# ASSISTIVE TECHNOLOGY – SUMMARY REPORT 26 MAY 2018

## **1.0 Introduction**

The purpose of this report is to set out the recommendations and evidence base for the delivery of Assistive Technology and Telecare to people with care needs within Cheshire East. This is necessary both due to a need to put new contract arrangements in place for this service, but also to maximise the opportunities that Assistive Technology provides. This includes giving people with care needs increased choice and control over their support, whilst also enabling them to live independently. There are also benefits for carers in terms of reassurance and reduced risk of carer breakdown.

### 2.0 Assistive Technology - Definitions

The World Health Organisation have defined Assistive Technology as "any device or system that allows individuals to perform tasks that they would otherwise be unable to do or increases the ease and safety with which tasks can be performed." (World Health Organisation)<sup>1</sup>. This differs from telecare, which is generally used to refer to sensors or alarms used to signal when someone is in distress and needs assistance. This can either happen with the user's prompting by pressing a pendant alarm or automatically for instance, via a falls sensor.

Note: for the purposes of this report Assistive Technology will be used to describe all technology which assists an individual with their care or health needs. Telecare is considered a sub-set of this.

### **3.0 Strategic Context**

The Cheshire East Council Corporate Plan (2016-2020)<sup>2</sup> consists of 6 priority outcomes. The most pertinent of these in relation to Assistive Technology is Outcome 5 'People Live Well and For Longer'. Although Outcome 1 'our local communities are strong and supportive' also has some pertinence (as a support structure is required for Assistive Technology to operate effectively).

The Cheshire Commissioning Plan<sup>3</sup> describes how we as a developing, commissioning council intend to shape services in Cheshire East from 2017-20. Of particular relevance in the plan includes: focussing on early help and prevention to help avoid problems developing; putting in place new, more cost effective approach to delivering adult social care; reducing demand and releasing resources for those who most need them.

The Social Care Outcomes Framework for 2018/19 includes the following relevant domains; enhancing quality of life for people with care and support needs; delaying and reducing the need for care and support; ensuring that people have a positive experience of care and

<sup>&</sup>lt;sup>1</sup> A Glossary of Terms For Community Health Care And Services For Older Persons", 2004 <sup>2</sup> The Cheshire East Council Corporate Plan (2016-2020)

https://moderngov.cheshireeast.gov.uk/documents/s45997/CEC%20Corporate%20Plan%202016%20d.pdf

<sup>&</sup>lt;sup>3</sup>https://moderngov.cheshireeast.gov.uk/documents/s56340/Appendix%20PEOPLE%20LIVE%20WELL%20FOR%20LONGER %20-%20V5%20-8.5.17%202.pdf

support; safeguarding adults whose circumstances make them vulnerable and protecting from avoidable harm.

Under the Care Act 2014, social workers hold responsibility for understanding what is available locally for service users to meet their needs and outcomes. This includes the usage of Assistive Technology.

### 4.0 Ethics

Assistive Technology (and particularly telecare) has the potential to threaten individual users' privacy, autonomy and control particularly for people with cognitive impairments including dementia. This means commissioners must ensure that people who are self-funders or personal budget holders have access to relevant information so they can decide what type of assistive technology service would best suit their needs.

The Social Care Institute for Excellence identify that the ethical issues exist at two particular stages:

•Pre-installation phase: The principal ethical concern here is that services should be tailored to the individual and that when considering appropriate assistive technology the risks of the person coming to harm should be balanced against their right to autonomy.

• Post-installation phase: The main ethical concern during the post-installation phase is that assistive technology information should be collected for a positive purpose and with the consent of the person concerned. The risks of invading individual privacy should be balanced against independence. Assistive technology should not isolate people socially, and the allocation of funding for assistive technology should be fair and just.

Any deployment or strategy for use of assistive technology must take these factors into account.

# **5.0 Referrals**

Table 1: below summarises the kit that can be requested through the current referral process from social care teams.

