TEC Action Alliance

Implementing TEC so we can all live gloriously ordinary lives







MARCH 2024

ACTION PAPER

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FOREWORD

Alyson Scurfield

Co-Chair, TEC Action Alliance and CEO, TEC Services Association (TSA)

I lost my dad in 2021. He had Parkinson's and mixed vascular dementia, but he lived for seven happy, gloriously ordinary years at home thanks to a combination of family support from us, his carers, along with some wonderful technology.

We personalised apps and devices for dad. His tablet reminded him to take his medication and listen to favourite songs. Photos of his grandchildren popped up, prompting fabulous conversations. He had a blood pressure monitor and a fall detector, and as his illness progressed, it was us who used the technology more; for example, bringing his vital signs data to appointments.

Later on, we put more formal care in place, with district nurses, home carers and TEC responders all supporting my dad until he passed away.

Thinking back to 2014, when the early signs of my dad's dementia appeared, we went to his GP. This was our first point of call, when he needed just a bit of support to stay independent. But his GP, who he and my mum really trusted, didn't mention TEC once.

This made me think about widening opportunities for our sector. The majority of TEC solutions and services are drawn on by people who've been assessed and identified as needing care and it's vital that our sector continues making the case for TEC to social care commissioners. But what about that broader cohort (just like my dad at his initial GP appointment) who might not yet have acute health needs but who would definitely benefit from TEC?

Targeting these people would require our sector to work with an additional set of partners and 'payers' – from self-funders to Integrated Care Systems, primary care providers to NHS community services.

These market segments will all want different types of TEC that respond to people's priorities at different stages of need. This Action Paper is a rallying call to our far-reaching, innovative sector to consider how they can continue building relationships with care and support commissioners but also reach new cohorts.

It's also a rallying call to the Department of Health and Social Care (DHSC) to work with NHS primary care and community services – via Integrated Care Systems – so they, too, signpost, commission and provide TEC.

I want to make sure that others who aren't as lucky as my dad, can lead good lives in the places they call home, keeping residential care and hospital at bay for as long as possible.

FOREWORD

Clenton Farquharson CBE

Co-Chair, TEC Action Alliance and Chair, Think Local Act Personal (TLAP)

As someone who draws on care and support, my journey is testament to the profound impact that technology has had on my life.

Digital devices, along with other resources, networks, activities and opportunities are part of the tapestry of support I've created to live the life I want.

Let's re-imagine social care in this way, so the digital realm is seamlessly integrated with the tools, relationships and creativity that supports us, every day.

To do this, we must widen our focus, so people see technology enabled care as relevant to them, their families and their communities. This is about changing the public narrative, so we talk about 'technology enabled lives'. Yes, systems and commissioning are part of that, but it's also about reaching out to self-funders so they can confidently pick and choose technologies that help them do the things they love, in the places they call home.

We need to talk about devices and apps as intertwining threads in our own tapestries of support. These digital strands must knit together smoothly and easily so we can get on with the important stuff: the interests, passions and interactions that make our lives worthwhile.

This Action Paper outlines a future where the voice of people is front and centre of decisions about technology enabled care. Amid the gloomy landscape of 'budget cuts' and 'system pressures' the TEC Action Alliance offers hope. That hope is the life-changing potential of technology to uplift individuals and become one of the central building blocks to wellbeing.

Over the past six months, I've witnessed the endeavour and innovation of our many different TEC Action Alliance partners as they have researched and realised this Action Paper. I believe it can be the catalyst for a wider social movement, one that involves like-minded organisations, networks and trusted brands, all collaborating to achieve the same vision – ensuring the right TEC support is in place so people can live gloriously ordinary lives – doing the things they've always wanted to do in life.

> "This Action Paper outlines a future where the voice of people is front and centre of decisions about technology enabled care.
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> **Clenton Farquharson CBE**

> "What about that broader cohort (just like my dad) who might not yet have acute health needs but who would definitely benefit from TEC?
>
> **Alyson Scurfield**

Our Vision

Implementing TEC so we can all live gloriously ordinary lives

Summary of the TEC Action Alliance's recommendations

1 We need to re-focus on people, their families and unpaid carers by:

- Considering 'What people want from TEC' principles when designing or providing TEC, including seamless, easy-to-use technology
- Co-producing all TEC solutions and services
- Adopting a common TEC language

2 We need to get ahead of the curve by supporting people who self-manage their health and wellbeing:

- Integrated Neighbourhood Teams signposting people to TEC
- Integrated Care Boards co-commissioning TEC with councils

3 Awareness of TEC options and benefits must be accelerated by:

- TEC sector using a common TEC language
- Addressing the digital skills gap
- TEC suppliers and local authority commissioners working more collaboratively, with shared risk
- ICBs running awareness campaigns

4 Trustable TEC needs to be easily recognisable by:

- Making TEC quality schemes accessible
- Government, regulators and commissioners mandating compliance to such schemes

5 We need to move away from pilots to a body of evidence by:

- Government supporting a Common TEC Evaluation Framework; our research proposes a common approach
- TEC sector adopting this Framework

6 We must address any perceived conflict between personalisation and scale by:

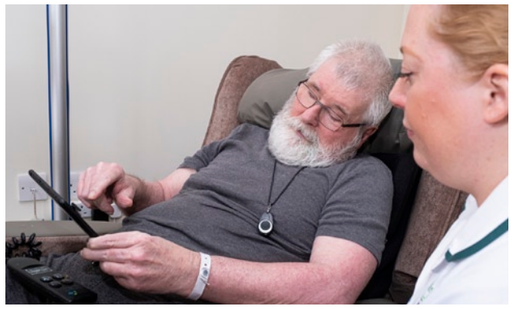
- TEC suppliers adopting a common TEC structure
- Commissioners mandating suppliers to use this new structure

> "This Action Paper is a rallying call to our far-reaching, innovative sector to consider how they can continue building relationships with care and support commissioners but also reach new cohorts.
>
> **Alyson Scurfield**

Executive Summary

The technology enabled care (TEC) sector delivers valued services to over two million people in the UK. Many of these individuals and their families draw on TEC through formal care services, commissioned by local authorities or housing providers, with most solutions reacting to crises.

But research conducted by the TEC Action Alliance indicates there is a much greater opportunity for technology-enablement to support people, their loved ones and unpaid carers to live great lives.



To do this, we must show individuals that TEC is beneficial to them way before they ever access statutory social care. This starts with raising awareness and building trust amongst families, across communities and throughout primary care, so that people we trust can confidently signpost to the right TEC.

It's also about demonstrating the value, not just of important reactive technologies, but of proactive services that put early support in place, helping us to self-manage and maintain our independence for as long as possible.

To explore this wider potential for our sector, the TEC Action Alliance commissioned research into what people want from TEC. An in-depth literature review, along with findings from focus groups and interviews showed that people who draw on care and support recognise six main functions of TEC. And when describing these functions, people used simple language that centres on TEC supporting them to live their lives.

Interestingly, this research also identified values and principles that people demand from TEC, such as finding out how it can meet their needs, wanting devices that help them do more themselves, and that offer control and peace of mind. People said they want TEC that is compatible with devices they already use, personalised and full of choice. They also want a say in the design of technology and services, and TEC that is accessible, affordable and respectful of their privacy.

To deliver on these values, the TEC Action Alliance believes a new, common language - that anyone can understand – is needed, to grow awareness of TEC. This language must incorporate, for example, proactive and preventative forms of support so people can manage their own wellbeing and delay the need for more intensive care and support.

If we are to respond to these demands from people who draw on care and support, then a new common 'structure' for TEC must also be created. This is one where people and families state their needs and personal preferences, and then solutions from multiple suppliers can be combined seamlessly, to deliver choice and familiar, easy-to-use interfaces. This structure also enables care and support services to access a shared view of an individual.

What do we mean by TEC?

In this Action Paper, technology enabled care (TEC) refers not only to specialist technologies, services and support such as home monitoring sensors, falls responder schemes and wellbeing calls. It also covers every day, consumer technologies and activities such as voice assistants, online interest groups and exercise apps. See pages 14-17 for a breakdown of the functions covered by TEC.

