Adult Social Services

Assistive Technology Commissioning Review:

Service Assessment

Contents

Abstract

As part of the Adult Services Transformation Programme, it has been agreed that a review of the Assistive Technology Service, including its dependency on Community Alarms (also known as Lifeline), will be undertaken to achieve the optimal service for both service users and Swansea Council going forward. This paper is principally concerned with reviewing the Assistive Technology Service as it currently exists. The task of describing what the optimal service looks like and how we reach that point will be the subject of a future strategy.

1. Introduction

Definitions

1.1 The World Health Organisation describes assistive technology as an umbrella term covering a range of products of services that **maintain or improve an individual's functioning and independence, thereby promoting their well-being.** This umbrella encompasses four main categories:-

i. Fixed Assistive Technology – this includes products such as grab-rails, walk-in baths and stair lifts – i.e. physical products that are fixed to the home.
ii. Portable Assistive Technology – this includes tap turners, kettle tippers and walking frames.
iii. Electronic Assistive Technology – including products such as environmental control systems to help individuals to automate or control various items in their home.
iv. Connected Assistive Technology – this includes products which tend to link with others such as lifeline, fall alarms, epilepsy alarms, gas alarms, medication dispensers and other digital care applications/services.

This paper is concerned with the last category only.

1.2 Please note that connected assistive technology can be broken down into further sub-categories or tiers (e.g. Predictive, Personalised, Proactive and Reactive) based on how preventative they are designed to be. Our existing Service sit at the Reactive end of the spectrum and discussion of the other tiers is not covered in this paper.

How has the Assistive Technology offer developed in Swansea?

1.3 In 1988 West Glamorgan County Council launched their 'Staying at Home' Initiative, which included the provision of a '**Community Alarm Service'**. This service has continued to be provided by Swansea Council ever since.

1.4 A Community Alarm (or Lifeline) consists of an emergency alarm button, which can either be worn on the wrist or around the person's neck, and a base unit connected to the existing telephone system. The base unit transmits alerts, and alarm messages through the phone system to a monitoring center. It has the ability of two-way speech, which enables the monitoring center to communicate with the person if they are within reach of the unit. One limitation of the system is that the person wearing the emergency alarm button must be able to press the pendant when help is needed.

1.5 Then, in 2006, Swansea was able to broaden its assistive technology offer to include a range of telecare sensors (this aspect of the Service is hereafter referred to as the Telecare Service for ease of reference). This expansion was made possible by the introduction of the Telecare Capital Grant (TCG) by the Welsh Assembly Government. Awarded to all 22 local authorities in Wales, the aim of the Grant was to provide 10,000 homes in Wales with a telecare service. The grant was designed to promote diverse models of telecare delivery across Wales and to enable local authorities to learn from each other's experiences and best practices.

1.6 To access the Grant, local authorities had to develop a telecare strategy based on local needs and compliance with the Grant specifications. Common objectives for all local authorities included:

- To create an alternative approach to care using 'assistive technology', with an emphasis on safety and security, alongside the traditional homecare provision.
- To increase the ability of people with dementia, sensory impairment or chronic illness to continue to live as safely and independently in the community as possible.
- To reduce the need for residential care through extending the range of early intervention support within people's homes.
- To avoid hospital admissions and facilitate timely hospital discharge.
- To strengthen the existing partnerships between health and social services to foster a more integrated care.

1.7 A Telecare Service provided by the Council consists of a base unit and one or more sensors that aim to reduce the assessed risk of harm for an individual by reacting to events and raising a response. Examples of telecare sensors include fall detectors, property exit sensors and, smoke detectors. If the sensor is triggered (e.g. because someone falls) it notifies the base unit. For many people the base unit is the same used for the purposes of the Community Support Alarm. In these situations the unit reports the incident to the call monitoring center who can then respond. Some individuals chose a different base unit called **CareAssist.** Rather than alerting the call centre, it alerts a friend or family member to respond.

2. What are we hoping to achieve from the Review?

2.1 Assistive technology has long been identified as a potential area of opportunity. Turning this opportunity into reality has proven difficult though, and resources have been consumed by competing priorities and events.

2.2 For example, the Commissioning Plan for Older Peoples Services: 2011 – 2014 recommended there should be additional investment in Assistive Technology **"to help people to maintain control over their lives, contribute to their independence and manage risk more effectively"**. As a precursor to any additional monies, it was advised that commissioners needed to first understand the lessons from the current service. However, this work was not completed and the recommendation was not implemented.

2.3 Then, in 2016 a project group started to look at the existing assistive technology offer. The project was split into 3 phases:-

- Phase 1 – Identifying quick wins that are not dependent on I.T. changes
- Phase 2 – Mini commissioning review to determine the best option to meet the needs of citizens and the Council in the longer term.
- Phase 3 – Implementation of preferred option

2.4 The options identified at Phase 2 were:-

1. Retain the service model as it is with the existing call centre service provider but align costs so that we maintain a cost neutral budget.
2. Retain the service model as it is with the existing equipment provider but with the addition of an in-house call centre provision.
3. Outsource the whole service to an alternative provider (private or third party sector).
4. Explore shared operational services with Neath Port Talbot Council and retain the existing call centre provider.
5. Explore the opportunities of regional and partnership working.

2.5 A decision about these options was not made and Phase 3 of the review was not completed.

Aim and objectives of the project?

2.6 In 2019, the Head of Adult Services asked for a review to be undertaken with the aim of improving outcomes for present and future users of assistive technology services in Swansea. The objectives are:-

a. Using elements of the Corporate Commissioning process, provide an evaluation of the data on the existing service, including the staffing, costs, performance, effectiveness, and the link with community alarms.
b. A comparative analysis to explore: alternative models of provision; alternative providers, and how assistive technology services function in different local authorities and potentially around the world.

c. A co-produced options appraisal that outlines a number of potential options, which is based on a suite of evidence, and recommends a preferred option for the service going forward.
d. An Integrated Impact Assessment that ensures changes do not adversely impact on any citizens with protected characteristics.

This paper is primarily concerned with fulfilling the first of these objectives.

2.7 The Covid-19 pandemic has unfortunately interrupted the project and caused some unwanted delay. While the aims and objectives remain the same, the impact of the pandemic and lessons gleaned have been incorporated – see section 8.

2.8 A number of preliminary tasks were completed prior to the pandemic imposed delay. This earlier work - which includes a consultation event with stakeholders, service user questionnaire and data analysis - will be referenced to below.

3. How is the Service delivered?

Location and workforce

3.1 The Community Alarm and Telecare Services are, for ease of reference, hereafter referred to as CAS.

3.2 The CAS is located in the Community Equipment Store (CES) in Morrison. CAS and CES are partially integrated and staff work across both services (see 4.6 below for further detail).

3.3 The CAS are an in-house team and are responsible for the installation of community alarms and telecare equipment. When a service user has finished with the equipment then it is returned to CAS. Repairs and maintenance tasks are performed in-house, unless it is required out-of-hours in which case it is undertaken by the private provider of the equipment: Tunstall (see section 5 for further information regarding Tunstall).

3.4 The call monitoring service is delivered via an externally commissioned provider: Delta Wellbeing (see section 5 for further information regarding Delta Wellbeing).

Referrals

3.5 People who require a community alarm do not require an eligibility assessment. Instead they are required to complete an online or paper order form. Once this has been received by CAS, arrangements are made at a convenient date and time for the alarm to be installed. The installer is responsible for demonstrating how to use the alarm.

3.6 By contrast, to receive a telecare service package (including CareAssist), a person has to be first assessed by a professional. This is usually an Occupational Therapist or Social Worker, but access is not limited to these

professionals. The table demonstrates the range of teams who assess and refer for telecare. They are known as Prescribers.

Teams who prescribe
Swansea CRT
Swansea Team (CAS)
Singleton Hospital OT
Swansea MHOT
Morriston Hospital OT
Gorseinon Hub
NPT Hospital OT
CCOS Social Services

Reviews

3.7 After the package of telecare has been installed, there are no reviews of the service or follow-ups to check if it is meeting the needs of the person. In the case of CareAssist pacakages, there is not a mechanism for checking that the equipment is still in place and in working order. The service does not form part of the annual review process for the Care and Support Plan.

