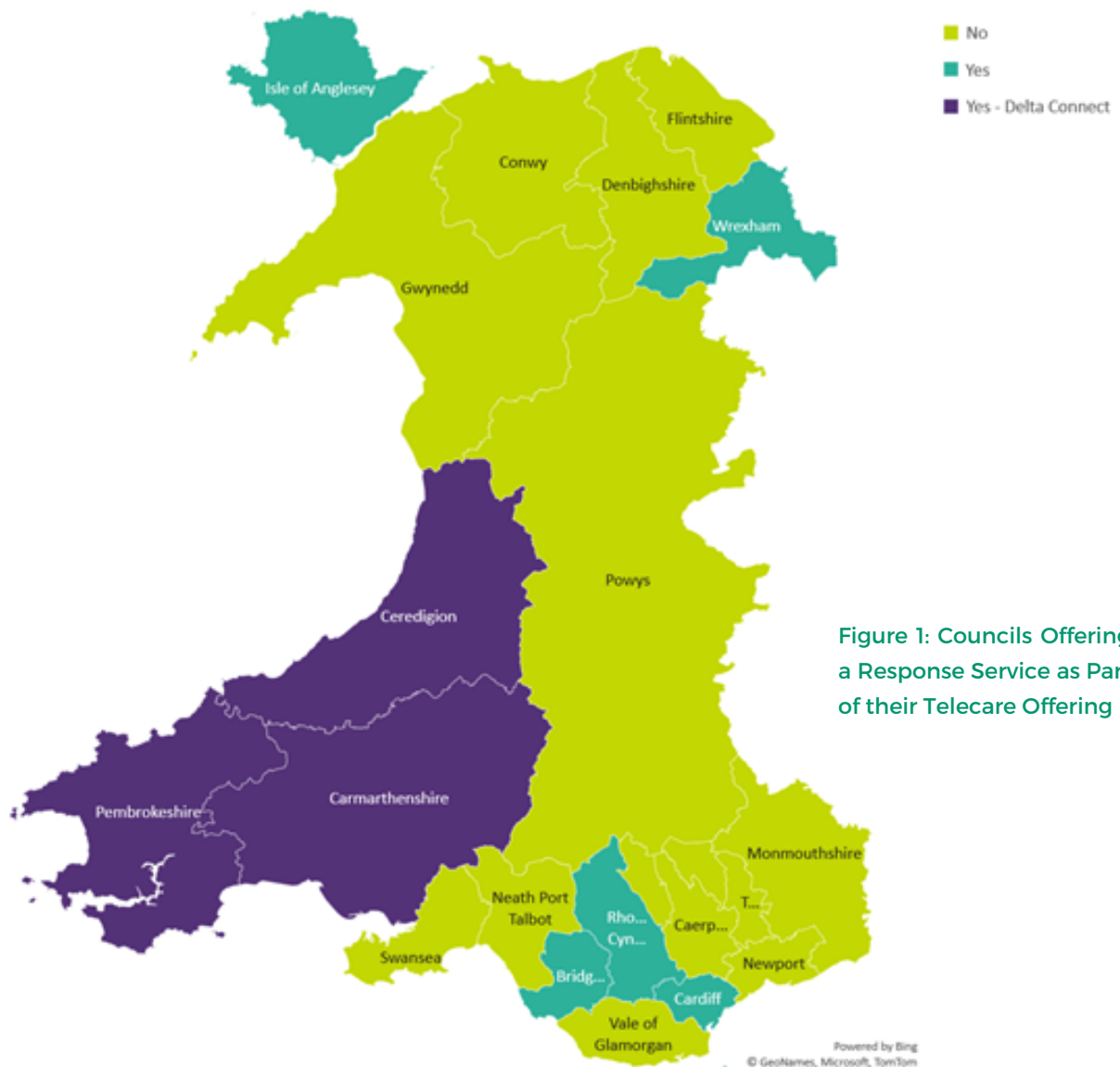
Charges can vary depending on:

- The number of service users in a property;
- The number of sensor peripherals installed;
- Whether a response service is provided.

Some Councils' service charges are means tested and/or subject to a service users' assessed level of care needs, meaning charges can be reduced, paid for as part of a care package, or the service provided free.

Some Councils also charge an installation fee, where charged this varies between £35 and £60.
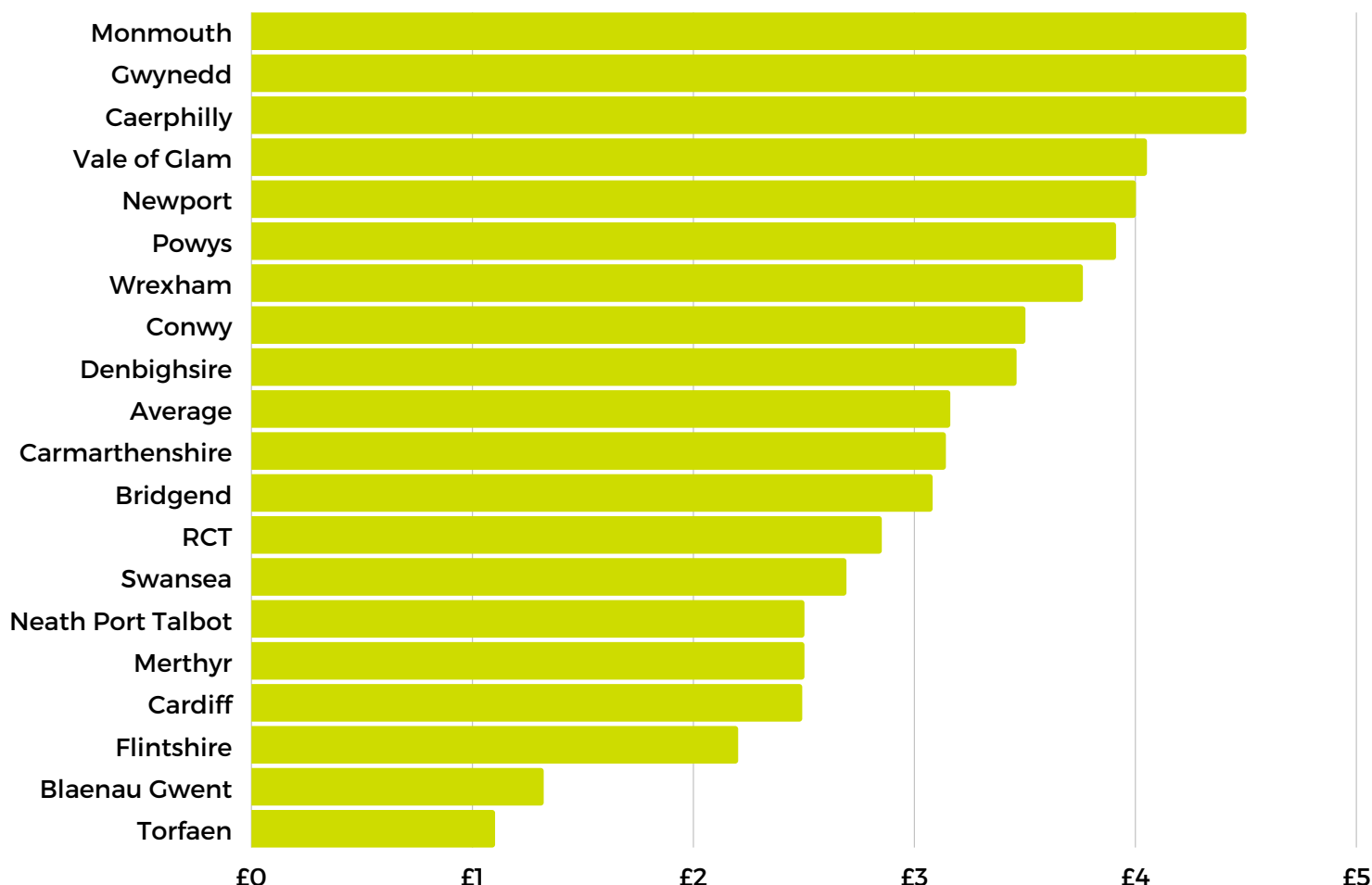

Figure 2: Weekly Cost of Councils' Telecare Offering (Basic Package where Range of Tariffs Apply)

The average amount Councils charge Telecare service users for their service is £3.16 per week. Charges vary between Councils, from £1.10/week at Torfaen to £4.50 at Monmouthshire, Cyngor Gwynedd, and Caerphilly.

In addition to their reactive telecare service, 10 Councils (of 16 providing a response to the question) stated that they also provided a proactive telecare service. The definition of proactive telecare covers a broad range of services, but in general is where contact is made with service users, either on a regular basis, or in response to an event or other trigger, for example following a fall, a bereavement, to check on wellbeing, or to provide seasonal health advice.

The nature of the proactive services currently offered by Councils varies, and includes:

- Birthday calls;
- Wellbeing calls;
- Temporary proactive calling as part of a re-enablement package;
- The use of solutions, such as ARMED, to identify service users at increased risk of falling;
- Delta Wellbeing's Connect project is offering a comprehensive package of proactive telecare to service users as part of a wider package of health and wellbeing care.

Four Councils (of 14 responding to the question) stated that they provided Telehealth services. The nature of these telehealth services also varied, with two Councils quoting ARMED as an example service. This is the same ARMED solution detailed above as a proactive telecare offering, demonstrating that there is some overlap between the definitions of telecare and telehealth services.