Integrated care in England, Scotland, Wales and Northern Ireland

In this paper, we refer to English structures such as Integrated Care Boards, Integrated Care Systems and Integrated Neighbourhood Teams. In Scotland, Wales and Northern Ireland, integrated care systems, bodies and teams are organised and named differently. However, we believe the insights and recommendations in this paper are relevant to all integrated care structures across every UK home nation.

> We must show individuals that TEC is beneficial to them way before they ever access statutory social care

For many people, including care professionals, trust in TEC relies on the demonstration of beneficial outcomes. The TEC Action Alliance commissioned further research for this report, which identified a common approach to TEC evaluation. A next step is for Government to test this common approach to TEC evaluation through national programmes, with the aim of creating a Common TEC Evaluation Framework.

In December 2023, we tested our research outcomes and Action Paper proposals with system and strategic leaders at a roundtable event at the House of Lords. Leaders concluded that if the changes proposed in this report are made, we can begin shifting the care model so people can draw on support in the way they want.

This might mean combining technology with homecare and adaptations accessed through their local authority. It might mean blending devices with support from micro-enterprises, neighbours and voluntary groups. Or, it may be about promoting technologies that help us self-manage our health and wellbeing, and also ensuring our homes can accommodate our changing needs.

Whatever form it takes, we believe TEC is relevant to a wide range of people, helping them to stay safe, well and flourish, at different stages in their lives.

1 How is the market demand for TEC changing?

'Unremittingly grim' is how a coalition of Britain's 60 leading charities described the social care picture painted in the Care Quality Commission's latest State of Care Report.

This and other reports, including the Association of Directors of Social Services' Autumn Survey, highlight that squeezed council budgets, workforce pressures, inflationary and cost-of-living challenges are deepening 'unfair care', with longer waits, less access and poorer outcomes.

With social care under huge demand, and no more budget available, traditional solutions are no longer enough. Commissioners need time and space to consider and adopt alternative, innovative care models.

People must be able to draw on the right support for them. That means widening the web of informal and formal support options available. TEC has an important part to play in this web, including familiar and widely used consumer apps and devices used alongside more specialist care technologies that connect people to support and assistance when it is needed.

Assessment of needs, and in some home nations, people's ability to pay, affects the scope of any support being offered. This means that the market for TEC should be viewed through the lens of different decision-makers, influencers and payers.

1 Commissioners of care and support

Under the 2014 Care Act, local authorities have a duty to meet an adult's 'eligible' needs, determined after an assessment, along with a range of more general duties such as promoting individual wellbeing, preventing needs for care and support and providing information and advice.

Social care commissioners nearly always provide TEC to people who are known to the care system and already have a health condition or disability. These individuals might be offered TEC as part of a funded package of care or guided towards TEC options, even if they don't meet this threshold.

The emergence of shared care records, and an increasing number of population health solutions, means that commissioners now have the potential to identify cohorts of people most in need of interventions and support.

In both mainstream and specialist or supported housing, where residents may have other care and support packages in place, TEC is often bundled as part of a housing service once someone's needs have been assessed at home.

As people's lives are rich and complex, their eligible needs vary. This is reflected in the TEC put in place by some forward-thinking NHS, local authority and housing commissioners. This might include proactive services that identify needs and provide help before a crisis results in more substantial health or care interventions.

However, this is not the national picture. Many councils and housing providers still see TEC as a reactive alarm service that will respond if people's needs escalate.

With additional funding unlikely in the current economic and political climate, the challenge for care and support commissioners is to ensure their existing budgets are spent on the smartest and most effective TEC that delivers the greatest benefits.

2 Private buyers, their families and unpaid carers

A growing cohort of people drawing on TEC services relates to the private-pay market. They might be individuals and their unpaid carers who self-direct a local authority personal budget, or they might be people and families who self-fund their own care and support.

Here, a wider spectrum of TEC is purchased as people are not bound by the inflexibilities of statutory service provision and can procure TEC to meet their varied ambitions and priorities reflecting different stages of need. Depending on their budget, they can also access a wider choice of products. They might buy everyday devices or specialist technologies, from smartwatches to home sensors, voice assistants to GPS trackers.

Digital technologies and associated services support people to maintain their identity and purpose, their wellbeing and physical health, and they also offer reassurance, allowing individuals to stitch together informal and formal support, resources and relationships in different ways.

This segment of the TEC market presents a great opportunity for development. Yet its sheer size means that service and technology providers, along with representative organisations must focus in on the groups they can make the most impact with.

Crucially, it is unlikely that any single supplier will meet all personalised needs and preferences. This means that technologies and manufacturers must work together to deliver a seamless experience.

The demands for the incorporation of familiar, consumer technologies, such as mobile phones, apps and smart speakers, will also require a fresh look at how we assess the risks and opportunities for helping individuals with TEC, ensuring they are reflected in standards for technology and services.

The TEC sector must consider how it responds to these challenges. What are the best ways to raise awareness and signpost to options? How can new, affordable approaches to assurance and flexible integration of technologies be developed?

3 Individuals self-managing their health and wellbeing and commissioners of NHS primary care and community services

> My girls both ring me on my smart phone every evening. I also have a mini tablet and they're extremely useful, a real comfort and reassurance - a lifeline to the outside world. I'm not a drain on the local authority, thank God... I'd like to stay at home as long as possible.
>
> **Person drawing on care and support**

One cohort that would benefit from TEC but might not be aware of it are people who are known to primary care services, such as GPs and pharmacists. These individuals may also be accessing NHS community services such as occupational therapists, physiotherapists, district and specialist nurses, but they aren't yet on their council's radar around statutory social care.

These people may not yet have high or complex needs that require a package of care from social care services. However, they could benefit now from preventative and proactive TEC support, along with everyday technology that offers protection, mental stimulation, helps them manage their healthcare, stay in touch with family or control their home environment.

Proactive and preventative TEC is particularly relevant to people with lower-level needs. This type of TEC helps to put the right support in place, early on.

It should be emphasised that TEC wouldn't replace the vital support of GPs, pharmacists, district nurses and others. Rather, it would improve people's knowledge about their own condition and help them manage their wellbeing and physical health. It would also strengthen knowledge about population health – supporting primary care and community services.

Using TEC as an anticipatory measure also aligns with NHS objectives for Proactive Care and Population Health Management. Here the aim is to shift the focus from reactive care to proactive and preventative care through risk stratification, thereby supporting new models of sustainable and integrated care at home.

The TEC Action Alliance believes that NHS primary care and community services should be able to signpost to appropriate TEC services and technologies that are supported by evidence of delivering effective outcomes.

For example, primary care services could point people to digital initiatives that would help them to find and use technology enabled care.

But for such signposting to be effective, the TEC sector must work with the Department of Health and Social Care (DHSC) and higher and further education bodies to raise TEC skills and awareness amongst staff. This is needed across all health and care professionals and, in social care, could be driven via the 15-year social care workforce strategy currently being developed by Skills for Care (which aligns with the NHS 15-year health workforce plan).

The TEC Action Alliance believes that approaches need to be integrated in terms of how TEC services are commissioned as well as how they are delivered. We recommend that Integrated Care Boards consider co-commissioning TEC services, as part of integrated care models with local authority partners, working together to develop joint specifications and outcomes.

There is also an awareness-raising role here for health services. Integrated Care Boards are increasingly influencing public behaviour through local health campaigns. Such campaigns could include options for technology-enablement so people can live safely and independently in their communities.

> One cohort that would benefit from TEC but might not be aware of it are people who are known to primary care services, such as GPs and pharmacists.

> Grass roots support for GPs is really important, to encourage wider use of digital tools. Patients will use TEC if GPs are promoting it. Patients come across TEC and love it. GPs are used to working in this face to face world and not used to promoting the digital way.
>
> **GP in London**

2 What do people want from TEC?

People's lives are rich and complex, and the opportunities for technology-enabled services to make a difference are wide-ranging. These services span a broad range of potential technology suppliers and care providers, where each may describe their offer in different terms.