Table 1: Kit Available Currently

<ul> <li>Lifeline unit</li> </ul>	<ul> <li>Standalone medication dispenser</li> </ul>
<ul> <li>Bed sensor*</li> </ul>	<ul> <li>Care Assist Pager - a portable device</li> </ul>
<ul> <li>Smoke detector</li> </ul>	that provides carers with a means to
<ul> <li>Passive Infrared Sensor movement</li> </ul>	receive instant alerts from a range of
detector - detects changes in	telecare sensors.
infra-red heat when an intruder walks	With a typical range of up to 200m.
into the protected area,	Means individuals and their informal
<ul> <li>Personal alarm wrist</li> </ul>	carers do not have to be connected
<ul> <li>Chair sensor</li> </ul>	to a 24 hour monitoring centre
<ul> <li>Temperature extremes</li> </ul>	service.
<ul> <li>Universal sensor</li> </ul>	<ul> <li>Gas detector plug-in</li> </ul>
<ul> <li>Personal alarm neck (pendant)</li> </ul>	<ul> <li>Bogus Caller alert</li> </ul>
<ul> <li>X10 appliance module for table lamp</li> </ul>	<ul> <li>Falls detector WRIST</li> </ul>
<ul> <li>Carbon Dioxide detector (property</li> </ul>	<ul> <li>Enuresis detector (bedwetting</li> </ul>
with gas only)	detector)
<ul> <li>Telecare medication dispenser -</li> </ul>	<ul> <li>Flood detector</li> </ul>

linked to lifeline <ul> <li>Exit sensor</li> <li>Auto ceiling light</li> <li>Gas detector mains/ hard-wired</li> </ul>	<ul> <li>Key Safe</li> <li>Falls detector multi -clip/pendant</li> <li>Radio pull cord</li> <li>Epilepsy monitor</li> <li>Timed voice prompts</li> </ul>
	<ul> <li>I Imed voice prompts</li> </ul>

# 6.0 Equipment in the Marketplace

The Assistive Technology market is constantly changing with more and more sophisticated devices becoming available over time. At the same time, costs of equipment are also reducing as once advanced technology becomes more commonplace. The list below gives some examples of what else is available. Note: some devices require individuals to have a broadband connection.

- Light sensors turn on when someone is in proximity, and thus can reduce the risk of falling
- Call screening devices only allow trusted callers through
- Bluetooth trackers allows objects such as keys to be located easily
- Visual Impairment devices e.g. OrCam reads text to someone who is partially sighted
- Memo minder plays a personalised message when someone walks by
- Electronic entry Sentry-key device giving access to an individual's home by electronic means (also provides an audit trail)
- Data hubs which record the information sent from sensors and then use this to analyse if an individual's behaviour has changed e.g. Cascade Connected Care, Kemuri.
- Video calling (e.g. in lieu of domiciliary care visits)
- Electronic medication dispensers e.g. Biodose. This can be used with tailored alerts e.g. blinking lights to encourage usage. If the medication is not removed chosen contracts can receive a customised alert.
- Voice activated assistants Amazon Alexa and Google Home
- Smartplugs, remote heating control, and other internet connected devices
- Tablets/smartphones and apps numerous examples of where they can provide support

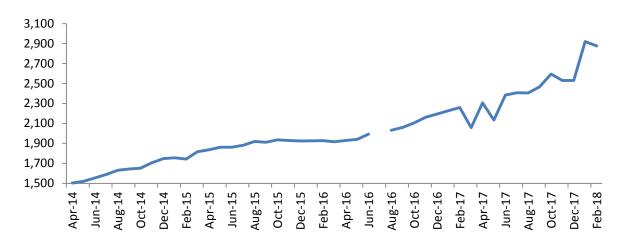
# 7.0 Current Contract

Cheshire East Council's contract with Peaks and Plains consists of installation, maintenance and withdrawal of Assistive Technology, a contact centre, and a carer's response card. Following a referral, Peaks and Plains are responsible for installing the equipment. This is carried out by making an appointment and explaining to the customers how the equipment works. Under the contract terms, installations should be re-visited one week after installation to ensure that the customer/carer is accustomed to the kit and that it is functioning correctly. Peaks and Plains are also responsible for removing the equipment when required, maintaining it, and keeping a stock list.

The contact centre responds to issues with sensors by liaising with the public over the phone/via a device and through home visits where necessary. They also contact other agencies such as the ambulance service when required.

# 8.0 Current Usage

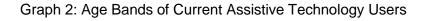
Graph 1 illustrates that usage of Telecare has risen steadily over time, with usage in February 2017 being 2,877. It is unclear how much of this growth has been due to genuine need or is due to lack of control over prescribing behaviour.

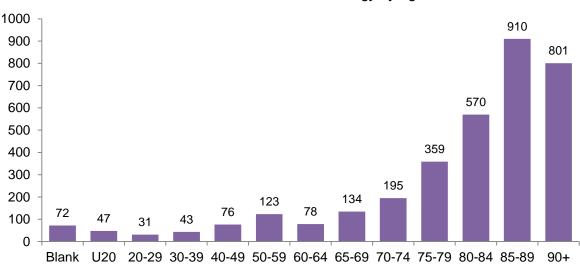


Graph 1: Usage of Telecare over Time

Note: figures were not available for July 2016 hence the gap

Graph 2 below shows current assistive technology users by age band. The peak in the 85+ bands is likely to be due mostly to the charging policy (85 year olds living alone will receive assistive technology for free).





