Putting People First: Commissioning for Connected Care, Homes and Communities

October 2016

The key to successful adoption of technology enabled care, putting people at the centre, service design and measuring the benefits
ABOUT TSA

TSA is the industry body for Technology Enabled Care (TEC), representing the largest industry specific network in Europe and bringing together a growing membership of organisations across local government, health and the private sector.

Led by Chief Executive Alyson Scurfield and supported by Rt Hon Paul Burstow, the former Minister of State for Care Services as Senior Advisor, the organisation is, with its members, driving the growth of the Technology Enabled Care industry by leading, inspiring, promoting and driving strategy, innovation, choice and standards to enhance people’s independence and quality of life.

TSA organises the annual International Technology Enabled Care Conference and drives quality throughout the sector through its internationally recognised Integrated Code of Practice which has recently been relaunched to introduce a set of new Technology Enabled Care Services Quality Standards Framework modules.

TSA is currently working on a new Technology Roadmap led by its Technology Steering Board guiding the industry on changes which need to be made by 2025 as analogue moves to digital.

The not-for-profit membership based organisation is also developing an online Education Platform designed to upskill staff across the TEC industry with relevant training. Initial modules being launched include Call Monitoring, Installation, Response Services and Fire Survival Guidance.

www.tsa-voice.org.uk

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The launch of this White Paper represents a significant step forward in raising the profile of technology enabled care services (TECS) and its benefits. This crucial document brings transparency of the benefits of TECS to an increasing range of stakeholders and a clear understanding that it is everyone’s role to raise awareness of the support TECS can provide in delivering sustainable ‘Connected Care, Homes and Communities.

We all have a clear opportunity to embed technology within every element of care and support, and instil a “think technology first” culture throughout our collective workforce. Technology has a pivotal role to play from information, advice and guidance to individual, outcomes-focussed solutions provided across social care, health and housing.

I have experienced the continual growth in the use of technology throughout my career of some 40 years within local government - in the way we use technology every day in our working environment and how we are all embracing technology in our everyday lives. I have witnessed first-hand how TECS can play a key part in maintaining independence and instilling confidence in family members wanting to remain in their own home and community.

In my current roles as both national Assistive Technology lead for the Associations of Directors of Adult Social Services (ADASS) and Strategic Director for People in City of Wolverhampton Council, I am proud to champion TECS and raise awareness of its ability to support the efficient delivery of services across social care, health and housing. I aim to promote independence and wellbeing to individuals, carers and families; to enable effective demand management and to deliver robust solutions for the self-funder.

ADASS welcomes the leadership provided by the TSA in producing this White Paper and the contributions of organisations representing social care, health and housing. On behalf of ADASS and the local authorities it represents, I fully support this White Paper as a useful discussion document and look forward to supporting the TSA in disseminating the key messages and objectives to an ever-growing audience.
This White Paper is not about technology: it is about people.

Across the four Home nations, both NHS and local government are facing huge financial and workforce pressures. Each of them are pursuing digital and technology enabled agendas. Technology, the paperless NHS, apps and much more are often seen as the solution. But are they?

TSA convened a Think Tank of local digital leaders with proven track records of incorporating technology solutions into health and care services. They told their stories of transforming services and turning the use of technology into ‘business as usual’.

The common competencies that marked out the contributors were business intelligence and analytics, using the data to really understand where the opportunities are to increase productivity and better results for people. These skills are in short supply and could be a serious obstacle to the rapid progress that Governments in all four nations are seeking.

The message that came loud and clear from participants was don’t be dazzled by the kit, be “tech agnostic”. Instead of focusing on technology, focus on meeting the needs of the patient, service user and carer. Technology is the enabler and connector, the object is the quality of life of the patient, service user and carer, and the optimum possible use of resources.

Robust benefits realisation to provide Council and NHS Finance Directors with the assurance they need that costs are being reduced or avoided, was critical to making the business case. Benefit realisation is vital too, when it comes to information sharing within and across health, social care and housing. Showing how information can be used to develop a sophisticated picture of population health needs, is enabling a more predictive and preventative approach to take shape.

To make a reality of technology enabled care services (TECS) not only do commissioners and service planners have to be bold and work differently, so too do technology suppliers. The industry offer must include a willingness to collaborate, to source the business intelligence and analytics capacity vital to effective service redesign, and to support robust benefit realisation.