Here, it is too easy to be drawn into jargon and technical language, and a simple understanding of what people want and how these needs will be met can be hard to distil. As a result, it's confusing for many people to navigate the available TEC options, articulate their requirements, identify the right type of support, find uniform evidence to compare solutions and then make informed, confident decisions.

> I have heard about pendants, but I don't know about anything else... there is so much of it, it's hard to know where to start really – I have to sort out my Dad's [personal] needs...I know someone who is using an app that sounded like it could help me – but I don't have the time to look at these either, I just stay with the basics.
>
> **Family carer**

> There are so many pilots involving different TEC and moving from analogue to digital tech is also a challenge – you suddenly have to become an IT expert...We need a common language and metrics, something that is consistent so you can start to compare other technologies and benefits and say this one has really worked. And suppliers would start to build their systems to map them through to this common language.
>
> **Stuart Cole, Mole Valley Life Independent Living Manager**

What do people want from TEC?

The TEC Action Alliance commissioned independent researcher Dr Sarah Alden to examine what people want from TEC. From the outset, Sarah found that people wanted to understand and describe technology-enablement through a non-technical and common language. You can find her research report here and the classification of TEC and ideas for a 'Common TEC Language' over the next few pages.

Dr Sarah Alden

Sarah Alden comes from a social policy background and previously worked at the University of Leeds and the University of Sheffield. Her research focuses on social inclusion and wellbeing in housing, digital, health and social care.

Dr Sarah Alden built on work begun in the TEC Action Alliance Challenge Paper. Her aim was to explore the myriad ways people use technology to support their lives and she examined 80 research studies, 26 case studies and an additional 23 frameworks and sources of evidence, all of which identify what people who draw on care want, with a focus on both specialist and mainstream services, software and devices. (For a list of all the sources Sarah consulted, click here). Sarah went on to challenge these findings through extensive interviews and focus groups with people who draw on care and support.

Sarah found that many literature sources include the voice of staff and organisations, with fewer views from people who draw on care. Much of the literature also covers types of technology, rather than comparing different ways to meet care and support needs.

An early finding was that the lack of a common language for types of TEC creates major challenges when trying to find suitable support options and draw comparisons. Therefore, it can be very difficult to draw conclusions about the preferences of people and their families or the relevance of different 'functional' characteristics of TEC.

Sarah challenged this issue further through the focus groups and interviews, held face to face and online, with 42 people from across England and Scotland who draw on care and support themselves, along with their unpaid carers and families. She purposefully selected groups of people whose voices were heard less across the main literature, including young people and individuals from ethnic minorities and lower socio-economic backgrounds.

COMMON TEC LANGUAGE

This diagram reflects the language that people themselves use when considering their day to day needs and desires, and how technology may enhance this. It shows a common language for describing the functions of TEC.

Supporting people to live gloriously ordinary lives

FUNCTIONS OF TEC

How TEC can support people's needs and ambitions

Examples

1 Staying well by being connected to others

Helping me to stay connected and socialise with family, friends and the community

- Communication: phone calls, email, texts
- Video software
- Social media
- Voice assistants

Helping me to communicate effectively

- Smartphone or computer tools
- Touchscreen enabled communication devices
- Speech generating devices

2 Living well in and around the home and community

Supporting me to manage my home environment

- Video doorbell
- Smart lightbulbs, blinds, heating, plugs
- Smart speakers
- Smart meters
- Smart sensor lights
- Door entry system
- Smart door locks/opener
- Vibration pads
- Voice control

Supporting me to carry out everyday tasks

- Voice activated control & reminders
- Smartphone/tablet for entertainment
- Smartphone payment & banking
- Smartwatches
- Smart toilets (voice activated)
- Medication dispensers
- Robotic vacuum cleaners

Providing (assistive) support when I need it outside the home

Smartphone apps:

- Help with public transport
- Connecting to volunteer helpers
- Weather checks

Supporting me to keep mentally and physically well and do things I enjoy

- Devices supporting hobbies, learning and games
- Apps supporting people networks
- Video links to interest groups, quizzes

3 Living safely in and around the home and community

Helping me to move around safely at home

- Aids, adaptions or home modifications
- Accessible layout & non-stigmatised design
- Community equipment (wheelchair, bed hoist etc)
- Access to maintenance & repairs

Providing (urgent) support when I need it outside the home

- GPS pendants/tracking devices
- Smartwatches
- Community response service

Providing access to help when I need it urgently

- General telecare
- Fall detector
- Sensors (property exit, heat, bed etc)
- Sensors worn on the body
- Voice activated assistant
- Smartwatch
- CCTV camera
- Helpline button
- Response teams

4 Accessing quality information, advice and support

Supporting access to information and advice when I or my family need it

- Access to technology experts
- Independent advice on TEC options
- Website resources
- Demonstration facilities to try before buy
- Voice activated assistants
- Digital health and care records
- Easy 'how to use' guides

5 Monitoring and managing own care, health and wellbeing needs

Helping me to monitor and keep track of my health and nutrition needs

Supporting me to interact with health and care providers

Supporting me to manage my own care and support needs

- Home health monitoring devices
- Remote (video) consultation
- Self-management apps for diet, nutrition, mental health, exercise, pain
- Hydration support
- Wearables for health & fitness

6 Drawing on proactive support to maintain wellbeing, health and care

Early intervention is available when I experience changes to my physical needs and behaviour

- Passive monitoring systems and sensors
- Early warning alerts
- Smartphone apps to check wellbeing
- Outreach call services

Dr Sarah Alden has written a full report detailing her research for the TEC Action Alliance. You can read it here. The report provides a comprehensive description of all types of TEC including a breakdown of the research that informs each classification. Feedback from people who draw on care about product and service design is also included.

Through the research, Sarah went beyond the functional characteristics of TEC, to draw out learnings on the values and principles that should be followed through all TEC design and implementation. These might be best described as 'non-functional' aspects of TEC. The main points are summarised on the next few pages, and all quotes were gathered through the focus groups and interviews that Sarah conducted.

VALUES AND PRINCIPLES TO INFORM TEC DESIGN AND IMPLEMENTATION

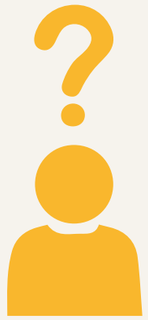
1

People want to know more about the ways in which technology can meet their needs

Evidence shows that people who draw on care sometimes have limited knowledge of TEC, and they are keen to find out what is available. Research also shows that when people receive personalised, quality, hands-on information and guidance (such as 'try before you buy' opportunities, effectiveness advice and training) they were more likely to use or purchase TEC.

> I could do with a technology expert, or a mobility expert to... talk me through what is best... someone who sits down and listens to what you need – then considers what technology is available to meet the need – and lets you try it out.
>
> **Person drawing on care and support**

80%



A survey showed 80% of [family] carers weren't sure what telecare was – yet when it was described to people in plain English 79% of these respondents said they would consider using it.

COMODAL: COnsumer MODels for Assisted Living: project summary and findings, 2015

> It would be more helpful if there was more public awareness of technology that supports care, so it is not such a hard sell to parents if it is more widely known, demystifying it so it feels less like big brother is watching you.
>
> **Family carer**

2

People want to do more for themselves

Supporting people to do more things for themselves and remain at home emerged as a chief motivator to adopting technology across all age groups and conditions. This was also the case for family carers who reported greater freedoms around going to work, socialising outside and building more meaningful relationships that centre less around care and support needs.

> [motion sensors] it's a bit big brother but it reduces invasion compared to an antenna shouting in your room – just calling to see if you died in the night. So it sees movement instead.
>
> **Person drawing on care and support**

Interviewees acknowledged that whilst some specialist TEC is not perfect, if it offered options for retaining independence, acceptance was higher.

3

People want to maintain control where possible

The research underlined high levels of satisfaction when people chose and self-managed elements of their care. Family members also talked positively of functionality that allowed them to control things at a distance, particularly when connected to technology that they used already:

> I use my smartphone and a smartwatch that is linked to this [app] – I can use this for what I need, to speak to my friends and family, take with me when I go to work as I have a part time job. I get anxious sometimes and I can get upset if things don't go to plan – this is easy to use and I can keep track of my activities...
>
> **Person drawing on care and support**

4

People want peace of mind

Wider support networks are key influencers in uptake of technology, with the literature highlighting how they offer practical and emotional assistance. Some people with care needs reported that providing reassurance to family members was the main reason they had accepted technology solutions.

