Herefordshire Council

Appendix 1

TEC Programme project detail

The aims and objectives of the original TEC Programme have been developed to support the new enhanced programme:

- To develop a proactive approach to technology enabled living, moving from a reactive 'monitoring and response' provision to the provision of technology enabled living that is personalised, proactive and predictive to include but not limited to:
    - A proactive calling model e.g. wellbeing checks, isolation contact, medication reminders, health and wellness advice.
    - A model of reassurance calling / video calls for users to be able to initiate when reassurance is needed.
    - Development of a base lifestyle / risk monitoring model to identify concerns and trigger preventative care and support interventions.
    - Development of advice and support pathways to compliment the new model of care.
    - Development of a reassessment, escalation and response model.
- Enable self-care and wellness to support people to take an active role in managing their wellbeing with positive lifestyle choices.
- Provide reassurance to family, friends and carers and support independence for longer.
- Keeping users engaged in their community, fostering social inclusion across the county.
- Enhance the existing Telecare equipment range to support a proactive and preventative service model to work alongside the traditional reactive model.
- Development of a specialist proactive and preventative multi-disciplinary team to support initial assessment and prescription of equipment, analyse data, manage escalation processes and support re-assessment of care requirements identified from new proactive monitoring systems.

In order to achieve these aims and objectives, we have developed 5 projects that will sit under the TEC Programme:

I. **Telecare digital migration (Analogue to digital switch) project** - The technology that is currently used to make traditional phone calls is changing. The equipment that runs the landline network (the PSTN) is becoming obsolete and will reach the end of its life by December 2025. It will be replaced with a digital network, also called an 'IP network'.

A switchover plan has been developed by providers that will see the whole network moved to the new IP network before December 2025. Telephone providers have already started to replace the old copper analogue lines and upgrade exchanges so if a user changes telephone provider or upgrades their service, they may already be offered an IP voice service.

The alarm unit that runs the Telecare equipment is currently plugged into the landline network and uses PSTN lines to call the alarm receiving centre (ARC). Going forwards, the Lifeline unit will need to plug straight into the internet router and will use internet lines to make calls. Calls placed using the internet are known as Voice over Internet Protocol or VOIP.

In order to continue to provide our existing reactive Telecare Service which is the base of the new predict & prevent model of care, we need to upgrade our infrastructure to work on the new IP networks. This project will deliver the infrastructure upgrade that is required.

Moving to a digital infrastructure will also bring many additional benefits including access to real time data which will support a more efficient delivery model within Social Care and is expected to deliver significant long term savings.

II. **Predict & prevent model of care project** - this project will deliver a base predict & prevent service model contracting a specialist alarm receiving centre (ARC) and develop and deliver a new specialist in-house predict & prevent team.

Predict & prevent services use technology to monitor everyday activities such as movement, temperature, night-time activity and eating and drinking habits and using the data captured create a baseline of each individual service-user's normal pattern of behaviour in their home. When a person's behaviour deviates from that baseline, such as a decrease in movement or reduced fluid intake, it may be an indication of a possible deterioration in health or wellbeing.

With the deviation flagged, the ARC can provide initial intervention if appropriate or alerts can be sent to the specialist team along with access to detailed reports of behaviour, enabling follow-up interventions to be made quickly by appropriate staff. This highly personalised approach means that the solution is uniquely appropriate to the individuals needs which enables prolonged independence at home for service users.

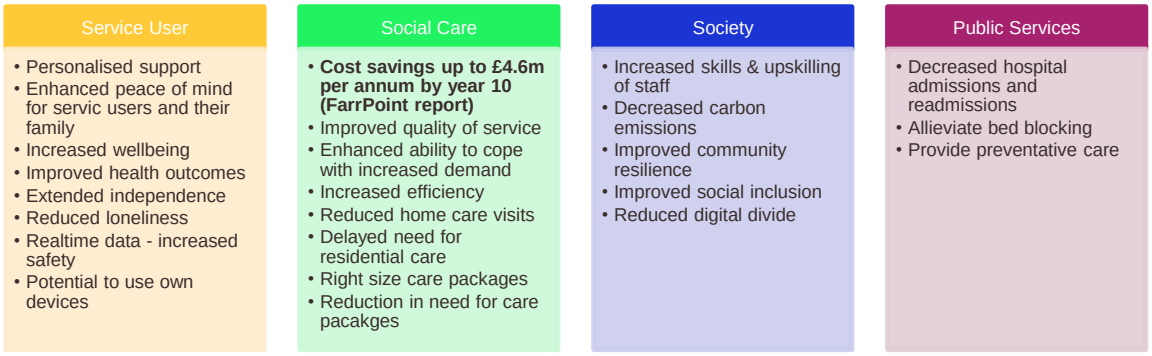
The data generated is key to supporting front-line care resources, allowing them to manage those that need care much more effectively and safely. Firm evidence allows more effective allocation of resources, which ultimately leads to an increase in the number of people that can be cared for without reducing the quality-of-care provision in any way.