#### Current users of Assistive Technology by age band

It should be noted that a significant tranche of service users receive assistive technology without any other element making up their care package.

### Carer's Card

A Carer's (or ACE) Card provides an emergency contact number for every carer who signs up. This allows an emergency plan to be enacted by Peaks and Plains if the carer gets into difficulty, which will involve them getting in touch with relevant alternative individuals. If there is no alternative support, the SMART Team can be contacted to provide support whilst care arrangements are made. The original aim of putting this in place was to try and reduce pressure on the ambulance service in these scenarios. 1,042 carers currently have a response card, with 45 new carers joining in Q4 17/18.

## 9. 0 Options Appraisal – Procurement

There are four primary components to an Assistive Technology service:

- a) Assessment for equipment
- b) Fitting, Maintenance and Withdrawal at home
- c) Response centre to sensor alerts/ phone calls
- d) Falls pick-up service

As such, the following options have been evaluated:

1. In-house assessment, with external fitting and response (current model)

Full assessment for assistive technology would continue to take place by operational staff. Note: currently this can be via social care assessors or telecare workers.

Equipment would be fitted, checked and maintained by the provider (and withdrawn when no longer needed). A response centre would operate which would contact users whose equipment has triggered alerts e.g. falls sensors and would handle conversations with users deriving from equipment e.g. telecare base unit.

2. Fully external service

Referral by social care assessors would take place to external assistive technology workers who would carry out a detailed technology based assessment. The remaining service is as in 1).

#### 3. Fully external service

As in 2. but the response centre would be commissioned separately.

The opportunity to include a falls pick-up service has also been reviewed independently of these options.

#### 4a. Falls Pick-Up Service

The response centre would also include wider provision for response around falls. This would be when the person does not require medical attention.

4b. No Falls Pick Up Service

This would mean the Clinical Commissioning Groups continue to have full responsibility for these services and for there to be no coordinated approach across the Borough (falls response would purely be confined to Assistive Technology)

### Other Options Considered and Eliminated:

- Fully internal service this does not align with the Council's declared aim of being a commissioning council. It would also require the management of additional services such as a specialist call centre and logistics operation (together with the employment of appropriate staff) which the Local Authority has only modest expertise in. We would also lose the potential economies of scale that would come from an external provider running services across multiple areas.
- No Council funded Assistive Technology Service This would remove the opportunity Assistive Technology provides to service users to have greater independence (including the ability to stay in their own home), choice and control. Moreover, it provides benefits to carers e.g. reassurance. It would also mean a missed opportunity to utilise the savings that Assistive Technology can provide on the costs of care packages.
- 3. Conducting a joint procurement for a Community Equipment and Assistive Technology Service – This might offer potential economies of scale by putting the two contracts together. However, the Community Equipment Service is still under review and no final decision has been taken on the future of in-house provision. It would also require agreement with Clinical Commissioning Group partners which could not be achieved within an appropriate timescale to that required by Assistive Technology procurement.

Moreover, there is a risk that these contracts cannot be easily disentangled if there is a major issue with one contract area. In these circumstances, quickly e-procuring both services at once would be a significant undertaking. Additionally, it would significantly reduce the number of providers able to tender, meaning the ability to achieve value might be reduced.

	Strengths	Weaknesses	Opportunities	Threats
1. In-house assessment, with external fitting and response	-Assessment for Assistive Technology can take place as part of the conventional social care needs	-Without strong control there is a danger that Assistive Technology is either forgotten or given	-To further build expertise amongst operational staff over the advantages of Assistive	-The difficulty of staff keeping up to date with changes in technology. Note: this could be tackled through
Note: assessment via specialist Assistive Technology workers	assessment in which people's outcomes are reviewed. This reduces duplication for the customer.	out indiscriminately.	-To achieve economies of scale through sharing of workforce between areas e.g. call	continued use of specialist Assistive Technology workers.