3.8 The lack of any review means we have no way of knowing if the service is achieving the intended outcomes. The feedback received from service users completing the questionnaires (see section 10) suggests introducing a review process would be welcomed by many service users.

Traditional Telecare vs CareAssist

3.9 As previously explained, the difference between a Telecare package and a CareAssist package is that the sensors report activity to a different type of base unit. For Telecare the base unit alerts the call monitoring centre, and for CareAssist the alert goes to a family member or carer.

3.10 There are strengths and weakness to both options. In some instances the family member or carer may be able to provide a faster response. However, this does depend on the availability and capacity of the family member or carer, and there is a greater risk of the incident going unanswered. Carers also have to monitor alerts indicating that a sensor battery is low and be responsible for contacting the CAS to arrange for it to be replaced. For those with a traditional Telecare package this is automated as the battery alert is communicated to the call monitoring centre.

3.11 There is scope to overcome the weaknesses with CareAssist by linking the sensors to both a CareAssist unit and a community alarm unit. This would mean the call centre could act as a back-up in the event the carer did not respond within a given time.

4. What do the financial arrangements look like?

Charging arrangements

4.1 An individual seeking a community alarm does not need to be open to Social Services. They are charged a weekly fee for use of the service and no financial assessment is performed.

Year	Fee per annum	Breakdown per week
2018/2019	£136.76	£2.63
2019/2020	£143.52	£2.76
2020/2021	£150.80	£2.90
2021/2022	£150.80	£2.90

4.2 The table below explores the charging arrangements compared with other local authority services and providers:-

	Swansea Council	Lifeline 24 (provider)	Careline 365 (provider)	Caerphilly Council	Rhonnda Cynon Taf Council	Age UK
Community alarm installation Fee	£0	£35	£40	£36	£0	£69
Standard Weekly Fee (Ex VAT)	£2.90	£2.88	£3.21	£4.50	£2.90	£3.88
Standard monthly Fee (Ex VAT)	£12.57	£12.49	£13.89	£19.50	£12.57	£16.81

4.3 While the cost of the Swansea service already compares favourably to other providers, proposals are being considered to amend the charging arrangements so that charges are only applied after a financial assessment has been undertaken.

4.4 Individuals with telecare packages are required to pay for a community alarm as standard, unless they have the CareAssist unit installed in which case there is no cost. While they have to pay for the community alarm, there are no additional fees charged for the rest of the package.

Service budget

4.5 The budget summary gives the headline information for CAS:-

Budget Summary	18-19 Actual Expenditure	19-20 Actual Expenditure	20-21 Actual Expenditure	21-22 Allocated Budget
GROSS EXPENDITURE	494,875	397,578	449,689	404,200
INCOME	-505,107	-462,092	-407,731	432,000
GRANT	0	-15,132	-112,067	
NET EXPENDITURE	-10,232	-79,646	-70,109	
Budget for 2020/21	-14,150	-21,150	-20,050	-27,800
Outturn	**-3,918**	**58,496**	**50,059**	

4.6 Key observations from reviewing the budget summary:-

- Fees paid by users of community alarms mean the service is income generating.
- In addition to fees, the service has also secured various ad-hoc grant sums.
- The target for the service is to break even overall, but the service has exceeded this by producing a positive outturn in 2019/20 and 20/21.
- It is difficult to accurately forecast the level of funding and expenditure. Causes of fluctuation include changes in demand, the level of spend on new equipment and the nature of any grants received. Given the level of variation from one year to the next, caution must be taken before making too many conclusions.
- In 2020/21, an investigation was undertaken to understand how much time staff spent respectively performing duties in pursuit of (i) the CES, and (ii) the CAS (see table below). This exercise has estimated that the budget for the latter should be increased slightly.

EMPLOYEES	FUNDING SPLIT - 2020-21 - onwards	
	CES	CAS
ASSISTIVE TECHNOLOGY OPERATIONAL LEAD	90%	10%
ACCOUNTANCY SUPPORT OFFICER	70%	20%
CUSTOMER SERVICES OFFICER	75%	25%
CUSTOMER SERVICES OFFICER	75%	25%
CUSTOMER SERVICES OFFICER	75%	25%
SENIOR OFFICER STORES	75%	25%
FINANCIAL ASSISTANT	0%	100%
FINANICAL ADMIN ASSISTANT	0%	100%
TWO INSTALLERS	0%	100%

Please note: the Operational Lead post is currently being covered by the Assistive Technology Operational Lead and a restructure is ongoing.

4.7 Delving into the sources of income in 2020/21 reveals:-

Source	Reason	Amount
Winter Pressures fund	One off Funding	£102,000
Housing Department	Equipment, Installation and upkeep for 1395 alarms	£119,116
Pobl Housing	Equipment, Installation and upkeep for 48 alarms	£5,352.88
Client Income	Lifeline annual service charge	£402,378

4.8 Below is an estimate of the income and expenditure for the installation of: (i) a community alarm; (ii) community alarm plus a telecare package (including 2 of the most popular aids); and (iii) a Care assist package (including 3 of the most popular aids).

	Alarm (£)	Alarm + Telecare (£)	Care Assist (£)
Income	150.80	150.80	0
*Less Cost of Sales (*1 - per annum, per lifeline)*	27.29	27.29	27.29
Less Fall/smoke detector/pendant		38.16	52.48
Gross Profit (per annum, per alarm)	**123.51**	**85.35**	**-79.77**
Less administration costs:			
Labour costs - installation	-6.00	-6.00	-6.00
Vehicle costs	-1.60	-1.60	-1.60
Finance staffing costs	-15.84	-15.84	-15.84
Customer Service staffing	-21.15	-21.15	-21.15
Delta Carmarthen - call centre	-27.94	-27.94	-27.94
Contract/Licences - Qubic/Adept/Q3	-5.44	-5.44	-5.44
Sundries	-0.74	-0.74	-0.74
Net Profit (per annum, per alarm)	**44.8**	**6.64**	**-158.48**

4.9 This clearly demonstrates that income generated from Community Support Alarms subsidises the other service offers.

4.10 The CES provides an internal service whereby it cleans returned community alarms and telecare equipment. The current charge is £3.50 per item and this is charged to CAS. For 2020/21, the annual charge for this service was £785.

5. Who are our partners in delivering the service?

Call monitoring services: Delta Wellbeing

5.1 Delta Wellbeing provides a bilingual 24 hour call monitoring service. The service is accredited with the Telecare Services Association (TSA). They have been the Council provider for 10 years and the current collaboration agreement with Delta Wellbeing is in place until December 2023. To exit this arrangement, 1 years notice would need to be given due to the complexities of setting up a similar service or moving to a new provider.

5.2 When an alarm, sensor or other equipment is triggered, the call goes to the phone line in the CES. From there, it is automatically diverted to the monitoring centre where the call is then managed. The diversion of calls in this way is primarily for disaster recovery arrangements, but it would also smooth the transition to a new provider should this ever be needed.

5.3 The monitoring centre alert the CAS when individuals report broken equipment or the death of a user.

5.4 No regular analysis of call data is currently in place.

5.5 The Contract fee varies as it reflects the number of live connections being monitored and this is a fluctuating figure. As of June 2021 there are 4,449 live connections charged at 0.81p per connection. Based on these figures the estimated annual cost for 2021/22 is in the region of £187,391. The live connections provided for the Housing department are recharged annually.

5.6 Over the last 4 years (including the current financial year), the average number of live connections is slowly falling:-

	2018-19	2019-20	2020-21	2021-22
Average No. of live connections	4,630	4,486 - 3% less than previous year	4,358 - 3% less than previous year	4,334 - 1% less than previous year

Equipment: Tunstall

5.7 Tunstall is a global company with over 60 years of experience in the field of assistive technology. They are the supplier of all telecare and assistive technology equipment for Swansea. Equipment is purchased utilising the All Wales contract which standardises the costings and contractual expectations.