This White Paper marks the start of an important strand of work for the TSA. By bringing together some of the leaders in technology enabled health and care, the TSA has identified a need to set up a local digital leaders’ network. Working with ADASS and others the TSA will draw together local expertise and national system leaders to spread the expertise and help shape future procurement and contracting.
The pressures on health and social care systems to provide affordable care to an ageing population with more complex needs are well known.

Recent reports from the National Audit Office, The King’s Fund, Nuffield Trust and others have highlighted the financial pressures faced by health and care services in England. Scotland, Wales and Northern Ireland are similarly affected by a combination of factors that threaten the sustainability of provision. Demand continues to increase whilst front-line staff and skill shortages are having a growing impact.

In the light of financial pressures, commissioners, providers and health and care boards will need to present potentially controversial proposals to local people and make difficult choices. It is incumbent on health and social care commissioners to identify ways to address this and it seems almost inevitable that care technology can play, indeed must play, a significant role.

Care technology, whether you define it as telecare, telehealth, telemonitoring, telecoaching, ehealth, mhealth, digital health or indeed all of the above, when intelligently deployed, has a growing track record of delivering high quality care whilst reducing the cost of provision. There is an increasing number of best practice services that have demonstrated that high quality services, when provided in the right way, can deliver higher standards of care sustainably and for a lower cost.

Increasingly, commissioners are revisiting their services, due to a pincer-movement of relentless pressure on budgets and being encouraged by an increasing number of high profile success stories.

However, even with a rising number of positive care technology examples, for many commissioners in health and social care, technology still has a somewhat negative reputation for a number of reasons:

- Many telecare services have evolved from housing community alarm services. These are services that may have seen little or no service transformation and development over the past 10 / 15 years. Whilst these, often self-funded, services are valued by end users, they would benefit from service transformation to add additional value to health and social care economies;
- The sector, by its own admission, has tended to focus on the technology rather than desired outcomes for the end user. This has led to services with high numbers of connections, but limited evidence of efficacy;
- There has not been enough attention paid to design and delight in the way the solutions look and function. This is a serious shortcoming in today’s world where design is so important. Equipment manufacturers, operating in a business-to-business context, have been slow to change and adapt to emerging requirements;
- Focus has been on seeking scale and department level savings first, rather than managing risk and achieving outcomes for the user.
Commissioners who are keen to look again at what care technology can do for them, now face the challenge of really understanding what a high quality care technology service looks like.

On 15 September 2016, a TSA Think Tank Panel (see Appendix for members) met to consider recent developments in the adoption of technology enabled care services (TECS) in the UK. This White Paper provides a summary of the discussion along with a series of conclusions and recommendations.

**The paper addresses the key question:**

*How can the care technology sector support health and social care commissioners to commission technology enabled care services that meet the growing and changing needs of the entire system?*

This question is answered in four themes that were discussed by the Think Tank Panel and are explored throughout the paper:

1. The care technology sector must make clear the case for change;
2. The care technology sector needs to define what good quality looks like;
3. The care technology sector needs to define the key enablers of success; and
4. Commissioners need to ensure the commissioning approach focuses on outcomes and not inputs.
THE CARE TECHNOLOGY SECTOR MUST MAKE CLEAR THE CASE FOR CHANGE

Evidence and practice

- The evidence for technology enabled care and digital health continues to grow
- The type of evidence that is proving most helpful is changing; a mix of research methods is better suited to today’s context of fast-paced technological change
- Data analysis should be a component of every stage of the care pathway

The care technology sector must make clear the case for change

The evidence for technology enabled care and digital health continues to grow

The Think Tank Panel recognise that more than ever where and how technology enabled care is working, what it costs and where the barriers to success are. The Panel recognised that they regularly hear of cases where simply adding technology to existing services results only in more expensive services that fail to deliver an evidenced outcome. A gap remains in the sector fully acknowledging and understanding how individuals’ behaviours and feelings towards adopting and using technology can affect its use and achievement of long-term benefits. This applies to service users, commissioners and care providers.

There is a need to match care technology services to people’s varying lifestyles and other services they receive. This also needs balancing with creating a service that supports the achievement of significant savings for commissioners and providers.

