



# Adopting the right technology to transform social care



### Introduction



In summer 2021 CCN and Tunstall published *Employing Assistive Technology in Adult Social Care*. This report set out the multitude of ways in which advances in digital technology are on the brink of delivering a potentially transformative impact on the adult social care system, both in terms of better outcomes for citizens and cost efficiencies for the state. The report aimed to help spur a greater push towards the use of digital technology across the adult social care sector.

'Technology' as defined within adult social care, can be utilised to describe a range of interventions, not necessarily electronic or connected technology. For instance a daily pill holder to help elderly people remember if they've taken their medication, or easy to identify coloured knives which help citizens with learning difficulties to achieve independent living by making the kitchen easier to navigate are both examples of technology. These may in many circumstances be more important and effective for meeting an individual's needs than supplying them with a tablet devices and a set of apps. However, there is no doubt that the potential for technology to help support those with social care needs is growing exponentially year by year – with the key driver being digital technology.

One year on since this report was published it is clear that progress is being made in many parts of the country. Two elements have been specifically noted:

- The prime objective for technology-based services in social care is still supporting citizens with their housing, health, and care needs. There is, however, growing understanding of how this objective also needs to incorporate citizen-focused outcomes. In short technology needs not only to deliver for the local authorities, but deliver tangible benefits for the actual citizens.
- Integrated Care Systems (ICS) are becoming the driver both of change and funding allocation for health and social care. However, local authorities are still finding out how they can best understand and navigate this increasingly complex environment with the NHS at a local level. Meanwhile rising inflation has placed more financial pressure on services and a wide-ranging reform agenda is being introduced across the health and social care system, with both issues limiting the bandwidth that can be devoted to fully engaging with the ICS agenda at present.

The possibility of revolutionising the whole social care system, both delivering better outcomes for individuals and reducing costs for the state still exists. But to achieve this, local authorities will need to carefully manage a wider array of bureaucracy and organisational challenges to understand what citizens need and then deliver excellent services for them quickly and efficiently.

The most positive step forward in the past year, though, has been the priority the Government has placed on technology as a means to improve adult social care services. CCN and Tunstall's report was released with the anticipation of helping to support the development of the Government's own proposals for reform promised later in the year. On its publication in December 2021 the *People At The Heart of Care* White Paper duly confirmed:

"...over the next three years we will invest at least £150 million of new funding to deliver a programme of digital transformation."

Alongside this it also highlighted a number of areas that the government expected this funding should be directed towards. These include procuring more and better assistive technology to support services; improving the establishment and maintenance of digital records and data; upskilling the adult social care workforce in how to use technology; and bedding in wider digital infrastructure and cybersecurity within systems.

With this investment now confirmed and £25m of this year's allocation already available to Integrated Care Systems (ICS), Tunstall and CCN have come together again to build on the findings of their previous report. This time the aim is to flesh out options for how local authorities might consider best investing resources most effectively.

This report considers three specific areas where investment in technology might be targeted:

- 1. Enabling the right systems and solutions in Local Authorities
- 2. Delivering quality care to citizens
- 3. Ensuring the right devices work in citizens' homes

Finally the paper considers the challenges and opportunities local authorities face, setting out a series of practical steps in section 4 that can be implemented so that savings can be realised whilst delivering pro-active and preventative services for citizens.

# **Executive Summary**



The white paper *People At The Heart Of Care* has placed an emphasis on better use of digital technology within adult social care. With pressures already in the system, and projections of rising demand for services from an ageing population for the foreseeable future, means technology will need to play an increasingly important role in helping to expand the capacity of the system to meet this challenge. As part of its reform package, the Government has allocated £150m to support service transformation in social care through technology. This report is designed to help local authorities and ICSs, as well as their local stakeholders such as providers, to start thinking about some of the options they have for using this funding most effectively.

# Section 1: Enabling the right systems and solutions in local authorities

The first section considers how local authorities can use technology most effectively to streamline their own systems and processes in several areas.

#### Access and assessment

Local authorities should be monitoring how effectively IT is being used to help manage access and assessment into social care services. Technology needs to help simplify this by enabling easy to access services, efficient referral processes, and solutions for citizens to get the support they need quickly and easily. Reducing the burden of conducting service assessments is going to become an increasingly important factor in the context of the new

charging reforms, which previous CCN research suggests could generate as many as an additional 200,000 assessments per annum.<sup>1</sup>

#### **Predictive technology**

The most cost-efficient way to deliver social care is to prevent it being required in the first place. Technology-driven solutions are increasingly proactive and predictive. These have the potential to revolutionise how services are run with data and information driving improvements. But to get to this position will require strategic investment of resources over time to see the full benefits.