Ten (of 15) Councils stated that they are planning to change the scope of the telecare service they offer to citizens. Planned changes to telecare services were further explored during stakeholder interviews, these are examined in a later section of this document.

Council's offering a Response Service

Yes 23%
Yes via Delta 14%
No 63%

Council's planning on changing their service offering

No 33%
Yes 67%

Council's offering proactive services

No 38%
Yes 62%

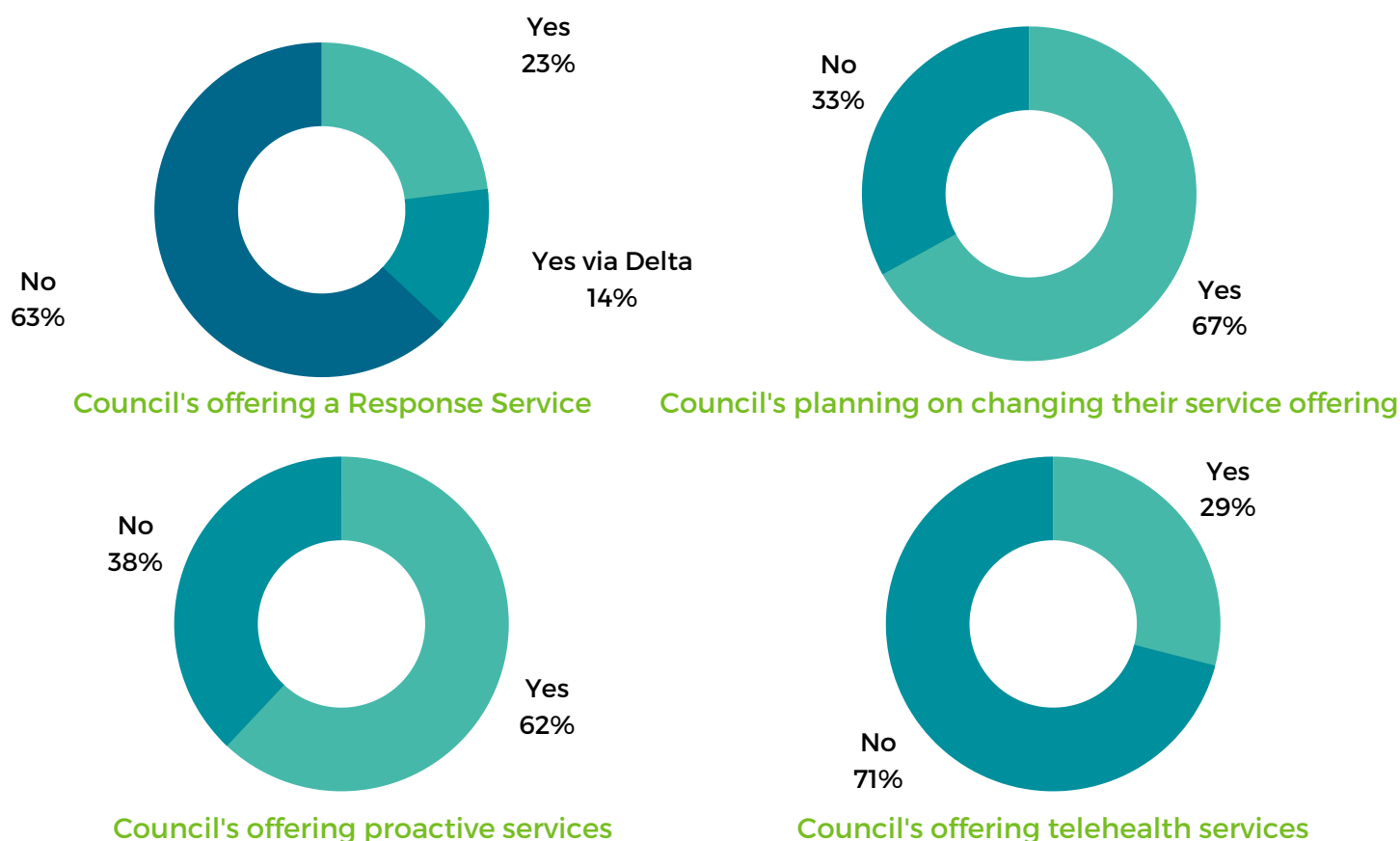**Council's offering telehealth services**

Yes 29%
No 71%

Figure 3: Councils Offering Response Service (% of 22 Councils that details were available for), Planning to Change the Scope of their Telecare Offering (% of 15 Councils that responded to the question), Offering a Proactive Service (% of 16 Councils responding), and Offering Telehealth Services (% of 14 Councils responding).

Telecare Service Users

There are an estimated 77,000 telecare service users in Wales

The number of telecare service users per head of population varies between Council areas by a factor of up to 4

91% of telecare service users are over 65, 38% are over 85

Methods of referral to telecare services vary significantly between Councils

There are an estimated 77,000 telecare service users in Wales. These telecare services are provided by Local Authorities, Housing Associations and charities to users in their homes or in grouped schemes.

The below table provides a summary of how this estimated number of telecare service users is split by each Council area.

Local authority	Telecare service users	Local authority	Telecare service users
Blaenau Gwent	1.645	Merthyr Tydfil	1,253
Bridgend	3,064	Monmouthshire	1,037
Caerphilly	4,096	Neath Port Talbot	3,181
Cardiff	5,620	Newport	1,317
Carmarthenshire	6,254	Pembrokeshire	2,585
Ceredigion	1,469	Powys	3,867
Conwy	1,980	Rhondda Cynon Taf	5,741
Denbighshire	3,465	Swansea	6,060
Flintshire	4,969	Torfaen	1,827
Gwynedd	1,921	Vale of Glamorgan	2,851
Isle of Anglesey	2,871	Wrexham	4,498

Figure 4 shows the number of telecare service uses graphically, showing 'hotspots' of users in Carmarthenshire, Cardiff, Rhondda Cynon Taf, and Swansea. Clearly these are also some of the most populous Council areas in Wales and so would be expected to have relatively large numbers of telecare service users.
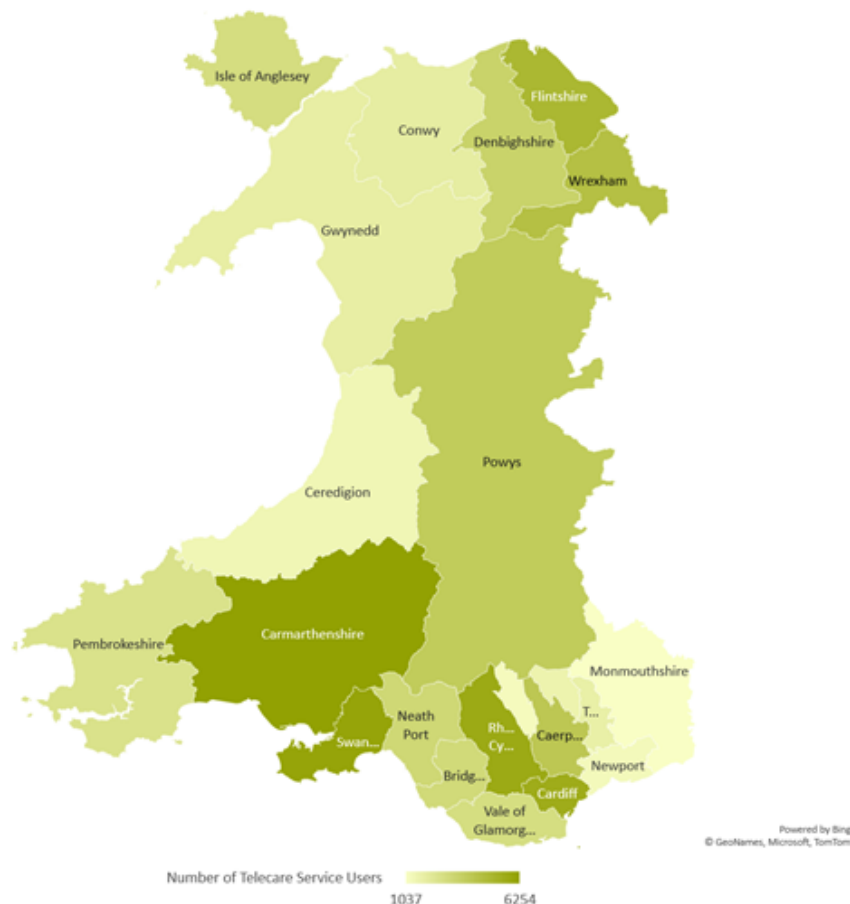
Figure 4: Councils Offering a Response Service as Part of their Telecare Offering