5.8 Product life expectancy is 3-5 years. As previously mentioned, while the CAS undertake general maintenance and repairs, Tunstall will respond to emergency repairs that take place outside of normal business hours. There is a charge attached to each call out, which is payable even if there is no work undertaken. The price per call out increased significantly in 2020/21 - from £41 to £60.50. The tables below highlights the financial implications for the Council:-

2018/19

Call outs	Community alarm	Telecare
679 (56 per month)	372 (55%)	307 (45%)
£41 per call out	£15,252	£12,587

2020/21		
Call outs total 2020/21	**Community alarm**	**Telecare**
748 (62 per month)	467 (62%)	281 (38%)
£60.50 per call out	£28,253.50	£13,189

5.9 The following table compares the call out charges with different providers:-

Internal	£45 per call out
Care & Repair	£70 per call out
Tunstall	£60.50 per call out

5.10 To achieve the best prices for equipment from Tunstall, it is also necessary to pay an annual subscription for affiliate membership. Examples of the prices and demand of common products:-

Product	Cost per unit	Number currently in the community
Detector - Smoke (Wireless) (AT091)	£40.80	180
Detector - Fall Vibby (AT041)	£75.00	123
Alarm - Carbon Monoxide (AT021)	£80.75	23

External I.C.T Support

5.11 Q3 are a private sector company that undertake the support and maintenance for the telephone system at the CES - ensuring it is able to redirect all calls to the monitoring centre. Q3 provide assistance for any technical fails in the system.

5.12 ICL Support help to maintain aspects of the ICT infrastructure. Their involvement is being reviewed, with possible plans to introduce a new system called Pro Cloud.

6. How many people are receiving a service?

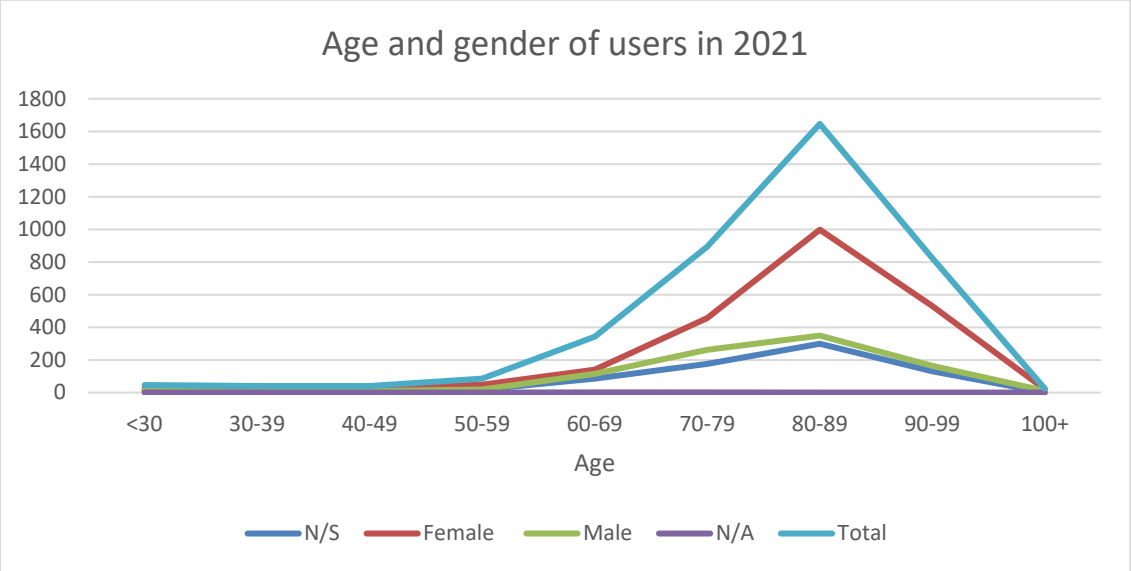
Total numbers

6.1 As the service is live and constantly responding to referrals, the figures provided below represent a snap shot of the products in the community on a given day, for example the 2021 data is as it stood on 26 April 2021.

6.2 The total number of services users of community alarms, telecare and additional services over the last 3 years are listed below:-

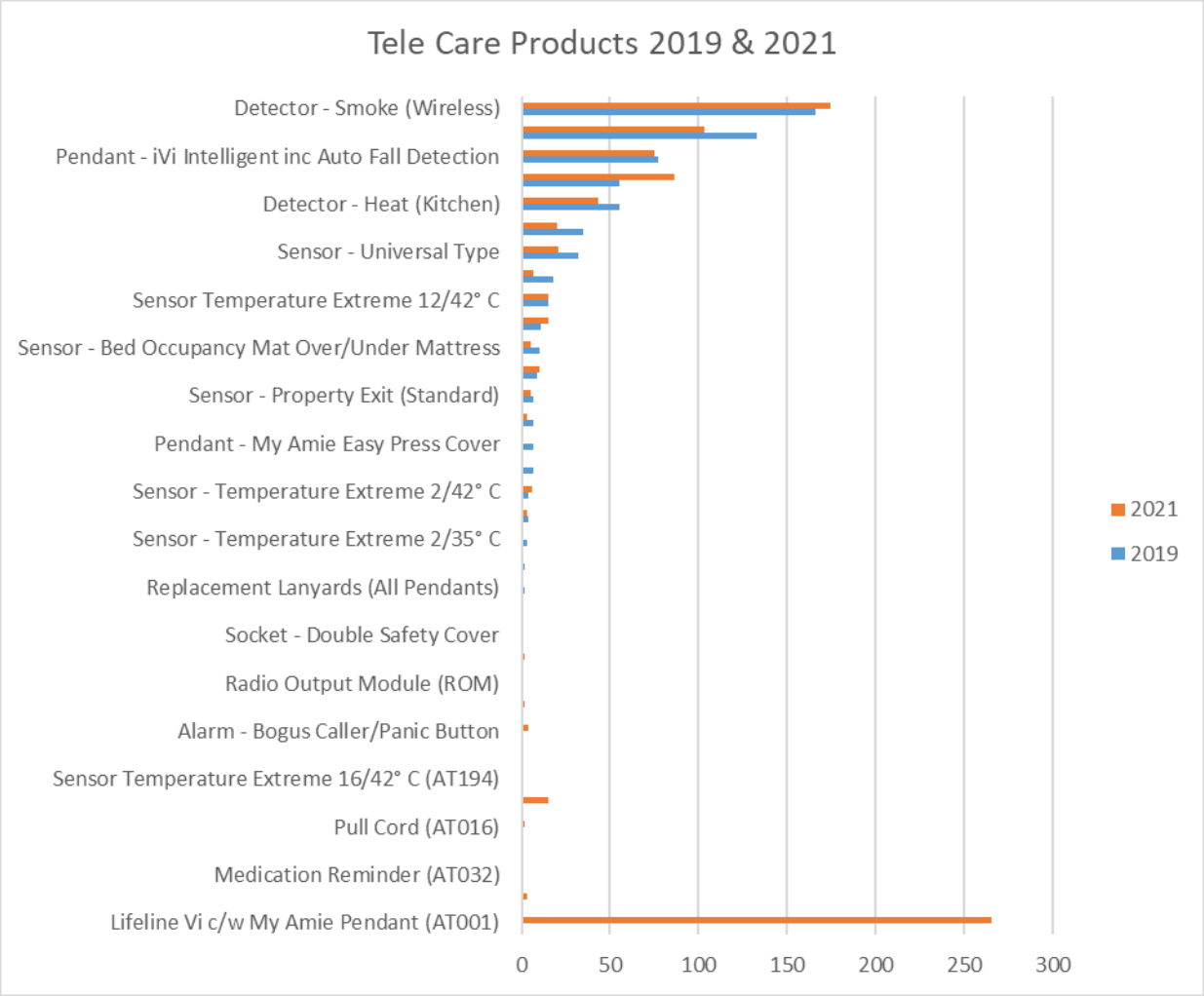
ASSISTIVE TECHNOLOGY PAST/CURRENT CONNECTIONS			
	2019 (April)	**2020 (April)**	**2021 (April)**
Individuals with community alarms	2718	2735	2530
Individuals with CareAssist packages	86	86	133
Individuals with telecare packages (inc. community alarms)	349	97	330
Gwalia Connections	48	48	46
Swansea sheltered housing connections	1397	1395	1410
TOTALS	**4,598**	**4,361**	**4,449**

6.3 The chart below explores the age and gender of individuals using the service during 2021. The information indicates women in their 80s are most likely to use assistive technology. The older age of so many of the recipients (80+), is an indication that the service is generally used on reactive basis rather than preventative – potentially being installed after an incident has occurred or where there is an identified risk. However, the flexibility and opportunity presented by assistive technology is that it can, and is to some degree, be used to support people from their twenties up to centenarians. For further detail, a full breakdown of the number of the users (in 2019 and 2021) by age and gender is available in the tables in Schedule 1.