The extent to which technology could provide peace of mind very much depended on individual circumstances, and there is not a particular type of technology that can be recommended to meet need. For example, whilst some viewed CCTV as an invasion of privacy, others reported that it gave them reassurance.

> My son has access to a dashboard [for motion sensors] on his phone – he knows when I get up and go to bed, he is part of the bedroom (laughs)...it doesn't affect me as I don't know it is happening...I know he worries and if something happens, within an hour he will be on it...it means we can both get on with our lives.
>
> **Person drawing on care and support**

5

People want it to be seamless and compatible with technology they already use

Many literature sources indicate that technology needs to fit into people's daily routines, moving away from discrete products or services to a model which allows for 'bundling' together to achieve a more holistic solution.

There is also higher demand for technology which is already familiar and can integrate across other elements of care accessed, rather than feeling like 'another thing to remember'.

Interviewees talked positively of technology that supports a range of everyday needs (care and non-care based) in one place.

More people are choosing off the shelf products to meet care and support needs, such as voice assistants, smart speakers, 'wearables', as well as social media and apps to set reminders, manage health, fitness, wellbeing, gaming and financial needs, and to communicate with family and health professionals. Compatibility across other devices and flexibility to carry out a range of tasks is a big draw for smart technology.

> I have got an Alexa in every room, I love it. I use it for music and radio and talking to my granddaughter, timing stuff in the oven, finding out what the weather is doing ...medication reminders – loads of stuff. [my granddaughter] uses Alexa as well, sometimes when we talk they talk to each other...I use it for blinds – there is an Alexa kettle – you can ask it to boil water.
>
> **Person drawing on care and support**

The extent to which technological solutions can fit into everyday life seamlessly was also related to whether something took on the appearance of familiar objects. Specialist TEC was viewed positively by interviewees when it either blended in with, or had a similar appearance to other everyday items.

6

People want it to be personalised and offer genuine choice

Closely related to the requirement for a seamless offer is the need to flex technology so that it meets different needs, as there is no one size fits all solution. Interviewees wanted to know about all the different kinds of technology available and to be able to choose which is best for them. Within this, people want to have a say in functionality, such as providing choice of who is contacted in an emergency, how much data is collected or shared, or the appearance.

> …show people the benefits and let them choose, they may want a [personal alarm] chain, might want a bracelet – they might think it isn't really for them. Don't just give it to people – ask if they want it.
>
> **Person drawing on care and support**

7

Design, functionality and wraparound services are important, and people want a say in how these are developed

Research indicated that design and functionality issues can have a negative impact on uptake of TEC. People have a diverse range of requirements and live in complex and differing environments, which are in turn impacted by demographic factors (age, socio-economic and cultural background) and access to family support, which will all impact on the TEC solutions preferred. Ensuring that products and services are co-designed can mitigate against some of these issues.

> The most important thing – don't 'do' to people. Conversation is cheap – make sure communication works both ways and listen. Technology is not for everybody – it will take away from some as well as add – if you don't have conversation you won't know.
>
> **Person drawing on care and support**

8

Some people struggle to access or adopt technological solutions

The literature highlights that some people are less likely to access technology or have a say in how TEC can achieve solutions for them (such as those who live in poor housing conditions or with limited income). A lack of skills and confidence, connectivity issues, cost, household environment and barriers due to existing disabilities and health conditions are frequently reported.

Research shows that people from a lower socio-economic or ethnic minority background are less likely to have access to WiFi or data, which is required for many tech solutions.

Interviewees who felt they would benefit from digital skills support said it would need to be tailored for different audiences. Others talked positively of receiving support to improve skills through a local charity or library. A notable gap was a lack of support around using more specialist types of TEC.

Some interviewees had stopped using technology due to dexterity or other issues, such as being unable to use a smartwatch due to impaired sight, struggling to use small buttons, or carry out tasks with something worn around the neck. Though there are solutions available to ensure technology is more accessible and can overcome these issues, people did not always know about them.

9

People want to be reassured around privacy and have autonomy around how data is managed

A key theme across the research is the extent to which technology invades privacy, particularly where behaviour or activity was monitored. A few interviewees had decided not to get a voice assistant due to privacy concerns, and a sense that someone may be "listening in".

Research shows that people in lower socio-economic groups and ethnic minority communities tend to report lower levels of trust in technology.

Research also indicates that older adults are often more 'nervous' about online security and privacy issues.

> I am wary I must say about using certain apps – you hear of bad experiences – I see them on Facebook and know people who've been scammed. I went to a class, and it was good to talk these fears through and learn how to ...keep my details safe...
>
> **Person drawing on care and support**

Family members described ways in which they ensured the privacy and dignity of their loved ones was maintained where possible, trying to keep a balance so peace of mind was still achieved.

> I fitted a CCTV camera in the hallway to see who is coming and going, I can see what [Dad] is wearing and that some days he may not have got changed. I try to respect his privacy and only have this in the hallway... I can log into the camera from my phone.
>
> **Family carer**

LINKS TO OTHER RESEARCH

It is worth noting that the conclusions of Sarah Alden's research align closely with a number of other studies and reports such as:

TLAP Making it Real framework

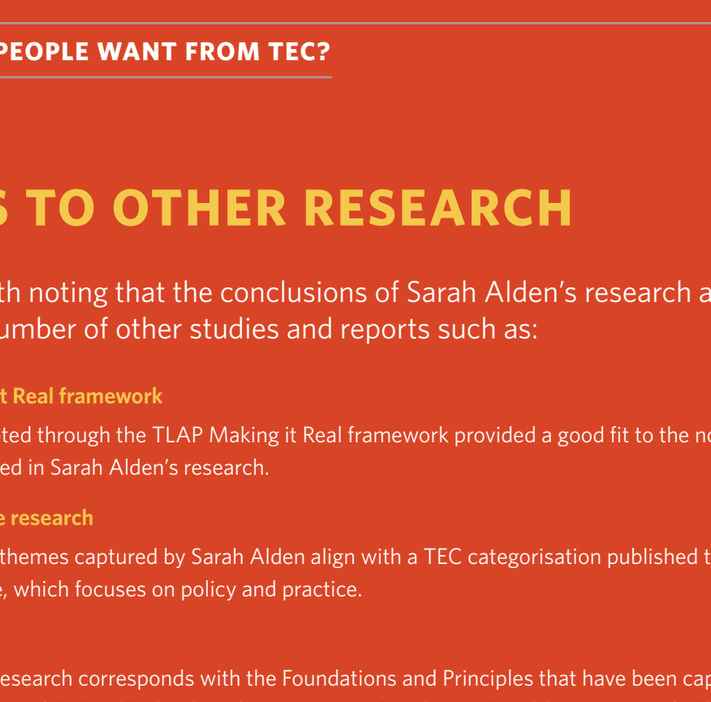
Language adopted through the TLAP Making it Real framework provided a good fit to the non-functional themes identified in Sarah Alden's research.

Centre for Care research

The functional themes captured by Sarah Alden align with a TEC categorisation published through the Centre for Care, which focuses on policy and practice.

TAPPI

Sarah Alden's research corresponds with the Foundations and Principles that have been captured in the second phase of TAPPI (Technology for our Ageing Population: Panel for Innovation). The TAPPI programme aims to improve the way technology is used in housing and care and is led by the Housing LIN and TSA, and funded by Dunhill Medical Trust:



TAPPI

The inner circle represents the TAPPI Foundations
The outer circle represents the TAPPI Principles

TAPPI Foundations

Before you start embedding technology-enabled services in housing and care for older people they need to be:

Co-produced

As early as possible in the process, people and those in their circle of support should be involved as equal partners in the design, procurement and implementation of digital solutions. Making sure that everyone is included, and no one is excluded from taking part.

Connected

Makes sure that devices and systems have a reliable, affordable, and secure internet connection and that there are back-ups or alternatives in place if connections fail. This is to help create a supportive environment where people and their circle of support can stay connected to each other and their community.