Figure 5 shows the number of telecare service users in each Council area adjusted per head of population. From this data it can be seen that there are variations of up to a factor of 4 in the number of telecare service users in a Council area. For example, Monmouthshire has 43 users per 1,000 over 65s, Wrexham has 164.
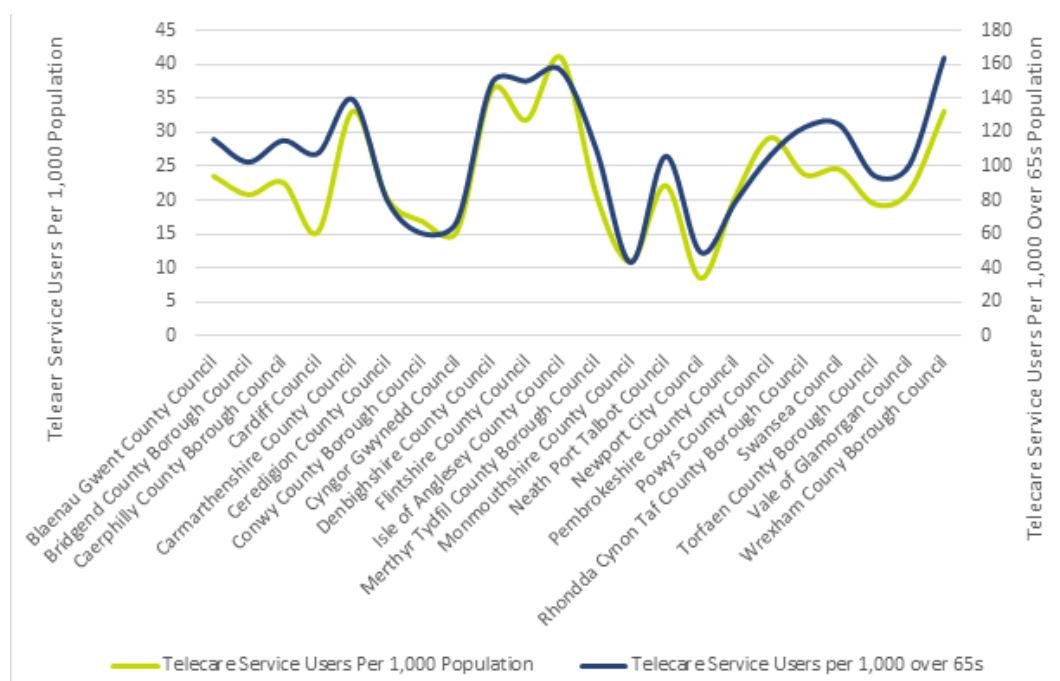
Figure 5: Number of Telecare Service Users Per 1,000 Population and Per 1,000 Over 65s Population by Council Area. (Population based on data from StatWales, Mid-Year 2019 figures)

The differences in levels of telecare take-up are likely to be due to a combination of factors. During stakeholder interviews, several potential factors were highlighted:

Service Charges Stakeholders suggested that high service charges can result in lower take-up levels. In addition, stakeholders highlighted that in some cases service users subscribe to telecare from commercial providers as their charges can be lower (the figures in this report only relate to telecare services provided by the Public Sector, users of commercial services do not appear in the figures). The data collected for this study shows some potential links between charges and impact take-up, for example Monmouthshire has the highest charge and lowest take-up (see Figure 7). However, there are other Councils where there is no clear link between take-up and charges, suggesting that although charges may influence take-up, other factors are also at play.

Response Service Telecare services offering a response service were seen as being a more compelling offering to service users. Again, the data collected for this study shows there may be some links, with the two Councils with the highest take-up (Wrexham and Isle of Anglesey) both offering a response service, however, other high take-up Councils (for example Flintshire) do not.

Promotion of telecare and referral Stakeholders highlighted that the Councils promoted telecare differently. Some promoted it relatively widely to potential service users, meaning there are high levels of awareness of the service availability; others relied on service users being referred. Referral routes also differ and can impact take-up: some Councils allow service users to self-refer; others require a health/care professional to refer service users.

Where Telecare sits within the Council Several stakeholders stated that take-up was impacted by the service area within the Council in which telecare sits. The Councils where telecare sits within social care were seen as having higher levels of take-up than those where telecare sits within customer services or housing, for example. Reasons quoted for this were that social workers were more aware of the telecare service offering and its benefits, and so were more likely to include it when designing care packages. Sitting within social care was also associated with better awareness of the preventative benefits of telecare and the links into healthcare.

Social Factors Some stakeholders highlighted that social factors may impact take-up levels – this was linked to varying levels of deprivation between Council areas. Examples quoted included where family lived locally and so were more likely to take responsibility for care of elderly relatives, rather than rely on telecare. Alternatively, family may live some distance away, but be relatively wealthy and procure their own technology and services to monitor elderly relatives.
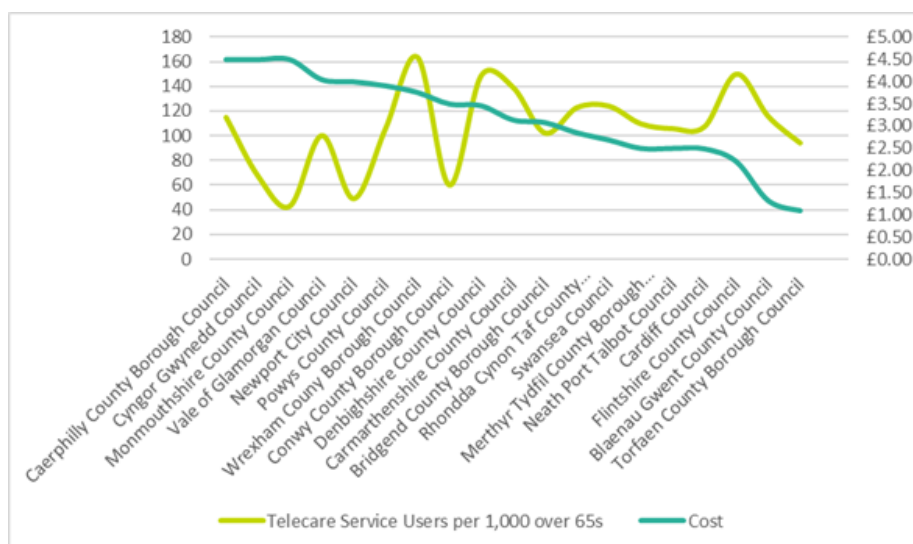
Figure 6: Cost of Telecare Services (Right Axis) vs Level of Telecare Take-up amongst the over 65s (Left Axis) by Council area (Councils for which service cost information was available)

There are a range of methods for service users being referred to the telecare service including via a social worker (on average 28% of users are referred this way), via self-referral (25%), another health professional (20%), or a friend/family member (17%).

However, as shown in Figure 7, referral routes vary significantly between Councils with, for example, 90% of Swansea's service users come from self-referral, but only 5% of Merthyr Tydfil's service users. 70% of Bridgend's service users come from referrals from other health professionals, but only 6% of Caerphilly's.

Part of this difference in referral routes can be explained by the different arrangements used by Councils. Some Council's allow citizens to self-refer to the service, whereas others only permit referral by a health or care professional. As detailed above, the service area within a Council in which telecare sits can also impact referral methods, with those within social work potentially having a higher proportion of social worker referrals than those within another service area, such as housing or customer services.
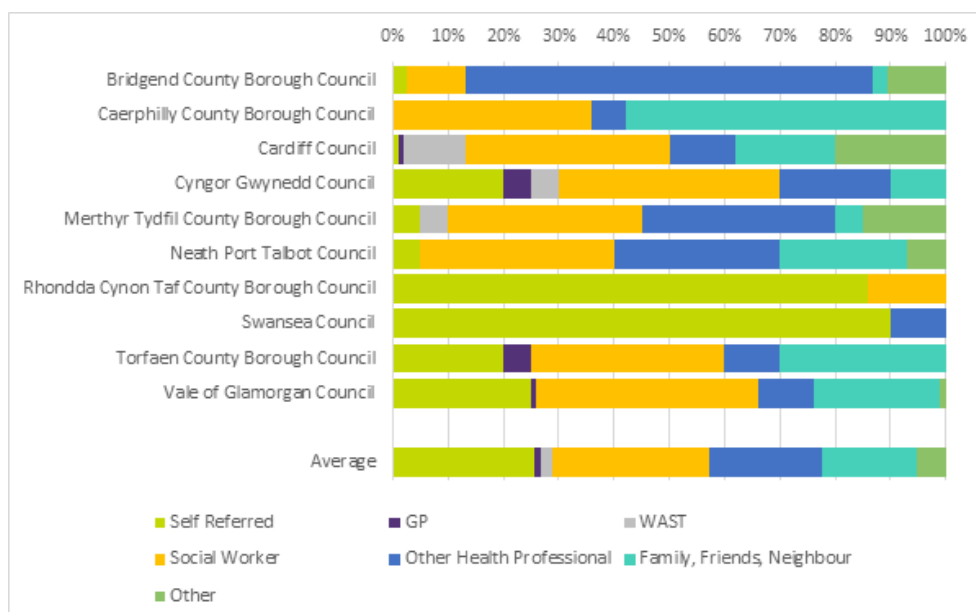

Figure 7: Referral Method for Telecare Service Users – Percentage of all referrals by method (where reported).