#### Data and GDPR

Robust methodologies for analysing and using data effectively to improve decision making across all parts of the system need to be designed to ensure data is held securely and privacy is not compromised. Data plays a particularly important role in empowering citizens to manage their own conditions. Local authorities need to tread carefully in choosing the right solutions for them, and ensure that when working with developers to create new systems they check that these solutions are both legally compliant, but also workable.

#### <u>Integration with partner systems</u>

Local authorities should consider how technology solutions they invest in will operate with those of local strategic partners. Integrated Care Systems (ICS) can play an important role in this co-ordination where should be at the forefront of strategic planning together with effective co-commissioning strategies across health and social care alike.

#### What is the Adult Social Care Digital Transformation Fund?

As part of the government's £5bn social care reform package announced in *People At The Heart Of Care*, £150m was announced specifically for supporting the adult social care sector. This would be made available as £50m over three years between 2022/3 and 2024/5. The first tranche of this funding – £25m – has now been allocated to Integrated Care Systems to fund the Adult Social Care Digital Transformation fund.

The fund, being administered by the Digitising Social Care team in the NHS Transformation Directorate, and then channelled through ICSs is "designed to support CQC registered adult social care providers to adopt technologies that can transform social care". The fund is designed to support providers to pursue the following priorities:

- adopt digital social care records (DSCR), also known as digital care plans, to ensure care teams have the most accurate, timely information at their fingertips to provide outstanding care;
- Roll-out sensor-based falls prevention and detection technologies to support those at risk of falls, reducing the frequency and severity of falls-related injuries and preventing hospital admissions; and
- Test other care technologies based on local needs to further develop our understanding of what works.

Councils interested in finding out more information about how the Adult Social Care Digital Transformation fund is being used in their area should contact their local integrated care system.



#### Supporting organisational and cultural change

For technological improvement to be implemented effectively, councils must also consider their organisational culture. It's important to simplify messages around technology to make it easier for both citizens and staff to understand the role of technology in care and support, as well as their role in using it most effectively.

#### Section 2: Delivering quality care to citizens

The second section considers how local authorities can use technology most effectively to directly support those needing care and their families.

#### Effective Commissioning

Forward-thinking local authorities are looking at different ways to commission technology within social care, in particular looking at co-creation with developers. Councils need to be able to clearly articulate the functionality they are looking for as part of the commissioning process, and provide an overview of what support they are able to provide during the development and adaptation stage.

#### Maximising staff time and productivity

One of the principal reasons for investing in technology is so councils can maximise the use of staff time such as through technology which allows remote contact with service users saving staff valuable travelling time to provide an in-person check. If staff time can be optimised using technology then it will make them more productive and can reduce the pressure on services.

#### **Prevention**

Keeping people at home for longer and away from frontline services is the optimum goal for local authorities, the NHS and citizens alike. The citizen has a better quality of life, whilst local authorities maximise the financial and resourcing benefits. Technology can be a principal driver of improvement in the prevention sphere with the increasing numbers of devices entering the market providing direct-



to-user equipment to help prevent accidents and enable more efficient responses to emergencies do occur.

# Section 3: Ensuring the right devices work in citizens' homes

There is massive potential in how infrastructure improvements will allow technology to enhance services. As such the present programme of work to upgrade national digital infrastructure is rightly seen as essential to the UK's future prosperity. It is important that councils are fully cognisant of the possible impact this work may have on local households as the rollout reaches their area. Of significant concern are vulnerable citizens currently receiving technology services that require these solutions to be connected to monitoring centres using their existing phone line and councils should evaluate what contingencies are in place for if these citizens experience disruption to their service which could reduce the quality of their care package, or in more severe cases present a risk to their welfare.

#### Section 4: Embedding the change

High-performing authorities understand that technology needs to be front and centre of any strategy for change. It is likely to provide the best route over time to enhancing the capacity of adult social care whilst at the same time reducing pressure on the workforce and maintaining high quality services. As such councils should be thinking now about where technologies could reduce expected pressures in the future.

For the benefits to be fully realised it is important that technology suppliers and local authorities collaborate effectively and co-creatively to ensure that both understand the ultimate aim for the technology. This needs effective communications between the different specialisations. Local authorities also need to make sure citizens and their families are consulted when developing digital strategies – councils should also consider how better supporting the carer can be hugely beneficial for both the user and the system overall.

It is hugely important that central government plays its role too. The Departments of Health and Social Care and Digital, Culture, Media and Sport must work in lockstep to drive this agenda through consistent joined up working and messaging. The White Paper emphasises the need for strong leadership and partnership and it is vital this rhetoric is supported by the actions of the new government taking up the reform agenda:



# Enabling the right systems and solutions in local authorities

Local authorities have a proven track record in delivering high quality social care, but often their existing systems and processes are now outmoded compared to what may be on offer. Sophisticated IT software can help deliver better services on the ground, minimise bureaucracy, as well as ensuring smoother interaction across different services and collaboration with other agencies. As demand pressures on the social care system are set to continue for the foreseeable future it is important that new investment helps in getting the right information technology in local authorities.