TAPPI Principles

Technology-enabled services and support needs to be:

Seamless

Makes sure that people and those in their circle of support and different technologies can work together seamlessly in an accessible and hassle-free way. Technologies should be able to adapt to people's changing circumstances and be future proofed so they can flex with new technological or service developments.

Affordable

Provides transparent value for money and enough choice to make it affordable for everyone.

Safe

Delivers a service that prevents problems developing and reinforces the independence of people and those in their circle of support. Makes sure that any private data is kept safe, and safeguards are in place to protect people from internet scams, technology misuse or failure.

Supported

Provides accessible, ongoing training and support to help people and those in their circle of support to build and maintain their digital confidence and skills. Makes sure that senior leaders are on board and that projects are supported by dedicated staff, with both technology know-how and people skills.

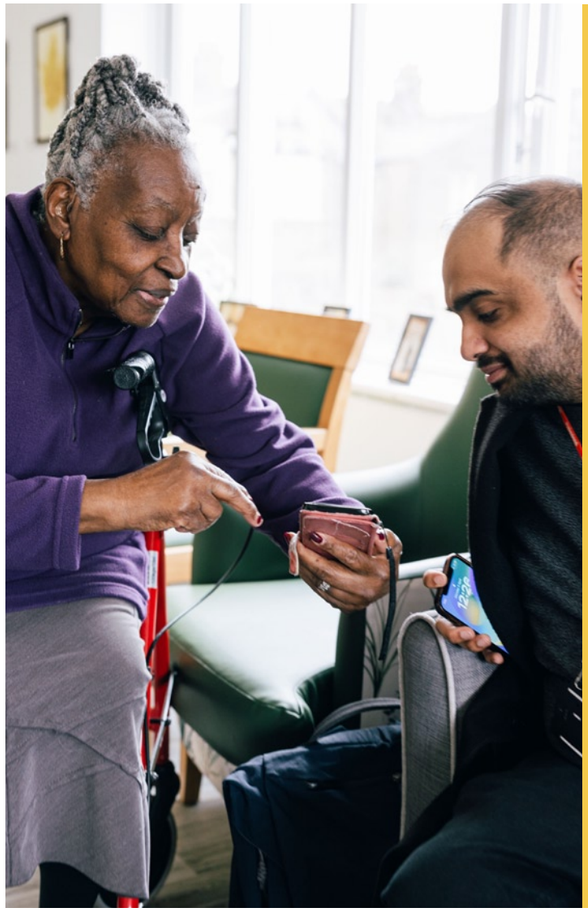
3 How can we ensure people get the TEC they want?

The UK's analogue telephone services will soon be switched off, as telecoms infrastructure is upgraded to digital connectivity. This has major implications for TEC, as traditional telecare devices will not work as reliably when reconnected to the digital network, and many devices will need to be upgraded or replaced, often by technologies that connect over mobile networks instead. The UK Government is pressing communications providers to adopt a charter to help manage the risks of digital upgrades for some people using telecare.

The TEC Action Alliance believes that this 'digital shift' offers an opportunity to re-position TEC, to align it with consumer demands for seamless technology and co-ordinated services that offer people truly personalised support.

One way we can realise this digital ambition and provide TEC that people really want, is through co-production – the process of sharing decision making about care with the people who will draw on it.

> We have access to a much richer, digital world for TEC, so let's move away from trying to create digital replicas of outdated alarm technology and do much more.
>
> **TEC Commissioner**



> Surprisingly, what we thought people wanted from technology turned out to be quite different from what we anticipated. This has highlighted the importance of approaching projects like this with an "open mind" and to start co-production as soon as possible – particularly for people who are older.
>
> **Caroline Humphrey, Head of Service Improvement and Development and Darshan Savani, TAPPI Project Manager at Haringey Council – one of the six TAPPI Testbeds**

> I'm passionate about co-production. I don't want things done to me. I want someone to come along and speak to me and say how can we support you to live a more independent life? Work together with me, but don't do things to me because I'm able to say what I want.
>
> **Debra Edwards, Haringey Council Co-production Champion, TAPPI**

For this Action Paper, we tasked TEC suppliers and care providers to share examples of effective co-production but very few came forward. This is surprising as it seems obvious that the best products result when the needs of the customer are well-understood.

> Co-production is an essential part of designing an effective technology service which meets people's needs and is effective in the long run. Engaging tenants after key decisions have already been made can reduce tenants' sense of ownership over the project and can prevent this from happening. The co-production process should therefore start as early as possible, prior to deciding on technologies, to ensure that people have a say on their services from the outset.
>
> **Cambridge Centre for Housing & Planning Research, TAPPI2 Evaluation**

We believe the supply community must do more to demonstrate they are listening to what people want from TEC and responding to their demands – creating personalised, familiar and seamless technology as a result.

For more information on using co-production to design, shape and provide TEC services, see the TEC Action Alliance's Guide to getting started in co-production.

Overcoming co-production barriers

The TEC sector's lack of consistent collaboration with people who draw on their services could be down to certain factors:

Institutional buyers:

TEC manufacturers mainly supply to organisations, not individuals. As the market develops and more people buy TEC directly, we expect the drive to co-produce will increase.

There are also some more general reasons why co-production can be tricky:

People don't always want to take part:

Mistrust or resistance to technology can be a barrier.

It takes time:

Long term, trusting relationships aren't quick to cultivate. Perceived delays can impact the time it takes to get products and services to market.

The process is resource intensive:

Dedicated staff and community connections are required.

Methods must be accessible:

Resources must be tailored to individual needs, taking time.

Co-production can feel overwhelming:

Organisations can be fearful of getting it wrong.

Historically, care power dynamics were different:

'Experts' 'fixed' 'vulnerable' service 'users'. A paradigm shift may take time.

It is not always obvious how personalised solutions can be delivered at scale:

Individual solutions do not drop off the end of a factory line, this needs choice and configuration.

We need to overcome these barriers and encourage more TEC manufacturers and providers to meaningfully co-produce their products and services.

How can we deliver personalisation AND scale?

Co-production is about sharing decision making around care and then providing support that is tailored to an individual's ambitions. Scale is often interpreted as the delivery of cost-effective solutions in bulk. So how can a custom-made approach be scaled in a way that is manageable and affordable?

These issues were identified by the Cambridge Centre for Housing & Planning Research in their evaluation of the TAPPI programme (Technology for our Ageing Population: Panel for Innovation), led by the Housing LIN and TSA, and funded by Dunhill Medical Trust. We believe this tension is one of the main barriers blocking co-production in the sector. Innovative approaches and solutions are needed to ensure that individuals' needs and desires continue to be met during a widespread TEC roll-out.

Case Study: Care Technologists

The Care Technologist role was first trialled across services and care homes in Glasgow, East Ayrshire and Aberdeen from July 2022 to July 2023.

Care Technologists work with services, homes and individuals to get to know people providing and accessing care, and create digital care plans to help them live and work well. Digital care plans have included 1:1 support, provision and set-up of technology and devices, and furthering access to online and community resources that improve digital skills.

Since starting the Test of Change in 2022, the team have worked with Baillieston Community Care, HRM Homecare, SRS Specialist Resource Solutions and over 20 care homes represented by Scottish Care to trial the role. Care Technologists have also worked with local Health and Social Care Partnerships (HSCPs), care services and educational services to share learning.

Since starting this work, there have been improvements in independent living, increased flexibility in support, and a widening of knowledge on technology available for people accessing care. Read the Care Technologist Test of Change Summary Report here.

Do we need a new structure for TEC?

For TEC services and products to meet demands for personalised support and earlier, they need to reflect the ambitions and priorities of people and their families, many of which are captured in our research on 'what people want'. We also need to interpret what these demands mean for the delivery of cost-effective TEC at scale.

Where different technology is used to support people at home, it is clear that these individuals and their families want a seamless experience, not a fragmentation of technologies that fails to share information, creating a complex experience for them. ('Seamless' was also one of four key principles that came out of phase two of the TAPPI programme. See pages 26-27 for more details).