Telecare is overwhelmingly a service supporting older people. It is estimated that 91% of service users are aged over 65, 71% are over 75, and 38% are over 85.
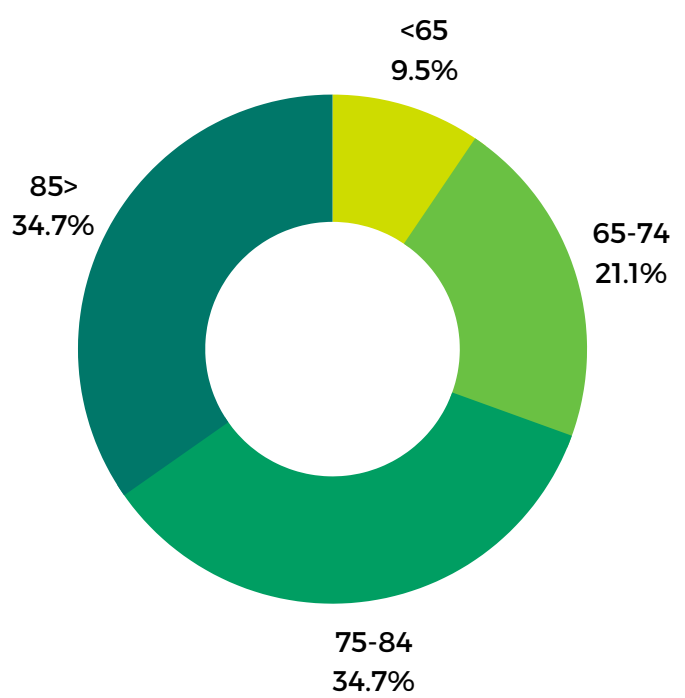

Figure 8: Age of Telecare Service Users (Based on information on ~35,000 service users)

34% Of the entire Welsh population aged over 85 use Telecare

3% Based on questionnaire responses from 7 Councils, telecare service users joining and leaving the telecare service result in an average churn of around 3% of service users per month
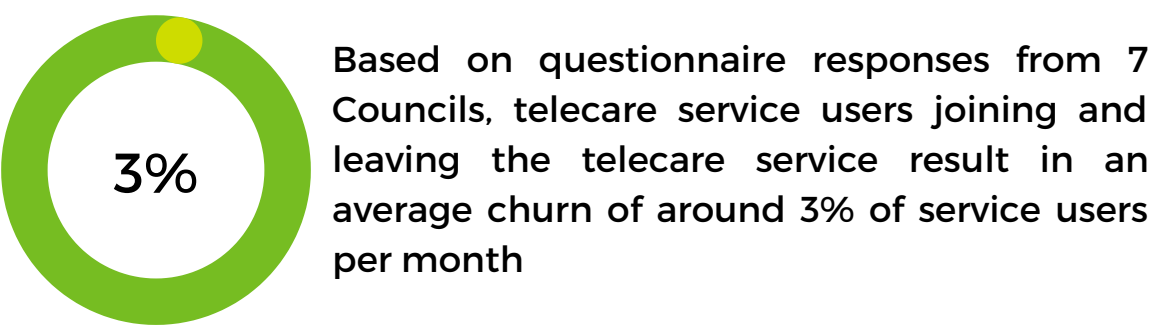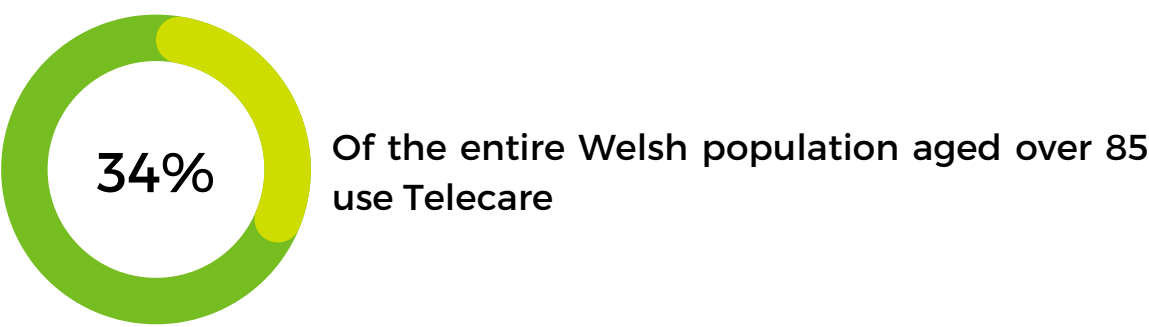
Performance and Benefits

Eight (of 12) Councils providing a response stated that they measure the performance of their telecare service. In all cases performance measurement was via regular (typically annual) service user satisfaction surveys. One Council (Cardiff) also stated that it measures the number of ambulance callouts prevented as a result of the telecare service.

The need for better measurement of the performance and benefits of telecare services was frequently quoted during stakeholder interviews. It was highlighted that, at present, Councils collect different amounts of data on their telecare services, and the data that does exist uses different definitions and formats. This means that it is very difficult to compare the services and benefits between telecare providers.

Stakeholders highlighted that better collection of data and measurement of telecare would:

- Allow telecare providers to benchmark and compare service performance;
- Allow the benefits telecare offers to service users, families, and the health and care system to be understood;
- Provide an all-Wales view of telecare service provision and the benefits provided;
- Provide a consistent approach to data capture, allowing better use to be made of telecare data;
- Allow increased use of automation in telecare call handling.

Stakeholders highlighted several challenges to changing how telecare is measured, including:

- There are currently no agreed definitions and data standards for telecare;
- Current telecare solutions use proprietary data formats and can have poor reporting capability, meaning it is difficult to extract the data required;
- Many telecare benefits are qualitative, meaning they can be hard to measure;
- Many telecare benefits are preventative in nature, meaning they can be hard to quantify, especially over a short time period.

Telecare Call Handling

Telecare service users' calls are answered by 9 Alarm Receiving Centres (ARC's).

ARC's vary from large shared facilities serving multiple Councils' service users, to standalone facilities dedicated to serving a single Council

Calls from telecare service users are received at one of 9 Alarm Receiving Centres (ARC), 7 of which are located in Wales. Most Councils do not have their own ARC, instead they use a shared facility.

Council's existing call handling arrangements are summarised in Figures 9 and 10. These arrangements may change over time, but the level of change is likely to be limited, with only 3 of 13 Councils who provided information stating that they are currently reviewing their call handling arrangements.

In addition to handling calls for Councils, several of the ARCs listed also handle calls on behalf of Housing Associations.
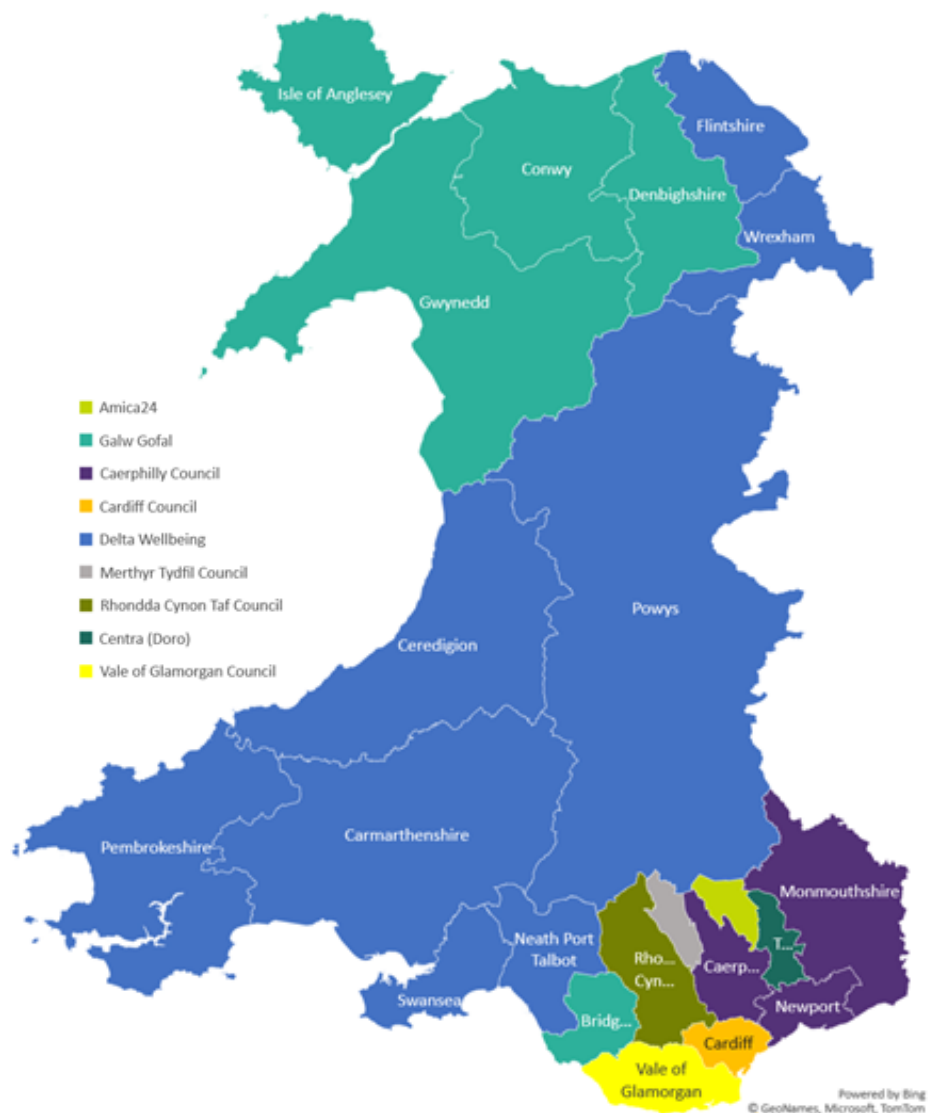

Legend:
- Amica24
- Galw Gofal
- Caerphilly Council
- Cardiff Council
- Delta Wellbeing
- Merthyr Tydfil Council
- Rhondda Cynon Taf Council
- Centra (Doro)
- Vale of Glamorgan Council

Figure 9: Alarm Receiving Centre Used by Each Council.

