

A. PROJECT SUMMARY INFORMATION

Project Name:	Technology Enabled Care Service Model		
Project ID (if known):	18 ST 125.6		
Cabinet Member:	Cllr Holland	Lead Officer (Sponsor):	Terry Dafter
Directorate(s):	People Growth and Regeneration	Associated service areas:	Adult Social Care Accessible Homes Bristol Operations Centre
Report lead author(s):	Mandate: Oliver Buell, Project Manager Outline Business Case: Oliver Buell, Project Manager Full Business Case: Oliver Buell, Project Manager		
Report recipients:	Terry Dafter, Stephen Beet, Pete Anderson, Tom Gilchrist, Neil Sinclair, Merlin Jones, Sarah Hooper, Amy Kedward, Alison Barnfather, Lee Ford, Lorna Laing, Sam Marsh, Ian Gale, Will Lewis, Eric Andrews, Gina Smalley		

B. ORGANISATIONAL CONTEXT

Alignment to corporate theme(s):	Empowering and caring: Working with partners to empower communities and individuals, increase independence, support those who need it.					
	<ul style="list-style-type: none"> Provide 'help to help yourself' and 'help when you need it' through a sustainable, safe and diverse system of social care and safeguarding provision, with a focus on early help and intervention. 					
	Well-connected: Taking bold and innovative steps to make Bristol a joined up city. <ul style="list-style-type: none"> Make progress towards being the UK's best digitally connected city. Reduce social and economic isolation and help connect people to people. 					
Project category:	<input checked="" type="checkbox"/> Saving delivery	<input checked="" type="checkbox"/> Compliance/Statutory	<input checked="" type="checkbox"/> Risk reduction			
Council Budget saving delivery:	<input checked="" type="checkbox"/> Cost avoidance <input checked="" type="checkbox"/> Improved outcomes <input checked="" type="checkbox"/> Enabling					
	This project is part of the Better Lives programme.					
	Budget reference: FP33					
	Savings description (as stated in approved budget): We'll be looking to deliver a transformation programme to change our adult social care services in order to ensure a more joined up and efficient service for the city. The programme will focus on ensuring people have the right level of care and ensuring residents can maximise their own independence, ensuring commissioning decisions can be better investigated to ensure good investment; and making sure our teams can work more efficiently and effectively with our partners.					
	<input type="button" value=" "/>	19/20	20/21	21/22	22/23	Full yr

		£'000s	£'000s	£'000s	£'000s	recurring £'000s	
Saving	4,213	2,000	0	0	6,213		

C. DOCUMENT CONTROL

Sections complete:	<input type="checkbox"/> Mandate <input type="checkbox"/> Outline Business Case <input checked="" type="checkbox"/> Full Business Case																																															
Document status:	<input type="checkbox"/> Draft <input checked="" type="checkbox"/> Final																																															
Document owner:	Oliver Buell																																															
Version control	<table border="1"> <thead> <tr> <th>Version</th> <th>Author(s)</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>V00_01</td> <td>Oliver Buell</td> <td>First draft</td> <td>14/03/18</td> </tr> <tr> <td>V00_02</td> <td>Oliver Buell</td> <td>Update to new template and additional information added, incorporated comments received from Business Partners and Service Director</td> <td>22/03/18</td> </tr> <tr> <td>V01_00</td> <td>Oliver Buell</td> <td>Mandate approved by Programme Board</td> <td>23/04/18</td> </tr> <tr> <td>V01_01</td> <td>Oliver Buell</td> <td>OBC first draft</td> <td>05/07/18</td> </tr> <tr> <td>V01_02</td> <td>Oliver Buell</td> <td>Updated to include professional views</td> <td>13/07/18</td> </tr> <tr> <td>V02_00</td> <td>Oliver Buell</td> <td>OBC approved by Programme Board and outstanding professional views incorporated</td> <td>23/07/18</td> </tr> <tr> <td>V02_01</td> <td>Oliver Buell</td> <td>FBC first draft</td> <td>20/01/19</td> </tr> <tr> <td>V02_02</td> <td>Oliver Buell</td> <td>PAC comments and input</td> <td>17/02/19</td> </tr> <tr> <td>V02_03</td> <td>Oliver Buell</td> <td>Professional views incorporated</td> <td>19/02/19</td> </tr> <tr> <td>V02_04</td> <td>Oliver Buell</td> <td>Finalised financial model and added further detail for implementation plan</td> <td>05/04/19</td> </tr> </tbody> </table>				Version	Author(s)	Description	Date	V00_01	Oliver Buell	First draft	14/03/18	V00_02	Oliver Buell	Update to new template and additional information added, incorporated comments received from Business Partners and Service Director	22/03/18	V01_00	Oliver Buell	Mandate approved by Programme Board	23/04/18	V01_01	Oliver Buell	OBC first draft	05/07/18	V01_02	Oliver Buell	Updated to include professional views	13/07/18	V02_00	Oliver Buell	OBC approved by Programme Board and outstanding professional views incorporated	23/07/18	V02_01	Oliver Buell	FBC first draft	20/01/19	V02_02	Oliver Buell	PAC comments and input	17/02/19	V02_03	Oliver Buell	Professional views incorporated	19/02/19	V02_04	Oliver Buell	Finalised financial model and added further detail for implementation plan	05/04/19
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EXECUTIVE SUMMARY: DECISION REQUIRED

Full Business Case (FBC) stage

Project context summary:

Care Technology is a key enabler of the Better Lives programme. By increasing the use of Technology Enabled Care (TEC) it will enable citizens to live longer at home and within their own communities. In turn this will lead to a reduction in the proportion of adults being supported by more-costly residential/nursing provision for lengthy periods of time.

Working in a more joined up way also delivers benefits to the local health economy. Providing TEC before patient release from hospital to build patient confidence in its use, developing greater awareness and understanding of how consumer technology is increasingly supporting health monitoring and benefits delivery as well as using TEC as part of the primary care services can drive greater patient and user satisfaction and confidence at same or less cost.

Currently TEC rates of referral by the Council and its partners are low. In the summer 2017, PA Consulting

was commissioned to examine the scale of current service, future potential and benefit to the care and health economy by developing a more proactive and targeted us of TEC. The resultant report recommended that all aspects of the current system could be significantly improved if commitment and investment were made in development and delivery of a service model designed to maximise the value of care technology across Bristol.

The intervening time-period has seen the council assess what is available in market and what other council's do, consider and further develop its outline business case for adopting a new approach to TEC use and has resulted in the development of this Full Business Case.

The business case concludes that the drivers for change continue to be:

- Rising costs of residential and domiciliary care
- Access to sufficiently well-trained and resilient pool of care staff
- Rising demand for independence and choice amongst the care population living with complex needs
- Continued and ongoing pressure on public service budgets

The opportunities presented by a TECS hub model designed to assess for and commission TEC at the earliest point of awareness is what this business case is founded upon. It is enhanced by consideration of immediate join-up of the TEC service with the Accessible Homes Service to exploit the future design and delivery of smart and connected homes. It is also considered the best option to build the council's capability and capacity in readiness for future join up with health partners to deliver a truly person-centred service.

Any key changes since Outline Business Case approval:

There are no significant changes to the decision environment and influencing factors since the determination of the OBC and choice of Preferred Option.

This Full Business Case will set out the detail underpinning delivery of the Preferred Option, building on the information in the Outline Business Case and providing greater detail or challenge of assumptions, risks and opportunities developed in the OBC which are now better able to be addressed to assure the Council of its choice and direction in delivery.

Recommended option:

The Preferred option is to develop a TECS Hub aligned to Care Direct as a single front door, Bristol Operations Centre as a monitoring service and combined with the Accessible Homes service. Integration between existing council services that support people living at home seems a logical step in providing a simple, accessible and single platform through which users, carers, practitioners and commissioners can understand what the council has to offer and how to access it. The Hub will also draw on the council's insight and intention to develop a future predictive demand analytics capability to ensure that support is targeted at where it is most needed and delivered in the most cost-effective manner.

Designing the service around the needs of existing and future users as well as the future and emerging trends of in-home technologies will facilitate buy-in from the different services, join-up with suppliers and partners around the new approach and ultimately provide a better service for the citizens of Bristol.

By keeping procurement and installations in-house, the service will maintain greater control over the matching, deployment and de-commissioning/re-use of equipment and services. The council consequently bears the risk of getting the match of people to product right and the testing and deployment in the home environment correct as part of the end to end TEC service. The council will build a capability of its own and be better able to manage supplier relationships and track assets deployed as it builds its capabilities.

This close to the user approach makes it more capable of generating user confidence in uptake not just in ASC but moving into Children's Services in the future. Working with partners in health will also mean that the service will be able to better support a reduction in e.g. Delayed Transfers of Care (DTOC) by

prioritising installations that enable people to return home from hospital.

Anticipated cost/benefit profile for preferred option delivery:

Preferred Option: TECS Hub incorporating Accessible Homes.

Low scenario

£'000	Yr 0 (19/20)	Yr 1 (20/21)	Yr 2 (21/22)	Yr 3 (22/23)	Yr 4 (23/24)	Yr 5 (24/25)	Total
Total	(19/20)	(20/21)	(21/22)	(22/23)	(23/24)	(24/25)	
New Costs	£300	£	£	£	£	£	£300
Opportunity Costs	£100	£	£	£	£	£	£100
Ongoing costs		£182	£198	£205	£209	£212	£1,006
Total costs	£400	£182	£198	£205	£209	£212	£1,406
Gross savings		£396	£537	£690	£725	£741	£3,088
Net savings	-£400	£214	£339	£484	£516	£529	£1,682

High scenario

£'000	Yr 0 (19/20)	Yr 1 (20/21)	Yr 2 (21/22)	Yr 3 (22/23)	Yr 4 (23/24)	Yr 5 (24/25)	Total
Total	(19/20)	(20/21)	(21/22)	(22/23)	(23/24)	(24/25)	
New Costs	£300	£	£	£	£	£	£300
Opportunity Costs	£100	£	£	£	£	£	£100
Ongoing costs		£186	£208	£216	£229	£236	£1,075
Total costs	£400	£186	£208	£216	£229	£236	£1,475
Gross savings		£679	£958	£1,148	£1,272	£1,371	£5,428
Net savings	-£400	£493	£751	£932	£1,043	£1,135	£3,953

Full assumptions and sensitivity analysis for each scenario modelled are found in the appendix. All figures have been signed off with Neil Sinclair.

Confidence level	Supporting commentary
75%	<p>In order to increase confidence in delivery of a successful service model, an external consultancy has been appointed. They have provided:</p> <ul style="list-style-type: none"> • Evidence of good practice that builds upon the Outline Business Case position • Support to test, refine and develop this business case, introducing greater detail into the cost and benefit assumptions. • Initial service model design following agreement of Service Vision and Design Principles – clarifying what the new service model could look like - to aid both decision-making and planning for transition from the ‘as is’ to the ‘to be’ model. • High level implementation planning. <p>The Council’s confidence in the strategic direction and ability to deliver the TECS Hub has increased with the support and experience of the consultancy – which has delivered end-to-end technology enabled independent living service models in other Local Authorities.</p> <p>Since approval of the Full Business Case by the Better Lives programme board, the</p>

	sensitivity analysis for the figures provided has progressed from 50% to 75% as the model was further developed and the evidence base built.
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Identified sources of funding (including any shortfall):

- Implementation costs of up to £300k will be funded from Disabled Facilities Grant.
- Ongoing costs of £182-236k per annum will be funded from Disabled Facilities Grant.

Other anticipated key measureable (non-financial) benefits:

Benefit type	Setting of care/cohort	Benefit
Service outcomes – financial (for the purposes of this business case)	Home/domiciliary care	<ul style="list-style-type: none"> • Current and future clients may be able to reduce purchased domiciliary hours for non-hands-on care • Current and future clients will be able to stay in their homes for longer, delaying the need for residential care
	Residential care	<ul style="list-style-type: none"> • Future clients will be able to stay in their homes for longer, avoiding the need for residential care
	LD Travel	<ul style="list-style-type: none"> • Technology support for LD/PD users will support them to travel independently without an accompaniment
	LD Supported Living	<ul style="list-style-type: none"> • A reduction in need for sleep-in services for LD people in supported living
	LD Carers	<ul style="list-style-type: none"> • Reduced respite care for LD/PD family carers
Service outcomes – non-financial (for the purposes of this business case, but could be quantified in the future)	Reablement	<ul style="list-style-type: none"> • Acceleration of return to independence
	DTOCs	<ul style="list-style-type: none"> • Faster discharge and potentially smaller packages due to provision of TEC at discharge
	LD Supported Living – carer support	<ul style="list-style-type: none"> • Reduction in paid carer support for LD people in supported living
	Carers	<ul style="list-style-type: none"> • Prevention of carer breakdown
	Users with complex needs	<ul style="list-style-type: none"> • Various outcomes dependent on the need (promoting medical adherence, safer homes, travel support, sensory support, epilepsy support)
	Mental health	<ul style="list-style-type: none"> • Support for those with dementia to increase independence
	Children and Young People	<ul style="list-style-type: none"> • Various outcomes dependent on the need. Could support improvements in attendance, increased levels of punctuality and independent travel, greater participation and engagement in lessons and beyond classroom, reduction in fixed term exclusions
Careline and service benefits – quantifiable but non-financial	Referrals	<ul style="list-style-type: none"> • Increase in referrals as a % of total cohort size
	Connections	<ul style="list-style-type: none"> • Increase in live connections • Increase in length of connections for live users
	Installation	<ul style="list-style-type: none"> • Lower time between referral and install
	Staff satisfaction with the service	<ul style="list-style-type: none"> • Increase in staff satisfaction with the service (this is not currently measured)
	Resident satisfaction with the service	<ul style="list-style-type: none"> • More widespread measurement of resident satisfaction of the service (the survey is based on a small number of clients currently)
Careline and service benefits –non-financial and non-quantifiable	Alignment with Adult Social Care strategy	<ul style="list-style-type: none"> • The Careline service meets the outcomes and agreed relevant indicators as set by the council
Developing a Centre of Excellence		
Culture change	Aligns to vision and design	<ul style="list-style-type: none"> • Support required for transformation across the council can be channelled through the Hub. Potentially developing a TEC showroom to prove and demonstrate the efficacy of

		care technology can inspire confidence amongst practitioners, users and council leadership;
Training	Aligns to vision and design	<ul style="list-style-type: none"> There will be a high and ongoing need for training. Consideration is needed of a training facility for new and existing practitioners providing valuable hands-on experience;
Testing centre for new technology	Aligns to vision and design	<ul style="list-style-type: none"> Developing (with suppliers) a rigorous test and trial service can benefit BCC profile and leading edge as new technologies come onto the market
Showcasing	Aligns to vision and design	<ul style="list-style-type: none"> In situ-assessment: for people with complex conditions, the CoE can be used to assess people in situ before installation in home where appropriate

Suggested project tolerances:

Tolerance areas	Project level tolerance	Escalation route	Control & tracking document(s)
Time +/- amounts of time on target completion	+1 month (key programme level – zero)	Better Lives programme Manager Programme Board	Project Plan Business Case Highlight Report
Cost +/- amounts of planned budget	+/- 10%	Programme Board	Project Plan Business Case Highlight Report
Quality Defining quality targets in terms of ranges	Zero	Programme Board	Requirements Document Business Case Highlight Report
Scope Permitted variation of the scope of a project solution	Zero	Programme Board	Project Plan Business Case Highlight Report
Benefits +/- amounts of planned benefit delivery	+/- 10%	Programme Board	Business Case Highlight Report
Risk Limit on aggregated value of threats and any individual threat (e.g. threat to operational service versus threat to organisation)	Risks rated as Red or greater must be escalated. Residual risks only – mitigate within project structures	Better Lives programme Manager Director: Adult Social Care Programme Board	RAID Log Highlight Report

Decisions requested for Full Business Case sign-off:

- Approve implementation of the Technology Enabled Care Service.

<u>Total spend to date - New costs:</u>	£23,660
<u>Total spend to date - Opp costs:</u>	£12,860

New costs to deliver project:	£300,000
Opportunity costs to deliver project:	£100,000
Funding required:	£300,000
Funding source(s):	Disabled Facilities Grant
Est. timescale for project delivery:	March 2020

MANDATE

See appendix B for mandate.

OUTLINE BUSINESS CASE

See appendix B for Outline Business Case.