Case Study: Bield Housing & Care

ALICE'S STORY

Alice is 88 and she lives in a retirement housing complex near Edinburgh owned by Bield Housing & Care.

Smartphones aren't my cup of tea, but I like sending emails on my new laptop and looking for books to read on the WH Smith website.

I've never been tech-savvy, but curiosity got the better of me with the TAPPI project! It meant I could learn how technology could help people to live in their own homes for as long as possible.

I met with Gary at Bield and other tenants and we talked about what we wanted from different types of support and technology. This helped Bield choose the right gadgets and it was important to me that I explained what I wanted and what I didn't want.

As a senior citizen I do not want to be organised by others. I may be slower than I used to be in thinking and in movement and saying what I want and don't want. But I am an individual, I am still able to think for myself. Companies providing tech need to ask us what we want before they put gadgets in place.

I was interested in the idea of a fall detector, so I don't just have to rely on my pendant alarm alerting people. I found one that I liked, and I was pleasantly surprised how discreet it was. In fact, I had to point it out to my family when they visited! However, the bits of technology didn't work together at first, and Gary at Bield had to get the suppliers to work together to fix it. They have sensors that detect other problems too, and my family can also check in on me to make sure I'm ok.

> "Some of our tenants are TAPPI co-production champions and we got them together with solutions providers to advise on what they wanted.

It was an opportunity for suppliers to showcase to us that they are at the forefront of their industry and that they are interoperable, because ultimately it will benefit our tenants and improve their outcomes, and we can't do that if suppliers aren't willing to talk and join together.

Three of our suppliers who provide falls detection, hydration and monitoring technologies began working together and they created open interfaces between their technologies which makes it easier for us as staff to understand the data, but crucially it makes it easier for our tenants to select what works for them and maintain control of all the tech in their lives.

Gary Baillie, Head of BR24 and Assistive Technology Development, Bield Housing & Care

We know that individuals, families and carers also want their care and support services to be well-informed and co-ordinated, pointing to the need for TEC monitoring services and their platforms (or 'dashboards') to be seamless too.

The demands for 'seamless' technologies indicate a need for greater integration within the TEC ecosystem, where the various services and technologies must work together in a clearly defined way.

This is no more than we expect in our daily lives, where our mobile phones, PCs, even TVs use a common core of technologies which can be personalised through apps, information content, configuration choices and personal data. So why shouldn't this apply to our TEC? This new, yet normal, structure for TEC would ensure that different solutions come together and work seamlessly.

How should commissioners respond to demands for personalised needs and co-production?

> The current care model is not sustainable. Using data insights and smart technology as part of a more targeted approach to prevention will mean we can support people ahead of a crisis and better manage demands on health and care services. But TEC must no longer be seen as an add-on or a piece of technology. TEC services must be seen alongside care and support, around activities of daily living and they must be embedded within the care purchasing budget rather than paid for from a separate, technology equipment budget.
>
> **TEC Commissioner**

Case Study

Reimagining home support for Bradford

> What we want in the future is not what we've always bought. Sometimes when commissioning cycles come around, we rush and buy what we've always bought. My advice to colleagues is to use innovation clauses. Think 'what will a contract look like in seven years' time?' and commission that, because that's where people's expectations will be.
>
> **Iain MacBeath, Strategic Director, Adult Social Care & Health for Bradford Council and Director of Integration for Bradford District Community NHS Trust**

In 2023, Bradford Council's homecare services contract came up for tender. Strategic director for adult social care and health, Iain MacBeath, decided to take a new procurement approach so the council, its workforce, and importantly, the people it supports, could benefit from technological developments that take place over the lifetime of the seven-year contract.

To do this, Iain built 'Innovation Sites' into the procurement specification. These locality areas will be trailblazers, testing new ways of working in homecare, supporting a small cohort of people in a phased approached, before reviewing what works. The views of people who draw on homecare, their carers and families will be central to this process, and demands for personalised and co-produced solutions are expected to drive innovation in publicly funded care and support services.

Innovation sites have to work together, sharing best practice and developing a consistent approach to monitoring. They pull together recommendations for a wider roll-out across Bradford District based on what works.

Innovation payments are made in years one and two of the contract and further payments in years three and four are also considered. The aim is for the work of innovation sites to become financially self-sustaining, either through drawing on other funding streams (such as health) or evidencing where an intervention has led to a reduction in support packages and helped people to lead the lives they want.

Nine initial 'innovation site' providers have been appointed to the Bradford District homecare framework. By the end of the seven-year contract, all 28 care providers on the framework will have adopted the most effective approaches coming from the nine innovation sites.

4 How can we show TEC is delivering the right outcomes?

Earlier in this Action Paper, we described different TEC influencers, suppliers, partners, beneficiaries and payers. Although the overall goal of supporting people to live healthy, happy lives applies right across the market, the needs and wants of each stakeholder do vary.

It's vital that suppliers understand the different beneficiaries, influencers and decision-makers that relate to the TEC market. Many suppliers are familiar with some (such as commissioners of care and support) more than others. This chapter seeks to identify the key arguments and questions that need addressing for each.

1 HOW CAN WE SHOW TEC IS DELIVERING THE RIGHT OUTCOMES FOR:

Commissioners of care and support?

The people that plan and procure TEC services want proof that their expenditure is having a worthwhile impact on the health and wellbeing of people with assessed care needs. They also want evidence that TEC is helping to reduce crisis-driven events that impact on formal health and social care services.

Case studies such as those below show the benefits of TEC to commissioners. They are compelling and we need to aggregate the evidence to show the impact of TEC at scale.

ESSEX COUNTY COUNCIL

Essex County Council are calculating their return on providing connected care platform Anthropos Detect (Vayyar) to people at risk of falls:

The key parameters include:

£200 Reduction in ambulance callouts @£200 per callout

25% 25% of ambulance callouts result in a 6-hour wait

1 DAY 1 hour on floor = 1 day in hospital

£800 Average daily hospital stay cost of £800

Essex County Council predicts total cost savings of £124,800 per year across the two care homes involved, just on emergency costs.

This does not include the increased likelihood of costs for reablement and enhanced care following hospital discharge.

£62,400
SAVINGS PER YEAR PER RES. CARE HOME

£124,800
TOTAL SAVINGS PER ANNUM ON EMERGENCY COSTS

[SOURCE: ANTHROPOS]

NOTTINGHAM CITY HOMES

Lilli has been working with Nottingham City Homes, part of Nottingham City Council to support their tech enabled activity assessment service and improve the hospital discharge process. The aim was for more people coming out of hospital to have Lilli's proactive remote monitoring technology installed upon discharge, allowing them to leave hospital promptly and recover safely at home, reducing readmission.

40% of participants were able to return home rather than go into residential care

The project increased the capacity of care resources throughout the Nottinghamshire region by generating additional care hours equivalent to those of 6.6 full-time employees

£54,588
CASH SAVINGS GENERATED

[SOURCE: LILLI]

TECHNOLOGY INTEGRATED HEALTH MANAGEMENT (TIHM)

The Technology Integrated Health Management (TIHM) remote monitoring service is commissioned through Surrey and Borders Partnership Trust. Howz provide the technology and the data insights which the Trust's clinical monitoring team then take action on. During Covid, the TIHM programme supported around 500 older people with dementia and their carers, improving quality of life and independent living.

500 **older people with dementia and their carers, supported by the programme**

60% of people using the service reported feeling less anxious

13% reduction in ambulance call-outs

32% reduction in emergency admissions

23% reduction in inpatient stays in hospital

42% reduction of risk to care home admission

[SOURCE: HOWZ]

ONWARD CARE SCHEME

The Onward Care scheme is a pilot developed with Buckinghamshire Healthcare NHS Trust. It links artificial intelligence (AI) electronic sensors on kettles and fridges to detect changes in the drinking and eating patterns of discharged hospital patients. Variances are flagged with a member of the Onward Care programme who will arrange help if needed.

140 The pilot supported roughly 140 people at home for 12 weeks after they were discharged from hospital

40% The Onward Care team estimate that on average 40% of patients who may not have fully recovered are readmitted to hospital within six months of being discharged

77% However, under the pilot, unplanned hospital readmissions were reduced by a remarkable 77%

The scheme is co-led by Sodexo, and they are in discussion about extending it to other trusts around the country.