Shared Alarm Receiving Centres

Local Authority or Local Authority Trading Company provided

Delta Wellbeing
- Carmarthenshire County Council
- Ceredigion County Council
- Flintshire County Council
- Neath Port Talbot Council
- Pembrokeshire County Council
- Powys County Council
- Swansea Council
- Wrexham County Borough Council

Galw Gofal
- Bridgend County Borough Council
- Conwy County Borough Council
- Cyngor Gwynedd Council
- Denbighshire County Counci
- Isle of Anglesey County Council

Caerphilly Council
- Caerphilly County Borough Council
- Monmouthshire County Council
- Newport City Council

Shared Alarm Receiving Centres

Commercially provided

Centra (Doro)
- Torfaen County Borough Council

Amica24
- Blaenau Gwent County Council

Standalone Alarm Receiving Centres
- Cardiff Council
- Merthyr Tydfil County Borough Council
- Rhondda Cynon Taf County Borough Council
- Vale of Glamorgan Council

Figure 10: Summary of Local Authority Telecare Call Handling Arrangements

Technology

8 Alarm Receiving Centres use Tunstall solutions, one uses Jontek

In-home alarms and peripherals are also largely Tunstall devices, though several other suppliers' devices are also used by some Councils

All Councils are aware of the impact of the digital transition on telecare

Only 3 Councils state they have operational digital telecare alarms

Only 19% of Councils have a plan to migrate their services to digital

67% are worried about the digital transition

Alarm Receiving Centres

Of the 7 ARCs in Wales (the other two ARCs being commercial providers), all but one use the Tunstall PNC solution. Most installations are version 8 of Tunstall PNC, meaning that they are "digital telecare ready". Galw Gofal uses Jontek's Answerlink solution, which is also a digital ready solution.

Alarm Devices

Councils use alarm devices from a range of suppliers to provide telecare services. Tunstall is the most used manufacturer, with 19 Councils using their equipment exclusively or as part of a mix of suppliers. 8 Councils are using Doro alarm devices and 4 Councils use Tynetec. Possum, CAIR, Chubb and Chiptech alarm devices are also being used by a small number of Councils.

Digital Telecare Transition

All 16 Councils who provided a response were aware of the 2025 digital phone line deadline and its impact on telecare, however, only 3 (19%) stated that they had a formal plan for transitioning their services to digital telecare.

Around half of Councils providing a response (6 out of 13) stated that their ARC was capable of receiving digital telecare alarm calls, but only 3 (out of 13) stated that they had digital alarms deployed. Upgrading an ARC to be digital capable is an important first step in moving to digital telecare, however, to provide operational digital telecare services it is often also necessary for an organisation to make changes to its wider IT infrastructure, to update its operational processes and complete staff training. Alarm equipment in service users' homes must also be upgraded to digital capable devices.

67% of survey respondents agreed, or strongly agreed with the statement "I am worried about the digital transition".

Figure 11 provides a summary of Councils' responses to the question:
"Do you feel you are getting enough support and guidance from the following in relation to the digital transition?"

As shown, Councils highlight that, in particular, further information needs to be provided by ARC and telecare alarm manufacturers and telecom providers.
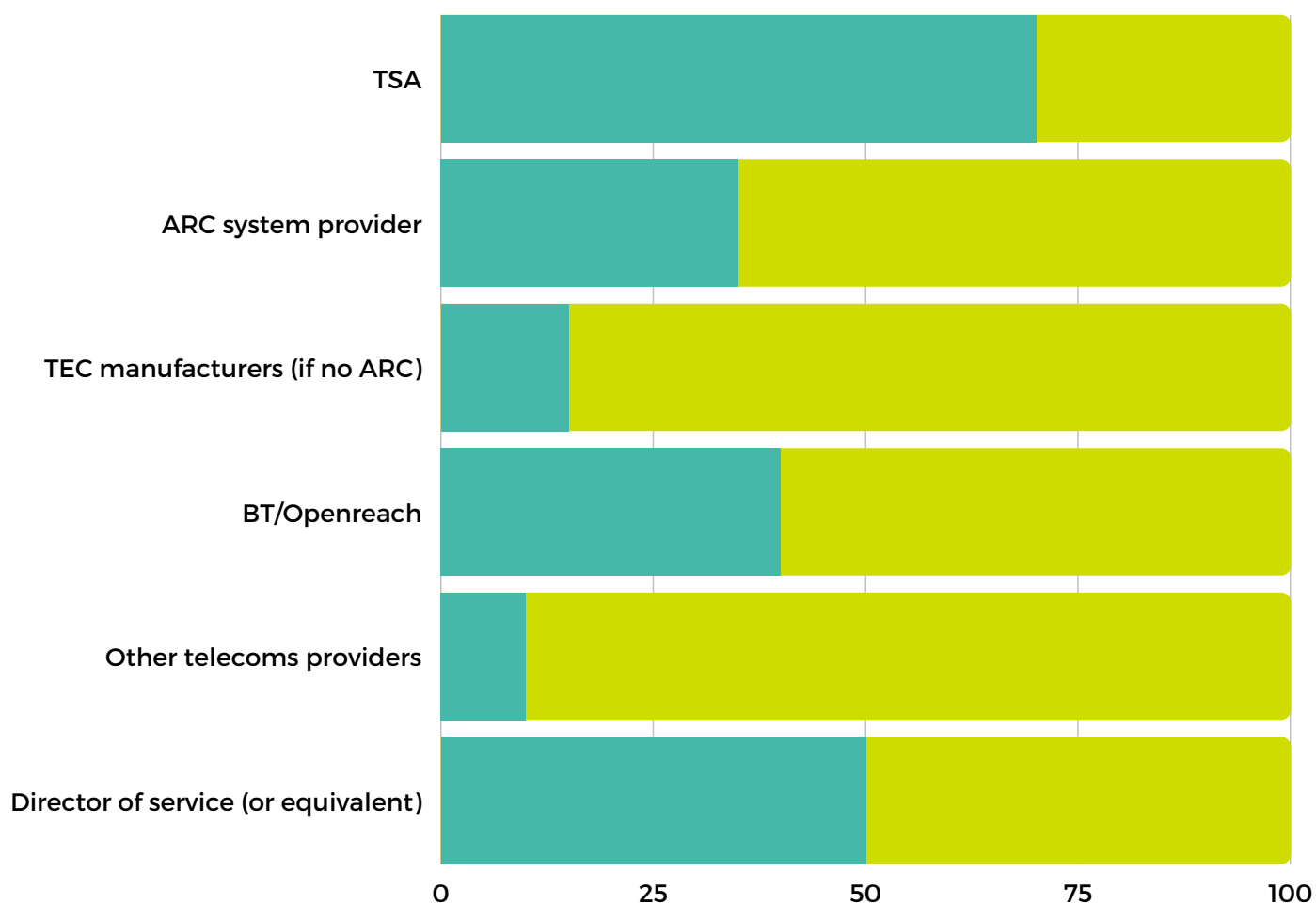

Figure 11: Responses to the question "Do you feel you are getting enough support and guidance from the following in relation to the digital transition?". Responses received from 14 Councils.

Leadership Views

The questionnaire sent to Councils asked for collected telecare leaders' views on several statements relating to their telecare services. Figure 12 summarises the responses received from 16 Councils.
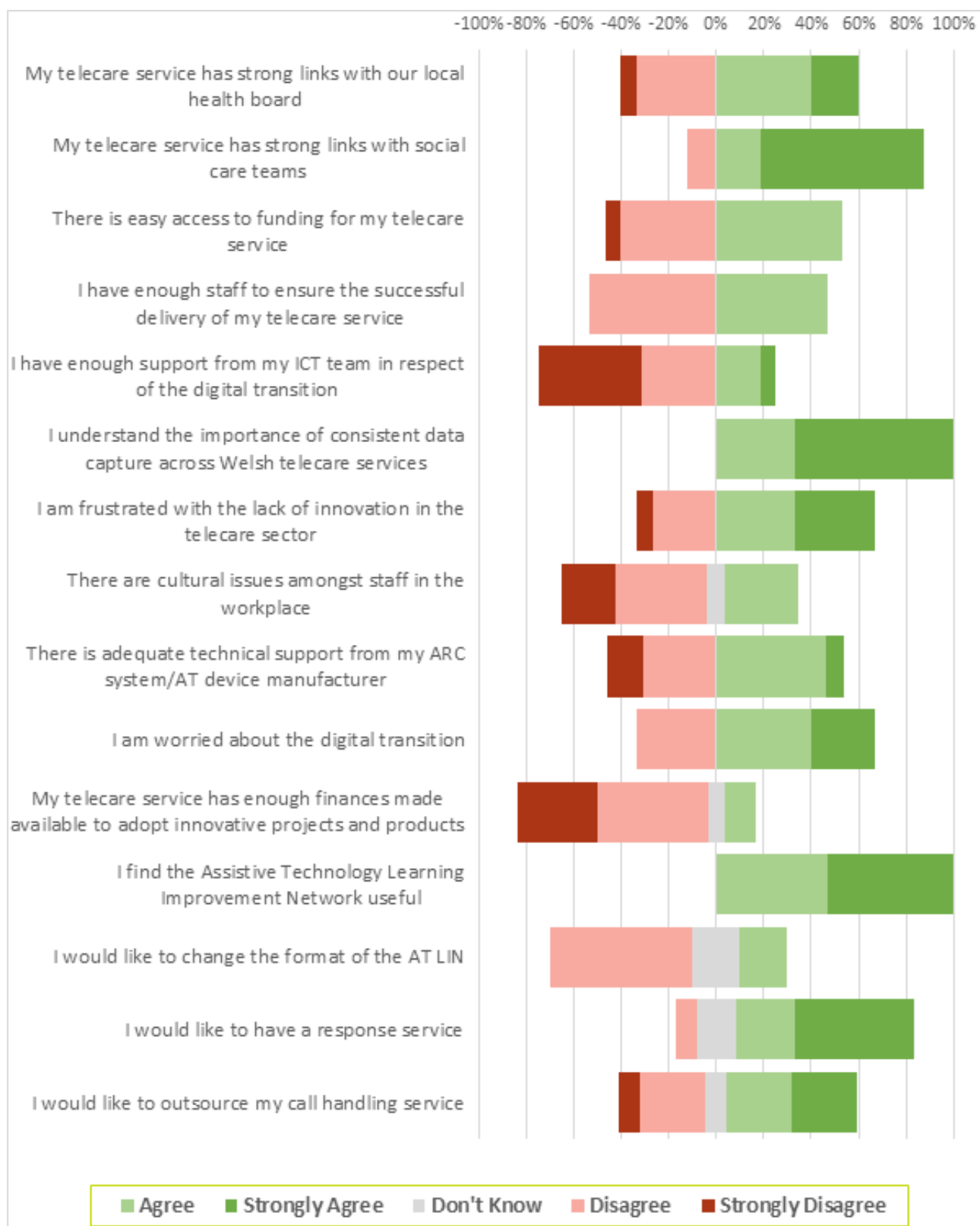