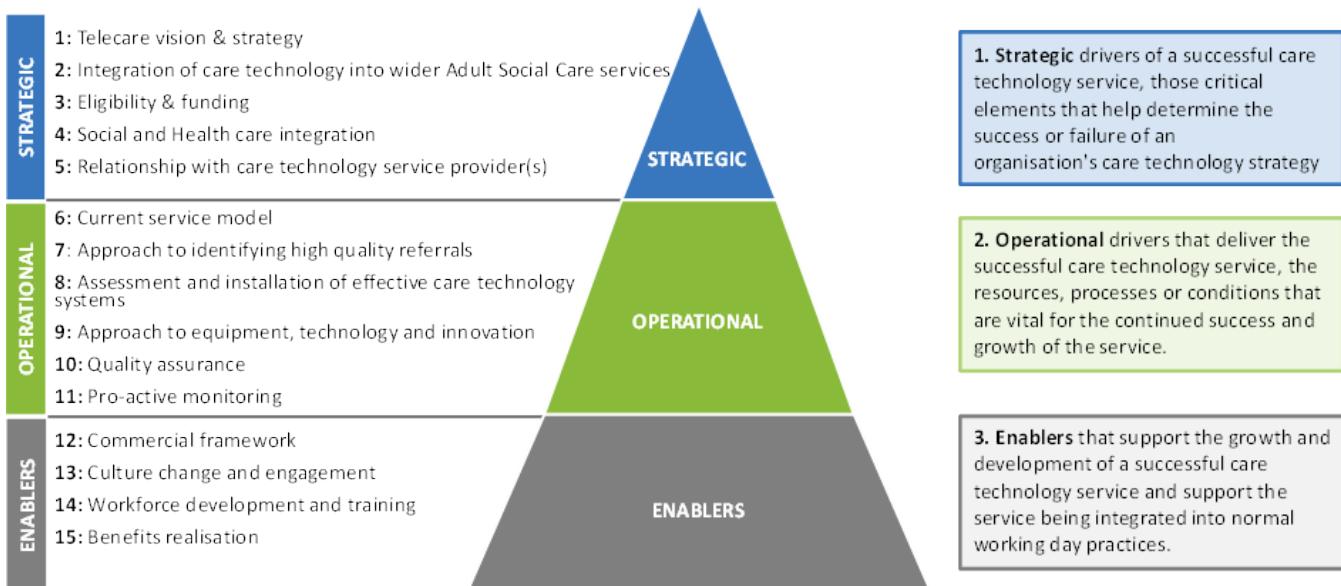
FULL BUSINESS CASE

17. Project overview

Technology Enabled Care (TEC) is a key enabler of the Better Lives programme. By increasing the use of TEC it will support citizens to live for longer within their own communities, leading to a reduction in the proportion of adults being supported by residential/nursing provision for lengthy periods of time. It has also been shown to reduce pressure on the local health economy e.g. by enabling earlier hospital discharge, shorter hospital stays for general conditions and even preventing some hospital admissions.

As rates of TEC referrals by the City Council are currently low, circa 800 each year, PA Consulting was commissioned to perform a TEC diagnostic. The diagnostic (illustrated below) examined all aspects of the current system against industry and sector good practices against three dimensions – strategic factors, operational factors and enabling factors.

Figure 1: Care Technology review of current service – framework used



The Diagnostic review concluded that the Council could maximise the value of care technology in developing a new service model and building upon the foundations already in place. To do so the new model would need to take account of the following recommendations:

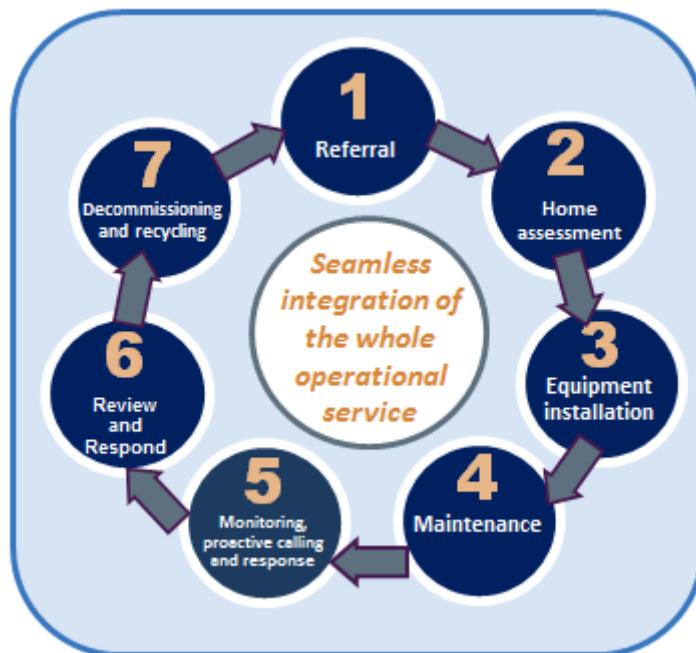
- Develop a clear **vision, strategy and business case** for care technology in Bristol.
- Embed the **culture change and engagement** required to drive increased volumes of high quality referrals.
- Develop **simple and effective care technology pathways** for both health and social care.
- Define a **central hub that brings together knowledge and skills** and is visible and easily accessible to all care professionals.

- Embed a **quality assurance framework** into the service model for care technology
- Robustly **measure the financial and non-financial benefits** of care technology.
- Commission **delivery of the agreed commercial model** that aligns with the service model.

Care Technology covers a broad spectrum of technology enabled care services (TECs) including telecare, telehealth, telemedicine, tele-coaching and self-care services. All of these services share the aim of putting people in control of their own health, wellbeing and support independence, keeping people safe, whilst offering them and their families' peace of mind.

Bristol City Council currently provides an in-house TEC service relying upon its own staff to understand and refer users into care technology services; an in-house function to match commission to supply and contracted suppliers to provide and install the technology. For clarity, a TEC Service model typically embraces the following end to end stages of delivery:

Stages of delivery in a good practice model



The current service provided by Bristol City Council does not deliver the full range of available TEC (also known as Assistive Technologies) but consists of a simplistic telecare pendant service and a catalogue of products.

The current services delivered by the Council could be described as designed to meet basic to moderate needs.

The following diagram illustrates the nature of technologies within the proposed scope of the TECS Hub delivery.

Typical definitions of Assistive Technologies showing in and out of scope functionality

Assistive technology – included in this business case	Telecare <p>• Typically, telecare services are provided through local authorities, housing associations, industry services and voluntary organisations. They include personal alarms, a wide range of home sensors (e.g. fire and flood detectors) and activity monitoring. Alerts are monitored by remote control centres that can respond quickly to emergencies.</p>
Not included in this business case	Mobile health apps <p>• Fitness and health/care apps (including mental health) are available for use on smartphones and tablets and are often referred to as mobile health or mHealth.</p>
Not included in this business case	Telehealth <p>• Telehealth and telemedicine involve video and phone connections between patients and clinicians as well as remote monitoring by clinicians of long term conditions (e.g. diabetes) using medical devices in the home (e.g. blood pressure and glucose monitors).</p>
Not included in this business case	Digital health <p>• eHealth, Health IT and digital health are broader terms that can also include web-based home health support systems as well as electronic health and care records used by practitioners. Increasingly, they cover predictive data analytics, machine learning, care robotics, virtual reality, voice operable systems and artificial intelligence.</p>

The scope of this current project excludes any health and medical needs but will refer to the future potential of exploring a more joined up service with health colleagues.

The approved Mandate and Outline Business Case found in appendix B propose a service model that will deliver on the areas outlined above. This Business Case builds on the previous work to provide greater detail of the service model and provide increased assurance on costs, benefits and delivery of the required outcomes.

18. Preferred Option: TEC Service Hub

To re-cap from the OBC, the drivers for change to the current service are summarised as follows:

- Rising costs of residential and domiciliary care
- Access to sufficiently well-trained and resilient pool of care staff
- Rising demand for independence and choice amongst the care population living with complex needs
- Continued and ongoing pressure on public service budgets

Below is an extract from the stakeholder survey (of over 100 BCC practitioners) undertaken as part of the TEC Diagnostic and summarises why current TEC services need to be reformed.

- There is consensus that there is significant opportunity to deliver greater outcomes for patients, service users and the local health and social care economy by creating a more coherent, effective and sustainable service model.
- 92% of staff surveyed believe TEC improves outcomes for their clients. However, the opportunity to capitalise on current interest and support for improved outcomes through care technology are being missed.
- There is a fragmented approach across Health and Social Care. For example, there is no direct access to referrals for Health teams, and a potentially effective TEC trial taking place at Southmead has no reporting mechanism back into BCC.

- The current operational processes are unnecessarily complex for practitioners navigating referral pathways.
- Referring for equipment rather than outcomes relies on all practitioners having significant expertise and knowledge, and whilst there are pockets of excellent expertise and advice across BCC this capability is not widespread or easily accessible to all that need it.
- This study has identified significant confusion over eligibility and funding for care technology equipment and services. There is a lack of clarity about the role of care technology and outcomes being sought, and there are no eligibility criteria.
- Practitioners and operational staff reported there is not a clear QA framework, which is required to facilitate learning and continuous improvement. This would give confidence to both staff and service users that they are being heard. If effectively deployed, a robust QA framework will facilitate service improvements and adaptations.
- There have been a number of attempts to promote care technology through established teams, training and engagement, but these have not been sustained and embedded. The remnants of these efforts are dispersed in the organisations as pockets of excellence but are not brought together in a structured and effective way.
- The lack of an immediate replacement for TEC Lead after she left in January 2017 has left practitioners feeling unsupported and lacking confidence, despite the best efforts of the TEC Champions Network, which requires a more robust mechanism for feedback than ad-hoc reports at TMTMs.
- There is a strong desire to understand the impact of care technology and the principles of benefits realisation are understood, although the operational processes and systems have not been set up to enable this and they are inconsistently applied.

The Council must proactively and professionally respond to these issues and make good use of the opportunities presented by a TECS hub model designed to assess for and commission TEC at the earliest point of awareness.

The Preferred Option from the OBC is to design and deliver a service that brings together all TEC activity within BCC into a single service hub. Furthermore, the new service envisages an enhanced version of existing service delivery combined with the existing Accessible Homes (AH) service to deliver increased join-up for service users and tenants. It is enhanced by consideration of immediate join-up of the TEC service with the Accessible Homes Service to exploit the future design and delivery of smart and connected homes. It is also considered the best option to build the council's capability and capacity in readiness for future join up with health partners to deliver a truly person-centred service.

The need for a new TECS Hub model is founded on the belief that:

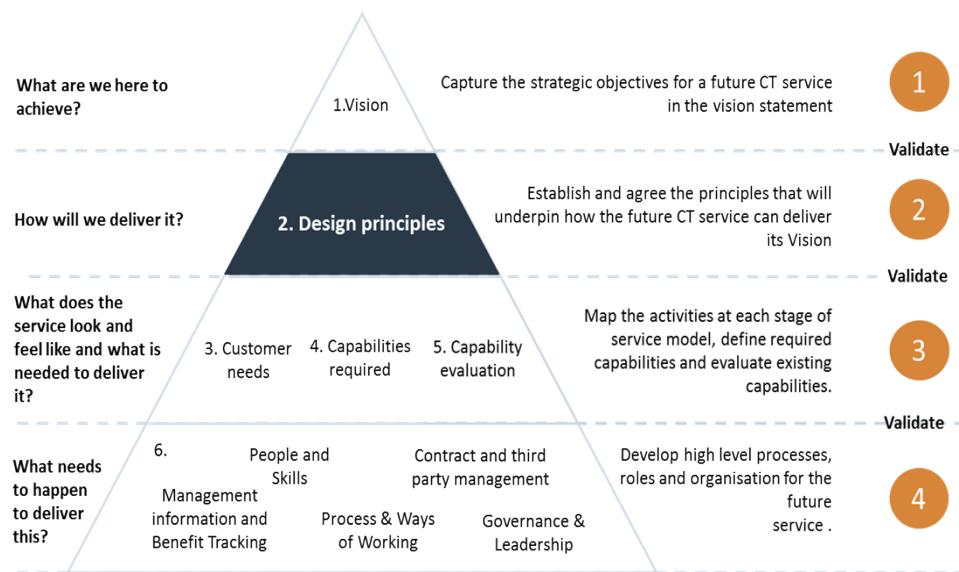
- **Care Technology has an important role to play in managing demand for care and support services.** TEC has the potential to maximise independence, improve outcomes and provide financial benefits, with 87% of 112 respondents in a recent study considering care technology to be 'important' or 'very important' for their role. Preliminary modelling indicates that BCC is forecast to be c. £800k better off in 2 years with a transformed TEC service compared to no change.
- **Leadership and management of TEC has been inconsistent.** The use of TEC has been promoted, trialled and then allowed to fade time and again. The pace and profile of TEC in market and social care use means that we cannot ignore what is available. We must commit to a service to avoid lots of different approaches are being taken with TEC provision across PSR pathways and care organisations leading to wasted cost and effort through duplication.
- **A rationalised service model supported by a central hub delivers more and better.** The hub would create a professional and connected approach amongst the service practitioners, users and community of interest. The joined-up approach will facilitate culture change towards use of TEC, facilitate consistent training, communications and provide a consistent source of trusted and authoritative information about TEC as it continues to develop.

- **The need for quality and assurance of TEC can consistently be met.** The Hub will function as a quality assurance mechanism ensuring referrals were appropriate, installed effectively and well-received by service users. The hub would serve as a clearing-house for feedback and act as a mechanism to facilitate learning and continuous improvement. A robust feedback system would give confidence to practitioners across Adult Social Care and Health at the same time as providing comfort to service users and integrating with Bristol's mission to be an authority responsive to citizens' needs. Clear feedback and accountability would provide a mechanism by which suppliers could be effectively commissioned and managed, as well as highlighting opportunities for collaboration.
- **Benefits monitoring and tracking is incorporated from the outset in the service design** and referral pathways. Although this option is currently available on the LAS form, its inconsistent application undermines confidence in the results, even when it is correctly used. There is no current BCC process to audit whether these expected savings are in fact achieved.
- **Transforming the care technology service model across the whole system in Bristol is based on strong evidence.** The use of technology supports a user centred, strengths-based approach and enables oversight and coordination between health, care and housing needs. To realise the opportunity of an integrated benefits-led model for the provision of TEC, this business case will focus on what can be done initially within the council and latterly with the support and involvement of partners.

18.1 Design Principles driving the development of the TEC Service Model

Design Principles are an essential aspect, not only of the initial design process, but also the ongoing development and performance management of the service. The Design Principles, and the approach they set out, become the yardstick against which alignment of the service against strategic goals, cultural values in delivery and behaviours of practitioners, carers and suppliers involved in the service become marked.

Illustrating the long-term importance of Design Principles



The development of the Design Principles and approach for the TECS Hub stem from the Better Lives strategy defined and adopted by the Adult Social Care function. It embraces the concept of the strengths-based approach and has the following statement of vision and intent:

Vision statement:

People can get the right help at the right time to promote independence and to prevent, reduce or delay the need for long term support.

Statement of Intent

- Maintain quality services with people at the heart of what we do.
- Make cost savings whilst holding our ambition to improve outcomes.

To drive the development of the TECS Hub model the following Design Principles have been proposed, reviewed and agreed by the Programme Board. It is requested that they are reviewed and agreed by the Cabinet as part of this Business Case.

Vision and Design Principles for the TECS Hub.

Vision	
<i>All citizens, with a support need, their carers and the practitioners who work with them, can refer into a joined-up and innovative service which will consider their circumstances and promptly provide the right technologies to enable them to stay safe, independent and in their homes for longer.</i>	
1. The approach should deliver...	The right help at the right time to promote independence and to prevent or delay the need for long term support
2. The service model should result in...	Improved outcomes at same or less cost for more people so that they feel supported, independent and safe
3. The service model should be...	Easy to access and understand for service users, professionals, carers and suppliers delivering seamless service from a central hub
4. The service model should be accessible to...	All adults with care and support needs, including young adults transitioning to adulthood and their carers
5. The service offer should include...	An expanding range of market solutions (consumer or care related), creatively applied to each individual and their circumstances
6. The approach to funding and eligibility should be...	Take a joined-up view of demand (appropriately using predictive analysis) for different types of care and support, prioritising cost-effective, sustainable and demonstrable benefits
7. The approach to service delivery should be...	Professional, caring, efficient and value-adding, proactive and responsive – drawing together health and care service resources around the users needs
8. The approach to practitioner support should be...	Informative, inspiring and focused on practical uses with case stories that show AT complimenting practitioner strengths and rewarding their efforts

These principles have been developed from consideration of the key messages underpinning:

- The BCC Vision and Statement of Intent for ASC
- The seven areas recommended for action following the TECS Diagnostic
- Good practice principles applied by other councils deploying TEC services and
- The service requirements developed in conjunction with service teams

The Design Principles are used to sense-check and prioritise how the Service Model should be structured and operate.

