

## Use of Assistive Technology and Technology Enabled Care in Adult Social Care

To: Adults and Health Committee

Meeting Date: 22 September 2021

From: Charlotte Black, Director of Adult Social Care

Electoral division(s): All

Key decision: No

Forward Plan ref: N/A

Outcome: To present the current and possible future role of Technology Enabled Care by Cambridgeshire County Council.

Recommendation: The Adults and Health Committee is recommended:

- a. To note the findings of this report.
- b. To consider the opportunities to expand and develop the TEC Service and ask for further work to be taken forward within the Business Planning context.

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# 1. Background

- 1.1 The Technology Enabled Care Services (TECS) Team is part of Prevention and Early Intervention of Cambridgeshire County Council (CCC) and sits alongside, Reablement, Enhanced Response, Adult Early Help, Specialist Sensory Services and Occupational Therapy. The main aims of these services are to promote the well-being of citizens by preventing, delaying, or reducing the need for formal community or hospital care and supporting family/informal carers.
- 1.2 TECS support anyone to look at how technology can improve their life. TEC refers to all types of care technology that can support someone to remain living independently. This includes assistive technology, telecare, telehealth, telemonitoring and daily living equipment, more details in Appendix 1. TEC is a less restrictive option than having a formal care package and can facilitate new or existing skills.
- 1.3 A March 2021 joint report by the TEC Service Association (TSA) and Association of Directors of Adult Social Services (ADASS) found that 76% of social care providers say using technology leads to better outcomes for individuals with 66% reporting that it frees up staff time to offer more meaningful support to people. They provided 4 key recommendations to health and social care which can be found in Appendix 2.
- 1.4 Cambridgeshire work on a TEC first approach looking at what technology can be used to help meet people's outcomes. TECS provide a wide range of electronic and technological devices to support people and their carers. Alongside this the team also offer advice, education and guidance to partners and service users around what technology is most appropriate and how it can support them.
- 1.5 In October 2020 TECS launched as a lifeline service, providing 24-hour support through a lifeline button, to work towards being more proactive in preventing escalation of needs in the community. Cambridgeshire County Council provide a funded trial for 6 weeks of the service then the person can carry the cost on. This is a great way to support people to remain independent and introduce TEC into their lives.

# 2. The Current Arrangements

## 2.1 Current Service Structure

- 2.1.1 TECS is commissioned via a Section 75 Agreement with the Cambridgeshire and Peterborough Clinical Commissioning Group (CCG). It is a wholly integrated service responsible for delivering both health and social care outcomes. The budget for 2021-2022 is £1.180m which consists of £936K from the County Council and £244K from the CCG. The budget covers both staffing and equipment costs.
- 2.1.2 An additional £77.9K is contributed to the service annually by NHS England, via the CCG, to fund Environmental Control Systems (ECS) – see Appendix 1. The Lifeline service is funded from £112k Transformation Fund funding + £73k expected income generation to fund budgeted costs of £185k.