Numbers using Telecare & CareAssist equipment

6.4 The number and range of telecare products in the community has decreased since 2019:-

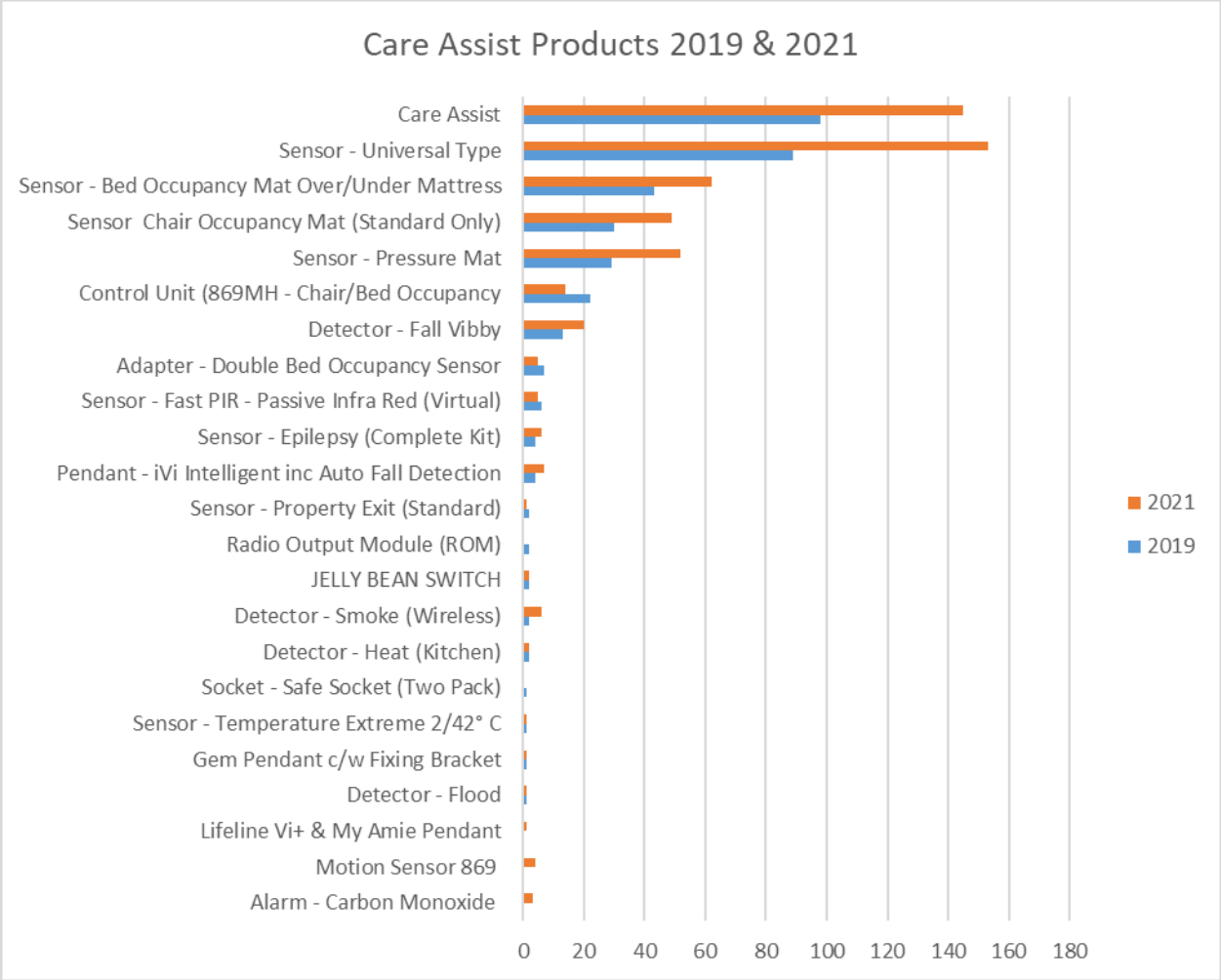


*It is useful to note there is currently no Just Checking Officer in place, hence there is no equipment in the community in 2021.

6.5 While the take-up of alarms and general telecare equipment has fallen slightly, the number of individuals using CareAssist has been increasing: up by 32% since 2019.

	2019	2021
Number of individuals with Care assist	92	134
Additional sensors	261	540

6.6 The average number of sensors has also increased: from 2.3 per individual to 4 per individual. Below is a comparison of the range of sensors that are being used in CareAssist packages in 2019 and 2021. In summary, there are a total of 23 different types of products in the community. 5 products have a seen a decrease in demand but 5 have not seen a change and 13 have seen an increase.



6.7 The duration that the packages are in use varies. The table below illustrates the period of time equipment has been in place on the 1st November 2019 and26th April 2021. It should be noted that some people had sensors added to their original packages hence the total number is not equal to the total number of individuals with a package.

Period	Packages 2019	Packages 2021
Day 1 – 6 months	24	56
6 month – 12 months	25	28
1 year – 18 months	18	38
18 months – 2 years	18	11
2 years – 30 months	13	31
30 months – 3 years	3	18
3 years +	0	18
Total	**101**	**200**

7. What does the call monitoring data tell us?

7.1 There is no routine data analysis being undertaken in relation to the calls received by the Delta Wellbeing Centre. This means the information being captured is not necessarily as accurate or informative as it could be. The data

that is available is captured via the PNC System monitoring database. To understand the sort of information available, 4 call categories have been selected to explore in more detail: (i) Ambulance requested, (ii) Client Fallen, (iii) Fire Brigade requested, and (iv) Door Exit.

7.2 The data provided below relates to the period between 20th November 2018 and 20th November 2019. The impact on the service as a result of the Covid-19 pandemic, as evidenced by the available data, will be discussed further below in section 8.

Ambulance requests

7.3 Available data:-

- There were 507 alerts requesting an ambulance.[1]
- These alerts came from 60 users. 52 of these users made more than one request for an ambulance during the year.

	Ambulance requests						
Number of people	8	39	5	3	3	1	1
Number of Ambulance Requests	1	2	3	4	5	6	22

- Individuals receiving a Telecare package are more than twice as likely to request an ambulance compared to those just in receipt of an alarm: 42 users with telecare compared to 18 with just an alarm.
- The Manual Trigger or the Integral Button generated the majority of the calls - 4 people had generated the call through the use of a Fall Detector on 11 occasions.

Alerts of a fall

7.4 Available data:-

[1] It must be noted that people did activate a call on more than one occasion during the same day, for the purpose of this analysis only the first call has been counted. It has been presumed the second or repeated calls during the same day would be checking on the progress of the call or reporting the outcome.

- The following table shows the number of falls, number of people who have fallen, and the number of occasions some people are seemingly reporting a fall:-

Incidences of Falls Recorded	Number of People Recorded Fallen
1	130
2	107
3	33
4	18
5	9
6	4
8	2
11	1
12	3
14	2
16	1
Total 1391	**310**

- The data also shows that people who have fallen are prone to contact the monitoring centre more than once after making the initial call, especially if the person had fallen during the evening or overnight. Examples to demonstrate this point:-

  - 26 people called 3 times
  - 16 people called 4 times
  - 8 people called 5 times
  - 3 people called 7 times
  - 1 person called 15 times
  - 1 person called 21 times
  - 1 person called 24 times
  - 1 person called 56 times

- Repeat calls will be linked to response times. The data suggests that the length of time people were waiting for assistance varied considerably, but there are examples where the data suggests that people were waiting several hours for assistance. The table provides a few examples to illustrate the experience of some:-

Number of Calls Received	Date of First Call	Time of First Call	Date of Last Call	Time of Last Call	Data Suggests Waiting Period
5	14/09/19	22.52	15/09/19	07.53	9 hrs 1 min

56	12/10/19	22.58	13/10/19	05.07	6 hrs 9 min
7	25/08/19	01.37	25/08/19	07.32	5 hrs 55 min
21	11/05/19	21.19	12/05/19	00.39	3 hrs 20 min
10	09/04/19	02.13	09/04/19	05.57	3 hrs 44 min
6	22/01/19	07.43	22/01/19	10.16	2 hrs 33 min
5	25/08/19	18.35	25/08/19	21.44	3 hrs 9 min

- When you combine the data for those people who have fallen and those people who require an ambulance, we can see that 24 people have a history of both. How incidents are recorded will depend on the call operator's judgement. The following example illustrates the issues:-

  - Mrs Jones presses her manual trigger and reports that she has fallen and injured herself and needs an ambulance, the operator then has a choice how to record the incident 'client fallen' or 'ambulance required', the operator may on this occasion record it as 'ambulance required'.
  - On another occasion Mrs Jones presses her manual trigger and reports that she has fallen not injured but cannot get up and requires an ambulance to assist, the operator on this occasion may record it as 'client fallen'.