18.2 Development of the TEC Service Model

The TECS Hub is designed to ensure that practitioners across social care (and subsequently health) will be able to confidently assess at first contact TEC needs and refer into the service when they believe TEC would be appropriate. The referrals will be outcomes-based i.e. practitioners will specify the required outcomes and the TEC Service perform an assessment to select appropriate equipment and support for the technology use. The TEC Service will have its performance managed in accordance with the delivery of the qualitative and quantitative benefits of delivering those outcomes for the end user, their support network, the health and care system and of course the impact on future health and care funding.

The TEC assessment currently sits outside of the Care Act assessment. The new model will address what is required to mainstream TEC assessment as part of the current assessment processes including the AH assessment for adaptions in citizen's homes. A combined assessment at the earliest point of presentation of need will enable care TEC, physical support and other adaptions to form a cohesive, cost-effective package of support suited to the user need, breaking the current cycle of multiple, independent assessments which often do not view TEC as a mainstream enabling approach to independent living needs.

The referral pathway envisaged by the new service model also expects to be made available to people external to Bristol City Council's current service user community e.g. self-funders with health and/or care needs and would be relevant to all ages from young adults transitioning into adulthood to later years. This future broadening out of the service will generate additional income for the Service as has been witnessed in other forward-thinking

authorities who have deployed such an approach. Close working between health and care commissioners, practitioners and budget holders is essential to maximise both value from delivery and potential income from individual uptake.

Consequently, the new TECS Hub model involves initial referral, assessment of the need and installing/providing training for the equipment or app, maintaining and reviewing, and then collecting or closing the service once it is no longer needed.

The service may typically be delivered in-house (e.g. Staffordshire County Council, LB Hillingdon and Blackburn with Darwen) or through a specialist care technology or managed service provider (e.g. WellBeing, NRS, Millbrook, Johnny Johnson Housing, Riverside, Tunstall, Argenti and so on). The Preferred Option for Bristol City Council is to deliver the transition to the new service model and quality and performance standards in-house with reference to external good practice where appropriate. Increasingly councils are realising the benefits that TEC services can deliver to service users, carers and the local health and social care economy when used as an enabler to transform the way in which adult social care is delivered – if benefits can be tracked, then data and information can be used to inform strategic decision-making and evidence savings.

A focus on cultural change and engagement is essential to drive increased take-up and support people to integrate more digital technology into their lives. It is often the case that the hardest and most essential need for early cultural change lies in the social care and commissioning community more than families, carers and users. Service development over time sees the integration of TEC services into wider social care and health services to ensure best value and user outcomes.

In developing a model for TEC service delivery, it is typical to include the following aspects of functionality and process in design:

- Referral
- Triage (and eligibility)
- Assessment and installation
- Monitoring
- Maintenance
- Review and respond
- Equipment management

Engagement has been carried out with stakeholders across BCC with experience of providing TEC services and who will be involved in the implementation of the future service to ascribe the desired service specifications for each stage above. i.e. *what* is required for effective service delivery.

#	Element	Activities and Characteristics
1	Referral	<ul style="list-style-type: none">• Needs to reflect service users risks, needs and safety. Reflect the needs of carers.• Proportionate – as short as possible to get the info required• Single system and point of access that is simple for different practitioners from different organisations• Always accessible, including mobile working capabilities (offline back ups required for urgent referrals)• Feedback and assurance that referral received, and communications to enable the referral to be tracked• Referral asks questions that the referrer can answer• Checks consent, capacity and DOLs assessment
2	Home Assessment	<ul style="list-style-type: none">• Need assessments will not always take place in advance of referrals, but could be commissioned for more complex cases e.g. supported living• Trusted assessor /trusted expert relationship• Joint visit with referrer where necessary• Speed of response should vary dependant on urgency (KPI's to be determined)• Hospital Discharge should give sufficient support to get home, then a home visit to check their needs are being met
3	Equipment Installation	<ul style="list-style-type: none">• Installation should usually take place as part of the Home Visit• With regard to the needs identified in the referral, convey the benefits so that people understand how it can help them in their lives• Takes account of service user ability to use equipment and how /where the technology would be used so that a judgement can be taken whether it is appropriate• Achieve informed consent, on the basis of whether the service user has capacity or is supported by a family member /carer• Feedback loop to the referrer so that they are aware of the outcome of installation

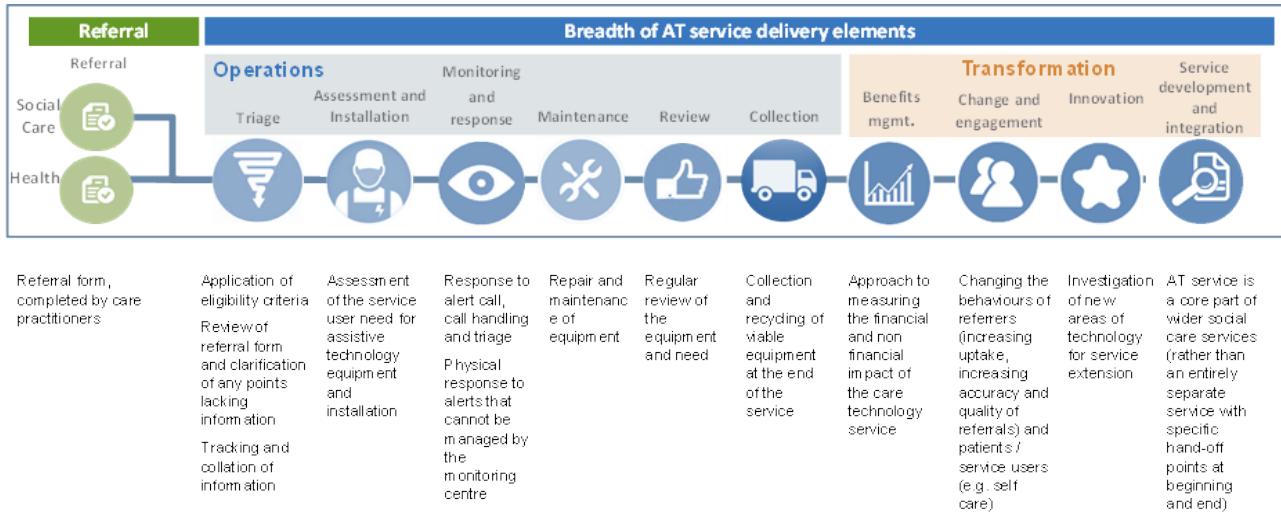
4	Maintenance	<ul style="list-style-type: none"> Simple mechanisms for requesting maintenance – number to call and contact details provided in a way that they can't be easily lost Maintenance should be proportionate to the needs that it is fulfilling Social Care reviews should take the care technology provision into account. Individuals with care technology only could have telephone reviews through the care technology provider (streamlined so that individuals don't have multiple reviews).
5	Call monitoring /pro-active calling and response	<ul style="list-style-type: none"> Mechanisms for monitoring service user needs, (particularly where care technology is the only service), how they are experiencing the service and changing needs Link back into care manager if the call history indicates potential issues or changing needs – trigger points defined to result in alerts, with clear escalation routes Make pro-active calling available in some cases e.g. medication reminders or service users requiring support
6	Review and respond	<ul style="list-style-type: none"> Ideally there would be multiple response options that can be used appropriately and proportionately Physical response would help to put many people at ease, but there is a risk that some individuals might over-use it. Response services should help to keep people at home and provide reassurance. Make better use of community response solutions Costs might increase if the response is more substantial, but need to understand within the context of ambulance costs.
7	Decommissioning and recycling	<ul style="list-style-type: none"> Timely removal of equipment Communication with referrer / social work teams if the service user is indicating that they want to stop / opt out that would have an impact on their safety Link to "Tell Us Once" process for when people have passed away and multiple services need to be stopped

Experience shows that the areas of differential in success for service users and commissioners comes from a dedicated focus on managing change and benefits delivery. Good practice indicates that the following functions also need to be considered for early investment and capability development:

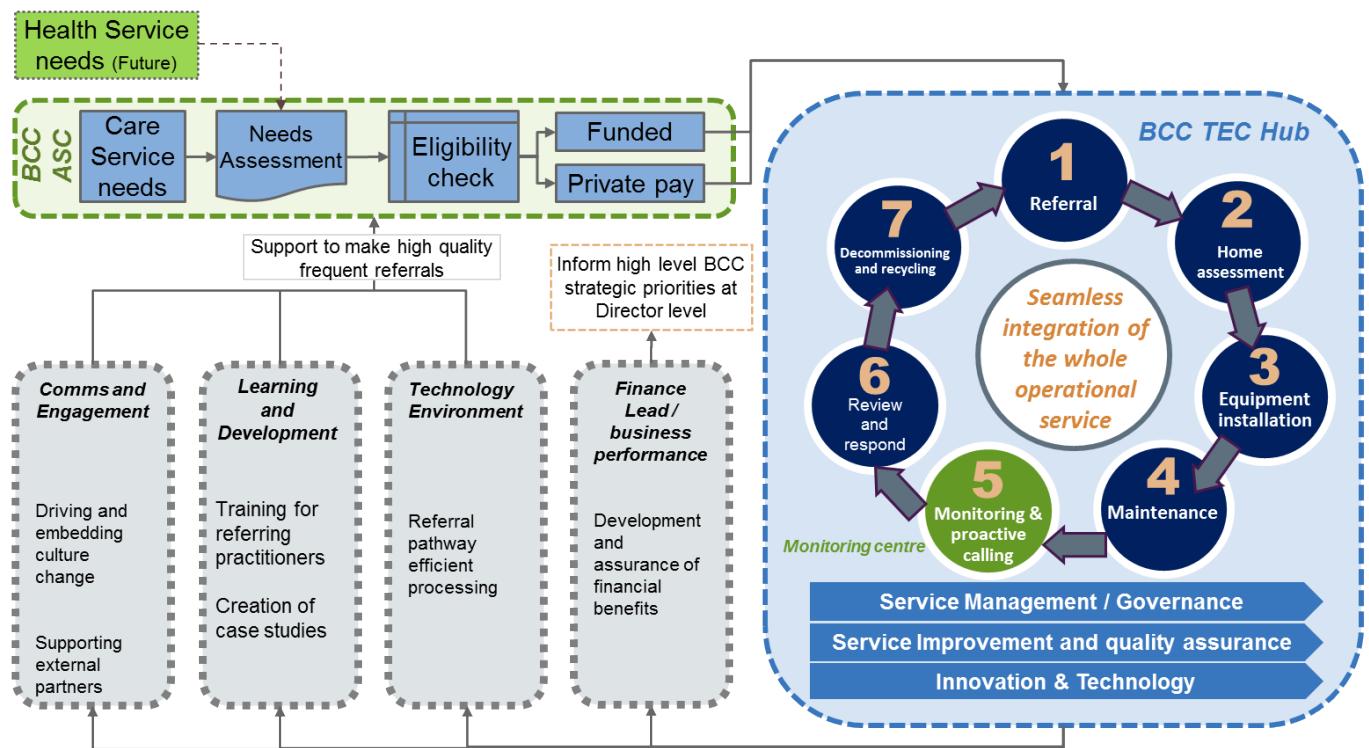
- Change Management
- Benefits realisation
- User and practitioner engagement
- Innovation
- Service development (using analytics and performance data)

This holistic approach is illustrated in the diagram below.

High level design of the future TECS Hub service model



Within a local context the proposed service model looks like this:



Note – it is intended that the Bristol Operations Centre would continue to operate Careline as the monitoring service and Care Direct as the single front door to services - Careline would be notified of new customers by the TEC Service Hub.

18.3 Scope and responsibilities

This section summarises the scope of the project to develop and deliver the Preferred Option as well as indicative scope and responsibilities for the future service model flowing from good practice design experience.

18.3.1 Scope and responsibilities of the project

In scope of the project

- Determination of the Design Principles and approach for the development of TECS Hub
- Development of the relevant structure and operating attributes for the TECS Hub including but not limited to:
 - Operating structure
 - Governance arrangements
 - Policies, procedures and processes including:
 - Eligibility criteria
 - Assessments and reviews of Service Users
 - Referral pathways including hospital discharge
 - Procurement and installation of TEC
 - Equipment storage and maintenance
 - Commercial frameworks and contract monitoring
 - Practitioner training and communication (including Occupational Therapists)
 - Benefits identification, tracking and realisation
 - Impact on and consideration of bundling of TEC budgets e.g. Disabled Facilities Grant/contribution from Health
- Development of the enabling technology environment and core systems enabling integration
- Determination of the supply for future TEC equipment
- Development of qualitative and quantitative service standards for the TEC Service managing the delivery of agreed expectations of Service Users, Referring Practitioners and Commissioning Bodies [Quality assurance framework (e.g. monitoring of TEC and referrals) with feedback and improvement mechanism]
- Developing, accessing and sharing outcomes-based studies of good practice to improve the TEC service and increase awareness of its benefits
- Development of a TEC Champions network aimed at scanning for TEC innovation, review, recommendation and adoption of new TEC when it becomes viable for use in the TEC Service such as robotics.
- Future benefits of TEC Service integration with Health – including joint funding arrangements
- Communication with local and national stakeholders
- Consideration of the impact of TEC within the future development of housing and supported facilities such as extra care and housing under the Better Lives Programme vision and principles.
- Accreditation to the Telecare Services Association Quality Standards Framework.

Out of scope	Any risks/consequences associated with “Out of scope” items
Services currently provided by health care providers – direct referrals from NHS and primary care	An obvious area of future scope of services given the level of benefits that accrue from early patient return to home and wider preventative benefits of cost avoidance
Referrals from local care suppliers – unlikely to be incentivised to make use of referral into TECS	Need to consider the offer of awareness and base training to the care supply community so that they do not dissuade service users from use of TEC in the home
Careline – 24/7 private pay service for help and support to individuals accessing TEC	Careline is managed by Bristol Operations Centre. There is a risk that BOC processes will not be aligned to the processes within Adult Social Care.
ICT hardware of professionals (Mobile Technology project)	If Professionals do not have appropriate hardware they may be unable to directly make referrals which could increase the time for installation and/or reduce volume of referrals. Additionally, the hardware can be used to demonstrate TEC such as apps to Service Users. If it is not in place it may reduce uptake of TEC.

18.3.2 Potential scope and responsibilities of the TECS Hub

Responsibilities of the TECS Hub would encompass each stage of the good practice model as well as standard functions expected of any contact management environment.