Figure 12: Leadership Responses to a range of question relating to their telecare services. Percentage of responses agreeing and disagreeing with each statement. Responses received from 16 Councils.

The statements covered a diverse range of topics, but the following are of particular note from the responses received:

- There is clear agreement that there are currently strong links between the telecare service and social care teams, and to a lesser extent the local health board;
- There is a need for better support from Council's ICT teams to support the migration to digital telecare;
- There is universal agreement that consistent data capture across Welsh telecare services is important;
- There is a degree of frustration with the lack of innovation in the telecare sector, and most Councils are worried about the digital transition;
- Lack of finance means that services are not able to adopt innovative projects and products;
- The Assistive Technology Learning Improvement Network is universally seen as useful, and most respondents do not wish to change its format;
- Most Councils would like to have a response service.

Planned Service Change

Ten (of 15) Councils stated that they are planning to change the scope of the telecare service they offer to citizens. This was further explored during stakeholder interviews with the main drivers for service change included below:

Drivers
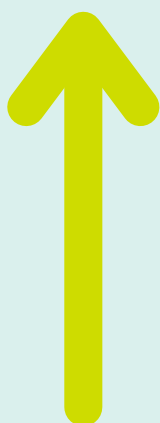
- Need to migrate to digital Telecare
- Increased availability of TEC solutions
- Demographic change
- Shift to preventative and proactive care
- Better use of data
- Closer working between health & care

- Need for a national Telecare strategy
- Levels of service variation
- Lack of evidence of Telecare benefits
- Lack of digital skills & mindset
- Market immaturity
- Cost
- Privacy & data protection
- Implementing integrated services
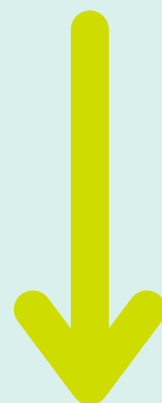
Barriers

Figure 13: Summary of telecare change drivers and challenges.

The upcoming migration to digital telecare The decommissioning of the UK's analogue telephone service means that telecare must be migrated to digital technology to ensure that the telecare services remain reliable. Some telecare providers are using this as an opportunity to review the services they offer and how they are provided.

The increasing range of Technology Enabled Care solutions available Technology Enabled Care is a fast developing sector, with new solutions frequently becoming available. Telecare providers recognise the benefits this technology delivers to service users and the wider care system, and so are keen to bring them into their service offering. These developments include the increasing availability of health and care features within consumer technology - use of these devices provides a rich source of information on service users' wellbeing that can be used in the delivery of telecare. In addition, using consumer technology instead of dedicated telecare equipment potentially allows a younger demographic to be offered telecare services.

Demographic change There is recognition that the ageing population will increase demand for all care services, including telecare. In addition to widening the scope of the telecare offering as detailed above, technology also provides the ability to broaden the telecare user base, for example using automation to improve service efficiency and allow more service users to be accommodated.

The desire to move to preventative and proactive care There is increasing awareness of the potential benefits offered to service users and the wider health and care system by proactive and preventative telecare services. This is partly due to the benefits provided by these services during the COVID-19 pandemic and the desire to continue to deliver proactive services post-COVID. With the move to proactive and preventive care there is a desire for services to become more person-centred and outcome focussed - this is not possible with the current limited range of analogue technology available to telecare providers.

Better Use of Data Linked to the development of preventative and proactive care was the need to make better use of telecare data - there is recognition that telecare does not currently exploit the data it collects on service users, and there is an opportunity to use it more effectively to identify where preventative care is required, and to enable better links with health.

The need to work more closely with other health and care providers Telecare services need to change as part of the wider move to integrating health and social care services. This links with the move to preventative and person-centred services outlined above, where some of the preventative benefits of these services accrue to the health services in terms of reduced admissions and demand for health services. Linking telecare with healthcare and other care services means that service users receive joined up care, offering the possibility of improved outcomes. The move to digital technology is also blurring the line between telecare and telehealth services with some services, for example the Armed solution detailed earlier in this report, already being offered as both telehealth and telecare.

Telecare providers highlighted several challenges associated with implementing this service change, these included:

The need for a national strategy for telecare Councils highlighted that there was currently no national strategy for telecare in Wales. There is legislation that includes telecare, but this is interpreted differently by Councils meaning there is not a consistent national approach to telecare delivery and development.

Service Variation The scope of the telecare offering and the approach to delivering services varies across Wales. This can complicate the planning and implementation of service change, particularly when it involves partnership with organisations that cross Council boundaries, such as health, the fire service, housing associations, and the third sector.

The lack of evidence and awareness of the benefits telecare provides As detailed earlier in this document, there is currently limited data collected on the benefits provided by telecare to citizens and the wider health and care system. Stakeholders expressed a perception that the value of telecare is not understood, quantified, or promoted, meaning that it can be difficult to justify investment in expanding and improving services.

The need for a digital 'mindset' Telecare technology has remained largely unchanged for decades. Only recently have new digital solutions become available meaning that there can be a lack of understanding amongst both telecare providers and solution suppliers of how to design services that fully utilise the capabilities digital technology can offer.

The need for specialist digital resource Related to the above, the move of telecare to digital means that there is a need for telecare providers to have resource with specialist digital expertise to assist with the specification, procurement and implementation of digital telecare solutions. Telecare providers can find difficulty obtaining this resource in sufficient amounts, if at all.

Market immaturity Digital telecare solutions have only recently become available and the market is still maturing. Some suppliers' solutions are still developing and there can be a lack of robust processes to support them. In addition, standards are limited and there can be interoperability and integration issues between solutions. This situation can be exacerbated by dominant market players promoting the use of proprietary standards.

Cost Digital telecare solutions and equipment are generally more expensive than their analogue equivalent and there is a resource cost associated with change. In addition, digital solutions can come with a revenue obligation due to their use of mobile networks for connectivity.

Privacy and Data Protection The move to digital telecare and a widening of the TEC service means that a wider range of data on service users is being collected, with this potentially being carried across the Internet and shared with a wider range of health and care providers. This raises a range of data privacy and cyber security risks that must be addressed by service providers.

Delivering integrated health and care services While telecare providers recognise the benefits associated with delivering integrated health and care services, they also recognise some of the organisational and practical challenges associated with implementing and delivering them, such as shared system access, data sharing agreements, and the need for an integrated service lead.

ROLE OF TEC CYMRU

The information gathered during this review has highlighted several potential roles for TEC Cymru's Telecare Programme in supporting the development of the services in Wales. These roles are grouped under three related headings.
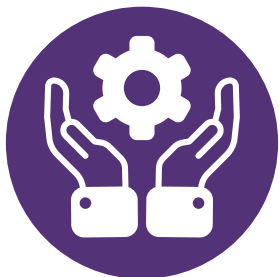
REPRESENT TELECARE IN WALES

- Collecting and promoting evidence on the benefits of telecare
- Linking to other digital public service developments
- Engagement with the telecare industry

SUPPORT THE SHIFT TO DIGITAL TELECARE

- Development of standards
- Sharing of Best Practice
- Providing specialist resource
- Establishing procurement framework(s)

PROMOTE TELECARE/TEC DEVELOPMENT

- Ongoing research into TEC developments
- Supporting TEC service integration
- Producing a Welsh telecare/TEC strategy
- Practical support to telecare/TEC development

Figure 14: Potential Roles for TEC Cymru.

REPRESENT TELECARE IN WALES

A view often quoted by stakeholders was that there is currently a relatively low level of understanding of the telecare service and the benefits it offers. This view relates to understanding amongst key groups such as Government, other areas of the health and care system and potential service users.