2.1.3 The Team consists of:

Team Manager

2 Senior Practitioners

8.06 Full Time Equivalent (FTE) Technologists – 0.5 fixed term and an additional 1FTE fixed term out to recruitment

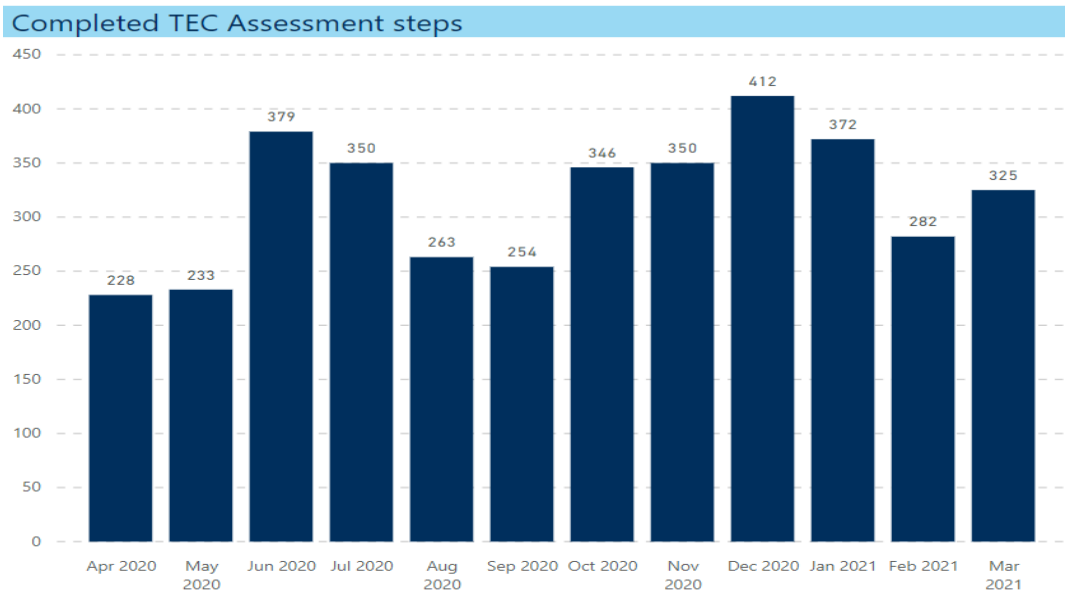
1 Senior Technician

4 Technicians – 1 fixed term

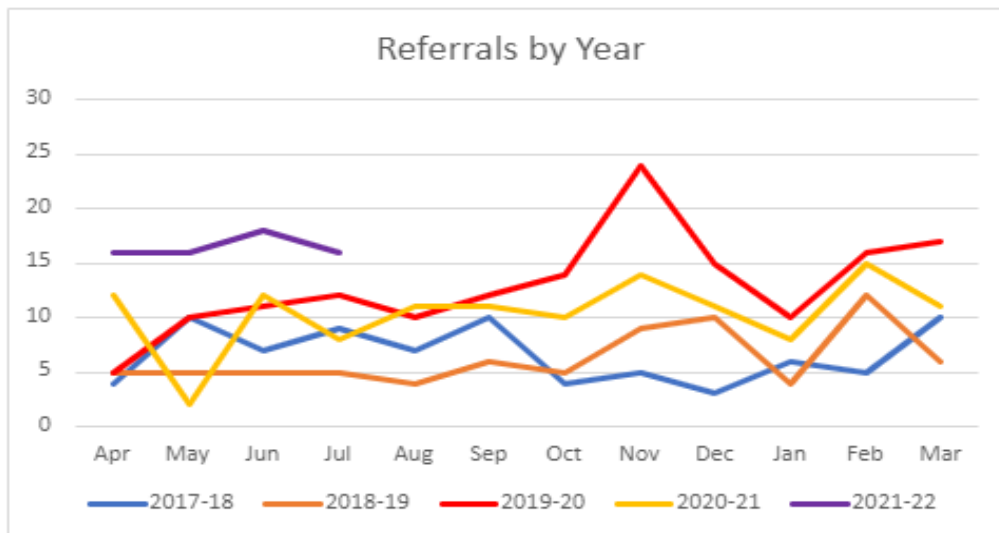
Appendix 1 provides more details.

Alongside this there is 5.61 FTE Business Support funded through TECS and the business support structure.

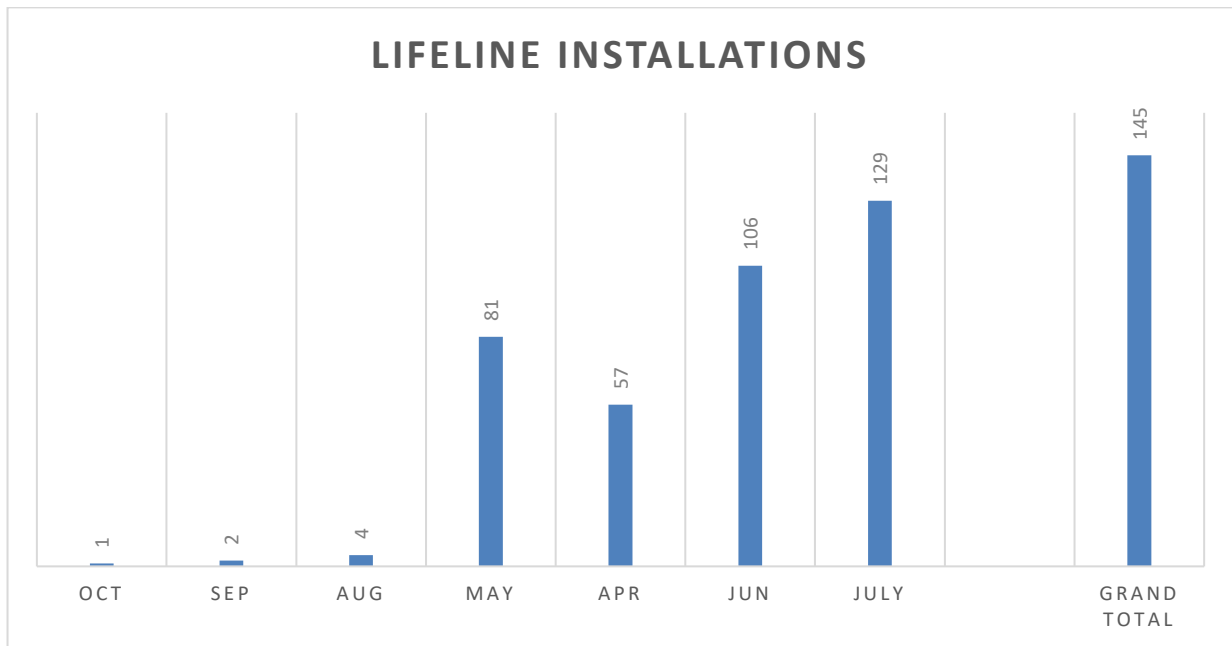
2.1.4 2020/21 TECS completed 3794 assessments with equipment being provided in 91% of cases.