The **primary responsibilities** rest within Operational Services and are described briefly as follows:

1. Receive referrals
 - Receive TEC referrals from care (and health) sources
 - Complete eligibility assessment
 - Sign-post to self-funding support
 - Accept into TECS
2. Undertake Home Assessments
 - Assess local environment and facilities
 - Ensure safe access arrangements in place for 24/7 cover
 - Attend hospital for pre-discharge visits
 - Make recommendations of suitable technologies for user circumstance
3. Install equipment
 - Manage end to end process either directly or through sub-contract
 - Manage supplier arrangements
 - Ensure seamless contact arrangements with service user e.g. setting up appointments
 - Collect and manage vital information e.g. first responders and key holders
4. Maintain equipment
 - Receive and respond to maintenance enquiries
 - Manage remote fix
 - Arrange maintenance visit/swap of equipment
 - Manage maintenance contracts with suppliers
 - Arrange replacement/alternative equipment
 - Ensure compliance with Portable Appliance Testing (PAT) regulations
5. Monitoring and user management
 - Proactive calls to users to ensure maximum value from experience
 - Monitor any poor/low use of equipment to arrange follow up
 - Manage relationships with first responders and key holders
 - Formal supplier - contract management arrangements
 - Supplier (and partners) relationship management
6. Review and response
 - Ensure 24/7 response to service user and support network needs
 - Maintain and update point of access and first responder information
 - Feed and track response issues/observations into future care needs and analytics
7. De-commissioning
 - Maintain asset lists
 - Review asset use and due dates for return
 - Arrange collection/disposal/recycling
 - Ensure change of needs review and potential re-commissioning

Secondary responsibilities within the Hub rest with the Performance and Resilience role and include:

1. Performance Management
 - Review and revision of end-to-end process performance to identify issues and efficiencies
 - Monitor and report on uptake
 - Contract management of supply arrangements

- Internal SLA management between Care Line and Response services
 - Development of relationships with commissioners, advocates, users and families
 - Accreditation to Telecare Services Association Quality Standards Framework
2. Data security
- Manage personal record keeping
 - Manage asset record keeping
 - Ensure compliance with data regulations
 - Assure compliance through audit and review
3. Insight and analysis
- Undertake analysis of base-line and periodic data
 - Assess trends in uptake, type of equipment for type of needs
 - Invite supplier/user comment on inter-operability
 - Scan market for insight and reports impacting demographics and demand profiles
 - Collaborate with key partners to ensure system value delivery from TECS
4. Awareness and training
- Design, develop and deliver awareness programme for practitioners, commissioners and users
 - Design, develop and deliver formal training for personnel within the TECS service relevant to their role
 - Design, develop and deliver formal training for practitioners, commissioners and users relevant to need
 - Deploy regular updates and promotional materials on benefits and good practices
5. Change management
- Design change management strategy and approach
 - Develop and engage in cultural change awareness towards acceptance and confidence in the use of TEC within practitioner, commissioner and user communities
 - Drive delivery of success stories through TEC champions
 - Build readiness and pull for change in stakeholder communities (leading to CYP and Health)
 - Track and celebrate benefits of change; capture and review lessons learned
6. Innovation and horizon scanning
- Undertake periodic review of products in and coming into market
 - Collaborate with other LAs and suppliers in the identification and development of new products, trends and applied uses
 - Gather, analyse and use user feedback to define new needs for solutions building
 - Good practice promotion and dissemination of BCC TECS experiences and global trends
 - Potential TECS Hub show-room to de-mystify TECs to users and practitioners

18.4 Objectives

The table below sets out an initial view of the objectives for the TECS Hub (flowing from the strategic aims, design principles and industry good practices) together with an indication of Key Performance Indicators that can be used to ensure delivery against those objectives.

More detail of the measures, establishment of baseline positions, timeline for their introduction and achievement will be developed as part of the mobilisation to implementation project.

	Specific	Measurable	Time bounded
1	Clear understanding of BCC's vision for TEC by all stakeholders	Ability to gain FBC sign-off to move into detailed planning and implementation	May 2019
2	Baseline established against which to measure service improvements and	2017 TECS diagnostic updated in 2019	May 2019

	costs		
3	TECS hub in place with oversight of training, communications and provides a consistent source of trusted and authoritative information.	TECS hub in place.	April 2020
4	All BCC Practitioners have received appropriate TEC training and provide appropriate, outcomes-based referrals; ongoing support and training is in place.	% of Practitioners that have completed TEC training. Reduction in inappropriate referrals for TEC. Rolling training programme in place.	April 2020
5	Quality assurance framework is in place supported by systems driven management information	Clear set of performance indicators linked to DP and success measures	April 2020
6	Regular reviews of referrals and efficacy of TEC undertaken and reviewed within governance to learn lessons and improve services.	E.g. % of installations of TEC are reviewed after 3 months Feedback on quality of referrals from Practitioners is available quarterly.	June 2020
7	Financial and non-financial benefits of all installations are recorded and tracked.	TEC is represented on Trajectory Management dashboard – to include number of installations, cost of equipment and financial benefits	September 2019
8	All assessments and reviews of packages of care consider use of TEC.	100% assessments and reviews have considered using TEC.	April 2020
9	Installation of TEC within 2 days of referral to support quicker hospital discharge.	Time taken from referral to installation of TEC. Time taken from referral to discharge from hospital to home.	April 2020
10	20% assessments and reviews result in referral for TEC to TECS Hub.	% of referrals that lead to installation of TEC.	April 2020 – March 2021
11	People seeking tier 3 services (self-funded) are appropriately diverted to provide TEC for themselves.	Number of people signposted to purchase TEC for themselves.	April 2020
12	Increase connections to Careline from 850 to 1,600.	Number of connections to Careline	April 2021
13	Achieve accreditation to Telecare Services Association Quality Standards Framework	Accreditation achieved.	April 2020
FUTURE AIMS			
A	Any commercial models in place include mechanisms for payment by results (i.e. delivery of outcomes is linked to commercial reward).	Contracts in place for all commercial arrangements. All contracts contain payments by results mechanisms.	April 2020
B	Delivered benefits to the local health economy (typically avoided ambulance call-outs, conveyances to hospital, avoided emergency admissions).	Number of avoided ambulance call-outs and emergency admissions.	April 2020
C	Children's services and Health	Number of referrals received from	April 2020

	practitioners are able to make TEC referrals along with self-funders.	Health	
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18.5 Quality Expectations

To ensure strategic alignment the Senior Professional Lead of the Better Lives programme will agree the prioritisation of requirements for delivery according to operational impact and budget. The lead within the Better Lives Programme will also ensure that there is a clear articulation of the outcomes expected from the new services and set in place outcome-based measures which are used to validate the extent to which the new service will and does deliver better outcomes than the current services.

Future staged reviews of qualitative delivery should be established within the governance approach during mobilisation. This process will also ensure the capture of lessons learned for future response in service improvement and communication to other organisations doing similar work.

A number of quality assurance processes will be set up during implementation that will become the remit of the TEC Hub during Business As Usual. These may include the below and will be fully defined during mobilisation.

Example approaches to Quality Assurance:

1. Sample approach deep dive – instigate period review of every x referral and conduct a deep dive examination of that referrals pathway all the way through to installation.
2. Survey service users
3. Call Service users
4. Survey practitioners referring to ensure that
5. Create and populate where necessary a complaints and positive feedback log
6. Create and populate where necessary a data security log
7. Review complaints and security incidents on a period (e.g. 6 monthly) basis

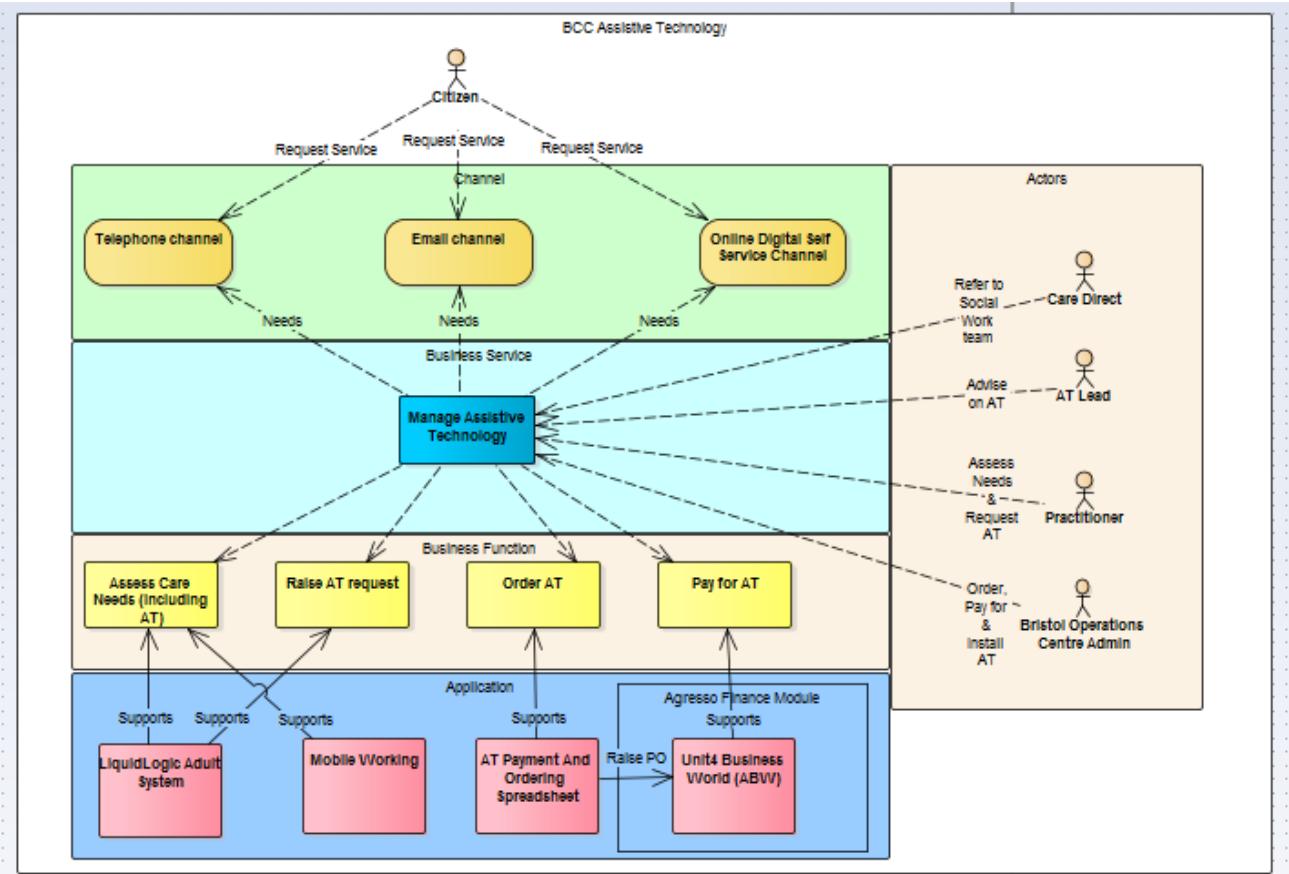
18.6 ICT requirements

As part of the implementation of the TEC Service Model it is important to take a view of the current technology environment and the future needs of the TECS Hub. Some service requirements have been gathered already and some work is already sitting within the future change programme pipeline to replace, upgrade or renew systems and platforms both within ASC and corporately.

This section illustrates the output from a recent and initial piece of work to document the current landscape and start the process of defining the future technology environment. This is a critical area of potential investment and at the very least needs to draw together work already commissioned or planned to be commissioned so that there is a holistic view of the technology needed to enable a joined up service and drive process costs down, accuracy of data capture and use up and ensure overall costs and quality of the new service model are enabled by the technology environment.

18.6.1 Current landscape

The ICT systems for the current TEC arrangements are outlined in the diagram below.



This shows there is scope to fit a new ICT offer around the service that is fit for the future and also helps to maximise the benefits of the service model.

As part of the mobilisation/pre-implementation phase, detailed Service Requirements for the service model will need to be developed against the following key groupings:

- Service Users
- Service user support network
- Suppliers
- Commissioners
- Practitioners

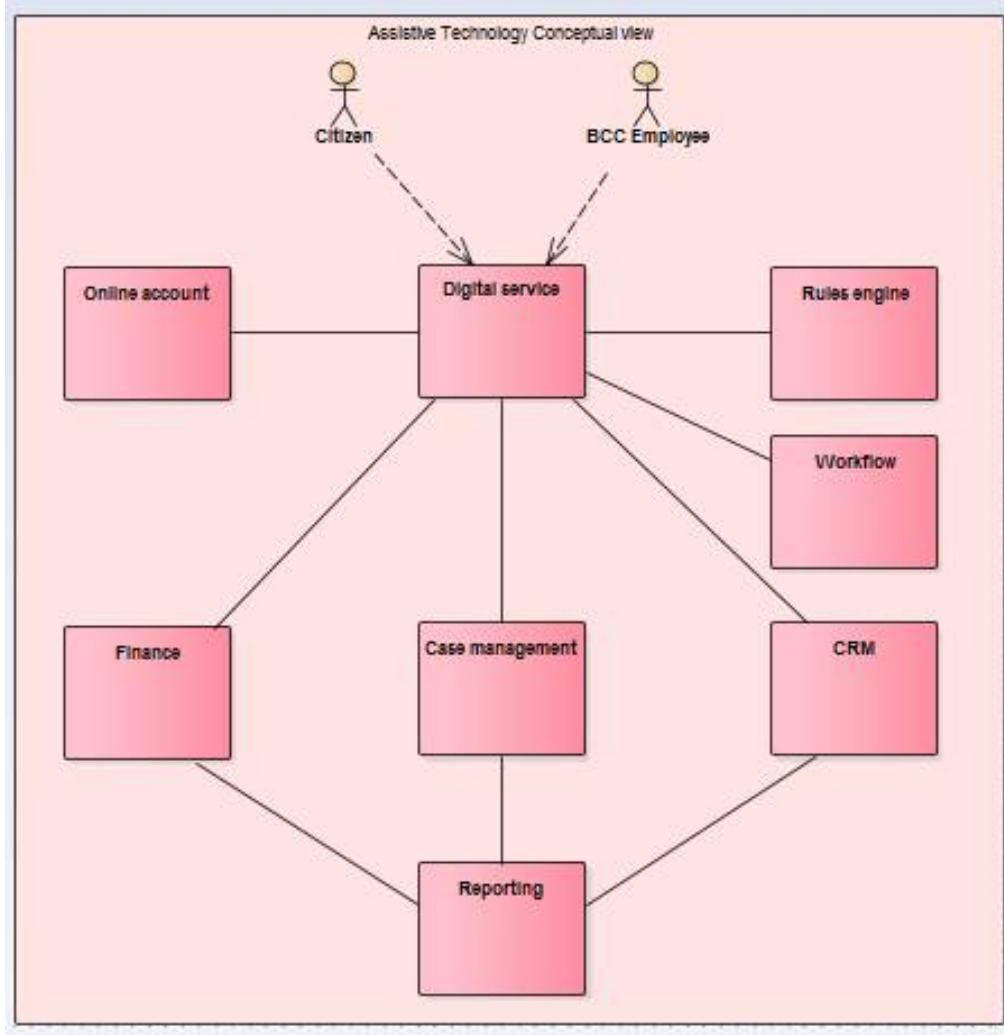
This is required to ensure the seamless flow of accountabilities, responsibilities and information through manual and systems driven processes to maximise efficiency and positive impact whilst minimising operating and data risks.

An initial requirements-gathering exercise has already been undertaken through a sequence of workshops with all internal stakeholders. This has informed the development of the service model. The requirements have been prioritised into categories where the new service must have, should have and could have positive impact from change. These requirements are available in appendix B.

To ensure robust design and delivery of the new service the same exercise needs to be undertaken with a wider group of stakeholders against the TECS Hub model to inform People, Process, Technology and Structural build of the new services.

18.6.2 Future potential landscape

The model below shows a first high-level view of each of the desired ICT elements for the service model.



The components of the future technology environment for the TECS Hub include:

- An interactive, compliance positive online requisition form - this is represented by the '**Digital Service**' above.
- Online eligibility check for paid for or self-funding – this is represented by the '**Rules Engine**'.
- Citizens/service users will have the ability to transact online through the digital form authentication using an '**Online account**'.
- It is assumed '**Workflow**' will be used for orchestration.
- Requisitions for TEC that stem from the digital service will be captured in a '**case management**' solution.
- Any and all touch points with service users and BCC employees will be captured with an intuitive '**CRM**'.
- Requisitions, tracking and payment for TEC equipment will be managed through a purchase to pay workflow (managed through a procurement partner) and is represented by the '**Finance**' element.
- All actions within the TEC process that need to be captured for future insight, trend analysis and future demand predictions and resource modelling will be recorded in the '**Reporting**' element.

As the ICT landscape of the Local Authority will be changing through the delivery of the Future State Assessment (FSA) programme, there is currently uncertainty as to how the ICT requirements of the service will integrate into the new ICT landscape. Therefore the Technology Environment workpackage within the implementation project will develop the current ICT solutions (e.g. Liquid Logic Adult System) to support the service on launch. This will ensure practitioners are easily able to make referrals into the service and also provide the basis for tracking the defined benefits of the service.

The current view of the Solution Architect is it will take between 6 to 18 months to put this environment in place. This timeline is impacted by relative priority of developing the TECS Hub over other corporate and service needs. The implementation project will initially deliver the detailed ICT requirements of the service. The delivery plan will

then be revised through a checkpoint review to reflect the FSA implementation plan. This will ensure joined up delivery.

18.7 Benefits

18.7.1 Financial benefits

The proposed service model is an enabler for the Better Lives programme. The financial savings to be delivered by this project are included in the financial savings target for the programme and are not additional.