[SOURCE: NATIONAL CARE FORUM ARTICLE]

These types of evaluation are valuable but not widespread in the TEC sector. Commissioners, for example, don't always have the capacity, resource or infrastructure for benefits realisation within their teams. They can struggle to get evidence from service providers or suppliers, making it hard to validate business cases for investment in the right TEC. Where evaluations are undertaken, they are often based on small sample sizes.

Language is also an issue, as the lack of common TEC terminology and evaluation data has made comparisons between different solutions difficult for commissioners and their teams. This links strongly with Sarah Alden's research and our call for a common TEC language – see pages 13 & 14.

Evaluations also need to examine what support people want in their lives, rather than measuring the specific performance of a piece of technology. As our research identified in chapter one, what people want in their lives and whether they are getting that hasn't been the focus of many previous evaluations.

Commissioners' perspective

There is significant potential for commissioners to use technology to deliver more personalised and co-produced services, but they are grappling with many challenges. Work undertaken by the Partners in Care and Health Programme (LGA & ADASS), Glenesk and a community of practice of local authority commissioners has categorised these as:

Funding challenges: creating a clear business case that links investment to results is imperative, but available evidence does not always bear financial scrutiny.

People challenges: many councils lack the time and specialist skills to deploy technology because it often involves overcoming change management challenges.

Market challenges: commissioners must find ways of commissioning technologies within existing frameworks and contracts.

Technology suppliers can help by taking into account the constraints commissioners work under and aligning their services and commercial terms with the outcomes people want to achieve.

Investing time to prove the benefits of technologies at scale, as well as in pilot, will also be key. Commissioners and service providers must find ways to share knowledge of outcomes and costs and generate credible business-cases to support the scaling of technology.

Moving from pilots to scaled evidence

By agreeing the ways to capture data and by using the Common TEC Language defined earlier, a standard TEC evaluation framework could result, ensuring that every organisation measures TEC outcomes in the same way.

Furthermore, the results of TEC trials and pilots could be combined to build quantified evidence at scale.

The TEC Action Alliance has collaborated with Dr Steven Ariss, Senior Research Fellow in the School of Health and Related Research (ScHARR) at the University of Sheffield to look at how the TEC sector should evaluate. Steven has expertise in digital healthcare, service improvement, user-centred design and evaluation of technology in health care.

The TEC Action Alliance commissioned Steven Ariss to identify key attributes for TEC evaluation. A comprehensive research process was needed to fully understand the landscape and to define the essential elements of a framework for TEC evaluation. Steven and his team have:

- Reviewed existing evaluation frameworks in the UK's TEC, digital health and care sectors.
- Created a living directory of these frameworks.
- Developed a strategy for examining evidence to create a bespoke TEC evaluation framework.

There is some complementary evaluation activity in this space, for example, work delivered by the SOcial Care Rapid evAluation TEam (SOCRATES). Steven Ariss (pictured) has reviewed all existing evaluation activity to inform his TEC Action Alliance research. A list of sources can be found in Steven's full research report. We are keen to acknowledge and collaborate with organisations that have done similar work in this space.

A Common Approach to TEC Evaluation

From this research work, Dr Steven Ariss has established what is needed for a common approach to TEC evaluation. The work also explores how the methods of evaluation can be refined further over time.

In the short-term it is recommended that we combine five building blocks to form an evaluation framework, incorporating key elements of the NICE (National Institute for Health and Care Excellence) and NASSS (Non-adoption, Abandonment, and challenges to Scale-up, Spread, and Sustainability) approaches to Digital Health Technology evaluation.

The building blocks relate to:

1 Adoption and Spread:
using the NASSS CAT tools

2 Technology Evaluation:
adaption of NICE evidence standards for digital health technology

3 Economic Evaluation:
NICE budget impact analysis (BIA)

4 Implementation Evaluation:
use case descriptions

5 Innovation & Change:
logic models included in use case descriptions

Details of this TEC evaluation research can be found here.

At a later point, this work may extend to some form of semi-automated environment, where evaluation data is captured and processed. This may also sit alongside physical and virtual environments where TEC solutions can be tried and evaluated.

The research team has also defined how this framework could be optimised further for TEC applications, and where evaluation data would be inherited and re-used in onward developments to an evaluation framework for TEC. The criteria for a further stage of development have been captured as follows:

a. Include measures for evaluation of the innovation and its implementation.

b. Understand and evaluate the programme theory in terms of a chain of outcomes.

c. Consider the production of practical use cases to aggregate and spread knowledge.

d. Consider scalability and sustainability of the intervention.

e. Adopt standardised, common terminology and categories for both TEC and outcomes.

f. Be suitable for use by health and care commissioners and people who are not expert in TEC.

g. Evaluations to take account of current evidence and evaluation best-practice for the intervention being investigated.

h. Ensure comprehensive coverage of the range of TEC most often commissioned.

i. Include standards of evidence to be met for commissioning in UK health and care systems.

j. Fit alongside other existing regulation in the UK without duplication or omission.

k. Consider additional means of assessing the economic and system-level impacts of TEC.

l. Consider technology that has inbuilt development, such as AI and machine learning.

m. Confirm applicability to proactive and preventative TEC.

n. Incorporate complexity, barriers and facilitators for implementation and realisation.

2

HOW CAN WE SHOW TEC IS DELIVERING THE RIGHT OUTCOMES FOR:

Private buyers, their families and unpaid carers?

Our research into what people want from TEC shows that individuals, their families and unpaid carers have multiple demands around TEC. These include challenges to the TEC sector around more familiar, easy to use and seamless technologies. Being able to navigate supply options using a common language is another challenge for the sector. People told us they want an easy way to understand the effectiveness of different TEC so they can make informed decisions about what to buy.

> I rang the council's social care adviceline, told them we were self-funders and asked what equipment to buy. They pointed me to their website but it's so basic. What I wanted was to speak to someone and tell them about [my loved one] and get advice on what was right for him. I wanted the personal touch.
>
> **Family carer**

People also want assurance that TEC services and technologies are of good quality, and that they will work safely, reliably and effectively. Similarly, they want this assurance to be readily identifiable, through a 'kitemark' scheme.

Assuring quality for different cohorts

Trusted, high quality, safe TEC has been identified as a priority in our research.

TEC Quality runs the only externally accredited (UKAS) Quality Standards Framework (QSF) for TEC in the UK. The team are currently working with health and care regulators to see how they can spread top quality TEC innovation through care provider inspections, registrations and rating decisions.

TEC Quality is also working with health, care and support commissioners and framework providers so QSF-certification is mandated in as many TEC procurement specifications as possible.

Accredited quality assurance schemes exist for TEC, and they are well-established and target outcomes for the commissioned market segment. But what about private buyers, families and unpaid carers? How can the public gain reassurance that they are purchasing high quality, safe TEC? The level of endorsed assurance or regulation that is needed should relate to an individual's stage of need, risks and the type of TEC they intend on using. This need for quality assurance that is accessible to people who draw on care and support must be addressed.

Research also identified that people want trusted information, guidance and support when choosing TEC. Similarly, they want assurance that solutions have been shaped with people who have lived experience.

The TEC Action Alliance believes there is a gap in the market for independent advice and guidance around TEC. The voluntary sector has a role to play here: there are a number of existing community organisations, well trusted by local people, that could provide TEC support and training if appropriately resourced.

Adopting a local advice demonstrator approach is another option. In 2023 the Department for Energy Security and Net Zero ran a competition, grant-funding 'Local Energy Advice Demonstrator' (LEAD) projects to trial new approaches to delivering in-person energy advice at a local level. Lessons from these projects could be applied to the provision of in-person TEC support and guidance.