2.1.5 TECS also provide support to children’s services and a business case is progressing to identify funding to increase TEC within services for children with a disability to bring about independence. Referral rates have been steadily increasing:



2.1.6 Since TECS launched as a lifeline provider in mid-October it has been more successful than planned managing to install above targeted number of lifelines every full month since implementation. Target installation were 72 per month, in reality the average has been 93. Target retention rate was 76% and the team are operating at 92% This has been without any active promotion of the service. Urgent Hospital Discharges take priority and are always scheduled for same/ next day where possible, with general referrals being prioritised and fitted into installer’s schedules where possible.



## 2.2 Current TEC Offer

2.2 TECS provide information free of charge to individuals on a loan basis delivered through our equipment provider NRS Healthcare. The Team have close links within the TEC industry and trial new equipment when it hits the market to see if this works to meet needs and they hold a variety of different stock from different providers. The team work closely with both their call centre Astraline, and different technology companies to find the products that are simple to use and provide the functionality they require. They have just completed a period of trialling and testing with Chiptech and are now happy to have a digital offer ready for the digital switchover in 2025.

2.2.2 TSA Membership – The TSA is the industry and advisory body for technology enabled care in the UK. The TSA provide events and give expert guidance to enable organisations to keep up in the changing world of technology. CCC is one of the 56 local authorities (LA) that appears on the TSA search for TEC providers (TSA, 2021) and in 2019 the Government reported there to be 343 LA’s in the UK (GOV.UK, 2019) so under 17% have chosen to become providers.

2.2.3 Huddles – Weekly TECS Huddles have been introduced within the Council for social care staff to gain information and advice. These huddles are open to staff both within Cambridgeshire County Council as well as CPFT Staff. Since they started in August 2020, 449 staff have attended the huddles.