Low scenario

£'000 Total	Yr 0 (YY/YY)	Yr 1 (YY/YY)	Yr 2 (YY/YY)	Yr 3 (YY/YY)	Yr 4 (YY/YY)	Yr 5 (YY/YY)	Total
New Costs	£300	£	£	£	£	£	£300
Opportunity Costs	£100	£	£	£	£	£	£100
Ongoing costs		£182	£198	£205	£209	£212	£1,006
Total costs	£400	£182	£198	£205	£209	£212	£1,406
Gross savings		£396	£537	£690	£725	£741	£3,088
Net savings	-£400	£214	£339	£484	£516	£529	£1,682

High scenario

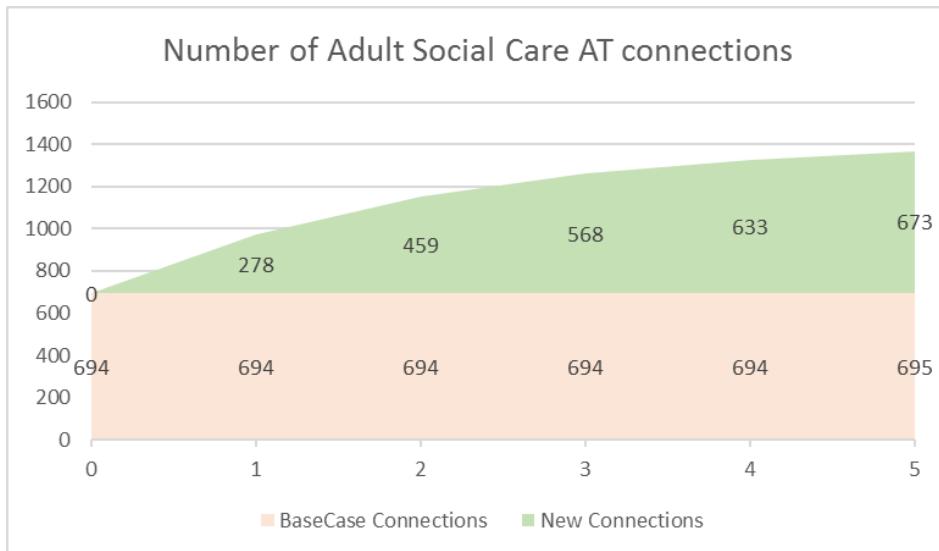
£'000 Total	Yr 0 (YY/YY)	Yr 1 (YY/YY)	Yr 2 (YY/YY)	Yr 3 (YY/YY)	Yr 4 (YY/YY)	Yr 5 (YY/YY)	Total
New Costs	£300	£	£	£	£	£	£300
Opportunity Costs	£100	£	£	£	£	£	£100
Ongoing costs		£186	£208	£216	£229	£236	£1,075
Total costs	£400	£186	£208	£216	£229	£236	£1,475
Gross savings		£679	£958	£1,148	£1,272	£1,371	£5,428
Net savings	-£400	£493	£751	£932	£1,043	£1,135	£3,953

The figures for ongoing costs and gross savings in the above table have been obtained through detailed analysis of current and historic service user data. This has enabled a high confidence in those numbers. Due to the large file size these calculations have not been included in the FBC but are available on request.

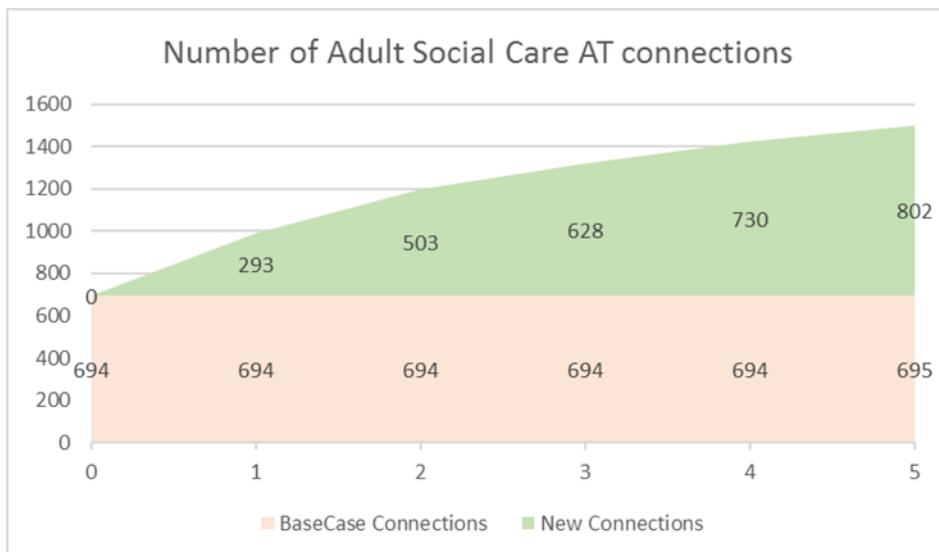
ASC TEC user number growth

- Baseline TEC connections to people on Adult Social Care packages is 694
- The Low Scenario expands to 1268 by year 5
- The High Scenario expands to 1497 by year 5
- In a meeting reviewing assumptions to the model with practitioners, the consensus in the room was that so long as all the steps are put in place to change culture and empower social workers to refer based on outcome, numbers could be “at least double”.

Low Scenario



High Scenario



18.7.2 Non-financial benefits

Benefit type	Setting of care/cohort	Benefit
Service outcomes – financial (for the purposes of this business case)	Home/domiciliary care	<ul style="list-style-type: none"> • Current and future clients may be able to reduce purchased domiciliary hours for non-hands-on care • Current and future clients will be able to stay in their homes for longer, delaying the need for residential care
	Residential care	<ul style="list-style-type: none"> • Future clients will be able to stay in their homes for longer, avoiding the need for residential care
	LD Travel	<ul style="list-style-type: none"> • Technology support for LD/PD users will support them to travel independently without an accompaniment
	LD Supported Living	<ul style="list-style-type: none"> • A reduction in need for sleep-in services for LD people in supported living
	LD Carers	<ul style="list-style-type: none"> • Reduced respite care for LD/PD family carers

Benefit type	Setting of care/cohort	Benefit
Service outcomes – non-financial (for the purposes of this business case, but could be quantified in the future)	Reablement	<ul style="list-style-type: none"> Acceleration of return to independence
	DTOCs	<ul style="list-style-type: none"> Faster discharge and potentially smaller packages due to provision of TEC at discharge
	LD Supported Living – carer support	<ul style="list-style-type: none"> Reduction in paid carer support for LD people in supported living
	Carers	<ul style="list-style-type: none"> Prevention of carer breakdown
	Users with complex needs	<ul style="list-style-type: none"> Various outcomes dependent on the need (promoting medical adherence, safer homes, travel support, sensory support, epilepsy support)
	Mental health	<ul style="list-style-type: none"> Support for those with dementia to increase independence
	Children and Young People	<ul style="list-style-type: none"> Various outcomes dependent on the need. Could support improvements in attendance, increased levels of punctuality and independent travel, greater participation and engagement in lessons and beyond classroom, reduction in fixed term exclusions
Careline and service benefits – quantifiable but non-financial	Referrals	<ul style="list-style-type: none"> Increase in referrals as a % of total cohort size
	Connections	<ul style="list-style-type: none"> Increase in live connections Increase in length of connections for live users
	Installation	<ul style="list-style-type: none"> Lower time between referral and install
	Staff satisfaction with the service	<ul style="list-style-type: none"> Increase in staff satisfaction with the service (this is not currently measured)
	Resident satisfaction with the service	<ul style="list-style-type: none"> More widespread measurement of resident satisfaction of the service (the survey is based on a small number of clients currently)
Careline and service benefits –non-financial and non-quantifiable	Alignment with Adult Social Care strategy	<ul style="list-style-type: none"> The Careline service meets the outcomes and agreed relevant indicators as set by the council

Developing a Centre of Excellence

Culture change	Aligns to vision and design	<ul style="list-style-type: none"> Support required for transformation across the council can be channelled through the Hub. Potentially developing a TEC showroom to prove and demonstrate the efficacy of care technology can inspire confidence amongst practitioners, users and council leadership;
Training	Aligns to vision and design	<ul style="list-style-type: none"> There will be a high and ongoing need for training. Consideration is needed of a training facility for new and existing practitioners providing valuable hands-on experience;
Testing centre for new technology	Aligns to vision and design	<ul style="list-style-type: none"> Developing (with suppliers) a rigorous test and trial service can benefit BCC profile and leading edge as new technologies come onto the market
Showcasing	Aligns to vision and design	<ul style="list-style-type: none"> In situ-assessment: for people with complex conditions, the CoE can be used to assess people in situ before installation in home where appropriate

18.8 Costs & Funding Sources

Funding source	Budget Holder	Cost-Code	Financial Year (or recurring)	Amount
Disabled Facilities Grant	Tom Gilchrist		2019/20 (transformation costs)	£300k
Disabled Facilities	Tom Gilchrist		Ongoing costs	£182-236k

Grant				
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Total funding required (ref S15.3)	£1,375,000
Total funding secured	£1,375,000
Variance	£0
Variance commentary: Not applicable.	

18.9 Key Risks and Issues

18.8.1 Risks

Ref.	Risk description	Impact (H/M/L)	Mitigation	Priority (H/M/L)
TECS Hub delivery risks				
1	Strategic alignment: the TECS Hub develops through implementation in a way that does not fully align with Better Lives programme	Organisation M	Governance of change ensures ongoing strategic review of Hub development	H
2	Technology risks: increased reliance on TEC is not accepted by practitioners and commissioners at first point of assessment in spite of positive user feedback	People H	Ensure awareness starts early and practitioners feel part of the change and confident in the technology	H
3	Technology risks: expectations of users rise to expect TEC as part of any service requirement despite eligibility not being met	People L	Managed conversations at triage/eligibility/assessment	L
4	Regulatory risk: increased use of equipment and data for monitoring may be incompatible with data regulations and information sharing	Process M	Maintain overview of process changes through governance and process owners	M
5	Commercial/financial: there are additional unknown costs associated e.g. with costs of training and culture change management, changes to existing technology contracts, rising home care or residential care costs in response to lower demand.	Resources H	Manage through detailed resource planning and cost modelling before FBC sign-off and manage through governance reviews in delivery	H
6	Benefits risk: projected financial benefits are not achieved as a result of scope creep and over-runs in implementation.	Process M	Develop and tightly manage benefits monitoring and realisation to evidence savings	M
7	Capacity and capability: there are insufficient skills and resources in place to deliver the change (either within Commissioning, across practitioner, staff or leadership)	People H	Manage through resource planning and detailed implementation management	H
8	Delivery and implementation: the TECS Hub change is not delivered to time, quality or budget.	Organisation M	Governance of change focuses on exception reporting	H
9	Supply: the potential supplier market for service delivery or equipment services is not able to fulfil demand and range of	Resources M	Market test future service requirements with existing and wider suppliers	M

	products at expected costs			
10	Affordability: budgetary constraints in next FY impact ability to fund the change as intended	Resources M	FBC sign-off secures budget commitment to change	L
11	Policy: future impact of regulatory changes may further adversely affect the TECS Hub and ASC Five Year Forward View	Resources M	FBC sign-off secures budget commitment to change	L
12	Technology risk: changes needed to Council systems to enable integrates end-to-end user centred service are unaffordable or will take too long for TECS Hub	Technology H	Scope technology requirements and ensure early review in council wide technology change plans	M

Business Case implementation risks

A	Service takes longer to implement than planned – delay achievement of project benefits	Organisation M	Governance of change focuses on exception reporting	H
B	Financial savings indicated in section 18.4 are not delivered as planned	Process M	Develop and tightly manage benefits monitoring and realisation to evidence savings	M
C	Staff with sufficient skills and experience to work in the service are not trained/recruited resulting in fewer, less appropriate assessments completed	People H	Manage through resource planning and detailed implementation management	H
D	Business case is not approved by Cabinet in May 2019 delaying the implementation phase with a knock-on effect on delivery.	Organisation H	Ensure passage of FBC through sign-off by walking key signatories through details	M
E	Appropriate TEC is not available reducing the support for service users	Resources M	Market test future service requirements with existing and wider suppliers	M
F	Cost of IT support for the service is higher than expected.	Technology H	Scope and cost technology requirements to ensure prioritised within council-wide technology changes	M
G	As part of Accessible Homes, TEC becomes less connected with Practitioners within Adult Social Care.	People M	Develop and deliver appropriate change management plans	M
H	There are a number of other ASC projects within the Transformation Programme which are linked to the benefits outlined in this business case.	Resources M	Manage duplicated requirements and resource overlaps through integrated programme planning	M

18.9.2 Risk Impact Analysis

The Full Business Case is being developed iteratively as the key assumptions, risks, dependencies and issues are identified and tested with key stakeholders as they progress through the round of Professional View sign-off. This is a process that adheres in principle with HMT Guidance for Better Business Cases although in practice it is more usual for the Outline Business Case to be iterative whilst the Full Business Case is developed to completion before seeking sign-off.

Constraints of time and the commitment of BCC's strategic intent to make progress towards a new model for April 2020, necessitate a more rapid and dynamic development process for the Full Business Case. It is essential that the governance in place is assured of the following progress prior to Business Case sign-off in May 2019:

- detailed model development

- technology environment and enabling infrastructure
- TEC supply arrangements
- benefits modelling and realisation planning
- resource planning
- change management planning

Good progress is being made to address these issues currently and correspondingly, reduce the risks of implementation.

18.9.3 Contingency Planning

In order to increase confidence in delivery of a successful service model, an external consultancy has been appointed. They have provided:

- Evidence of good practice that builds upon the Outline Business Case position
- Support to test, refine and develop this business case, introducing greater detail into the cost and benefit assumptions.
- Initial service model design following agreement of Service Vision and Design Principles – clarifying what the new service model could look like - to aid both decision-making and planning for transition from the ‘as is’ to the ‘to be’ model.
- High level implementation planning.

The Council’s confidence in the strategic direction and ability to deliver the TECS Hub has increased with the support and experience of the consultancy – which has delivered end-to-end technology enabled independent living service models in other Local Authorities.

Since approval of the Full Business Case by the Better Lives programme board, the sensitivity analysis for the figures provided has progressed from 50% to 75% as the model was further developed and the evidence base built.

19. Delivery Approach

19.1 Implementation Approach

This section describes the typical actions that will be required to ensure the successful delivery of the TECS Hub in accordance with good practice.