- The following table provides a breakdown of the equipment generating the alert of a fall:-

Sensor / Equipment	**Number of calls**
Bed/Chair Mat	1
Fall Detector Button	105
Fall Detector first resident	10
Fall Detector second resident	2
Fall Detector Fallen	28
Fall Detector first resident	3
Fall Detector Fallen & low battery	1
Integral Button	56
Manual Trigger first resident	550
Manual Trigger second resident	112
Manual Trigger third resident	13
Pressure mat bedroom	11
Property Exit	1

Alerts for support from the fire service

7.5 Available data:-

- There were 138 alerts.
- The majority of alerts are generated by Sheltered Housing residents. Other community alarm and telecare users only generated 20 alerts (14%).

Property exit sensors

7.6 The property exit sensor is designed to monitor the safety of people with a cognitive impairment who may be prone to leaving their homes for extended periods at inappropriate times of the day or night, thereby putting themselves at risk. The system has many benefits, primarily that of helping people with dementia to live safely independently in the community. It allows appropriate action to be taken as quickly as possible to ensure the user is returned to a safe environment, and can also help to alleviate the emotional and physical stress of caring for someone who may leave their home and be unable to return unassisted.

7.7 The property exit sensor is located above the door and comprises a PIR (Passive Infra-Red) movement detector and door contacts which together detect if someone has walked out of the door and not returned. The alarm can be set to activate for certain periods of the day, and will raise an alarm to either the carer or the monitoring centre.

7.8 Available data:-

- 496 calls were received from just 12 service users.
- There were many reasons recorded but the main reason reported were false calls, which totalled 383. The table below illustrates the reasons given.

Reason Recorded	Number of Recording
Assistance Required	4
Client Information	54
Contact Arrived	5
False Call	383
No Response	21
Unable to understand client	5

- The following table looks at the number of alerts from 4 individuals who generated the most activity:-

Service User	Number of Calls	First Call Date	Last Call Date	Period

W	22	05/06/19	26/07/19	7 weeks
X	51	17/09/19	18/11/19	9 weeks
Y	146	21/11/18	26/03/19	18 weeks
Z	249	09/01/19	29/09/19	37 weeks

8. What do we understand about the impact of the Covid-19 pandemic

8.1 As with the rest of society, the CAS had to quickly adapt and adjust to the pandemic, lockdown and adhere to COVID-19 guidelines. Anecdotally, it is reported that the service has been as busy as ever.

8.2 In May 2020, the CAS supported the re-opening of Parkway Residential Care Home and Alexandra House to reduce the demand on health services. The CAS helped by providing alarms, bed and chair sensors, pressure mats and door sensors. These sensors were linked to a CareAssist unit which notified the on-site carers. The equipment provided reassurance and peace of mind for staff members that they would be quickly notified if a resident was in need.

8.3 There continued to be referrals into the CAS. The option of people collecting pre-programmed equipment ('plug and play') was introduced, which reduced the number of occasions where staff had to visit homes to install equipment.

8.4 New users in 2020/21:-

	Total Users
Community alarms	218
Telecare/ Care assist	183
Total	**401**

8.5 The service delivered or installed a total 812 products during 2020/21. On average this is 67 products a month. The numbers of equipment repairs or collections are not recorded.

8.6 CareAssist referrals increased in the first 3 months of the financial year 2020/21.

8.7 The table below displays a comparison of the teams referring in 2019/20 and 2020/21. This data does not include self-referrals for the community alarm.

Referrals via team	**number of referrals 2019/20**	**2019/20 %**	**number of referrals 2020/21**	**2020/21 %**
Swansea CRT	64	30%	80	30%
Swansea Team (CAS)	3	1.4%	57	22%
Singleton Hosp OT	38	18%	46	17%
Swansea MHOT	11	5.2%	29	11%
Morriston Hosp OT	65	31%	20	8%

Gorseinon Hub	3	1.4%	14	5%
NPT Hospital OT	0	0%	9	3%
CCOS Social Services	0	0%	7	3%
NPT Community LDT	0	0%	2	1%
ABMU CNWK cityhealth	1	0.5%	0	0%
Swansea Admin	27	13%	0	0%
Total	**212**	**100%**	**264**	**100%**

8.8 While the number of service users has fallen slightly, the overall number of calls in and out of the monitoring centre has decreased dramatically between 2018/19 and 2020/21.

Year	2018/19	2020/21
Total Calls	227,797	91,614 (60% less calls then 2018/19)

8.9 Due to technical issues, the level of call monitoring data for the period of the pandemic is even more limited. However, by comparing a few available indicators for 2020/21 to the figures in 2019/20, it is apparent that there have been other significant changes in demand during the pandemic:-

- A sharp drop in the number of calls where an ambulance is requested - 49% fewer calls.
- An increase in fall detector activations - 24% increase.
- An increase in property exit sensor activations - 58% increase.

8.10 Caution is needed to avoid making hasty conclusions, but it is probably reasonable to hypothesize that the changes are in-part due to individual's spending more time in the home and alternative support networks (e.g. family) having been put in place due to people's reticence to access health services.

8.11 The split between outgoing and incoming calls to the monitoring centre is consistent with around 18% of calls outgoing and 82% incoming over the last 2 years. Places with a more preventative model of telecare can expect a much higher percentage of outgoing calls, e.g. routine calls to remind individuals to take their medication.

8.12 There is also some data capturing calls, whether they are incoming or outgoing, by the Reason, Action and Event. However, the data is often incomplete and could benefit from being reconfigured in a manner that provides a clearer insight of the recurring or common call events.

8.13 Further information regarding the available data for 2020/21 is contained within Schedule 1.

9. Are there any interdependencies or related projects and services?

Digital switchover

9.1 The digital switchover is a programme of change to switch from analogue telephone networks to digital (VOIP – Voice Over Internet Protocol). The roll out is being managed by British Telecom and Virgin Media but will affect all telephone providers. The work across the UK is due to be completed by 2025. Swansea is currently scheduled for the roll out to be completed by 2022 but this is understood to be subject to change. Furthermore, it is worth noting that home owners/housing providers can choose to switch from an analogue to a digital line prior to the deadline. Switching over is actively promoted by many phone providers and if customers aren't aware of the impacts on their alarm/telecare service there could be a risk to its functionality as a result.

9.2 All systems dependent on an analogue phone-line will be redundant and unusable after the switch-over. The majority of the existing base units will therefore need to be adapted or replaced.

9.3 A co-ordinated approach and systematic communication around the necessity of this adaptation prior to the planned switch over to digital will need to be established to ensure that service is maintained and risks mitigated.

9.4 **Can we keep the Lifeline Vi Base Unit?**

9.5 The Lifeline Vi Base Units are used by approximately 3100 community alarm customers and telecare recipients. These units are adaptable and can be made compatible with digital phone lines via the installation of an ATA adapter to the unit. Responsibility for the installation and costs associated with this additional kit is yet to be confirmed.

9.6 In the event of a power cut, the ATA adapter will provide battery back-up for up to 1 hour. This is a significant reduction of the current 72 hours available via the analogue system. This risk would need to be considered when deciding whether or not to continue to use the existing Lifeline Vi Base Units.

9.7 A decision to continue to rely on the Lifeline Vi base units would mean we would be restricted by some of the inherent limitations of that unit. For instance, we would not be able to remotely access, test, and change settings of units, and such tasks would need to be completed in the person's home as they are now.