The type of evidence that is proving most helpful is changing

Historically, evidence has been gathered through long, formal trials, giving in-depth analysis on a few specific areas. However a mix of research methods is better suited to today’s context of fast-paced technological change, increasing innovation and connected smart phones, homes and communities.

The speed of access to learning is also important. As soon as possible after a new service is in place or a new technology transformation is deployed, it is vital to have insight and learning brought together in one place. This will enable rapid sharing of successes and challenges between commissioners and providers.

Case Story - Learning from Liverpool CCG:

Evidence is important, but Randomised Control Trials are not appropriate for technology interventions; Liverpool redesigned how it collected evidence in conjunction with its supplier. There are 25 people in the Business Intelligence Team and they have developed predictive analysis for hospital admission. This is now 77% accurate based on matching with a control group. When there is >25% risk of admissions, they are achieving a 22%-32% reduction in emergency hospital admissions.

GP’s have a button on their computer to link to the telecare provider - it is so important not to give GPs more work! The service pulls data out of GP surgeries each month heart failure, COPD, diabetes and GPs sign off lists of patients each month; there are thousands of patients who could benefit from technology. There is a challenge of adoption at scale, but once on, 99% of people stay on the service. We need to think about the service design and not the kit.
Case Story - Sunderland highlights:

Sunderland highlights the real world challenges of trying new approaches

The challenge in Sunderland is significant, but not unfamiliar. £60m of efficiencies required, with around half identified and a further half to find. Whilst not averse to using technology enabled care, to date technology use has been an under explored area to help meet the financial gap.

The ambition is for a system that shares risks and rewards, with people’s care outcomes at the centre. Currently challenges are confined to individual parts of the system and there is opportunity for joining up pathways to find a clearer solution. For example, coordinating out of hospital care is challenging. There are instances where one person has 18 visits each day from six care providers. Limitations in current contracts, tariffs and systems analysis are not currently being fully addressed.

That said, Sunderland has had some success in embracing TECS. Small pilots are producing savings. New approaches to using tablets in care homes have been award winning. They are a Global Digital Exemplar, which is helpful, but is all acute focused. Sunderland needs support to identify what can be done for community and primary care services.

Sunderland wants to work together across the system to turn their pockets of innovation into large scale success. They want to agree a change management approach that can bring all partners together, and ensure their culture is one that is ready to make the most of what new technologies and updated pathways have to offer. As is a commonly heard challenge – they know what is out there. They want help to change the commissioning approach to make the most of it.

Data analysis should be a component of every stage of the care pathway

Real time data from technology enabled care services needs to be part of connected health and care records to provide a more comprehensive user profile so that effective and prompt action can be taken. Such data can be used operationally, for example in an emergency situation and also strategically, to inform service design. Historically commissioners have tended to capture only simple input indicators, like numbers of referrals or what equipment has been provided. There needs to be a recognition of the importance of gathering more insightful information, to understand the interventions being made, along with the impact that services are having and contracts are actually performing (‘you get what you measure’).
Case Story - Leading from Dallas:

Learning from the Dallas ‘delivering assistive living lifestyles at scale’ programme, shows the need to think about service design and not the specific technology being used. New types of working in partnership with industry worked better than treating technology suppliers as simply ‘off the shelf’ providers, which limits access to significant resource and expertise from product improvement to evaluation and deployment. Speedy access to data can also support appropriate service design and avoid a focus just on the technology being used. For example, with regards to falls; evidence shows that it is the fourth or fifth fall on average that causes a patient’s fracture. The technology provides an opportunity to intervene earlier by registering those earlier falls.

Impact, outcomes and benefits

- All parties involved in a technology enabled service need to be incentivised to achieve the required outcomes for service users
- Commissioners will need to think about how plans for technology enabled services are presented to a wider public and how the changes will be implemented
- Benefits can be achieved through partnership working to make the best use of resources
All parties involved in a technology enabled service need to be incentivised to achieve the required outcomes for service users

Commissioners need to challenge the traditional contracting model for technology enabled services. Organisations might need to be incentivised to behave differently through transformational funding mechanisms including, the possible use of payment-by-results mechanisms for meeting or exceeding contract aims. It is important to re-balance, remove perverse incentives and stimulate innovation across the sector.

There is a perceived challenge of adoption of care technology at scale. However if the focus is on getting the service design right at the beginning, so the pathway centres on meeting service user needs and using technology appropriately, then individual savings per installation add up as more and more people receive the service.