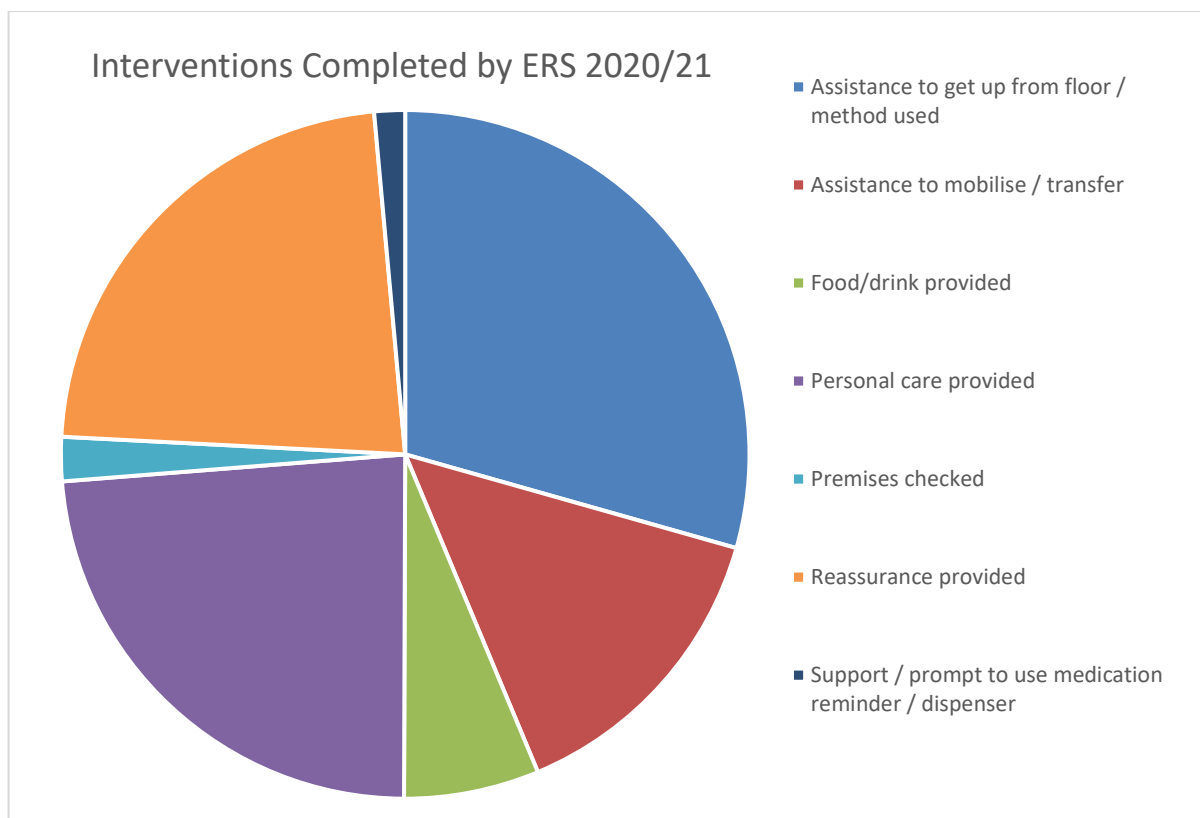
#### 2.2.4 Recent Projects -

- Social Care Digital Innovation programme - The LGA in collaboration with NHS Digital grant funded digital innovation in social care. In 2019-21, 12 councils were selected for the third wave of funding, with six progressing to implementation. TECS was a part of this project developing TECHKNOW, an online resource supporting adults with learning disabilities and carers find technology to help them be more independent.
- Social Care Digital Innovation Accelerator (SCDIA) Councils co-funded and co-developed three Social Care Digital Innovation Accelerator (SCDIA) projects in 2020/21. Cambridgeshire County Council were part of a Virtual support project – AutonoMe. This collaborative project set out to help people with learning disabilities live more independently, particularly after the Covid pandemic. This was done by developing and implementing virtual support through a provider that guides people through information and learning materials to develop their employability and better manage their mental health and wellbeing.

#### 2.2.5 Recent Media coverage – The CCC TECS team are often approached by media or other leaders within the market to provide information or advice some recent examples are below:

- LGA Awards – TECS have been shortlisted as finalists in the category Best use of technology. “The LGC Awards are about recognising the most exceptional local government talent” (Editor Nick Golding)
- Government Events Conference – TECS have been approached to be a guest speaker at the Government Events’ upcoming ‘The Digital Inclusion Conference 2021: Making Digital Services Accessible for All’. Alongside this they have been asked to publish some literature for their learning portal
- Healthwatch – A recent presentation was given at the Annual General Meeting for Healthwatch Cambridgeshire and Peterborough about the use of TEC and how it can support individuals and their carers, this is now available for future use on their YouTube page.

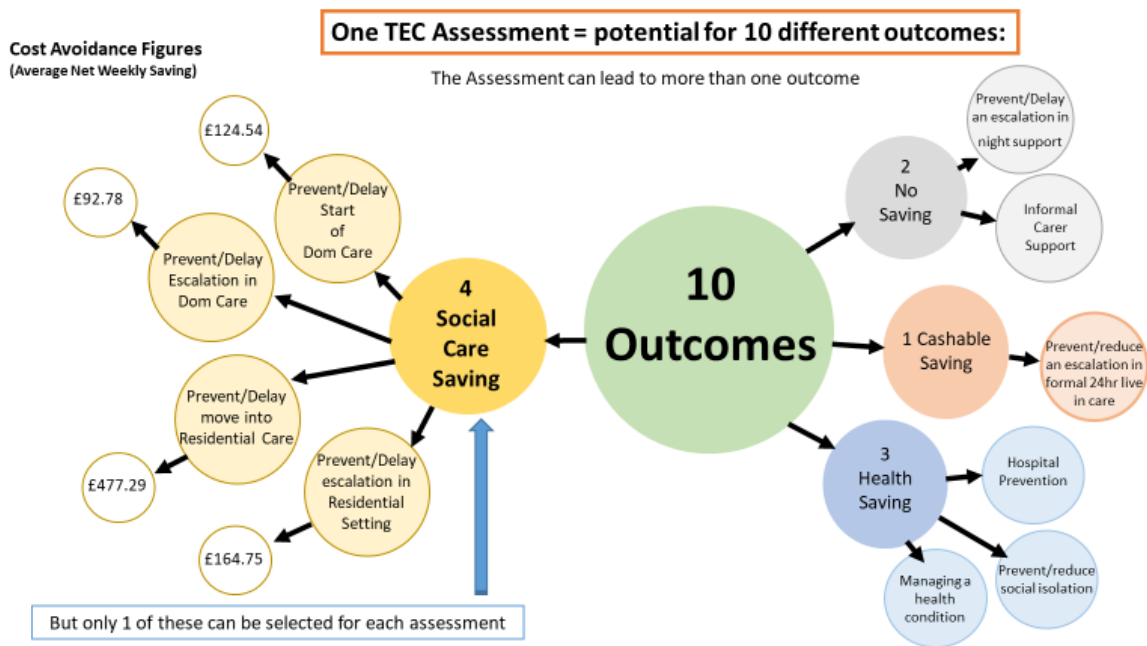
#### 2.2.6 Enhanced Response Service (ERS) The TEC service links with the Enhanced Response Service (ERS) who sit alongside our Reablement Service, both Care Quality Commission (CQC) registered. In 2020/21 ERS avoided ambulance call out in 3,295 cases, supported informal carers in 132 cases and prevented need for a package of care or placement in 120 cases, enabling people to remain at home. The support from ERS is more than just support following a fall, as can be seen here.