Stakeholders highlighted that TEC Cymru could represent telecare' in Wales, helping to raise awareness of the service and ensuring that telecare developments are linked to wider change in the delivery of health and care. This could include:

Collecting and promoting evidence on the benefits telecare delivers There is a widespread view amongst stakeholders consulted by this study that telecare services provide a range of benefits to service users, the wider health and care system, and society. However, there is currently limited evidence to demonstrate this, meaning that the benefits of telecare are not well understood or publicised.

This issue is seen as important by stakeholders as in some Councils the financial sustainability of telecare services can currently be assessed on the ability of service user charging alone to cover the costs of delivery. Charges may not cover costs, and this is seen as being an increasing issue given the additional costs associated with the move to digital telecare. Understanding the wider benefits that telecare delivers was seen as key to justifying the ongoing financial sustainability of services.

TEC Cymru could complete research to determine and monitor the benefits telecare delivers. This could then be promoted to key groups, including:
- Welsh Government, to ensure that the role of telecare is meeting the goals of 'A healthier Wales' and future health and care policies are understood.
- Social Services, to ensure that telecare services are considered by social care staff when determining care packages. There is a perception that the capabilities and benefits of telecare are not always understood and utilised by social work staff, particularly in local authorities where responsibility for the telecare service sits outside social work, for example in housing or customer service teams.
- Health Services, highlighting the benefits telecare provides to the health system, including its impact on admissions, discharge, and prevention.

- The Public and the third sector, ensuring that citizens and their families that could benefit from telecare are aware of the service. Raising awareness of telecare amongst potential service users would maximise the uptake and the level of benefit provided. Engagement with these groups also provides a route to collect service users' views on the service, ensuring that they remain person-centred.

Linking telecare to digital public service developments   Digital developments are progressing across the public sector and many of these have potential links with telecare. TEC Cymru could represent telecare services to ensure that service developments are joined up, maximising benefits and reducing duplication. Examples of other digital developments telecare should liaise with include:

- Data standards and resources: There are several developments planned or progressing relating to data that telecare should be linked with. These include: the development of the National Data Resource being completed by Digital Health & Care Wales; the Welsh Local Government Association's plans for improving arrangements for the sharing of social care data; the Cardiff Smart city/region roadmap.
- Telehealth: Telehealth services are being developed and deployed across Wales. The line between telecare and telehealth services is blurred and some telecare providers are already offering telehealth services, either independently or delivered with health partners as an integrated offering. Development of telecare and telehealth services needs to be linked to ensure that opportunities to provide joined up services and for shared service delivery are identified.
- Digital inclusion and connectivity projects: Telecare services are becoming increasingly reliant on the availability of digital devices and connectivity. Once the analogue telephony switch-off is complete by 2025, telecare will be entirely reliant on digital connectivity. Future developments of telecare, and TEC more generally, are likely to require higher bandwidth and use a broader range of connectivity technologies, such as full fibre, 5G, LoRaWAN, and NB-IoT. Some health and care services will be delivered using smart consumer technology, meaning access to devices, affordability, and digital skills are also prerequisites. Linking telecare with digital connectivity and digital inclusion programmes ensures that the rollout of digital telecare and future TEC developments can be planned around the availability of these digital foundations.

Engaging with the Telecare Industry The telecare and TEC marketplace is changing at a pace: traditional telecare suppliers are adapting their solutions and operations to digital, a range of new suppliers are entering the market, and solutions are becoming increasingly sophisticated. TEC Cymru could act as a point of contact for Welsh telecare's engagement with the marketplace which could include:

- Identifying and evaluating new suppliers, equipment, and services.
- Ensuring suppliers are given a consistent view of Welsh telecare's current and future service needs (linked to the development of a telecare strategy – see next section).
- Escalating supplier and product/service issues.

SUPPORT THE SHIFT TO DIGITAL TELECARE

As detailed earlier in this report, all providers providing a response were aware of the digital telecare shift, but only 19% had an implementation plan and two thirds (67%) were worried about the shift. There is clearly a need to provide support to providers with the digital shift and stakeholders saw TEC Cymru as being well placed to do this. This role could include:

Development of telecare standards Telecare services are currently delivered differently by each service provider in Wales. This complicates service delivery and change as each provider must develop processes suited to their local arrangements. While telecare services are always likely to require a degree of local tailoring, development and use of a set of core standards would simplify operational management and service change. The move to digital telecare provides an opportunity to implement standards given the degree of technology and service change involved.

Standards could be developed to cover: the telecare service offering; operational processes; technology; data. Examples include:

- A standard data set for recording details of service users, call volumes, call reasons, response types, outcomes. This would allow: providers to benchmark their service; data to be collected at a national level; data to be shared with other health and care providers, and; better use of analytics.
- Technology standards: enabling standardised procurement (procurement simplicity and economies of scale), common approaches to implementing service/technology change, and increasing flexibility to implement shared service delivery.
- Operational standards: providing common approaches to elements of telecare service delivery. This could include development of a common approach to responding to the additional information provided by digital telecare, for example, how and when to respond to missed 'heartbeats' from telecare equipment. Operational management of technology, such as how and when to upgrade telecare alarm software. A common approach to assessment of new TEC solutions.

Sharing of best practice As mentioned above, digital telecare technology, services, and marketplace are changing rapidly, and there is a constant stream of lessons learned and best practice being generated as services are trialled and implemented. TEC Cymru could share best practice in the development, implementation, and operation of digital telecare solutions. This could include best practice from Welsh providers, the rest of the UK, and internationally.

Sharing best practice could include the development of template resources for telecare providers to use to support their digital telecare implementations. This could include:
- Procurement documentation;
- Operational processes;
- Technology management;
- Data protection and cyber security;
- Stakeholder communications – service users, staff, suppliers;
- Project plans and documentation;
- Implementation and testing guides.

Providing specialist resource The availability of specialist resource was highlighted as a risk to digital telecare implementation by several telecare providers during this study. TEC Cymru could provide specialist resource to support Councils with their digital telecare implementation. Skills gaps highlighted by providers included:
- Digital telecare;
- Digital/IT;
- Data protection and cyber security
- Training.

Establishing procurement framework(s) Several telecare providers stated that their digital telecare implementation would benefit from having access to a Welsh framework that provided a route to procure telecare equipment and services. Currently providers use a range of procurement routes, including local procurements and use of frameworks established by other organisations. Having access to a Welsh framework could potentially:
- Offer providers a faster and simpler procurement route;
- Improve economies of scale;
- Widen the range of suppliers' solutions available to providers;
- Provide greater influence over suppliers, to ensure solutions meet providers' requirements and to escalate service issues.
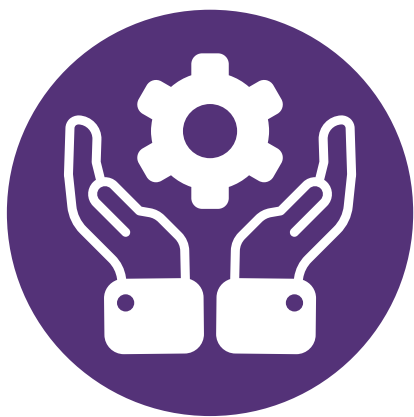
PROMOTE TELECARE/TEC DEVELOPMENT

As detailed earlier in this document, Welsh providers are planning to develop their telecare service offering to broaden and improve services and to take advantage of new technologies.

TEC Cymru could promote and support this service development by providing a centre of excellence that researches and shares knowledge and best practice in delivering and implementing TEC services.

Many of the tasks associated with this role are continuations of those listed above, with the TEC Cymru role evolving from supporting providers with the shift to digital technology to ensuring they fully exploit the opportunities that digital technology offers.

Recognising that telecare is becoming increasingly integrated with other TEC service offerings, including telehealth and assistive/smart technologies, development of telecare should be planned as part of a wider TEC strategy.

This role could include:

Ongoing research into TEC developments TEC Cymru should extend the stakeholder engagement and marketplace monitoring roles detailed above to complete ongoing research into TEC developments. This will include collecting and sharing information on new TEC solutions and best practice on TEC services, use of TEC data, benefits and implementation from providers inside and outside Wales.

Supporting TEC service integration Telecare services will increasingly be delivered as part of an integrated package of TEC. As highlighted by stakeholders during this study, there are operational, organisational, and technology challenges associated with implementing this integration. TEC Cymru could support the implementation of integrated services through the development of standards, operational processes, and sharing best practice. This would require liaison and joint working with a range of organisations potentially involved in delivery of integrated services, including health boards, Fire Services, the third sector, and community groups.

Producing a Welsh telecare/TEC strategy During this study telecare providers stated that there are a range of different interpretations of what the 'A Healthier Wales' strategy means for telecare services. They highlighted that they would benefit from a telecare strategy that provided a common approach to the definition and implementation of telecare. As above, telecare is increasingly going to be delivered as part of an integrated TEC offering, meaning the scope of any strategy should be widened to cover all TEC services. A TEC strategy would provide a common TEC service offering and service delivery approach and allow a framework of implementation support to be put in place to support all Welsh providers.