19.1.1 Implementation plan

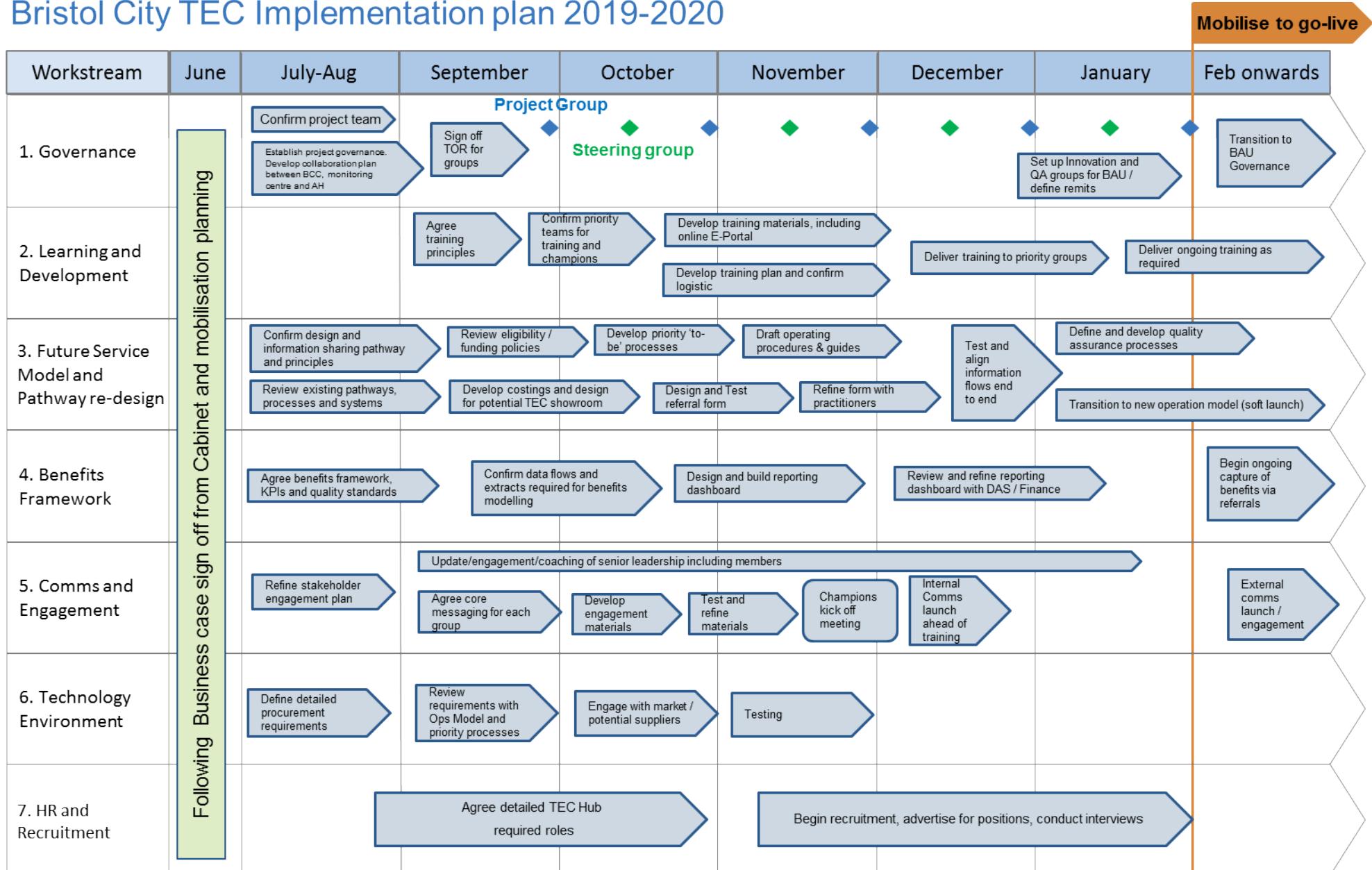
The new TECS Hub service is anticipated to be ready for go-live in April 2020. With appropriate resources to the core project and support in developing the enabling technology environment, mobilising culture change and awareness in the user and practitioner community, it is expected to take nine months to fully mobilise and implement the preferred option: one-month pre-mobilisation activity; seven months mobilisation prior to go-live and one month post go-live. The plan below sets out the expected implementation plan and organises activity into seven broad workstreams:

1. **Governance:** establishing strong, decisive governance structures that operate across Bristol to provide inputs at the right level throughout the transformation and development of the service .
2. **Learning and development:** supporting referrers, commissioners, providers, leadership across Bristol to have the capacity and capability to use the service and encourage higher rates of take-up.
3. **Future service model and pathway redesign:** establishing and embedding the new operational service model across Bristol. Pathway and service redesign work to co-design and co-produce new simplified referral pathways across health and social care. This includes planning for quick wins.
4. **Benefits framework:** designing and implementing a robust approach to benefits measurement and realisation that meets the needs of Bristol stakeholders.
5. **Communication and engagement:** raising the profile of the service through a programme of activity around culture change and engagement to increase understanding of the service and benefits that TEC can have for people.

6. **Technology Environment:** Ensuring procurement of appropriate technology to meet service users outcomes and removing and technical barriers to effective referrals for practitioners.
7. **HR and Recruitment:** ensuring the new TEC hub and accessible homes have the capabilities required to deliver the new target operating model.

More detailed information relating to the implementation of the service can be found in appendix B.

Bristol City TEC Implementation plan 2019-2020



19.1.2 Technology environment

A sixth workstream for this approach will be to ensure that the technology is available not only to deliver the TEC equipment on a cost-effective and responsive basis, but also to support end-to-end service delivery using standardised, simplified and as far as possible, automated process and data management.

As stated in section 18.6 due to potential changes to the ICT environment through delivery of the Future State Assessment (FSA), there is currently uncertainty as to how the ICT requirements of the service will integrate into the new ICT landscape.

To ensure the service is supported on launch, the Technology Environment workpackage within the implementation project will redevelop the current ICT solutions (e.g. Liquid Logic Adult System) to support the service on launch. This will ensure practitioners are easily able to make referrals into the service and also provide the basis for tracking the defined benefits of the service.

The implementation project will also deliver the wider detailed ICT requirements of the service. The delivery plan will then be revised through a checkpoint review to reflect the FSA implementation plan. This will ensure joined up delivery and that the service model is aligned to the future ICT strategy of the organisation.

Assumptions around cost of IT change are notoriously difficult to quantify with certainty given that so much cost is resource costs for configuration and implementation with existing systems and projects. As far as practicable the final costs assumptions detail the areas of likely IT cost, phased nature of the expenditure and identify the risks and mitigations to be managed through Programme and Project Governance.

19.1.3 Change and engagement

Developing ‘project infrastructure’ will be needed to drive a lasting change. In parallel, focus on removing ‘barriers’, such as a complex referral form or confusing guidance will be needed, with the aim of driving beneficial change. Achieving and sustaining successful change relies on a campaign to win hearts and minds. It will not be a one-off exercise but will need to be part of an ongoing approach, which will need to be adopted by staff, users, carers, providers, partners and senior leadership. This will mean:

- Investing in securing and maintaining senior buy-in, including senior officers and elected members;
- Building a network of TEC champions, people with experience and confidence who are or have been actively involved in service development;
- Setting the expectation that using TEC is ‘the way we do things here’, at all levels of the organisation and outside of the organisation;
- Supporting referrers to make high quality referrals, based on need, regardless of where they refer from;
- Managing people’s expectations around the level of support provided and possible financial contribution for TEC;
- Co-designing and delivering a formal classroom training programme, compulsory for anyone able to make a referral and built into induction processes for new staff;
- Monitoring the source of TEC referrals at team and individual level and where lower than projected, investigating and supporting care practitioners;
- Linking to performance management systems, so that TEC is part of performance management of staff;
- Telling a compelling story about the successes of the service using case stories and gathering evidence on performance;
- Actively seeking, analysing and responding to practitioner feedback.

19.2 Benefits

The quality assurance function of the service model is intended to monitor delivery of the project benefits as business as usual activity. The service will initially collect data on the easily measured information e.g.:

- Number of referrals into the service (funded and self-funded)
- Number of TEC assessments completed
- Outcome of TEC assessments
- Projected benefit from value, quantity and type of TEC installed (per user and collated by cohort)
- Time taken between referral, assessment and installation of TEC
- Number of connections to Careline
- Operability of TEC in client's homes
- Cashable and non-cashable financial savings to BCC and wider health economy

This will be reported to the Better Lives programme board through the existing Trajectory Management process.

Within the development of service model and go-live, a balanced scorecard of measures will be developed to reflect the outcomes from deploying care technology to support independent living. A mix of service user, commissioner, council and wider economy impact measures will be developed to ensure the service is seen through the lens of the ASC strategic aims and intent.

The data from the TEC service will also be compared to a baseline of TEC referrals and installations (taken from the Adult Social Care database and installation figures held by Bristol Operations Centre) before implementation. This will allow a meaningful comparison to ensure the service has delivered the required benefits through a formal evaluation of the service 6 months after the service has been implemented.

The manager of the new service will be responsible for ensuring the data outline above is collated. It is anticipated that the data collection will be through accurate single point of input and data capture, supported by work-flow tracking and an automated dashboard of key reporting metrics.

The remainder of this section sets out a proposed benefits management approach, roles and metrics.

19.2.1 Benefits and benefits realisation

Measuring the financial impact of the service model and evidencing progress towards achievement of financial targets is fundamental to successful implementation of this case. An approach must be agreed that gives all stakeholders across the Council confidence in the financial benefits from transforming the service. Fundamental to this will be agreement of some principles that will guide the approach – these will need to align the need for evidence with the principles of a Strengths-based Approach – which may be a tension. Whichever approach is chosen, it must be proportionate to the need identified. This section describes some key principles, the benefits that could be measured and the key roles in tracking and measuring.

19.2.2 Benefit realisation approaches

Evidencing the benefits described in the Preferred Option will mean implementing an approach to benefits measurement that is based upon some key principles:

- **Ensuring alignment with the three tier model: the approach needs to be specific enough to meet the requirement to manage outcomes, but not add to the burden of work for practitioners;**
- **Co-designing the benefits measurement framework from the outset:** Developing a tailored approach to meet The Council needs, ensuring buy-in from stakeholders;
- **Ownership by Bristol:** It is important that the Council has assurance of the financial benefit that the service will realise. The approach to benefits realisation will involve appropriate stakeholders from the Council so that the final approach is owned;
- **Embedding benefits measurement and realisation throughout the TEC pathway:** Building and validating the robust evidence base required to measure telecare benefits, from the point of referral.

This is likely to mean focussing on reduced packages first, with tracking of avoided costs being tested over time;

- **Measuring the financial impact on a granular basis:** To track both reduced packages of care as well as avoided costs, financial benefits can be measured at a granular level and aggregated up, allowing the Council to fully reconcile, audit and realise all types of benefit;
- **Manage via a balanced scorecard:** Developing a series of simple, high-level key performance indicators in clear dashboards tailored for each stakeholder group.

19.2.3 Benefits

The high-level benefits of successful delivery are as follows, with the below table describing some outline metrics and a measurement approach. This shows metrics at a high level – through the implementation phase the project will explore metrics to be measured and tracked in a systematic way. It should be noted that home/domiciliary care prior clients and a proportion of new clients have been counted as ‘cashable’.

Benefits for the project

Theme	Benefit	Benefit type	Owner	Key metric ¹
Home / domiciliary care	Current and future clients may be able to reduce purchased domiciliary hours for non-hands-on care	Financial	ASC Transformation Prog.	# TEC assessments # domiciliary care placements as a % of total Average domiciliary care hours
	Current and future clients will be able to stay in their homes for longer, delaying the need for residential care			# TEC assessments # residential care placements as a % of total Length of domiciliary care placement prior to residential care entry
Residential care	Future clients will be able to stay in their homes for longer, avoiding the need for residential care	Financial		# TEC assessments # residential care placements as a % of total
LD Travel	Technology support for LD/PD users will mean they will be able to travel independently and will not need an accompaniment	Financial		# TEC assessments # accompanied LD people as a % of total
LD Supported Living	A reduction in need for sleep-in services for LD people in supported living	Financial		# TEC assessments # LD sleep-ins as a % of total
LD Carers	Reduced respite for	Financial		# TEC assessments

¹ In order to monitor the actual difference with TEC, a control group without TEC could be monitored alongside the TEC cohort – otherwise the result will be a change in trend. Alternatively, data can be monitored on a user by user basis (care package before and after the TEC installation) which is a more onerous but accurate approach.

Theme	Benefit	Benefit type	Owner	Key metric ¹
	LD/PD family carers			# LD carer respite breaks as a % of total
Reablement	Acceleration of return to independence	Non-financial		Average weeks of reablement placements (when TEC in place)
DTOCs	Faster discharge due to provision of TEC at discharge	Non-financial (financial for health, should this be part of scope in future)		# TEC assessments Length of days' delay
Carers	Prevention of carer breakdown	Non-financial		Overall cost of carer breaks and support User satisfaction survey
Mental health	Support for those with dementia to increase independence	Non-financial		# police reports of people reported missing
Health	Medicine reminders, reducing the need for face to face visits	Non-financial		# medicine reminder hours in the home as a ratio of total visit hours
Users with complex and multiple needs (learning difficulties / physical disabilities and mental health for e.g.)	Various outcomes dependent on the need on a user by user basis (promoting medical adherence, safer homes, travel support, sensory support, epilepsy support)	Non-financial		Package of care cost and length of provision by care type on a user by user basis, before and after TEC installed
Referrals	Increase in referrals as a % of total cohort size	Non-financial	Careline	# referrals, by cohort and provenance
Connections	Increase in live connections Increase in length of connections for live users	Non-financial		# live connections Length of live connection
Installation	Lower time between referral and install	Non-financial		Days/hours between referral and install
Staff satisfaction	Increase in staff satisfaction with the	Non-financial		% staff satisfaction rate in line with local standards

Theme	Benefit	Benefit type	Owner	Key metric ¹
with the service	service (this is not currently measured)			
Practitioners	Confidence in commissioning TEC at first point of assessment knowing the outcomes that can be delivered	Non-financial		Corresponding benefit of TEC being seen as complementary too not an addition to physical care
Resident satisfaction with the service	More widespread measurement of resident satisfaction of the service (the survey is based on a small number of clients currently)	Non-financial		% resident satisfaction rate in line with local standards

Example benefits measurement process during BAU – full process to be defined during implementation

BENEFITS MEASUREMENT	STEP 1 Referral	STEP 2 Service desk	STEP 3 Referral management	STEP 4 Financial benefits measurement	STEP 5 Panel review	STEP 6 Finance review
RESOURCE	Care & Health practitioners	TEC service	TEC service	Performance & Improvement Team	Council Panel	Council Finance
FREQUENCY	Daily	Daily	Daily	Monthly	Monthly	Annual

19.2.4 Roles in benefit tracking

The table below sets out the key roles which are likely to be involved in benefits realisation.

Team	Role
Senior Management	<p>Active support required to:</p> <ul style="list-style-type: none"> • Reinforce the culture change and engagement programme, including the importance of identifying potential savings at the point of referral and consistent messaging on the importance of TEC within the whole care pathway. • Provide sustained and consistent leadership support to the Careline service and practitioners.

Team	Role
Performance team	Contribute to co-designing the benefits management approach. Bristol performance team will own the measurement of the financial impact of the TEC service as recorded in care management systems, so claimed savings will be separate from the Careline operational service.
Finance	Finance Business Partner will have a key role in reviewing and audit results of benefits reporting.
Practitioners	Practitioners provide a key role in the service in making a robust and accurate referral, with a professional assessment of the anticipated outcome based on the TEC intervention.
Careline	Careline has an operational role in running the service to a high standard. The service will also supply data to inform performance metrics.
Learning and Development	Managing the impact of behaviour change and practitioner confidence to put TEC in front of mind and confident in commissioning for outcomes

19.3 Procurement Approach

There are three identified areas of procurement requiring consideration as a result of proceeding with the Business Case. They are:

1. Procurement of TEC equipment
2. Procurement of the integrated technology environment

This section summarises the current position, future considerations and recommendations for next step in each of these three cases.

19.3.1 Procurement of TEC equipment

The Council's current arrangements for sourcing and supply of TEC equipment is fragmented and difficult to performance manage or assess for good value. Supply arrangements have necessarily built up over time in response to vertical service demand for specific products – primarily simple pendant, alarm or reminder response devices – required by different parts of the Council e.g. Housing, Care Services, Careline. These are however compliant as they are purchased through an ESPO framework and individual call-offs are undertaken. This is very time consuming and has not allowed for a large take up of TEC.

The Council is currently investigating whether its Integrated Community Equipment Service (ICES) contract can satisfy the Council. A benchmarking exercise is currently being undertaken. The Contract runs until September 2020 and allows for contract variation to include TEC equipment – a variation not triggered by BCC until now. Subject to provision of the current supply catalogue by Medequip, and the Council's review of it against its current requirements and cost envelope, it makes good sense to proceed with this variation to ensure continuity of existing need. It is anticipated that the new arrangement will provide a wider range of products at an overall lesser cost and an easier ordering process for OT's and equipment required by service users to be discharged from hospital will be readily available at one time. This assumption will be tested by the work undertaken by the Council's category management team.

The Council's future needs for TEC will rapidly move beyond simple product supply. The concept of the TECS Hub is that BCC develops a Centre of Excellence and innovation in sourcing, configuration assessment and deployment of TEC. The pace at which care, medical and consumer assistive technologies is advancing indicates that the Council will require more dynamic, innovative and responsive supplier management and relationship arrangements in the mid-term future.

The current work to seek a variation to the ICES contract could be used as a platform to test the Council's future supply requirements. In summary, the requirements are that the Council, in addition to continuing

to seek basic TEC equipment in an effective, Just-in-time, and cost-efficient way, the Council will also seek to understand and evaluate the supply of existing consumer and emerging TEC in market.

For the longer term, the implementation project will develop the detailed future requirements of for TEC supply to be managed through the TEC hub. Following a test of the market a full procurement exercise will be performed to seek a new market partner through open competition for outcomes.

19.3.2 Procurement of the integrated technology environment

The current end to end process for deploying care technology is currently dependent upon a series of systems that are either primarily used by ASC (i.e. not available to other BCC departments) or are used by other areas of the council without specific regard to the end to end needs of users and practitioners. For example:

- receipt of enquiry is recorded on LAS
- assessment and TEC referral is undertaken in Liquid Logic
- eligibility check is manual and
- requisition and payment is undertaken in Agresso Business World

This is a typically fragmented approach as systems have been deployed over time in response to different departmental and corporate needs. It results in sub-optimal process flows, poor user data capture and analytics re-use (information is re-keyed at different points creating error opportunity or data loss), low take up of data capture in online form functionality (often relying on manual free text rather than compliance scripting) and process inefficiency for the end user.