2.2.7 The Enhanced Response service can refer on to our reablement team for short term care support to help the individual get back to independence, or raise any concerns about escalation in need with family, medical staff or providers. This means by having the TEC link the individual is getting the right support when they need it without having to re refer to services.

### 2.3 Current Performance Outcomes

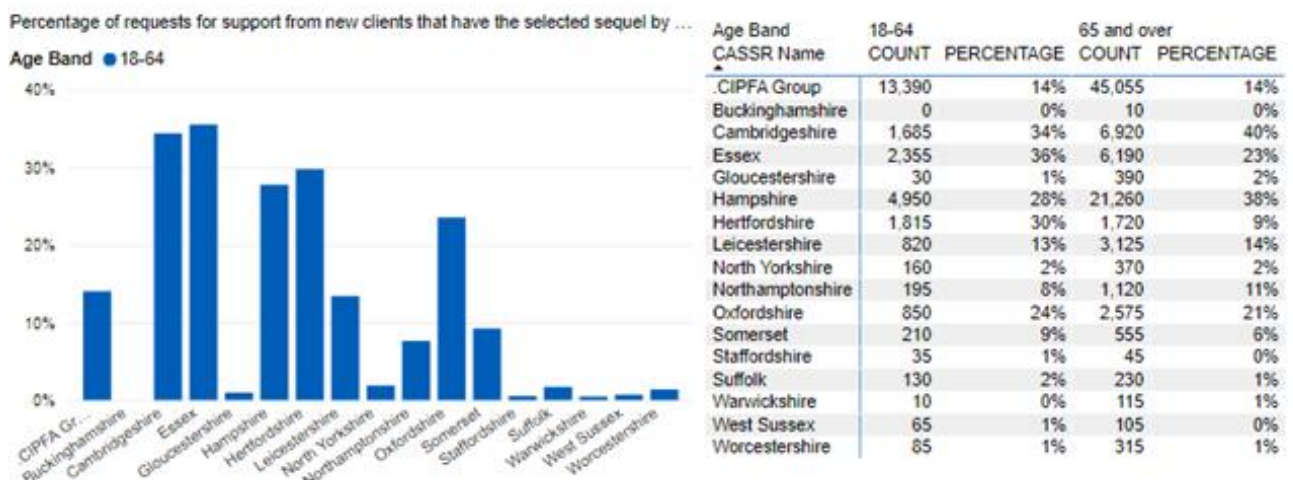
2.3.1 Every TEC Assessment looks at what the individual would like to achieve as an outcome and works to match equipment to this outcome. At the end of the assessment process the technologist will make a decision about what outcome has been achieved. There are 10 possible outcomes in total, 4 of these outcomes provide a cost avoidance, the other 6 provide system savings but these are not currently costed. Savings are calculated by using a formula that assumes;  $\text{Net Weekly cost of care prevented} \times \text{average number of weeks where cost remains same} \times (100-12\%)$ . The 12% is to account for the number of people receiving a TEC intervention that would not be financially eligible for a council funded care package.



2.3.2 In 2020/21 it was calculated £3.66 million of avoided costs attributable to TEC. There were 1,996 outcomes resulting in hospital prevention and 1,053 supporting informal carers. This shows that TEC is not just supporting adult social care but the system in general.

2.3.3 The 2018 UTOPIA study of local authority usage of care technology concluded that whilst basic technology had been considered most local authorities had not taken this far enough. It stated that the focus was often on the type of technology not on outcomes of service users and the CCC TEC Service has worked hard to increase the focus on positive outcomes and enhancing people's quality of life. At the time of the report Cambridgeshire was found to be one of only 7 local authorities that had a dedicated TEC strategy. Further Information can be found in Appendix 3.