#### **Access and Assessment**

Local authorities should be monitoring how effectively IT is being used to help manage access and assessment into social care services. Understanding how to access social care can be confusing. Too often citizens need help 'right now' but many are not aware how they can access the support they need in the first place. When it is needed those attempting to obtain the care – most often carers, family, or friends – will often be at crisis point and will attempt to access any service that will listen to them, even if it's not appropriate.

The system can be difficult to navigate even for those who understand it, let alone those who don't. Even for those who get past that barrier it can take time to allocate workers, create care plans and agree what's needed – often time the service user doesn't have. Technology needs to help simplify things by enabling easy to access services, efficient referral processes, and solutions for citizens to get the support they need quickly and easily.

Most local authorities have already begun to use technology to help manage access to social care services to a degree. Council websites contain extensive information about what services are available and how they can be applied for. Automation is used to facilitate and to some extent screen applications to receive care to a greater or lesser degree.

However, as IT systems become more sophisticated local authorities need to think more clearly about how technology might be used in reducing the burden of conducting service assessments. This is going to become an increasingly important issue in the context of the new reform proposals, particularly the charging reforms introducing a cap on care costs and an extended means test. This will require local authorities to undertake many

more assessments – research by CCN and Newton earlier this year suggests as many as 200,000 per annum.<sup>3</sup>

Local authorities should evaluate how far technology is currently being used to support their access and assessment processes. This exercise should identify where improvements might be made to help streamline the system and make it easier to use. One useful approach can be to regularly obtain feedback from users on their experience and for staff and managers to be regularly testing the 'front of house' service online to check it is operating as intended. This can be a useful way of identifying that things like navigation around webpages and the clarity of language used on them are fit for purpose. Digital literacy is an increasingly important issue, with many of the most vulnerable people likely to be seeking social care support also among those most likely to be at risk of 'digital exclusion' making what may seem a simple process to those familiar with digital services, much more complex to this cohort.

Councils should also remain in regular contact with technology suppliers and other digital contractors they have a relationship with to stay abreast of whether upgrades to existing software or new technology altogether may be able to better support the assessment process and if this could be cost effective. Where there may be opportunities to introduce new IT systems then councils should work closely with developers to ensure that these are used to best advantage and which can help streamline the existing process rather than complicating.

#### **Predictive technology**

The most cost-efficient way to deliver social care is to prevent it being required in the first place. *People At The Heart Of Care* emphasises the importance of preventative approaches to minimise the amount of people requiring



social care in the future. Digital technology offers important tools to support this approach.

Technology-driven solutions are increasingly proactive and predictive. In September 2021, the *Journal of Healthcare Informatics Research* outlined that:

"...through the delivery of proactive and personalised telecare services, comprehensive operating and sensor-based data is collected. This represents a rich dataset to enable advanced and progressively predictive analytics to further support the development of the telecare service capability, as well as supporting allied research.

"Proactive telecare retains all of the aspects of reactive services but extends these in ways designed to avoid or reduce critical situations arising. Proactive telecare is normally delivered as an integrated programme of outbound calls, follow-ups, home care visits, along with advice and guidance, to provide broader and more holistic support for service users and their carers. Proactive support can extend further when the service is personalised to the specific needs of the service user through an ongoing needs stratification process.

"[A final tier is] advanced predictive telecare, in which data driven-insight and comprehensive health and care interventions can complement the proactive personalised telecare capability. By providing earlier predictive indications of developing issues, this offers the potential to inform earlier and more targeted interventions intended to help avoid the adverse event arising." 4

The findings of the paper indicated that when services were more proactive and predictive, that "for service users in the observed population, with broadly consistent profile at registration but an increasing mean age at cessation, ambulance mobilisations pp/pa reduced over the period by 33.3%"

Moving to proactive and preventative digital solutions across health and social care has the potential to revolutionise how services are run with data and information driving improvements. But to get to this position will require strategic investment of resources over time to see the full benefits – the preventative nature of the technology means it should not be expected to yield its full potential immediately and should be evaluated over reasonable timescales.

#### **Data and GDPR**

There are, however, key issues of data security which need to be addressed when using sophisticated predictive technology in social care. Robust methodologies for analysing and using the data effectively to improve decision making across all parts of the system needs to be designed to ensure data is held securely and privacy is not compromised.

Aligned to this is the importance of maintaining data integrity, GDPR compliance, and standards. Whilst this *shouldn't* be a barrier, feedback from member councils indicates it too often is. It is therefore important that digital solutions are developed in the right standards-based way. Local authorities need to tread carefully in choosing the right solutions for them, and ensure that when working with developers to create new systems they check that these solutions are both legally compliant, but also workable. For example if a suggested data set is not practical to collect easily or is likely to come back ill-defined, then this may compromise the effectiveness of the system and may need rethinking.