The Council is in the early stages of developing its enterprise wide requirements for its future IT architecture. It is in principle seeking to move to a cloud-based storage solution and a more consistent, enterprise IT operating architecture. One option open to it is use of Microsoft technology stack* – which would include contact management, data warehousing, corporate systems supply and so on.

At the same time, the forward work plan for IT includes projects to assess the future need for and replacement of the core ASC systems – LAS and Liquid Logic – within the next FY. Both of these systems could offer wider use across the Council or be subsumed into a future, more integrated suite of products e.g. integration in the end to end assessment and referrals process as well as a minimum an operating interface with purchase to pay system functionality.

*[*Note that this is an assumed scenario at this time not a pre-judgement of work being undertaken within the IT department.]*

19.4 Communications and Engagement Approach

19.4.1 TEC Service Communications and Engagement

As outlined above, a vital part of a successful TEC service is awareness and training. This is to ensure that practitioners are able to recognise opportunities for the use of TEC and make the right, high quality referrals. This will be achieved through the following:

- Design, develop and deliver awareness programme for practitioners, commissioners and users
- Design, develop and deliver formal training for personnel within the TECS service relevant to their role
- Design, develop and deliver formal training for practitioners, commissioners and users relevant to need
- Deploy regular updates and promotional materials on benefits and good practices
- Develop online e-portal material available to practitioners at all times.

Types of learning that will be available to practitioners to support them to make effective TEC referrals



19.4.2 Project Communications and Engagement

In addition to the communication relating to the service model there is a requirement for project related communication. Consultation with the various stakeholders below is ongoing.

- **Members**

Assistant Mayor for Adult Social Care has been engaged through production of the business case and also through the Better Lives programme board. As the proposal moves through the Decision Pathway to Cabinet there will be further engagement sessions scheduled.

- **Colleagues**

Engaged through Better Lives newsletter (monthly), staff engagement group (monthly), TEC Champions group (regular meetings). Once the service model is in place there will be further engagement through the structured training programme.

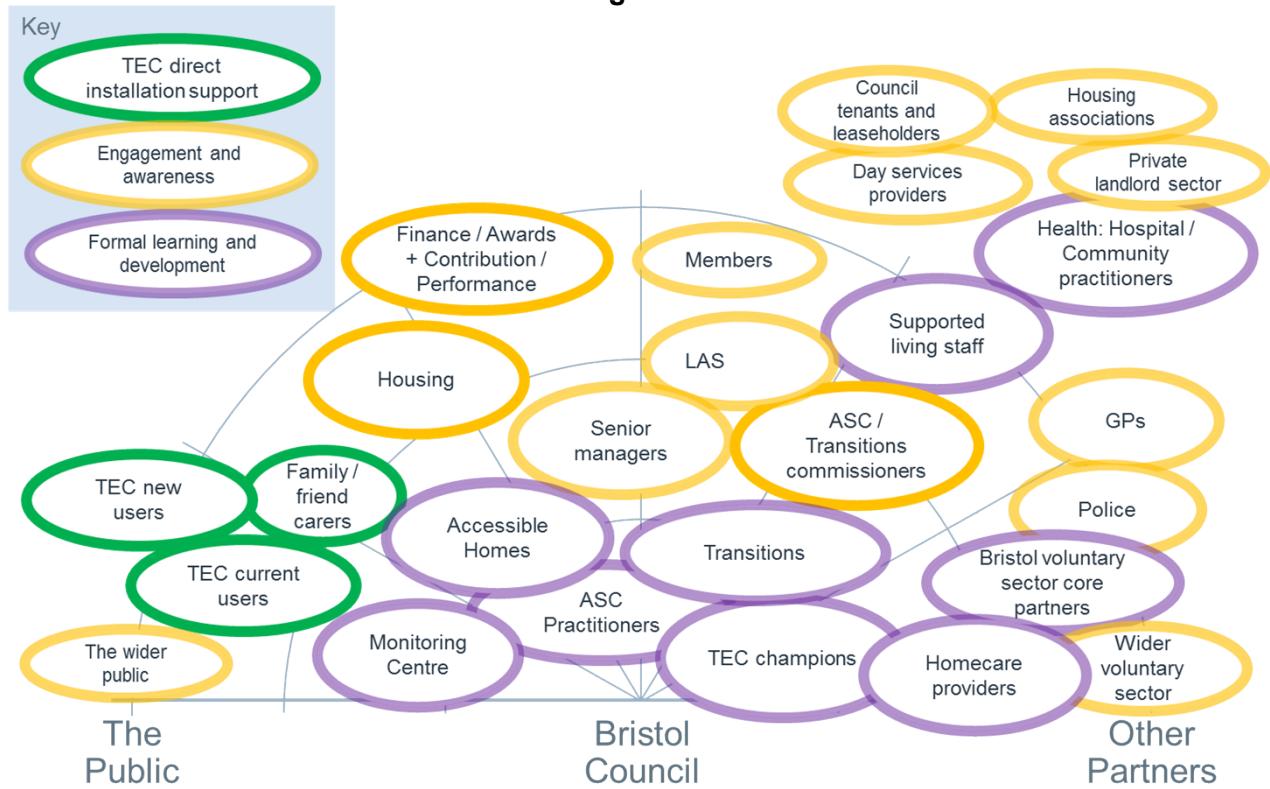
- **Health**

Engagement with Health has been through the Healthier Together programme (BNSSG change programme including representatives from other regional local authorities). The structured training programme will also apply to colleagues who work in hospitals.

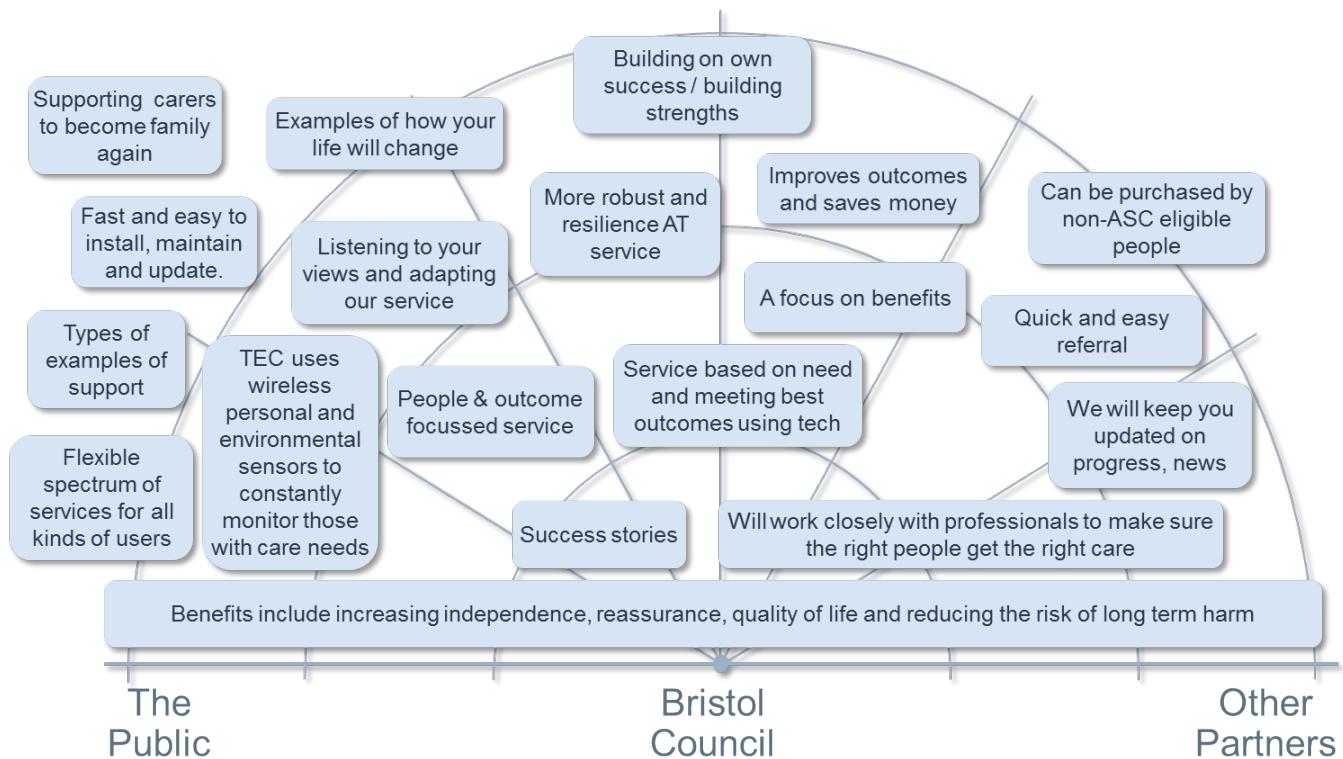
- **Public**

There can be a perception that increased use of TEC will be at the expense of face-to-face contact with carers, however, this is not the main driver for the need to increase the use of TEC. To accompany publication of the business case there will be external communications to show how TEC can assist people to be more independent and also to help them to live in their homes for longer.

Who will be affected and what will the change mean to them



Key messaging for each audience



19.5 Project timeline and Key Milestones leading to go-live

The high level plan for implementation can be found on page 31.

Preferred Option A: Key Milestones	Target Date
Full Business Case sign off	06/05/2019
Project Mobilisation for delivery	30/06/2019
Update baseline indicators against TEC Diagnostic	30/06/2019
Service model and detailed pathway design	July and August 2019
Process design and delivery	September 2019 to January 2020
TEC supply arrangements	May to September 2019
Pre-engagement	May to July 2019
Communications and engagement	July 2019 to January 2020
Awareness and training	September 2019 to January 2020
Benefits framework and tracking development	01/08/2019
IT environment requirements, sourcing delivery	May 2019 to January 2020
IT testing and implementation	January to March 2020
Service go-live	April 2020
Benefits tracking mobilised	April 2020
Project closed – demobilisation review and lessons learned	01/07/2020

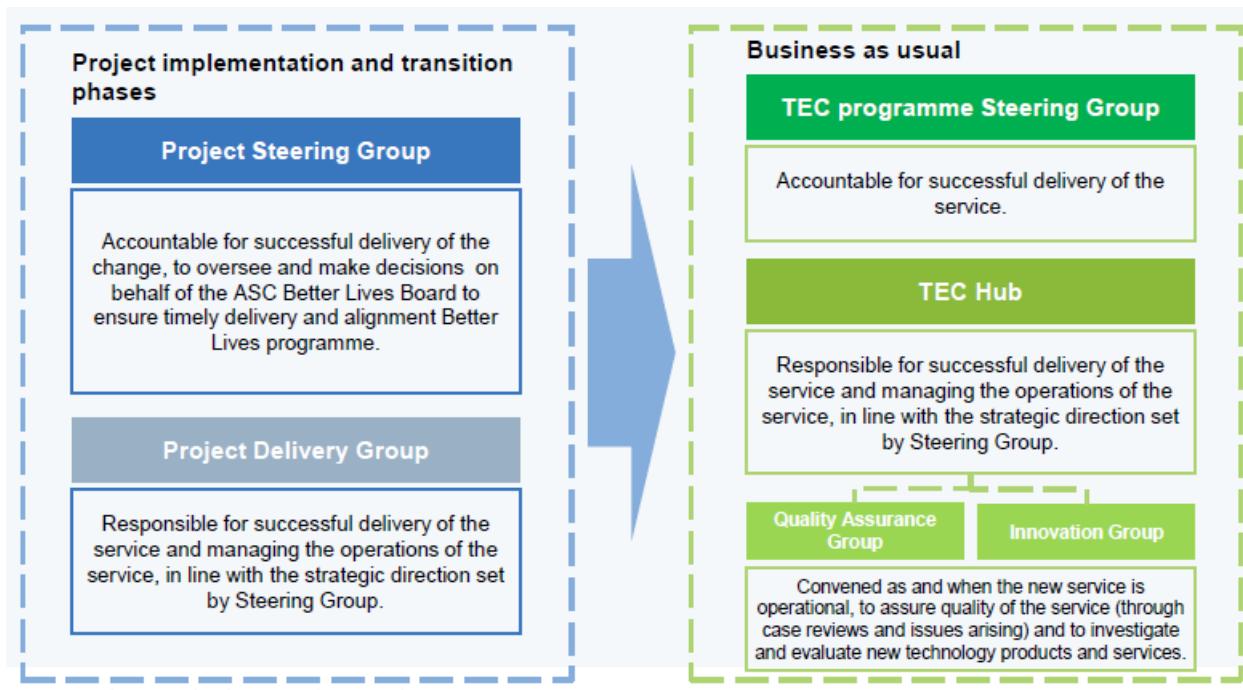
20. Project governance for implementation

The project will ultimately report into the Better Lives Programme Board. However, in order to manage the implementation of the service model on a day-to-day basis there will be two governance groups – a project steering group and a project group.

- TECS Model Project Group: manages the mobilisation and transition – this would form an operational group to manage the service once the project moves to business as usual. This group would also have a role in quality assurance and continuous improvement and innovation, once the project moves to business as usual.
- TECS Model Steering Group: oversees and make decisions on behalf of the Adult Social Care Better Lives Programme Board to ensure timely delivery and alignment to the strategic vision and aims.

The Better Lives Programme Board will in turn be responsible for feeding in to the BCC governance process to Executive and Democratic levels.

Following go-live the Project delivery structure will convert to the BAU governance structure. The Quality Assurance group activities and remit are to be defined during the transition phase whilst the innovation group is expected to be set up after go-live and the BAU service has bedded in.



The project group will be made up of the roles defined in section 20.2 while the steering group will be made up of the following:

Project Role	Name	Job Title
Sponsor	Terry Daft	Director: Adult Social Care
Project Executive		Head of Service and Senior Professional Lead Better Lives programme
Project User(s)		TEC Lead
Project Supplier(s)		Team Manager, Accessible Homes Operation Centre Manager, Bristol Operation Centre
Project Assurance		Head of Service and Senior Professional Lead Better Lives programme
Project Manager		Project Manager
Finance		Finance Business Partner

20.1 Project Tolerances & Controls

The table below outlines the anticipated tolerances within which delivery can be pursued without seeking further delegation from the SRO and Programme Board following sign-off of the FBC. These tolerances will be tested and agreed with the Programme Board prior to presentation of the Full Business Case for approval.

Once agreed, any decisions that indicate they are likely to go outside of the tolerances set will be escalated to the SRO immediately before being presented to the next Programme Board with recovery actions for discussion and decision.