2.3.4 2019/20 benchmarking on percentage of new client contacts that result in low level support (which is where Cambridgeshire count TEC) and where Cambridgeshire has high rates for both younger and older people compared to CIPFA (most similar) Councils



### 3. Future Development

- 3.1 The following are possible areas for future development. These have not yet been fully costed but have been included to give an indication of opportunities going forward should the Council decide to increase its investment in TEC.
- 3.2 TEC is a rapidly growing and developing service and it is important to ensure the service remains up to date with market demands. The experience of the pandemic has increased the focus on prevention and integrating digital solutions into both health and social care. Alongside the trialling and testing of new equipment the team are currently focusing future development around 4 key themes
- Increase in communication and education
  - Increasing support at earlier stages
  - Promotion and expansion of the service to meet demand
  - Increasing carers support through TEC.
- 3.3 Below are current plans to meet these themes:
- 3.3.1 **Increase in communication and education**  
Update of Smart Flat and open usage to public – TECS currently have a smart flat which they equip and set up for staff to see different equipment being used within a home for teaching purposes. Since the COVID pandemic began, the flat has not been in use and some equipment is now out of date. The Service plans to revamp the flat with new and future technology and widen the scope to allow members of the public to book and attend training events.
- 3.3.2 **Increasing support at earlier stages**  
Outbound calling in D2A - TECS are currently looking to start a trial of outbound calling within the prevention and early intervention services. Outbound calling is the option of providing calls to people as automated messages, reminders, wellbeing calls or check calls. The TECS offer will provide a more advanced service allowing for our call centre to follow up on automated calls when there is an inappropriate or no response. If support is required the call centre can alert family, the Enhanced Response Service or emergency services. Outbound calling can be used to support those at early stages or as an alternative to traditional care and support packages.
- 3.3.3 Other local authorities have been able to use similar services in the following circumstances:
- Calls to customers at risk of loneliness e.g. on Birthday or Christmas, provide information on local befriending services, encourage attendance at local events and promote social engagement. This is usually a chargeable service
  - Automated messaging of universal public health messages e.g. keeping warm in winter, coping in hot weather, uptake of flu vaccinations, falls prevention advice
- 3.3.4 Costs for the Automated Service are currently at:
- £25.00 + Vat one-off set-up per customer.
  - Automated call £0.41 + Vat each
  - Alarm call £0.77 + Vat each



3.3.5 Children's Services – Children's services have made TEC a priority for this year to look at how they can increase the use of technology in the support of children. TECS are currently working with children's service to scope the level of demand and resource required to meet demand as well as potential outcomes for children. This also includes the integration of TECS onto Children's case recording system to improve transparency.

### **3.4 Promotion and Expansion of the service to meet demand**

3.4.1 Promotion of lifeline service – As previously discussed the lifeline service has surpassed expectations with regards to uptake and retention rates. This has been achieved without any outside promotion. Future development would include promotion to outside agencies through media and presentations. We have already been approached by local radio and health colleagues with regards to promotional opportunities but have currently not taken these up due to capacity limitations within the service.

3.4.2 TSA Accreditation - TECS are currently a member of the TSA. It is possible for lifeline services to become TSA accredited; Accreditation sets out KPIs for lifeline providers. This would be of benefit to the organisation as we can ensure the governance of the service through control activities, develop our risk response through risk management as well as transparency and accountability to our customers of our performance against KPI's. Currently the TECS reportable KPIs are with regards to the connections and retention rates not service delivery. TECS are hoping to move towards accreditation in 2022. Current cost of Accreditation is £2,460 p/a. Further details can be found in Appendix 4.

3.4.3 Service Expansion - With ever increasing demand on the service this is resulting in capacity concerns with regards to staffing and equipment usage. As the demand for the service continues to grow and develop, the structure around this will be needing to be increased. Future considerations need also to be given to the management structure, use of enhanced response services as well as project management, equipment testing and business intelligence to help identify growth opportunities for service.

3.4.4 Alongside this there is potential to grow the lifeline service, we know the TECS Lifeline service provides additional features to other services and a more rounded service to its users, such as use of the enhanced response service, limiting need for emergency response, and more proactive prevention through earlier identification of increasing need. It is therefore important to consider how the lifeline service expands further can support other providers locally.

### **3.5 Increasing carers support through TEC**

Carers Joint Delivery Plan – Currently the carers delivery plan has a task to develop a range of Digital and Technology enabled care and support for Carers and review the Digital Resilience for Carers e.g. access and affordability. TECS are set to review the current offer provided to carers and how this can be strengthened in 2021/22.