#### Detailed Options Appraisal

			centre	
2. Fully external service	<ul> <li>-Assessment for Assistive Technology can be conducted by specialists in technology.</li> <li>-Potential economies in assessment being carried out by external provider.</li> <li>-Larger contract may be more attractive to suppliers. Examples from other areas where this has taken place.</li> <li>May prevent/delay access to Social Care/ Health</li> <li>May reduce barriers to accessing Assistive Technology due to perceptions of Social Care Assessments</li> <li>User experience i.e. seamless/single pathway for</li> </ul>	<ul> <li>-Provider may have an incentive to over prescribe equipment although control would happen via contract management</li> <li>-Putting components together risks a smaller number of providers being able to deliver the contract as a whole</li> <li>-TUPE would apply and it would create disruption for staff</li> <li>-Possible loss of early intervention and prevention focus by Social Care teams i.e. becoming disjointed from Social Care Assessments, Reviews and Care Planning</li> </ul>	-To achieve economies of scale through the sharing of workforce between areas e.g. call centre	-Less flexibility to reconfigure service delivery in the future, although some variations will be negotiable.
3. Fully external	Assistive Technology As 2	As 2	As 2	As 2
service but the response service would be commissioned separately	-Separate contracts might increase the opportunity for smaller and more local providers to be involved	-Splitting components risks larger providers being less interested in contract delivery -Transfer of information would need to be handled		
		seamlessly		
4a. Falls Pick-Up service (provided with the externally commissioned response centre. This would also	There is no borough wide joint falls pick up service. Opportunity to instigate something as part of a new	Clinical Commissioning Groups already have commissioned falls pick up services (although	Opportunity to link falls services across the Local Authority and Clinical Commissioning Groups thus	Lack of clarity over long term funding stream for this

deal with non B	Borough wide falls	small scale in	resulting in	
	nitiative	south). There would	enhanced service	
Technology clients)		be a need for these	for local people	
<b>.</b> ,	Clinical	arrangements to		
	Commissioning	end. Discussions	Links to the Fire	
	Groups falls pick up	are in their very	Service Safe and	
	services are not	early stages in	Well Checks.	
	oined up and there	relation to working		
	are potential real	together on this.		
	efficiencies in	0		
li	inking these	The Council would		
to	ogether.	require financial		
		contributions from		
	May result in people	the Clinical		
	with social care	Commissioning		
	needs being able to	Groups to make this		
	ive independently	viable.		
fo	for longer.	<del>.</del>		
.		The evidence base		
	Helps to safeguard	in terms of financial		
l ir	ndividuals.	impact to Adult		
		Social Care needs		
		more research		
4b. No Falls Pick J	Joining up of	There would be a		Without this, risk of
	services does not	missed opportunity		growing numbers of
	necessarily have to	to join up falls pick-		people being
	nvolve the Council	up services and to		admitted to
0	or the Assistive	find system wide		residential care
Т	Technology	economies as a		
C	contract.	result		
	The evidence base			
	n terms of financial			
	mpact to Adult			
-	Social Care			
	requires further			
	research and there			
	s a risk we would commit resources			
	to a service that			
	night not generate			
	significant savings			
	for the Local			
	Authority.			
	-			

#### Financial Modelling - Benchmarking

Note: Full details have not been given of the Local Authority the spend relates to, due to agreements over confidentiality. These values should also be considered a guide only, as it is hard to know what has been excluded or included from figures provided.

Council	Spend/ Model	Provider
A	Total gross expenditure on Assistive Technology for 2017/18 including relevant staffing costs was £1,161,751.	In-house assessment + Housing Association

В	£220K for 17/18 for 2,200 people. Assessments by provider.	Housing Association
С	£230K including equipment and falls lifting service for 1200 people 17/18	Housing Association
D	£504K for 4,900 people for 15/16 (includes falls lifting service)	In-house

The full extent of realisable savings is currently being explored (e.g. by soft market testing).

### Preferred Option:

Whilst discussions have been had with a cross-section of operational managers, further senior input is required to determine the preferred option.

Further work is also required in terms of the falls pick-up service to establish viability and efficiencies. This will include partnership work with the CCGs through the Cheshire East Falls Prevention Group.

	Risk	Likelihood (1-4)	Impact (1-4)	Score
1.	Budget shortfall due to uncertainties in future Better Care Fund finances.	2	4	8
2.	Difficulty of finding providers prepared to pick up different service strands.	2	3	6
3.	Delays in delivery due to complexities involved e.g. potential TUPE	2	2	4
4.	Genuine savings not realised due to lack of precision in assessment process.	1	3	3
5.	Difficulty of understanding our current Assistive Technology asset base	1	1	1
6.	The difficulty in implementing a new contract with sufficient flexibility e.g. due to changes in technology and approach	1	2	2

### 10.0 Risks

# 11.0 Assistive Technology Strategy

An initial draft of an Assistive Technology strategy has been completed which will need further development with partners including CCGs. This will identify future ways in which we can make the best use of technology via a whole systems approach. This will also include a focus on Telehealth. Note: a falls prevention strategy is also under development with a range of partners, which will play into this.

Report Author: Nik Darwin, Senior Commissioning Manager