Commissioners will need to think about how plans for technology enabled services are presented to a wider public and how the changes will be implemented

Such plans could meet with resistance from stakeholders who equate the use of technology with a diminution in the quality of care, so options need to be well researched and presented as a coherent business case compared with traditional approaches for service delivery. A challenging aspect to the future of commissioning is the potential merger and reorganisations of health and care organisations. A joint focus on meeting the needs of service users and patients, rather than purely benefits for commissioning organisations, can help overcome the reservations that some may have about growing the reliance on technology.

Benefits can be achieved through partnership working to make the best use of resources

Integration, Better Care Fund and Pioneer programmes all stress the importance of partnership working to make the best use of resources, avoid duplication and improve outcomes. The panel discussed ‘how do you ensure collaborative engagement with industry and suppliers’? There has been concern for many years about the challenge of joining-up the NHS and other sectors. Local authorities and housing associations have perhaps tended to be more open to partnering.

New contracting models, such as the developmental contracting adopted by Hampshire County Council, offer ways of combining service redesign; end-to-end service provision; risk sharing; enabling innovation to reach the market and; robust benefit realisation around agreed outcomes.

Case Story - Learning from Hampshire County Council:

Hampshire County Council has ensured that there is a strong quality assurance process with its partnerships to deliver outcomes. The local authority had developed a successful partnership approach with PA Consulting’s Argenti consortium, through its innovative commissioning which received the TSA Crystal Award in 2015 (https://www.tsa-voice.org.uk/international-conference/2015-tsa-awards).

This is also starting to improve with the test beds and various accelerator programmes and the prospects of a national tariff for some devices and apps in England, although the role of tariff as a driver of innovation is by no means universally accepted. The Accelerated Access Review is expected in late 2016 to support a new approach to partnering and collaborations between the NHS and industry.
THE CARE TECHNOLOGY SECTOR NEEDS TO DEFINE WHAT GOOD QUALITY LOOKS LIKE

People – patients, users, carers and their support network

- A primary objective of any technology enabled care is to help keep people independent for longer and improve health outcomes.
- Service users, patients and carers need to be involved in the choices being made about their technology-enabled service.
- Services must be designed right first time to support people’s needs; especially to build trust in a service being provided.

A primary objective of any technology enabled care is to help keep people independent for longer and improve health outcomes.

Defining what high quality looks like relies on outcomes for individuals being identified as part of the initial assessment before any technology-enabled service being installed. Without that early, explicit definition of what was sought, it is impossible to judge if technology has been successfully deployed.

Appropriate equipment should be commissioned based on its ability to reduce the service user’s identified risks. Positive risk taking needs to be encouraged amongst professionals, with service users present at the time of assessment and service installation, to build trust and familiarity with the solution being provided and reasons for its suitability.

Case Story - Learning from the sector:

The use of voice-controlled devices, phones and tablets can lower the threshold for digital inclusion and make interfaces more accessible. People are more and more used to booking and using services online (e.g. Uber, Expedia, First Connect, Facebook) and have increasing expectations of health and care services having this functionality too. Organisations such as Carers UK have introduced digital resources including forums and apps to provide support.

Service users, patients and carers need to be involved in the choices being made about their technology-enabled service

Users, patients and carers need to be involved from the start of service design, through to service installation and proactive monitoring of their experience whilst they are receiving the service. Where new technology and apps are being developed, co-design with users, patients and carers using recognised standards and pathways is more likely to lead to endorsement, prescription, adherence and ‘delight’ with the provision.

Services must be designed right first time to support people’s needs; especially to build trust in a service being provided

Technology enabled services are likely to be different to traditional care that people have experienced and are familiar with. Without trust in, and ultimately appropriate use of, the technology, the full potential of the service for the user will not be achieved. Commissioners and providers need to talk to people about how they can lead the lives that they want to lead and must be informed about how the suggested service will support them to achieve their individual outcomes.

We know that people are more informed about the services available to them as more information is available through the internet, such as through provider websites, online forums and social media sites. Patients’ contribution to their own health and wellbeing can be often undervalued in medical records and traditional approaches. Developing services in partnership with people will mean recognising where people access information and this may not in the first instance be through material provided by commissioners and may instead be through participative approaches such as PatientsLikeMe - https://www.patientslikeme.com/.