## **4 Evaluation and Feedback on the Service**

4.1 Overall feedback on the service is extremely positive and included below is a variety of feedback and case studies highlighting this. There are times however when TEC is not appropriate as an option. This can sometimes apply to people with advanced dementia

who are likely to turn off any electrical devices and for those who often leave their home and have no one to attend. This is why having a dedicated TEC service allows for in-depth assessment of what is suitable.

## 4.2 Case Studies:

### 4.2.1 Using Alexa for an individual following a Deafblind Specialist Assessment

A Rehabilitation Worker who is part of Cambridgeshire’s Sensory Services Team, highlighted that a service user was slowly becoming more withdrawn due to significant hearing and sight loss despite living with her very attentive and caring daughter. Julie said: “The simple addition of a personal listener, a device used to enhance sound and reduce background noise, improved the situation immediately. The team carried out a home audiology visit and arranged for new hearing aids.

### 4.2.2 Use of Robotic Cat for someone with Dementia

Mrs D was a lady with advancing dementia, her family had been unable to see her as much due to the pandemic. They had noticed she was becoming withdrawn and not interacting with her carers, she would spend the day staring out the window. She was also becoming more reliant on her right arm and using her left arm less and less. The TECS team provided her with a robotic cat. Mrs D has become attached the cat, naming it and showing it off to visitors. She interacts with the cat stroking it with both arms and carrying it around her home. Family report ‘it’s like seeing my mum back’.

### 4.2.3 Use of GPS Tracker to support someone to remain at home

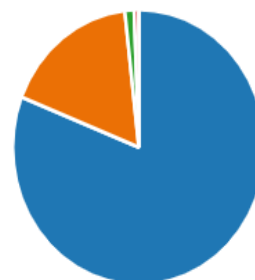
Mr F was a gentleman with advancing Alzheimer’s who had taken to leaving the property and getting lost, family had placed him into emergency 24hour care as they were unsure how to support him going further. TECS supplied him with door sensors so family would be alerted when he was leaving the property, he was then provided with a GPS tracker so family could monitor him out walking and track his location if he did not return within the usual time. Mr F was able to remain at home as family carers felt supported and his was supported to keep his independence with daily walks.

## 4.3 Recent Customer Feedback:

2. How likely are you to recommend our service to friends and family if they need similar care and/or support?

[More Details](#)

<span style="color: blue;">●</span> Extremely likely	136
<span style="color: orange;">●</span> Likely	29
<span style="color: green;">●</span> Neither likely nor unlikely	2
<span style="color: red;">●</span> Unlikely	1
<span style="color: purple;">●</span> Extremely unlikely	0

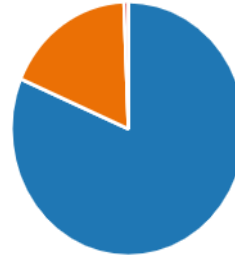


## 8. How do you feel about our service?

[More Details](#)

[Insights](#)

Excellent	136
Good	30
OK	0
Poor	1
Very poor	0



*“She also said that she is very pleased with the whole experience of having the lifeline and says it gives her peace of mind and makes her feel safer.”*

*“You, Ben and your organisation are a beacon of light to people like me in times of worry and concern for our loved ones.”*

## 5. Alignment with corporate priorities

5.1 Communities at the heart of everything we do:

5.2 A good quality of life for everyone  
There are no significant implications for this priority.

5.3 Helping our children learn, develop and live life to the full  
There are no significant implications for this priority.

5.4 Cambridgeshire: a well-connected, safe, clean, green environment  
There are no significant implications for this priority.

5.5 Protecting and caring for those who need us

## 6. Significant Implications

6.1 Resource Implications  
There are no significant implications within this category.

6.2 Procurement/Contractual/Council Contract Procedure Rules Implications  
There are no significant implications within this category

6.3 Statutory, Legal and Risk Implications  
There are no significant implications within this category

6.4 Equality and Diversity Implications  
There are no significant implications within this category.

6.5 Engagement and Communications Implications  
There are no significant implications within this category

- 6.6 Localism and Local Member Involvement  
There are no significant implications within this category.
- 6.7 Public Health Implications  
There are no significant implications within this category
- 6.8 Environment and Climate Change Implications on Priority Areas  
There are no significant implications within this category
- 6.8.1 Implication 1: Energy efficient, low carbon buildings.  
There are no significant implications within this category
- 6.8.2 Implication 2: Low carbon transport.  
There are no significant implications within this category
- 6.8.3 Implication 3: Green spaces, peatland, afforestation, habitats and land management.  
There are no significant implications within this category
- 6.8.4 Implication 4: Waste Management and Tackling Plastic Pollution.  
There are no significant implications within this category
- 6.8.5 Implication 5: Water use, availability and management:  
There are no significant implications within this category
- 6.8.6 Implication 6: Air Pollution.  
There are no significant implications within this category
- 6.8.7 Implication 7: Resilience of our services and infrastructure and supporting vulnerable people to cope with climate change.  
There are no significant implications within this category