As well as decreased incidences of unnecessary and costly callouts, proactive technology also reduces the likelihood of more complex and costly treatment or admission to hospital. The result is that in conjunction with improved care, there's a reduction in the strain being placed on the wider health and social care services outside the home, enabling better clinical pathways.

This model will also encourage self-care and self-management by giving the user access to their own data and provide reassurance to families, friends and carers who will be able to see everyday activity changes. Interventions will include community based options that will be developed through partnerships.

The below link gives some additional information on the model:
https://www.tsa-voice.org.uk/news_and_views/tsa-member-news/powering-a-proactive-approach-to-home-care/

Key benefits to this model:



Industry case studies

Predict & prevent is a relatively new model and in Hertfordshire and Surrey is in its infancy. They have collected some examples of success but these have yet to be costed:

Reason for TEC / Outcomes	Case Study info
➢ Monitoring recovery following fall ➢ Package of care reduced	• Mrs M lives alone with health challenges including high blood pressure, poor mobility, poor hearing, and a heart condition. Was receiving 3 calls a day. • Cascade was installed to monitor safety and reduce risks as she had suffered recent falls. • Hoped that the kit would provide reassurance to the family. • It showed her mobilising more and preparing meals. • Daughter accessed the flight deck frequently and was reassured. • Calls reduced in her 4th week of reablement from 3 to 2 per day.
➢ Purposeful walker, suffering from Korsakoff syndrome ➢ Anxiety from high care package ➢ Package of care reduced	• Mr R is in his 60s with Korsakoff syndrome (presenting as dementia), acquired brain injury and dysphasia. • Assessed on discharge from hospital as requiring 12hr daytime care and care placement also considered. • 12-hour care was causing him anxiety • Remote monitoring system installed • GPS lifeline alarm was also installed to locate him as he is a purposeful walker. • Remained at home and care reduced from 12hr to 3 visits (1.5hr) then 2 visits (1hr) per day.
➢ To allow son to return home ➢ Increasing mum's independence ➢ Prevent/avoid further health issues for son due to stress ➢ Whole system savings	• Mr X is in his 70s and has had a stroke. • Moved in with his circa 100-year-old mum due to concerns about her increasing frailty. • Upon discharge he was told that she needed 24-hour care. • Remote monitoring system installed, and he was given support to use the dashboard. • Returned home as he's now able to assure himself of his mum's daily level of activity and respond proactively. • Stress levels reduced and potentially contributed to prevention of further health incident (stroke) and his mum's care was reduced to 2 hours per day.

➢ Monitoring recovery following fall ➢ Right-sized package from 24-hour care	• Mr W suffers from poor sight, hearing and dementia and was discharged from hospital following a fall. • He was given a 24-hour care package as the ward observed frequent toileting needs at night. • Cascade was installed and his lifeline alarm was upgraded to a fall detector. • Detected he is very mobile during the day and has hourly visits to the bathroom at night but is safe to do so. • Bathroom visits investigated; no medical issues found. • His package has been reduced to two visits per day, reducing the cost to ASC

III. **Digitally enhanced care home provision pilot** - as well as supporting technology use within the community, this programme will look at how predictive technologies can be used to support residents within council owned care homes, developing a blueprint for technology good practice.

This project aims to introduce technology to ensure the best quality of life for individuals while helping them achieve the maximum independence possible. Technology will play a leading role in building a bank of data that can analyse trends to identify people's changing needs. This will support early detection of changes in clinical needs and reduce the burden on primary care.

IV. **Online technology information and support directory and self-assessment portal** – in order to underpin the new model of care, an online technology portal will be developed. The portal will allow users, carers and staff to access a range of information and advice, including:

- Information on Council Telecare and Technology Services;
- Condition specific technology advice and support;
- Signposting to specialist sites and useful contacts;
- A feedback area for users to provide feedback on TEC they have used and how it worked for them;
- TEC development – up and coming developments of interest;
- Questions about TEC – area where questions can be posted about technology and answered by others;
- Volunteer section – where users can volunteer to support technology trials in Herefordshire;
- What's happening in Herefordshire in TEC – signposting to TEC support workshops, classes, talks or groups etc.

Other options are also being considered to include a live chat function to support questions around Telecare and TEC.

The online technology information site will also signpost to a self-assessment site where users can assess themselves or their family for technologies and equipment to support independence. The site will also be used by staff at the assessment & demonstration centre to provide supported self-assessment for technology whilst users are onsite.

V. **Technology training and development programme** - in order to ensure staff can maximise the benefits of technology for users, this project will focus on developing a module

based learning and development programme that can provide customised training to suit all roles and responsibilities.

A training and development programme will increase employee motivation and job satisfaction as well as support increase employee retention.