Connectivity and interoperability

The panel considered that technology was an important ‘connector’ and ‘enabler’ as part of local change and transformation programmes.

Care needs to be connected, communities need to be connected (an important theme for TSA in 2016). A place-based approach with a single or integrated commissioner and a single or integrated budget is increasingly part of the thinking in all home nations.

- Connectivity and interoperability between services and technology remain an issue
- Partnership working with other digital leaders is a positive move forwards
- Engage service users to understand what existing technology they use and how this can support them to manage their health
THE CARE TECHNOLOGY SECTOR NEEDS TO DEFINE WHAT GOOD QUALITY LOOKS LIKE

Connectivity and interoperability between services and technology remain an issue

Connectivity and interoperability impact the degree to which devices can ‘speak’ to each other and therefore the flexibility and effectiveness of the end service that the end user receives. Leading organisations are joining up their health and care records using national patient identifiers and connected software to help make connected care a reality. Carers UK recently introduced digital resources (including the Jointly app) to make communication and coordination easier for those that share carer responsibilities. It is important to recognise that current traditional service structures and contracts are unlikely to be transformed through technology alone; this will require vision, leadership, changes in behaviour and new ways of working across the sector.

As part of developing interoperability, information sharing (real-time and historic) needs to be consented and available across partners.

The TSA’s Technology Steering Group has developed a technology roadmap to consider how TECS can operate within the wider digital ecosystem. Any service design needs to incorporate the flexibility to allow services to be informed of technology improvements and respond to these by updating the service appropriately.

Partnership working with other digital leaders could be a positive move forwards

Co-locating key service provider staff with technology champions and digital leaders can help catalyse fresh thinking. A clear leadership vision with a focus on making positive changes, would help to drive new behaviours and ultimately develop a culture where innovation thrives.

Building regular technology sector reviews into contracts for care services can support commissioners to know what the latest opportunities are and how these might best suit their service users’ needs. By having a flexible and alternative contract model, it is also possible to have less reliance on one technology provider, which can be seen to limit choice for individual needs.

Engage service users to understand what existing technology they use and how this can support them to manage their health

Events with stakeholders should take place to understand and discuss how digital technologies could be incorporated into service design. For example, Hampshire County Council hosts an annual innovation conference that highlights the importance of good design, accessibility and usability.

Options such as social prescribing and personal budgets for technology enabled care could be explored with users, patients and carers. However, approaches such as an innovation tariff in England could have the opposite effect and stifle innovation. Such an approach could have unintended consequences of creating an incentive that is meant to drive innovation but is based on a closed list of products.
Whole system design and transformation

- It is vital that we think wider than traditional service boundaries
- Quality outcomes need to be aligned between service users, care professionals, commissioners and providers

It is vital that we think wider than traditional service boundaries

There is a need to move away from hospitals as the focus for health improvement, with more emphasis on primary and community care, social care and prevention. In a recent ADASS survey adult social care directors cited increased prevention and early intervention as ‘very important’ priority savings areas.

Technology enabled care can support local authorities to have early awareness of multiple factors about a service user’s wellbeing. This can support decision making and service provision not only in social services, but wider wellbeing determinants and departments too, such as housing, fire safety, policing, etc. In the event of an incident at home, using nominated networks of family and neighbour volunteers instead of defaulting to ambulance callouts, can reduce pressures on emergency services and hospital departments.

Quality outcomes need to be aligned between service users, care professionals and commissioners and providers

An organisation and workforce embracing innovation is more likely to engage with patients, users, carers and frontline staff to look for new solutions. Frontline staff are fundamental to the successful adoption of new services involving technology solutions. It is necessary to re-imagine working practices (e.g. by examining care pathways). It is important that clinicians understand how to use technology enabled care where it could make a difference.

For GPs in their primary care role, improving clinician confidence in technology enabled care is an important local action – they have a key role in service re-design. A skills audit followed by awareness-raising and appropriate training would help improve clinician confidence in ‘prescribing’ solutions that leverage technology. In Hampshire, 1,000 social workers and occupational therapists received training in referring for technology enabled care.

Extracts from the TSA Think Tank Panel discussion

Liverpool CCG commissioned independent design services to help develop their TECS offering. The design approach is to make the technology disappear into the background.