9.8 **Is there an alternative to the Lifeline Vi Base Unit?**

9.9 Digital Smart Hubs – compatible with the digital switchover units - do not require a physical connection as they operate via an inbuilt SIM.

9.10 The key advantage of these units over an adapted Lifeline Vi Base Unit are threefold. They provide a guaranteed 24 hours back up in the event of a power cut. They can be placed anywhere in the home – i.e. wherever the person spends most of their time – and are not dependent on a landline. They can be maintained/tested/updated post installation remotely from the CES base. Further understanding on the potential reduction of associated maintenance costs of a full scale roll out of this model of delivery would need to be established to evaluate the Cost/Value analysis.

9.11 Winter funding monies and previous Intermediate Care Funding has enabled the Council to purchase a relatively small stock of these Hubs, but the level of installation when compared to the use of the Lifeline Vi Base Units is minimal.

9.12 The initial cost per Smart hub is £198. This does not include the recurring SIM costs of £45 per annum following 24 months post installation date. To replace all current Lifeline Vi base units in use would therefore incur cost in the region of £597k (minus current stock not in use) The recurring SIM costs for 3100 units would be approximately £139k per annum following year 2 post installation.

9.13 To help take forward the work required as a result of the switchover, a temporary Digital Switchover Project Manager position has been created to work within the CAS service. This role has been recruited alongside an additional Installation and Maintenance Technician.

Rapid Discharge & Home First programme

9.14 The ‘Home First’ Programme was established across the West Glamorgan Region - in partnership with Neath Port Talbot Council, Swansea Bay University Health Board and the third sector. It is the product of the ‘Hospital to Home’ regional model (launched in December 2019) and Rapid Discharge process established in July 2020. Its purpose is to manage the unique pressures around hospital admissions and discharges during the Covid pandemic.

9.15 Part of the work is to eliminate the delays some people experience when being discharged. Unfortunately, it is not unusual for patients to remain in hospital despite having been deemed ‘medically fit’. One of the reasons for this can be the time taken by providers to undertake assessments and make longer-term care arrangements prior to the person being able to return home. This delay can result in hospital stays that are longer than necessary. Home First ensures that, wherever possible, these delays are avoided by community resources undertaking assessments away from the hospital setting, and ideally within the persons home.

9.16 Management of referrals to the service is facilitated by a dedicated, therapy-led, triage team based within the Community Resource Team. This team, which also includes nursing, social work and domiciliary care professionals, work alongside

ward staff and the person. In many instances, assessments that were previously carried out in hospital, are instead undertaken in a person's own home on the day they are discharged. As well as improving discharge timescales, it provides assessors with a better picture of the individual's living environment and potential support needs.

9.17 As part of the Home First pathway, an assistive technology element has been introduced to support the therapist in their assessment. This includes the use of Smart Hubs. The Smart Hubs are programmed by the Community Alarm Service team and are available for collection from CES or can be delivered to the person's home.

9.18 The Smart Hubs will be on loan for the period up to 6 weeks free of charge. If, after the six week period, the service user feels that they would like to continue with the alarm service, they will be issued with an order form, and arrangements are made to swap over the Smart Hub for our standard Lifeline Vi base unit. The service at this point will then become chargeable.

9.19 The Smart Hub will then be cleaned, de-programmed and transferred back into stock.

Just Checking

9.20 Just Checking is an activity monitoring system that helps people with dementia and learning disabilities live in their own homes for longer. Just Checking uses various sensors around the house to gather information on an individual's day-to-day activities.

9.21 The system can be used to provide reports that give professionals a better understanding of where support is actually required, helping to maximise independence and improve efficiency, without compromising on the quality of care. Just Checking is a part of the wider evaluation of the care packages and rightsizing work, it works alongside other tools and processes to appropriately assess individual's needs. Used correctly, it can potentially help to increase capacity in the domiciliary care sector.

9.22 Just Checking is not the only system of this kind but it is the one we have experience of in Swansea. It was piloted via an ICF Grant. The grant was used to purchase ten Just Checking kits, and helped to create an Assistive Technology Officer post. Their role was to provide users with the Just Checking kits, monitor and write reports for each service user, and record the outcomes. The service worked well during its trial period, which began in January 2019 and ended on 18th May 2020. In under a year and half, the outcomes report shows the following changes in packages where Just Checking was involved:-

- Homecare Packages downsized: £85,800
- Homecare Packages increased: £62,400

- Avoidance costs: £169,600

9.23 Unfortunately, due to a lack of further Government funding, the Just Checking Service was ceased in October 2020. The 10 Just Checking activity monitoring systems are currently in storage and not in use.

Internal Residential Care Commissioning Review Phase 2 Project

9.24 The Older People's Residential Care Commissioning Review project is looking at how our in-house residential care homes operate. It is still in its early stages, but it is expected that assistive technology will, in future, play a large part in any care homes, e.g. to help therapists / care managers to assess the level of need required by the individual.

Plans in development by the Housing Department

9.25 A Commissioning Review within the Housing Department has recently been completed. The purpose being to reflect on the fact the Housing Department has seen a reduction in demand for their traditional sheltered accommodation projects. At the same time, they are also encountering challenges in terms of meeting the range of needs of older people.

9.26 The review therefore proposes to rebrand sheltered schemes as Independent Living Services. The Wardens will become Independent Living Officers. They will offer support and signposting to residents as well as making the most of the available communal spaces. The long term aim is for Independent Living Services to be more effective at supporting independence for a greater range of needs.

9.27 The Housing Department have a long standing relationship with CAS to provide and install assistive technology products. Independent Living Services will have a new alarm system which supports the digital switchover and broadband. The relationship between CAS and the housing schemes will therefore continue - with an allocated price per unit which supports the monitoring, installation and repair of Assistive Technology products. (The annual recharge from housing to CAS is in the region of £119,116 in 2020/21.) Whether there are further opportunities to develop the assistive technology offer in these new services will need to be kept under consideration.

10. What do service users and other stakeholders say about assistive technology?

10.1 This review of the service has followed the Council model for commissioning reviews. Consequently, stakeholders who have an interest or potential interest in the exercise were mapped out at the outset. An initial meeting was convened to decide how we should best proceed. As there was no information available regarding service user experiences, it was agreed that we would canvas opinions via the use of questionnaires. Furthermore, it was decided we should

hold stakeholder events - the first of to explore what is working and what could be improved.

Outcome of the stakeholder workshop

10.2 A stakeholder event was arranged for 1st October 2019. Over 40 stakeholders attended from a wide range of professions and organisations. Kevin Doughty a visiting Professor in the Digital Transformation of Care Service gave an inspiring and thought-provoking presentation which demonstrated the potential of assistive technology if we were to 'think outside the box'.

10.3 Attendees took part in two activities - the first was a Strengths, Weakness, Opportunities and Threats (SWOT) analysis looking at 'Where we are now' and the second looked at 'The opportunities for doing things differently'. Some of the suggestions included:-

- Looking at new business models to ensure a sustainable service and review current assistive technology charges.
- Pushing or selling the community alarms by improved advertising, but signposting people to other providers where other technology is required.
- Broadening the cohorts of people we consider assistive technology for. Taking this sort of approach could, it was suggested, lead to a more informed understanding of cost benefits, preventative effects and other quality of life impacts for citizens.
- That changes may need to be incremental to manage roll out of any agreed changes.
- We update technology/infrastructure within our own processes.
- The opportunity and benefit of using assistive technology to take a person centred approach and support assessments and care planning. Ideas for how we achieve this:
    - we recruit and train additional Assistive Tech Officers to help realise this cultural change; and
    - have an assistive technology expert present during MDTs to provide advice on opportunities to integrate assistive technology into care packages.
- A reoccurring suggestion was to establish a mobile falls unit linked to the technology.

10.4 Further information on the event, agenda, presentation and the report and comments can be found in Schedule 2.

Service User Questionnaires

10.5 Three specific service user questionnaires were developed: one for recipients of a community alarm only, another for those receiving a telecare package as well, and the third for CareAssist users. The questionnaires had both tick box questions and free text boxes.

10.6 What follows is a summary of the feedback on each of the questionnaires, and more detailed information is available in Schedule 2.