> It helps to have someone showing you how to use technology. It has to be explained in great detail. I make notes on everything. No matter where I am, I make notes. The older you get, the less your memory works the way it used to.
>
> **Alice, a resident of a retirement complex owned by Bield Housing & Care near Edinburgh**

> Confidence and knowing what I'm doing are big barriers for me [around using TEC]. It's much easier if you have someone with you – not necessarily to keep asking them but just someone in the room that you can turn to if anything goes wrong. It would give me confidence and be like a comfort blanket to have someone there.
>
> **Vicki, a resident at Dairy View, a Wiltshire Council extra care living scheme managed by Housing2I. Wiltshire Council were one of the six TAPPI testbeds.**

3

HOW CAN WE SHOW TEC IS DELIVERING THE RIGHT OUTCOMES FOR:

Individuals self-managing their health and wellbeing and providers of primary care and community services?

> To reach people who don't yet draw on statutory social care services but who would benefit from TEC, we need to engage with NHS primary care and community services.

This will involve raising awareness around the benefits TEC can provide. Benefits will need to be demonstrated through consistent evaluation data and they must be easily understood, using a common language. This will support NHS primary care and community services to signpost those who would most benefit to TEC services.

NHS primary care and community services practitioners may also need information on training and support that they can direct people and families to. Our research shows that when training and support is provided alongside the TEC itself, people and families are more likely to engage.

4 in 5 (79%)

Nearly 4 in 5 (79%) of people would be happy to use technology to manage their health if recommended by the NHS; this increases to 89% of the over-75s.

NHS CONFEDERATION AND GOOGLE HEALTH SURVEY. Patient empowerment: what is the role of technology in transforming care? 2023

Digital adoption: A role for Integrated Care Systems

In 2022, the Fuller Stocktake Report: Next steps for integrating primary care highlighted how 'digital technology is playing an increasingly important role in maintaining services for patients' and 'having created a greater appetite for digital services – both among patients and staff – we should continue to offer a greater diversity of services'.

The Fuller Stocktake also identifies Integrated Care Systems (ICSs) as 'having a vital role in developing a more coherent approach to digital transformation in primary care that focuses on improving patient experience and outcomes'. The report outlines how ICSs must play a key part in providing digital training for primary care staff and they must consider how potential barriers to using digital tools, such as digital exclusion, are addressed.

This aligns with the TEC Action Alliance's view that NHS primary care and community services should be equipped to be important advisors and sign-posters to TEC.

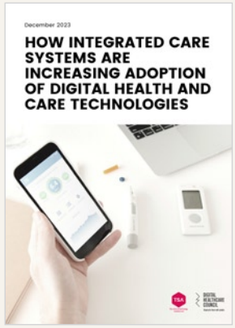
Integrated Neighbourhood Teams

In line with the Fuller Stocktake, many areas are developing Integrated Neighbourhood Teams which bring together multi-disciplinary professionals from NHS primary care, community, mental health and acute services, local authorities and the voluntary sector to support populations of circa 30,000 to 50,000 people.

These teams deliver more joined up preventative care at a neighbourhood level by sharing resources and information. The TEC Action Alliance believes they could play an important role in referring to and raising awareness of TEC amongst local populations. Equally, TEC could be an enabler for these teams, providing data and intelligence.

Digital Healthcare Council (DHC) and TSA report

A recent publication from the Digital Healthcare Council (DHC) and TSA also reflects these points. The paper examines how the health sector is increasing its use of digital technologies, and what the TEC sector can learn from this. It concludes that Integrated Care Systems (ICSs) are perfectly placed to take a leading role in increasing the adoption of digital technologies in health and care systems, enabling people to live healthy, happy lives.



Conclusions and Recommendations

The TEC Action Alliance has made the following recommendations to realise its vision of implementing TEC so we can all live gloriously ordinary lives.

1 We need to re-focus on people, their families and unpaid carers:

- TEC suppliers and service providers must consider each of the nine 'What people want from TEC' principles (detailed on pages 18-25) whenever they design or provide TEC solutions and services. This means delivering on people's demands for:
  - Co-production, so TEC is shaped and chosen by the people who will be using it
  - Seamless TEC that links with the technologies people already use
  - Familiar, easy to use technologies and devices
  - Adoption of a common structure and language for TEC, to help with awareness and selection of the right solutions
- Commissioners, when they procure TEC contracts, should mandate suppliers to respond to the nine 'What people want from TEC' principles in their bids.
- TEC service providers and suppliers to follow best practice co-production processes and guides such as the TEC Action Alliance's Guide to getting started in co-production and also learn from exemplars such as Bield Housing & Care and findings from TAPPI.
- TEC suppliers and service providers, commissioners and policy makers to adopt a new Common TEC Language that standardises the way we describe TEC and aids navigation of the market.

> "NHS primary care and community services, through Integrated Neighbourhood Teams, to signpost TEC services to those who would most benefit.

> "Adopt a new Common TEC Language that standardises the way we describe TEC and aids navigation of the market.

2 We need to get ahead of the curve by supporting people who self-manage their health and wellbeing:

- NHS primary care and community services, through Integrated Neighbourhood Teams, to signpost TEC services to those who would most benefit.
- Integrated Care Boards should seek to co-commission TEC services, as part of integrated care models, with local authority partners, working together to develop joint specifications and outcomes.

3 Awareness of TEC options and benefits must be accelerated:

- TEC suppliers, service providers and other TEC stakeholders to work together to find the best way of communicating TEC options to the wider private pay sector, using a Common TEC Language.
- TEC suppliers, local authority commissioners and social care staff to seek opportunities to collaborate, with shared risk, to address challenges that could benefit from technology solutions.
- The TEC sector to work with DHSC, the voluntary sector, higher and further education to address the digital skills gap (amongst people, families, unpaid carers and also care and support staff) which may impact TEC adoption. This involves linking with the 15-year social care workforce strategy currently being developed by Skills for Care, but it also involves working with the voluntary sector, using their networks and assets to raise TEC awareness amongst people and families. We must recognise that the adoption of familiar and easy-to-use technologies will go a long way towards closing digital skills gaps.
- Integrated Care Boards should consider delivering public behaviour influencing campaigns to raise awareness of TEC amongst the broader population.
- The TEC sector to work with DHSC, Skills for Care and NHS England to make evidence available to relevant education programmes, showing best practice TEC and outcomes to people who are training to work in care, housing and health.

4 Trustable TEC needs to be easily recognisable:

- Ensure that TEC quality assurance schemes are accessible to people, their families and unpaid carers, who can use them to inform their decision-making around TEC.
- Government to endorse such quality assurance schemes by:
  a. Embedding standards within legislative requirements
  b. Raising public awareness of schemes through a kitemark mechanism
- Commissioners to ensure they mandate audited compliance to a quality assurance scheme within the procurement of any TEC supplier or service provider.
- UK regulators to endorse this quality standards scheme as part of rating decisions.
- Organisations such as TSA should embed the nine 'What people want from TEC' principles' in TEC quality assurance schemes.

5 We need to move away from pilots to a body of evidence:

- Government to support the development of a Common TEC Evaluation Framework by testing the common approach to TEC evaluation created by Dr Steven Ariss through national programmes.
- Once available, TEC suppliers and service providers to adopt a Common TEC Evaluation Framework and Government, national bodies and commissioners to mandate use of this so an evidence base is built through aggregation of findings from multiple programmes. This evidence base needs to be relevant to people who draw on care as well as care and health systems.
- Social care commissioners to recognise the benefits that derive from investment in proactive services and commission these services at scale.

6 We must address any perceived conflict between personalisation and scale:

- TEC suppliers to adopt a new structure for TEC that will ensure different technologies work together, whilst helping care and housing providers to access a single view of a person. This structure will help to ensure data sets, services and support work together and it will enable personalised solutions and choice, emulating the open platforms and personally chosen apps used in most consumer technologies.
- Commissioners, when they procure TEC contracts, should mandate suppliers to use this new structure for TEC.

> "Government to support the development of a Common TEC Evaluation Framework by testing the....approach to TEC evaluation created by Dr Steven Ariss through national programmes.

> "Ensure that TEC quality assurance schemes are accessible to people, their families and unpaid carers...to inform their decision-making around TEC.

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Find out more

Insight and best practice from a wide range of reports, research and case studies has informed this paper.

Find out more on the TEC Action Alliance website.

tec-action.org.uk