Hampshire County Council’s Argenti telecare service is being extended to other services e.g. social isolation and children’s services following its success in adult services.

The Wales ‘Prudent healthcare’ approach is moving towards real-time feedback, non-financial incentives and dashboards.
The role of technology and standards

The Think Tank panel discussed the increasing numbers of health and care technologies available to support service delivery into the home and community, including chemotherapy and IV antibiotics.

For many years, individuals have been able to monitor a range of metrics themselves including blood pressure, blood glucose, weight and activity. Smartphones, watches, voice-controlled devices and activity wearables will inevitably link to more sophisticated sensors to track health and wellbeing in real time and to link with other connected home devices.

When considering the role of technology and standards:

- Standards need to be firmly focused on the user, patient and their support network
- Commissioners and providers need to be familiar with the technology available to fully understand the potential benefits and when it is best used

Standards need to be firmly focused on the user, patient and their support network

The panel considered that standards needed to underpin commissioning and provision of technology enabled care. The standards needed to be firmly focused on the user, patient and their support network. Everyone involved needs to feel confident that the technology, with the wraparound service, will be responsive particularly in emergency situations.

The panel considered that some people along with carers and families will actively self-care using their own data, some could benefit from adopting remote monitoring to take preventative action and some will continue to need active face to face support to help manage complex conditions.

Commissioners and providers need to be familiar with the technology available to fully understand the potential benefits and when it is best used

The Think Tank panel thought that it was important that commissioners and providers are able to see and physically handle the technologies available to understand how they could help meet user needs and fit in with their lifestyles. Local marketplace events provide an opportunity to speak with vendors about their offerings. An understanding of the benefits and limitations of particular technologies could help improve practitioner buy-in. There is an extensive evidence base of what works and for whom, but health and care practitioners still need to be assured that services supported by technology are safe, meet recognised standards, are cost-effective and are at least equivalent to any comparable face to face offering.
The importance of service quality

The TSA has long been a global leader in clearly defining quality for service users, carers, commissioners and providers. Its Code of Practice is already recognised as the benchmark for technology-enabled care services (TECS) with over 130 organisations across the UK accredited to it.

However, as industry evolves so must the way in which we think about “what good looks like”. The Code has therefore been superseded by a Quality Standards Framework which ensures that users and their representatives are ‘front and centre’ and are able to influence the way in which we plan and deliver services.

This new Framework adopts a flexible structure that ensures continuous quality improvement whilst encouraging innovation. It embraces technology enabled care in its entirety: wearables, activity trackers, tele-coaching, apps, video monitoring; not forgetting more traditional telecare services.

Most importantly, is a renewed focus on the achievement of outcomes, what does the delivery of TECS really mean for individuals and communities?

Compliance with the TSA’s new standards provides the only real assurance that providers are delivering quality in what is otherwise a largely unregulated industry.
THE CARE TECHNOLOGY SECTOR NEEDS TO DEFINE THE KEY ENABLERS OF SUCCESS

Leadership, workforce, behaviour and culture

‘It’s all about leadership, behaviour and culture’ was a recurring message from the Think Tank Panel. Staff need to feel valued and trusted but also everyone needs to take responsibility to focus on the people reliant on funded services.

- Having clarity of vision is dependent on being brave and ensuring the focus of service changes are on achieving user outcomes and ‘forgetting about the kit’
- Inspiring leadership, vision and co-design is more likely to motivate the workforce and result in behaviour change
- Recognise that national leaders need to give people space and time to achieve results

Having clarity of vision is dependent on being brave and ensuring the focus of service changes are on achieving user outcomes and ‘forgetting about the kit’

We need to ‘forget about the kit’ and look to the design of the service from the perspective of service users, patients and carers – pursuing what makes a positive difference. Senior managers need to be clear on what is to be achieved and bought into the service changes required. Leaders need to adopt mentoring and coaching approaches to build momentum for change. If care managers do not feel empowered to support their service users, then they will not make the change in behaviour required to use alternative types of services. Staff need to know they are supported to take positive risks for their service users when less intrusive and less expensive forms of care, that can meet individual service user outcomes, are available.