10.7 **Community alarm questionnaire:-**

10.8 The first of the questionnaires were sent out in January 2020. Sent to **400** Community Alarm Users who had used the system in the past year, **152** completed questionnaires were returned. This represents a **38%** response rate. Evidence informs that a 10-15% response rate is average for external surveys. A 38% return is therefore much higher than the average and a good sample number.

10.9 A detailed analysis report is available in Schedule 2 but here are a few of the key headline findings:-

- A high percentage of people found out about the service from professionals, but family and friends were another important source of information.
- The main reasons why people had a community alarm was for peace of mind, to help remain in their own homes, feel safe, and to raise an alarm if they were to fall.
- **97** people (64%) strongly agreed that they had found the Community Alarm service useful.
- **100** people (66%) strongly agreed that the community alarm had helped them stay independent.
- **105** people (69%) strongly agreed that they felt safer with a community alarm.
- **53** people (35%) had used the community alarm in an emergency or accident compared to **95** who had not. **23** of those were of a result of a fall.
- Only **9** people (6%) would be interested in purchasing a telecare service from a private company. **22** people selected 'did not know', **29** 'disagreed' and **63** 'strongly disagreed'.

10.10 A range of suggestions were received as to how we could improve the service:

- Consider improving the medical knowledge of call centre staff.
- More publicity as to availability
- A reminder to test the alarm
- Improved repair response times.
- 'I always wear my lifeline but can only use it in the house and my small garden. It would be a huge benefit were I to get more mobile and able to walk to neighbours to be able to use it somehow if I had a fall for instance'
- Automated reminders for medication etc. would be useful to those with memory problems.
- 'I feel it would be good to have more communication after pressing for help before ambulance arrives. I had to phone – via button 2 times last time to check where they were and my phone company charge me for pressing!'
- 'I can afford it but lots of people can't. Make it cheaper'

10.11 A number of other comments were made which are included in the appended report, but here are a few examples:

- At present, I am more than satisfied
- Service very efficient, call answered almost immediately by very polite operators
- Very pleased with the service you provide
- I would be very unhappy if the service was to be put out to another provider. Since the carer service was put out to a private provider the service has deteriorated drastically and I fear this would also apply to the Community Alarm if this were to happen
- My alarm is indeed a lifeline and so far has met my needs - ☺for good service from all staff

10.12 **Telecare Service User Questionnaire**

10.13 The second of the questionnaires was sent out in February 2020. They were sent to all **358** telecare users. **54** completed questionnaires were returned which is a **15%** response rate, which is average.

10.14 A detailed analysis report can be found below, here are a few of the headline findings:-

- A higher number of people found out about the Service from professionals, particularly Social Workers and Occupational Therapists. Some people also found out from family members.
- The main reasons why people had telecare equipment was to raise an alarm if they were to fall so they could remain living in their own home.
- Most people were aware which telecare sensor that they had in their homes but **14** people **(26% of respondents)** were not.
- **38** people (70%) strongly agreed that they found the telecare equipment useful, while **34** strongly agreed that the equipment has helped them to manage better and feel safer in their homes.
- Respondents advised that there have been **13** emergencies or accidents that had been identified by the equipment.
- **38** people strongly agreed that they were happy with the service.
- **36** strongly agreed they were happy with the service received from the Monitoring Centre.
- **15** people (28%) would like someone to respond physically to an alarm alert compared with **23** who either did not know or disagreed.
- Only **9** people (17%) agreed that they would consider financially contributing to a response service, compared to **27** who either did not know or disagreed.
- The vast majority of people would not be prepared to contribute to the costs of the service.

- Only **1** person would be interested in purchasing a telecare service from a private company with **34** people either saying they did not know **(5)**, disagreed **(9)** or strongly disagreed **(20).**

10.15 Respondents were also given the opportunity to suggest improvements. Examples include:-

- 'Telecare service is not for everyone. It depends, are you an old age pensioner living alone, in poor health, no family you can call on when not feeling well. Can you afford to pay for the service?'
- 'The company that installs and runs the equipment, need to do a follow up service, so that the person using it understands how the equipment works.'
- 'Voice response through a pendant – my house is large and the current speaker / listener monitor doesn't always pick up my voice.'
- 'More stringent checking updating of my medical conditions on your records. Maybe linking to my NHS records.'

10.16 Other comments of note:-

- Not sure if this is the correct equipment for my mother in law, as she cannot understand that you can press the face of it to call for assistance, used to have a red button before, and has not worked a couple of times when she has fallen slowly.
- Not sure if call from the lifeline goes through to the monitoring centre first or to a neighbour or my aunt.
- At the moment I am satisfied with the alarm system supplied.
- All very good.
- My father has Alzheimer's and does not really know how to respond to the call answering service so I was very grateful when the police arrived promptly in response to the fall alarm being triggered.

10.17 **CareAssist / Telecare Service User Questionnaire:-**

10.18 The third questionnaire was designed for Care Assist users and was sent out in October 2021 to all **136** CareAssist users. **23** completed questionnaires were returned which is a **17%** response rate (within the average range).

10.19 Here are a few of the headline findings:-

- A higher number of people found out about the Community Alarm Service from professionals, particularly Occupational Therapists and Social Workers.
- The main reasons why people had the equipment was to raise an alarm if they were to fall and to minimise risk of harm.
- **8** people were not aware which telecare sensor that they had in their homes. There did appear to be some confusion about the scope of the questionnaire by some - a couple of people included a range of non-telecare equipment

such as hand rails, bath lift etc. and another mentioned they were not connected to CareAssist.

- **12** people (52%) strongly agreed that they found CareAssist useful while **9 (39%)** strongly agreed that the equipment has helped them to manage better and feel safer in their homes.
- There has only been **1** emergency or accident identified by the equipment.
- Only **4** people agreed that they would consider financially contributing to a response service compared to **13** who either did not know or disagreed.
- Only **4** people would be willing to contribute financially to the telecare service compared to **13** who either did not know or disagreed.
- Only **1** person would be interested in purchasing a telecare service from a private company

10.20 Carers were also asked specific questions in terms of their experience of CareAssist:-

- **11** carers strongly agreed the equipment was useful.
- **13** carers strongly agreed that the CareAssist had helped them in their caring role, **1** disagreed
- **9** carers strongly agreed or agreed that their quality of life had improved since the Care Assist and equipment had been installed. **6** either did not know or disagreed.

10.21 Comments made to specific text box questions:-

- If the telecare service has improved your quality of life, how has it done so?
  - ‘The pressure mat care assist system did exactly what I needed to do – to alert me (my dad’s carer) to when he got up from bed in the night, so that I could assist him and prevent him from falling which he would do if unaided’
  - ‘We did not find a need for Telecare, he has not had a fall this year.’
- If the telecare service has improved your quality of life, how has it done so?
  - ‘My husband fell and broke hip without equipment I don’t know how we would have managed’
  - ‘It enables me to carry out tasks in the home knowing I will be alerted if my husband attempts to leave his chair’

10.22 Suggestions for Improvements:-

- ‘Follow up after installation. Equipment was provided 2018 and never followed up since.’
- ‘The remote controls are quite stiff and require firm pressure to turn off / acknowledge. A better smoother remote would improve ease of use.’
- ‘A follow up visit time would be good, as sometimes other equipment or use of could be discussed.’

11. Summary and Conclusions

11.1 The Department has a long history of successfully delivering assistive technology services. The whole raison d'etre of assistive technology is to promote the independence and wellbeing of the individual service user, which means it is completely aligned with the departmental Mission statement. Moreover, while it is not covered in this paper, the use of assistive technology is seen by Welsh Government, and others, as one of the principal means by which social services can remain sustainable in the face of increasing numbers of vulnerable people.

11.2 There is some evidence available that the service helps to keep people safe (and feeling safe), and enables them to live independently for longer. But, the data available has a number of limitations and shortcomings. There is very little available about the outcomes it is intended to support at the outset. The absence of any review process for the service means it effectiveness in achieving these outcomes is also unknown. Where data is collected by the call monitoring centre, it is not organised in a way that is conducive to undertake a detailed analysis.

11.3 Nevertheless, we know, from feedback, that professionals and service users are generally very positive about the service and the difference it can make. All respondents reported that assistive technology helped them feel safe, have peace of mind, and it has allowed them to remain in their own home.