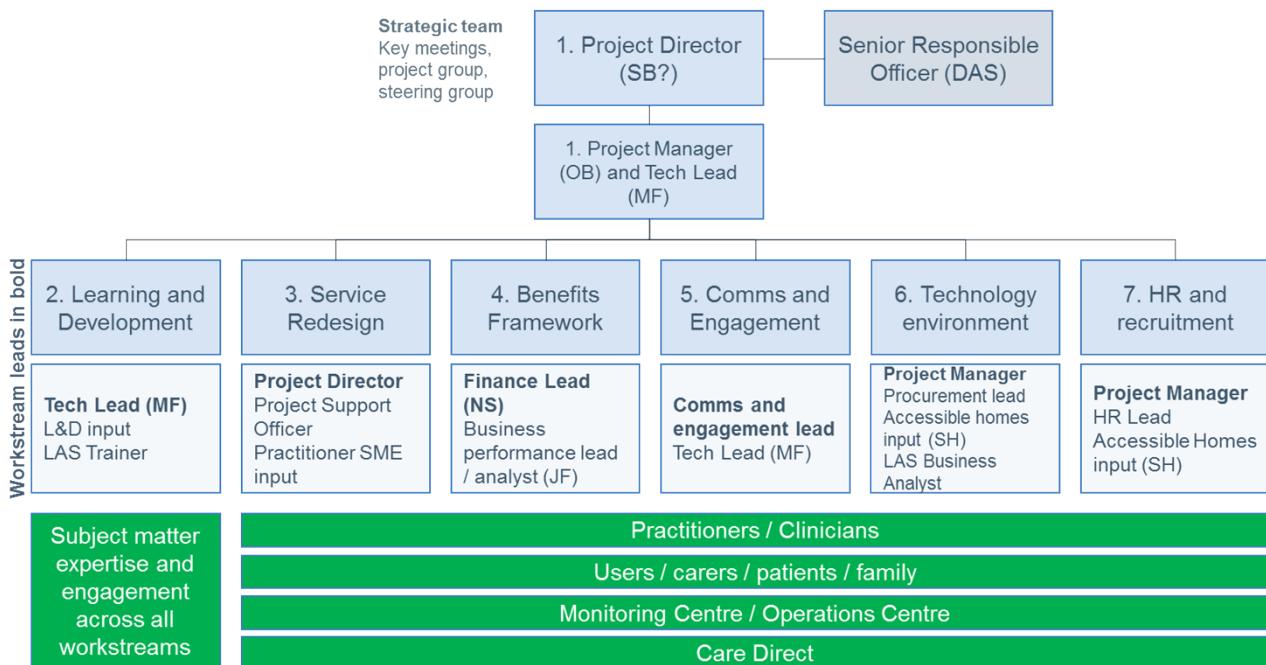
Tolerance areas	Project level tolerance	Escalation route	Control & tracking document(s)
Time +/- amounts of time on target completion	+1 month (key programme level – zero)	Better Lives programme Manager Programme Board	Project Plan Business Case Highlight Report

Cost +/- amounts of planned budget	+/- 10%	Programme Board	Project Plan Business Case Highlight Report
Quality Defining quality targets in terms of ranges	Zero	Programme Board	Requirements Document Business Case Highlight Report
Scope Permitted variation of the scope of a project solution	Zero	Programme Board	Project Plan Business Case Highlight Report
Benefits +/- amounts of planned benefit delivery	+/- 10%	Programme Board	Business Case Highlight Report
Risk Limit on aggregated value of threats and any individual threat (e.g. threat to operational service versus threat to organisation)	Risks rated as Red or greater must be escalated. Residual risks only – mitigate within project structures	Better Lives programme Manager Director: Adult Social Care Programme Board	RAID Log Highlight Report

20.2 Project Team Resource Requirements

Project resources will be required to manage the project, through the mobilisation and implementation phases. This may encompass the following roles, outlined in the figure below. The monitoring arrangements are currently managed by the Careline team – this is not expected to change and creates a dependency with the TEC project and therefore is highlighted below.

PROJECT TEAM AND ROLES



These roles are described in greater detail below. Roles will be allocated to named individuals where this has not been provisionally done below, and the roles defined fully in the more detailed implementation and resource plan, which will be developed following business case sign off.

Where a role is expected to lead a defined workstream, this is highlighted in italics in the table below.

Role	Description	Weekly commitment	Total Days	New/ Opp	Internal identified resource (provisional)
Senior Responsible Owner	Accountable for successful delivery of the project.	N/A	Attendance at Board	O	Terry Dafters (DAS)
Project Director (Service redesign lead)	Responsible for successful delivery of the project and steering the team to meet the desired objectives. Responsible for managing the team to meet the desired project outcomes. Likely to have a lead role in managing service redesign.	0.36	15	O	
Project Manager (Tech Environment and HR/Recruitment lead)	Responsible for delivering the project to time and to budget. Also, likely to be responsible for developing governance arrangements, supporting development of policies and procedures, project managing key workstreams.	3/4	140	O	
Project Support Officer (L&D lead)	Provides administrative support to the Project Manager and wider project.	5	190	N	
TEC lead	Plays critical role in developing training materials, supports development of service workstream. Provides continuity between implementation and service go-live.	5	190	O	
Monitoring Centre lead	Provides SME across workstreams. Critical engagement with service design to ensure correct information flows	0.25	9.5	O	
Accessible Homes Lead	Provides SME across workstreams. Critical engagement with service design to ensure correct information flows. Critical engagement with procurement and HR/Recruitment workstreams.	0.36	15	O	
Practitioner SME(s)	Supports service redesign workstream lead to provide expertise from a social care practitioner point of view.	0.25	9.5	O	
LAS Training and Dev Officer	Supports service redesign workstream in redesigning supporting processes and systems, including redesign of LAS form.	0.8	30	O	
Business/Performance Analyst	Supports benefits framework and tracking workstream in developing metrics, dashboard and reporting system.	N/A	15	N	

Finance Lead (Benefits framework Lead)	Responsible for finance inputs to the business case and to designing a benefits framework and tracking approach.	N/A	35	O
Communications and Engagement Lead	Designs a communications and engagement plan and approach and leads training and engagement sessions through transition.	0.5	18	O
HR Lead	Advises ASC on management and process of change – job roles, matching, consultation, recruitment, interviewing.	0.25	9.5	O
Procurement lead	Advises on procurement of correct technology and sourcing of kit for installations. Advises and supports Accessible homes in tendering process.	0.25	9.5	O
Solution Architect	Advises on ICT systems suitable to underpin service delivery.	N/A	15	O

Resource relating to delivering an ICT solution for the service has not been fully scoped however a contingency for this is included in the resourcing costs below.

Table: Project roles and requirements

One-off costs for transformation have been estimated as £400,000. Of this figure £100,000 will be internal opportunity costs. The remaining figure of £300,000 includes an estimation ICT transformation expenditure based on figures from other comparable Local Authorities. The figures provided are conservative and the final resource costings are not expected to exceed this.

Total opportunity costs	£100,000
Total new costs	£300,000
Total resource costs	£400,000
Total funding being sought	£300,000

21. Equalities Impact Assessment (EqIA) Summary of Impact and Key Mitigation

The use of TEC is decided on an individual basis through the application of a Care Act 2014 compliant assessment of need or review of a package of care. This ensures that all aspects of an individual's wellbeing are considered before TEC is used and that they are not disadvantaged in any way. Training of staff will be delivered in accordance with Bristol City Council policy and ensure that staff with protected characteristics are not disadvantaged.

Please see the appendix for the EqIA relevance check.

22. Eco-Impact Assessment Summary of Impact and Key Mitigation

Increased use of Care Technology will lead to increased CO2 production as the electronic devices will require electricity to function. However, the amount of electricity required is not significant.

Please see the appendix for the EcoIA.

23. Privacy-Impact Assessment Summary of Impact and Key Mitigation

Key security impacts relate to inappropriate access to data and information loss. Actions to mitigate this include:

- All staff to complete Data Protection training.
- All staff to complete Information Security training
- Business continuity plan to be developed and documented.
- Data not being shared with 3rd parties.

More information can be found in the Privacy-Impact Assessment.

It is currently envisaged there will be no data transfer to 3rd parties. If this changes in the future, the PIA will be updated to reflect this. Additionally, the Care Technology currently used within BCC does not collect personal data, however if products come to the market in future again the PIA will be updated.

Please see the appendix for the PIA.

24. Full Business Case - sign off

Name	Job Title	Date circulated
Terry Dafters	Director: Adult Social Care	19/02/2019
Stephen Beet	Head of Service and Senior Professional Lead	19/02/2019
Merlin Jones	Senior Project Manager	19/02/2019

Decision making authority	Cabinet
Date seeking endorsement	07/05/2019

APPENDIX

A. Required commentary and recommended consultation

Commentary on Mandate and Outline Business Case are available in the relevant appendices.

FULL BUSINESS CASE		
Recommended bodies/individuals for consultation ahead of submission to DWG:	Commentary (if any)	Date
Cabinet Lead	Fully supportive	25/03/2019
Executive Director Meeting (EDM)	Fully supportive	13/03/2019
Professional Views	Commentary	Date
MANDATORY – and must include confirmation of funding source(s) Finance Business Partner	<u>General commentary:</u> Adult Social Care continues to have significant challenges in delivering a balanced budget, which includes the delivery of savings of a minimum of £4.2m in 2019/20 and a further £2m in 2020/20. This business case targets an opportunity to invest in technology enabled care and at the same time reduce the amount of direct face to face support where a service user will remain safe in their own home. The plans are ambitious but are based on national work implemented in other parts of the country that have delivered cashable savings and reduced the escalation of costs. It is anticipated that the savings from this project will contribute significantly to the ASC savings target over the next 4 years. It is anticipated that net savings from the investment in TEC and increasing service users who have TEC installed to from a current base of 700 to c1500 will be in the range of £1.7m to £4.0m. The actual benefits from the increased number of service users and the operating costs will be refined and firmed up during the implementation of the new model. The assumptions made in terms of the growth in the number of service users and benefits that accrue from increased number of installations based on knowledge of other implementations suggests that there may be an opportunity to realise greater savings than suggested in the FBC.	05/04/2019

MANDATORY FOR ALL FULL BUSINESS CASES WITH A RESOURCE REQUEST PMO Operations Manager	<p>10/04/2019: I've reviewed the plan, resource estimates and costs with the project manager and am happy that the case has evolved and refined these to a good level of confidence at this point. I'm happy to endorse these and the business case as a whole.</p> <p>22/02/2019: Accepting that this business case is currently unfinished; that an understanding of resource needs will be refined before submission to cabinet and there being no immediate change to the resources already assigned to this work I'm very happy to endorse the position presented in this document and in supporting information provided to me by the project manager. I would like to have the opportunity to review the detailed plan and refined resource requirements before the business case is finalised but in the meantime see no reason at all why this important project should not proceed to the proposed next steps.</p>	10/04/2019
HR Business Partner	<p>The proposal to develop an TEC Service within Bristol City Council will have an impact on our current and future workforce. Some of the TEC solutions could mean that some tasks are no longer required to be performed by our employees, and therefore could have an impact on job role/employment. There will be training implications for employees for some TEC solutions as they will be new to employees and may have significant training requirements. Longer term we may need to review our recruitment strategy for this work group and re-write job descriptions as we will be looking for different skills and experience going forward.</p> <p>All changes that affect the workforce and the way they work will be fully consulted on through our Sub JCC and DJCC with our employees and their local trade union representatives.</p>	19/02/2019
Change Services View	This iteration of the Full Business Case should be considered to be an interim	18/02/2019

	<p>step to approve the preferred option of developing a TECS Hub aligned to Care Direct as a single front door. It is acknowledged in the business case that a further level of detailed work is needed before full sign off in May 2019.</p> <p>Prior to full sign off the following areas should be strengthened through the next iteration of the business case:</p> <p>Clarify the financial benefits associated with the new service. The service model proposed is clearly flagged as an enabler to the financial savings target of the programme. Prior to sign off of the business case a clearer indication of the financial savings associated with the work will help to establish whether the change is worth the investment. Financial and non-financial benefits are listed in section 19 but not quantified.</p> <p>Strengthen the indicative costs of the change. New costs are indicated to be £400k and these need validating through the next phase of detailed planning.</p> <p>Address changes needed in teams to improve confidence in and awareness of TEC. Evidence from stakeholders indicates that previous attempts to promote the use of care technology have not been sustained or embedded. This preferred option to build on existing pockets of excellence in a more structured and effective way is to be welcomed, and next stage of detailed planning would benefit from consideration of how these changes will enable the change to 'stick' with the referring teams.</p> <p>Confirm scope. TEC services currently provided by health care providers is specifically mentioned as being out of scope. It would be helpful to clarify whether closer work with health is a future aspiration for this service to ensure that future opportunities are not 'designed out'.</p>	
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	<p>Addressing these areas will better enable the programme to set tolerances (section 20) and expectations on the project so that the work can be kept on track and any areas of under-delivery or drift can be quickly resolved.</p>	
IT View	<p>There is no doubt that technology may offer the opportunity to enrich or even transform lives or citizens and IT is supportive of this initiative. There are, however, two main elements in the business case that will require further IT consideration.</p> <p>Section 18.3.1 - Health care professionals are out of scope; the implications of this need to be clearly understood and acknowledged.</p> <p>Section 18.3.6 – As noted, the aspirations for new IT requirements are significant and complex. This will require time and resources to design and develop and will need input from existing as well as future suppliers.</p>	17/02/2019
Enterprise/Solution Architecture View	<p>As requested I have read the relevant parts of the FBC you highlighted in red and have scanned the rest and have discussed required updates (ABW definition, Microsoft technology stack, inclusion of Transition team resource, etc.).</p> <p>I see you have incorporated the As Is and the Conceptual models I drafted for the FBC.</p> <p>I discussed my view with Gary Alexander and followed up on the points discussed with yourself this morning – dates clarification, TEC procurement options, PA Consulting view.</p> <p>Following these reviews my SA view remains the same as detailed below:</p> <p>Solution Architecture View - Assistive Technology</p> <p>The proposed model is an abstraction to</p>	08/02/2019

	<p>a higher level so no technologies or vendors have been mentioned.</p> <p>The initial plan for the architectural design for this work remains at a high level. It is based on the strategic objectives of a future TEC service for BCC.</p> <p>The technology will seek to support the development of the processes, roles and organisational design for the future BCC TEC service model proposed by PA Consulting.</p> <p>The proposed design would comply with the future IT strategy and EA architectural principles.</p>	
Property View	Not applicable.	
Legal View	<p>The Procurement Regulations and the Council own Procurement Rules should be complied with in respect of all commissioning of external services and procurement of equipment etc. Where any employees are impacted by the proposals, appropriate consultation should be undertaken. Wherever there is a proposal to reduce packages of care and/or replace with or otherwise employ AT, this should be the subject of proper and effective consultation with key stakeholders (eg service users) , and all appropriate equalities impacts should be identified and assessed. Consideration should also be given to how procurement activities will support the Council's social value policy.</p>	19/02/2019
Commissioning & Procurement View	<p>19.3.1 – Procurement of TEC Equipment – The approach described in this document is the current approach agreed. Any variation to the ICES contract will need to be agreed with CPG and evidenced that this will achieve best value for money for the Council. One of the options that has been explored for the future requirements of the TEC hub is to include the TEC requirement in the new ICES contract/tender process. This will be an EU compliant procurement approach, it is also anticipated that this will be a collaboration across the CCG's and the other Council's in the area. If the</p>	18/02/2019

	<p>provision of TEC is not satisfactory within the ICES contract, the Council may explore other means of purchasing this equipment.</p> <p>19.3.2. - Procurement of the integrated technology environment – ICT have provided comments for this section.</p> <p>19.3.3 - Procurement of capacity and capability – Any procurement of additional capacity and capability will need to be compliant with our own Procurement Rules as well as the Public Contracts Regulations 2015. These services maybe available from the ESPO telecare contract and a mini competition from this contract can be undertaken to ensure value for money is achieved.</p>	
Information Security View	<p>From the perspective that this is just a change to the service model, this is approved with the following points:</p> <ul style="list-style-type: none"> ○ Outside of this PIA some testing of the TEC devices is undertaken. ○ Future TEC devices will require a review under this PIA especially when the service expands to track individual's locations, behaviours, habits etc. ○ Can the data flow reflect the handover of processing to the Bristol Operations Centre. When/where/how does SU data pass over Ops Centre. ○ Can the service assure us that the Bristol Operations Centre accreditation is appropriate and compliant. <p>The service will need to make sure they record the process around securing the devices/removing factory default settings.</p>	18/02/2019

B. Mandatory Project Documents

Document Name (& links to templates)	Stage required	Document Exists? (Yes/No)	Document Owner	Hyperlink to document
EQIA Relevance Check	Mandate	Yes	Oliver Buell	
Privacy Impact Assessment Relevance check	Mandate	Yes	Oliver Buell	
Options Appraisal	OBC	Yes	Oliver Buell	
Project Financial Spreadsheet	OBC & FBC	Yes	Oliver Buell	

<i>(costs and benefits/ sources of funding/ benefits contracts)</i>				
RAID Log	OBBC & FBC	Yes	Oliver Buell	
Project Plan	OBBC & FBC	Yes	Oliver Buell	
EQIA	OBBC & FBC	Full EqIA not required. See EqIA relevance check above.		
Ecola	OBBC & FBC	Yes	Oliver Buell	
Info: General Data Protection Regulation Privacy Impact Assessment template	OBBC & FBC	Yes	Oliver Buell	
Project Board Terms Of Reference	FBC (Recommended OBC)	Yes	Merlin Jones	
Business Requirements	FBC	Yes	Oliver Buell	
Mandate	OBBC & FBC	Yes	Oliver Buell	
Outline Business Case	FBC	Yes	Oliver Buell	
Implementation plan	FBC	Yes	Oliver Buell	

C. Timeline of approvals and any associated conditions

#	Meeting	Date	Action/Decision/Condition	Date for completion (if applicable)	Owner
1	Better Lives Programme Board	25/02/2019			
2	EDM	13/03/2019			
3	Cabinet Member Briefing	25/03/2019			
4	Cabinet	07/05/2019			