Case Study - Learning from Hampshire County Council

A clear vision about funding, together with people who can see the big picture were needed. If you obsess about the cost of the kit you are in a hole; there must be seniority to make decisions to meet outcomes. You needed to be clear about where you get benefits. A vision for adult services was needed; no pilots; we took a managed leap of faith based on a clear business case and outcome-based commissioning.

We looked at how outcomes could be delivered in other forms of care - not a bolt on – make TECS an integral part of the way we work - social workers define outcomes and risks then providers respond with technology. You needed to be bold and brave.
Inspiring leadership, vision and co-design is more likely to motivate the workforce and result in behaviour change

The Think Tank heard that over time this offered the best chance of making technology a mainstream part of the care offer, rather than a slice’d afterthought. Buy-in from commissioners, providers, practitioners was vital to successful implementation. This may prove difficult where there is a shortage of skilled staff to advocate for technology or where technology is seen as a threat. It is a responsibility of leaders in the digital age to support its workforce in realising the benefits of proven technologies and managing sustainable transformational change.

Recognise that national leaders need to give people space and time to achieve results

The care sector has a role in communicating with national bodies and decision makers about the potential for technology enabled services and the time and investment required to get the service and pathways right. Having confidence in bottom-up approaches that deliver new services underpinned by technology, data and digital thinking, as well as a focus on users, patients and carers, is not easy. Especially whilst there is top-down pressures to simply reduce costs (often without transformation). Confidence needs to be given to local champions and front line staff so they have the opportunity to make genuine change, which has potential in the longer term to deliver benefits for years to come and not simply in one financial year.

Data and information

The use of big data as part of a population health management approach is spreading in the NHS but there is some way to go yet to gain useful insight from the large amounts of data currently available, let alone what will be available in future.

Increasingly, access to electronic health records will underpin new care models but this may take time (up to 2023 for some health trusts in England).

New skills are needed in health and care organisations to link technologies and data sets particularly where individuals are also holding their own personal records. There is some value to commissioners developing these data analysis and actuarial skills in-house. The TSA has been examining at these workforce skill issues and will publish its conclusions in the near future.

Increasingly, the use of risk assessment and predictive analysis are being used to identify individuals who could benefit from early intervention to help people live with their condition. The opportunities to incorporate technology into the offer are significant. This additional insight should enable providers to tailor technology enabled care services in future to increase the impact for individuals.
COMMISSIONERS NEED TO ENSURE THE COMMISSIONING APPROACH FOCUSES ON OUTCOMES AND NOT INPUTS

Resources and funding

- Funding decisions are crucial to adopting technology-enabled services at scale
- New contract approaches are needed

**Funding decisions are crucial to adopting technology-enabled services at scale**

Some specific, additional funding is available (e.g. telehealth in Scotland, learning disabilities support in England). However it needs to be considered and used in the broader picture of service re-design and transformation, with more emphasis on out of hospital services and care closer to home.

Funding needs to address the whole picture at the same time, with a particular onus on supporting people closer to home. Business case and benefits realisation analysis would indicate over what period any potential efficiencies could be achieved. It is important to consider the cost of the ‘do nothing’ option e.g. falls at home, which cost an estimated £200k per fracture; or diabetes, where an estimated £14 billion pounds is spent a year in UK on treatment and complications.

**New contract approaches are needed**

Commissioners will need to review how these transformational changes are designed, how budgets are pooled and how incentives are used to build momentum. It is important for commissioners to balance their approach to ensure that their programmes have impact. Innovative reimbursement and contract approaches could make a difference between success and failure.

The importance of greater use of outcome-based commissioning was stressed. This can help to keep the focus of the service commissioner on what is done, rather than on how it is done. This allows the service provider to respond more creatively to the aims being set out as part of the contract. It moves away from rigid contracts that specific inputs and the time that everything must be done. It is an approach that allows providers to be flexible and innovative with the ways they meet service user needs and potentially allows for outcomes to be met in ways not originally thought of by the commissioner.

In Hampshire, commissioners closely monitor the impact of their investment on service users as well as tracking savings for the County Council. This focus on benefits realisation in Hampshire, is opening up opportunities with other service user cohorts across the county, as it shows that good outcomes can be delivered at lower costs.
CONCLUSIONS

Health and care systems across the UK are under huge financial pressure and experiencing growing workforce shortages. There is an urgent need to find new ways of managing and reducing demand for health and social care services.