Have the resource implications been cleared by Finance?  
Name of Financial Officer: N/A

Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the Head of Procurement?  
Name of Officer: N/A

Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer?  
Name of Legal Officer: N/A

Have the equality and diversity implications been cleared by your Service Contact?  
Name of Officer: N/A

Have any engagement and communication implications been cleared by Communications?  
Name of Officer: N/A

Have any localism and Local Member involvement issues been cleared by your Service Contact?  
Name of Officer: N/A

Have any Public Health implications been cleared by Public Health?  
Name of Officer: N/A

If a Key decision, have any Environment and Climate Change implications been cleared by the Climate Change Officer?  
Name of Officer: N/A

## 7. Source documents guidance

7.1 None

## **Appendix 1**

### **GLOSSARY**

**Assistive technology** – technology products or devices that support a person to perform/maintain functions

**Telecare** – a monitoring service, often called a lifeline, to support people living at home using an alarm unit, pendant and 24/7 monitoring support

**Telehealth** – delivery of health related services include medical care, support, information and education through digital communications

**Telemonitoring** – remote monitoring of people's needs through use of devices transmitted to a health or care provider

**Environmental Control Systems (ECS)**- are devices which assist people who have severe physical impairments enabling them to control their surroundings – for example, controlling heating, remotely answering a door intercom / releasing a door to allow carers in, opening and closing curtains, switching lights on and off. The devices can be controlled by switches that respond to even the slightest movement – eg an eye blink might be used by someone who might be, in all other respects, completely paralysed. Funding for these systems has been controlled centrally for many years – first through Health Authorities and now via NHS England. Cambridgeshire are keen to align their ECS offer with the rest of the service but the baseline funding for ECS is extremely small (only £77K per year to cover new installations and ongoing maintenance) so this has to be carefully managed.

**Technologist** – Practitioners completing assessments for TECS

**Technician** – Installs specialist equipment and lifelines for TECS

## **Appendix 2:**

ADASS and TSA report March 2021. Key recommendations:

1. Technology enabled services need to be proactive and co-produced with people, their families and carers.

2. Digital infrastructure, skills and approaches in adult social care must improve so individuals and the care workforce can maximise digital opportunities.

3. People must own and control their health and social care data and enable access by the right people, at the right time.

4. More collaboration is needed in care and support across all levels, so services and policies are joined-up and contribute to the wider wellbeing of people, their families and carers.

Full report can be found at:

[adass\\_tsa\\_commission\\_report\\_integrating\\_technology\\_into\\_social\\_care\\_final\\_pages.pdf \(tsa-voice.org.uk\)](https://www.tsa-voice.org.uk/adass_tsa_commission_report_integrating_technology_into_social_care_final_pages.pdf)

**Appendix 3:**

Inform Report. Care technology landscape Review by Soctim can be found below:

[Care-Technology-Landscape-Review-Socitm-June-2019-Report-for-Essex-CC.pdf  
\(telecareaware.com\)](https://telecareaware.com/Care-Technology-Landscape-Review-Socitm-June-2019-Report-for-Essex-CC.pdf)



## **Appendix 4:**

Below are the TSA standards for Accreditation:

### ***TSA standards for Assessment and installation***

#### ***Referral***

- 5 out of 10 referrals completed within 2 working days – remaining referrals processed within 5 working days

#### ***Installation of Telecare***

- 9 out of 10 URGENT installations completed within 2 working days of initial referral - remaining installations completed within 5 working days of initial referral
- 9 out of 10 NON-URGENT installations completed within 15 working days of initial referral - remaining installations completed within 20 working days of initial referral
- 9 out of 10 COMPLEX installations completed within 15 working days of initial referral – remaining installations completed within 20 working days of initial referral

#### ***Installation of Telehealth***

- EVERY installation to be completed by the end of the next working day on receipt of a completed Telehealth plan

#### ***Repairs***

- 9 out of 10 CRITICAL faults (i.e. where user safety is compromised), repaired or equipment replaced within 24 hours of the fault being reported – remaining critical faults within 48 hours of the fault being reported
- 9 out of 10 NON-CRITICAL faults repaired or equipment replaced within 5 working days of the fault being reported - remaining noncritical faults within 10 working days of the fault being