Supporting telecare/TEC development TEC Cymru could extend the support arrangements put in place for the move to digital telecare to support wider telecare and TEC development. This would include producing standards, sharing best practice, and providing access to specialist resource and procurement frameworks.
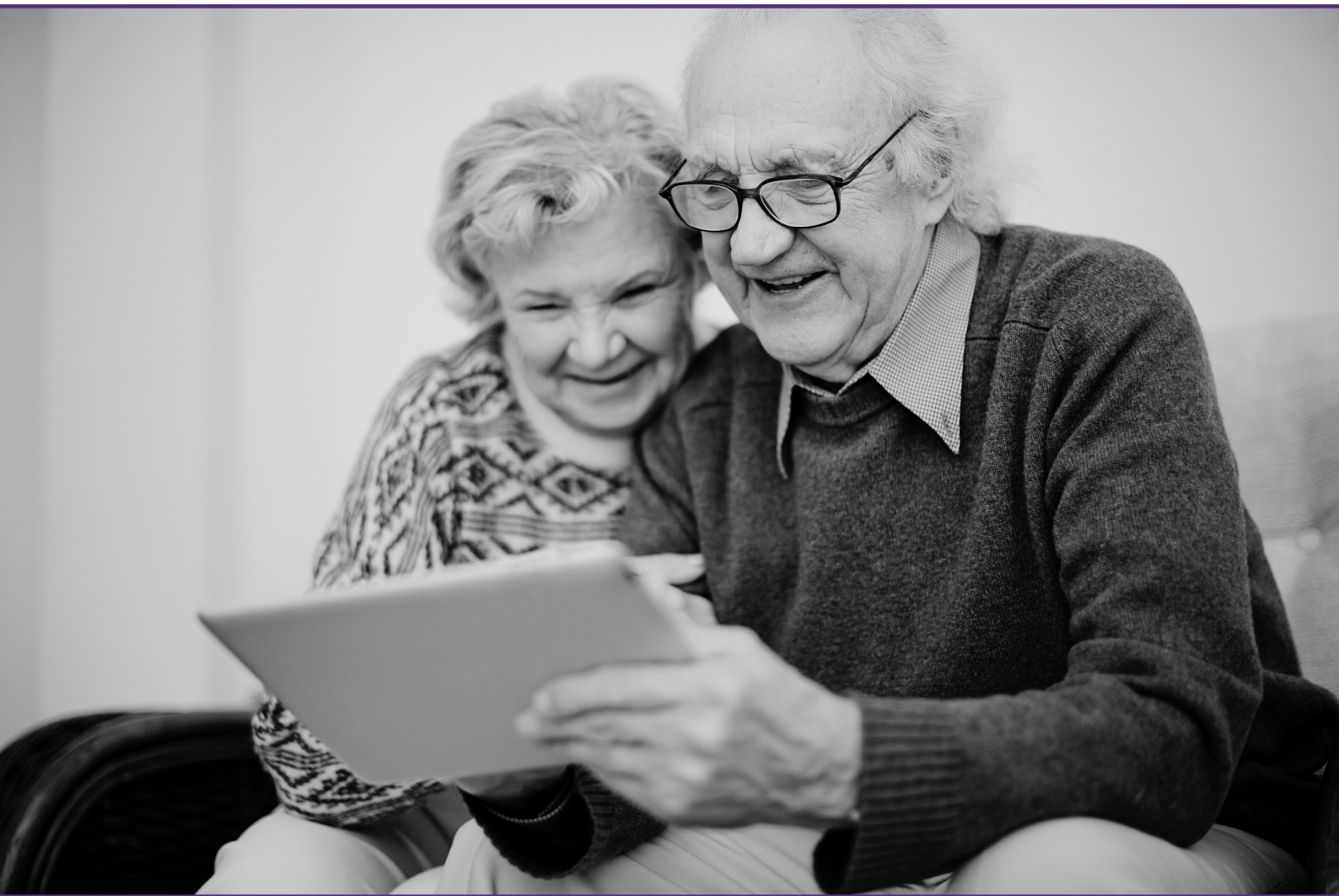
SUMMARY

This report has summarised the existing Welsh telecare offering. It has shown that telecare is offered across Wales and is currently delivering care and support to a large number of service users using well established technology, processes and resource. However, there is significant variation in the telecare service offering in terms of take-up, scope and delivery arrangements which means that it is difficult to directly compare services.

There is widespread acceptance that telecare services deliver a range of benefits to service users, their families, and the health and care system, but there is very limited evidence collected or available to demonstrate or quantify this. There is a perception amongst some stakeholders that this lack of understanding of benefits can lead to under-investment and/or under-utilisation of the service.

There is a high degree of change planned for telecare. This is driven by the need to move the service to digital technology to ensure service continuity following the decommissioning of the UK's analogue telephone network and by the desire to broaden and improve the service offering using new TEC solutions.

TEC Cymru potentially has an important role to play in improving and developing Welsh telecare services. This includes:

- Representing telecare in Wales, ensuring that the existing and potential future scope and benefits of the service are understood and communicated.
- Supporting providers though the process of transferring their services to digital technology. Using this as an opportunity to implement a more common approach to service delivery, improving services and simplifying the implementation of both the current digital shift and any future telecare developments.
- Promoting and supporting TEC development to ensure that telecare services continue to evolve, taking full advantage of digital technology as part of a wider integrated TEC offering.

This recommended role for TEC Cymru in supporting telecare aligns with the original definition of the organisation as contained in the TEC proposal to Welsh Government, an extract from which is contained at Annex B, for information.

ANNEX A; STAKEHOLDERS CONSULTED

The stakeholders organisations that provided information for study are detailed below. We are grateful for their assistance.

- Blaenau Gwent County Council
- Bridgend County Borough Council
- Caerphilly County Borough Council
- Cardiff Council
- Conwy County Borough Council
- Cyngor Gwynedd Council
- Delta Wellbeing
- Merthyr Tydfil County Borough Council
- Monmouthshire County Council
- Neath Port Talbot Council
- Newport City Council
- Powys County Council
- Rhondda Cynon Taf County Borough Council
- Swansea Council
- Vale of Glamorgan Council
- Wrexham County Borough Council

Stakeholder Meetings and Workshops were held with the following organisations:

- Aneurin Bevan University Health Board
- Bridgend County Borough Council
- Caerphilly County Borough Council
- Cardiff & Vale University Health Board
- Cardiff Council
- Conwy County Borough Council
- Delta Wellbeing
- Digital Health & Care Wales
- Digital Health Ecosystem Wales
- Galw Gofal
- Merthyr Tydfil County Borough Council
- Monmouthshire County Council
- NHS Wales
- Rhondda Cynon Taf County Borough Council
- Social Care Wales
- South Wales Fire Service
- Swansea Council
- Taff Housing
- TEC Cymru
- Torfaen County Borough Council
- Vale of Glamorgan Council
- Welsh Ambulance Services NHS Trust
- Welsh Local Government Association
- Wrexham County Borough Council

ANNEX B; THE ROLE OF TEC CYMRU FROM THE 2021 TEC PROPOSAL TO WELSH GOVERNMENT

The stakeholders organisations that provided information for study are detailed below. We are grateful for their assistance.

The role of TEC Cymru

TEC Cymru will provide a number of functions in support of scaling value added TEC across Wales.

Act as a lead coordinator for TEC opportunities and projects

- Engage across health, social care, academia, industry and policy leads to plan and facilitate future work;
- Use National Steering Group to provide oversight, direction and secure senior business ownership;
- Utilise existing Health & Social Care governance structures to leverage cross sector representation from local to national level;
- Establish a network and communities of practice, to promote the use of TEC through information sharing and showcasing best practice;
- Seek relevant expertise and experience from user base to identify and address business need before technological solution;
- Recruit Programme Managers to act as single points of contact, lead key work streams, become subject matter experts and provide contributions to specialist/national groups.

Develop and promote a consistent, objective and evidenced based approach to evaluating benefits

- Develop a national evaluation framework for TEC to support consistency in evidence gathering and adopt a quality improvement approach;
- Regularly publish and promote research and findings;
- Provide research & evaluation services to inform and support excellent in research practice,
- Establish a TEC project and evidence register to support and sign post new services;
- Collaborate with universities, professional bodies and industry upon joint research bids and ventures;
- Share evidence and lessons learned with TEC network as appropriate;
- Emphasis a culture of continuous learning to inform new ways of working and solutions;
- Where data does not exist to inform investment, commission 'discovery' work packages to obtain evidence for decision making.

Identify, prioritise and scale up TEC activity areas which demonstrate a higher value return

- Use the PMO to build and prioritise a balanced portfolio which will deliver against strategic benefits;
- Plan and manage the transition from pilot through to scalable national services;
- Explore business models that offer viable cost effective alternatives;
- Facilitate the procurement of solutions on an all Wales basis to support health boards & local authorities and achieve economies of scale;
- Identify appropriate business and technical solutions to meet the requirements of health and social care objectives;
- Establish a business development work stream team to acquire external funds via R&D industry investment, bids, competitions & research grants;
- Identify revenue generating streams through provision of TEC Cymru products & services;
- Provide best practice approaches to governance and assurance to enable rapid and repeatable implementations;
- Use PMO to apply consistent governance and assurance for projects;
- Use learning from pilot projects to develop knowledge base, expertise and 'toolkits' to enable scale up;
- Engage and partner with projects/initiatives across the home countries to share knowledge and practice.

Inform and contribute policy in Wales

- Work with Welsh Government to inform and contribute to TEC Policy consultation and the development of a National delivery plan for TEC;
- Work with other policy work streams to inform approach and opportunities with TEC eg mental health, education, justice;
- Advise and inform local IMTPs on relevant strategies;
- Align TEC objectives with Social Care Wales workforce development strategy.