11.4 The nationwide switchover from analogue to digital telecommunications will create service continuity risks unless it is carefully managed. Ultimately, the decision about how we respond should be aligned to our strategic ambitions for the service. If a decision is made to transition to a more capable, future proofed system delivered via Smart Hubs, then there will be an associated cost which will need to be paid for somehow.

11.5 The service is income generating and is expected to 'break even' each year. The service assessment indicates that this expectation is increasingly difficult to achieve and is often dependent on ad-hoc grant funding. With additional costs anticipated as a result of the 'digital switchover' programme, a new financial model is required to ensure the service not only remains sustainable but is able to expand where required.

11.6 Any new financial model will need to consider how charges are applied for use of the service. Historically people receiving a community alarm have been charged a flat rate. This is not subject to any means testing and is applied regardless of any other care service received. At the same time, any additional telecare equipment is provided free of charge and those using CareAssist do not pay anything. Whether these arrangements are properly aligned with the department's wider charging policy and ambitions for the service should be reviewed separately.

11.7 The service demonstrated adaptability in response to the Covid-19 pandemic. Equipment provided by the service supported the re-opening of local care homes, and CAS worked effectively with others to support the safe and timely

discharge of people from hospital. Unnecessary visits by staff to service user homes were avoided by providing pre-programed devices (plug and play). This period has clearly demonstrated the creativity and responsiveness of the service, which are valuable qualities that could facilitate the successful implementation of future changes.

11.8 The pandemic has also seen a change in the nature and level with which assistive technology is called upon as people's daily habits have changed. There has, overall, been a reduced volume of incidents, with considerably fewer people requesting an ambulance. At the same time, there is evidence of a potentially greater dependency on family and carers, e.g. with more choosing to use of CareAssist model. Whether these trends continues post-pandemic, will need to be carefully monitored.

11.9 It is submitted that there is considerable potential to grow the service. Strengths based social work practice is absolutely compatible with the opportunities afforded by assistive technology. However, we are missing the opportunity to integrate assistive technology into our practice at the assessment, planning and review stages. The Just Checking pilot was small in scale and time limited, but it proved what is possible: technology can support people to be more independent and ensure value for money for the public purse.

11.10 At the same time, the service assessment highlights the risk that some people, in the absence of any review mechanism, are not adequately having their needs met. This might result as 'waste' in the system because of false alerts being made to the call centre. More worrying, it could mean individuals are frequently falling without checks being done to see if there is anything more that can be done.

11.11 The profile of individuals using the service shows it is often older people (particularly women in their 80s). While there are some younger adults accessing the service, there is considerable room to explore the advantages of assistive technology with other population groups - e.g. those with learning disabilities, mental health needs, substance misuse – and in different environments – e.g. supported living settings.

11.12 There are a variety of professions referring to the telecare service, but the majority are generated by Occupational Therapists working with people following an acute incident or period in hospital. There is considerable potential to promote assistive technology amongst social workers so they routinely consider how assistive technology can contribute to meeting the needs of service users. Further, there is the potential, subject to additional resources being provided, to promote its use earlier in the person's 'journey'. By developing the sophistication of our model to become less reactive focused and more preventative, it is possible we can prevent, or at least delay, people from accessing statutory services to meet their needs.

11.13 Developing how we use assistive technology in the manner described above will require a cultural change for professionals and members of the public. Embedding assistive technology as a mainstream response will take work to

overcome the stigma attached to using devices (particularly in the older male population), and upskilling professionals to understand technical solutions and new and emerging opportunities.

SCHEDULE 1 – Tables and charts

Profile of service users in 2019:-

Age & Gender									
	<30	**30-39**	**40-49**	**50-59**	**60-69**	**70-79**	**80-89**	**90-99**	**100+**
N/S	14	9	5	15	81	133	211	75	0
Female	32	29	28	64	173	516	**1187**	586	17
Male	14	5	8	24	139	296	423	179	7
N/A	0	0	0	0	1	1	0	0	0
Total	**60**	**43**	**41**	**103**	**394**	**946**	**1821**	**840**	**24**
%	**1.4%**	**1%**	**0.9%**	**2.4%**	**9.2%**	**22.1%**	**42.6%**	**19.6%**	**0.5%**

Profile of service users in 2021:-

Age & Gender									
	<30	**30-39**	**40-49**	**50-59**	**60-69**	**70-79**	**80-89**	**90-99**	**100+**
N/S	12	10	6	18	86	175	299	131	1
Female	22	27	26	49	141	456	**998**	530	21
Male	12	3	9	18	114	261	349	163	10
N/A	0	0	0	0	1	1	0	0	0
Total	**46**	**40**	**41**	**85**	**342**	**893**	**1646**	**824**	**32**
%	**0.9%**	**0.8%**	**0.8%**	**1.7%**	**6.9%**	**18.0%**	**33.2%**	**16.6%**	**0.6%**

Snapshot of the number of Telecare products in use:-

Product	2019	2021
Detector - Smoke (Wireless)	166	174
Detector - Fall Vibby	133	103
Gem Pendant c/w Fixing Bracket	55	86
Pendant - iVi Intelligent inc Auto Fall Detection	77	75
Detector - Heat (Kitchen)	55	43
Sensor - Universal Type	32	21
Alarm - Carbon Monoxide	35	20
Detector - Natural Gas (Plug In Type)	11	15
Sensor Temperature Extreme 12/42° C	15	15
Detector - Flood	9	10
Sensor - Pressure Mat	18	7
Sensor - Temperature Extreme 2/42° C	4	6
Sensor - Bed Occupancy Mat Over/Under Mattress	10	5
Sensor - Property Exit (Standard)	7	5
Alarm - Bogus Caller/Panic Button	1	4
Control Unit (869MH - Chair/Bed Occupancy)	4	3
Sensor Chair Occupancy Mat (Standard Only)	7	3
Pull Cord (AT016)	0	2
Possum HCP Switch Pneumatic Suck, RF Enabled	1	2
Sensor - Fast PIR - Passive Infra-Red (Virtual)	1	2
Medication Reminder (AT032)	0	1
Minuet Watch-Falls Detector (AT017)	0	1
Sensor Temperature Extreme 16/42° C (AT194)	0	1
Radio Output Module (ROM)	1	1
Sensor - Epilepsy (Complete Kit)	2	1
Socket - Double Safety Cover	1	0
Socket - Single Safety Cover	1	0
Replacement Lanyards (All Pendants)	2	0
Sensor - Temperature Extreme 2/35° C	3	0
***Just Checking Daily living system 3**	**7**	**0**
Pendant - My Amie Easy Press Cover	7	0
Adapter - Double Bed Occupancy Sensor	1	0
Total	**666**	**621**

Call monitoring data comparing 2020/21 with the position pre-pandemic:-

	2019/20	2020/21
Ambulance Requested	490 (65% from Manual trigger)	249 (68% from Manual trigger)

	2019/20	2020/21
Falls Detector Activations	4046 (62% Fall detector button)	5321 (50.7% Fall Detector Fallen & 49.3% Fall Detector button)

	2019/20	2020/21
Property exit sensor	841 (Property exit walking 100%)	1996 (Property exit walking 100%)

SCHEDULE 2 – Stakeholders and Service User feedback

Documents relating to the stakeholder workshop:-


Stakeholder event report tech final dra


Stakeholder event anaylsis.docx


KD Swansea Stakeholders Octob


Document1.docx

Documents relating to the community alarms questionnaire:-


Community Alarms cover letter.doc


Swansea Lifeline questionnaire v2.do


Community Alarms Questionnaire repor


Lifeline Questionnaire analy

Documents relating to the telecare questionnaire:-


Community Alarms cover letter.doc


Swansea Lifeline questionnaire v2.do


Telecare Questionnaire repor


Telecare quetionnaire text re

Documents relating to the CareAssist questionnaire:-


Care Assist Telecare Service cover letter e


Swansea Assistive Technology CareAss


Care Assist Questionnaire repor


Care Assist questionnaire text r

SCHEDULE 3 – Pictorial examples of equipment

An example of the Lifeline Vi base unit:

Example of the CareAssist unit

Examples of telecare equipment include:

Vibby Falls detector

Smoke Detector


Bed Sensor


pressure mat