Technology enabled care services can make a significant contribution to delivering great outcomes for people and cost savings. But to make this a reality for the majority, the focus must move from the technology to evidenced outcomes for people.

The discussions in the TSA’s Think Tank were grounded in practical experience of overcoming barriers and working differently. A common theme was the need for informed leadership, whole system thinking and an agreed approach to accounting for savings.

The commissioners who are seeing greatest success have realised that services users, patients, informal carers and care professionals have to be fully engaged in redesigning the care offer to take full advantage of technology. These stakeholders are essential partners in co-creating services that realise the potential of technology and deliver the dignity and control people want.

There is an urgent need to network and share insights like those brought together at the Think Tank. Local digital leaders networks need to provide the good practice examples, peer support and problem solving capability to accelerate the spread of TECS.

As technology becomes more embedded in services it is essential that it is grounded in clear standards. Building on its long history of supporting and shaping the sector, the TSA is developing new outcomes based standards for the delivery of high quality, safe technology enabled care.

Commissioners seeking a step change in the way technology is used to deliver outcomes need to:

- Review strategies, policies, specifications, contracts and care pathways to ensure that cost-effective technology enabled care can become embedded in business as usual;
- Re-design services and specifications to incorporate real time benefits realisation;
- Involve service users and care professionals in care pathway redesign;
- Engage partners across the system to deliver truly integrated TECS;
- Foster and promote digital leadership skills and an innovation culture with experts and champions;
- Adopt an agnostic approach to technology and always put the service user and carer at the centre;
- Use innovative contracting approaches that share risks among partners and incorporate a reward element for the achievement of outcomes;
- Set realistic expectations about the pace and scale of service development;
- Partner/buddy with organisations that have expertise in different aspects of technology enabled care to drive rapid progress;
- Understand the role TECS can play in supporting the entire local population, not just those eligible; and
- Regularly review trusted sources of case studies and evidence for inspiration.
What will TSA do

Over the coming twelve months

• TSA will raise awareness of the White Paper key messages nationally through its influencing, marketing and communication activity
• TSA work with partners to disseminate the key recommendations from the White Paper and develop actions plans to deliver them
• TSA will develop a TECS ‘Offer’ to support the major transformation and service re-design supported by robust benefit realisation
• TSA will convene a digital leaders network to work with Commissioners, Providers and key partners to share expertise in delivering Technology Enabled Care solutions that are cost effective and are adopted at scale
• TSA will seek national endorsement for the new TECS Quality Standard Framework ensuring the delivery of quality and safety of Technology Enabled Care Services
• TSA and its partners will develop a robust technical road map to support the transition from analogue to digital and address interoperability to support the implementation of the TECS ‘offer’
Appendix

- Think Tank Panel Members (September 2016)
- The Think Tank panel met on 15 September 2016 to consider recent developments in the adoption of technology enabled care in the UK. This White Paper summarises the discussions along with a series of conclusions and recommendations.
- Alyson Scurfield, Chief Executive, TSA
- Rt Hon Paul Burstow, Senior Advisor, TSA
- Mark Allen, Strategic Commissioning Manager, Adult Services, Hampshire County Council
- Mike Clark, Associate, TSA
- Terry Dafter, Informatics Advisor, ADASS
- Paul Dolan, CEO, Jonnie Johnson Housing
- Adrian Clarke, Head of Quality Assurance Improvement Team, NHS Wales
- Paul Gibson, Informatics Programme Manager, Sunderland Clinical Commissioning Group
- Clare Heaney, Chief Operating Officer, First Ark Group
- Dave Horsfield, Programme Manager Liverpool Clinical Commissioning Group
- Wendy Kendall, Director, TSA
- Mike Kenny, Head of Programmes, Innovation Agency
- Shane Mills, Clinical Lead at the National Collaborative Commissioning Unit, Welsh Government
- Steven Phillips, Director, Newton Europe Limited
- Linda Sanders, Telecare Lead, ADASS
- Mike Smith, Board Member, UKHCA
- Madeleine Starr, Director of Business Development and Innovation, Carers UK
- Karen Taylor, Research Director, UK Centre for Health Solutions, Deloitte
- Robert Turnbull, lead for Care Technology, PA Consulting
- Scott Watson, Director of Contracting and Informatics, Sunderland Clinical Commissioning Group