As councils continue to invest in and integrate technology into their services, it will potentially give citizens greater ability to become more involved in how their health and care is managed. Data plays a particularly important role in empowering citizens to manage their own conditions. For instance using technology such as remote monitoring, they can take their own readings – e.g. temperature – and have a means of sharing these with the right people at the right time. Using data in a proactive and predictive way means issues can be highlighted early, often delaying or preventing entry into health or social care which is in everyone's best interest. The more citizens are involved with data, taking readings and managing their own health, the more they'll understand how to manage better on a day-to-day basis.

#### **Integration with partner systems**

Another key issue local authorities need to consider when investing in technology solutions is how effectively they will operate with those of local strategic partners. Alongside the social care reforms currently being pursued, the Health and Care Act 2022 has laid the ground to further advance the Government's moves to better integrate health and social care services. It is therefore important that as investment is made in technology for social care this is



cross referenced with the strategies being employed in local health services – ideally by commissioning solutions that are compatible across both systems, and possibly even through the means of exploring opportunities for joint commissioning.

Integrated Care Systems (ICS) can play an important role in this co-ordination. Each ICS is tasked with defining and developing a strategic plan. Technology should be at the forefront of these plans together with effective co-commissioning strategies. When done well, both the citizen and system benefit.

Better integrated services can deliver better outcomes for people, reducing the need for crisis support, hospital admission, accident and emergency attendance and care home placements. Such initiatives can be localised, often addressing specific groups, which is where the 'place-led' approach may have the most potential to facilitate joint delivery models – partners working together to develop 'whole systems' approaches to providing a more effective and seamless service whilst reducing costs. As such, delivering measurable improvements in citizens' experience of health and social care services, reduces the cost of health and social care and makes joint working the default option.

But what about cost avoidance rather than cash savings? Local authorities are rightly tasked by Government to review services to make sure they are appropriate for citizens. What can happen, though, is that necessary budgetary savings for an authority have a direct impact on the health system and vice-versa. This is where ICSs will have a key role to play in making sure that cost avoidance to the system in general is recognised and that high quality support for citizens drives cost avoidance to both health and social care.

An element of this is about writing supportive business cases that don't just define what is required, but that outline financial (cost avoidance) and social return on investment (SROI). SROI is often not considered, but is an important outcomes-based measurement tool that helps organisations to understand and quantify the social, environmental and economic value they are creating. A technology service, for example, may deliver financial savings – but if it also helps to improve citizen well-being; increases quality and independence; and reduces anxiety, all whilst enabling early intervention if necessary, then that's also a good thing and should be captured when assessing the value of the investment.

For example, one local authority trialled the use of a mobile fall detector to support hospital discharge. Their approach was led from the top and embedded across multiple teams. Patients were engaged, the service prevented readmission and entry into residential care, provided reassurance and generated savings. Over one month, 37 out of 61 patients generated savings for the NHS of £9,270 (55%) and social care of £7,707 (45%) with a net cost avoidance to other services of £244.15 per person.

#### **Driving Digital Systems - the move to ICSs**

The What Good Looks Like framework for Integrated Care Systems developed by the NHS Transformation Directorate in 2021 lists seven measures for success,<sup>5</sup> all around driving digital systems with the citizen at the centre of service design:

- **1.** <u>Well led:</u> Boards are equipped to lead digital transformation and collaboration. They own and drive the digital transformation journey.
- **2.** <u>Smart foundations:</u> Digital, data and infrastructure operating environments are reliable, modern, secure, sustainable and resilient.
- 3. <u>Safe practice:</u> Organisations maintain standards for safe care and routinely review digital and data systems to ensure they are safe, robust, secure, sustainable and resilient.
- **4. Supported people:** The workforce are digitally literate and are able to work optimally with data and technology.
- **5.** <u>Empower citizens:</u> Citizens are at the centre of service design and can access and contribute to their healthcare information, taking an active role in their health and wellbeing.
- **6.** *Improve care:* Health and care practitioners use digital and data to improve health and wellbeing, transform care pathways and deliver innovative and sustainable care models.
- **7.** <u>Healthy populations:</u> Organisations encourage development and adoption of new ICS-led, population-based, digitally-driven models of care.

On its release the Health Secretary highlighted the important role technology should play in the development of ICSs:

"Over the past 18 months we have all appreciated the immense value of technology. This is particularly true for the NHS with digital technologies freeing up hospital beds and allowing clinicians to continue seeing patients remotely – and it will be invaluable in meeting other health challenges in the long-term." <sup>6</sup>



#### Supporting organisational and cultural change

This section has outlined how digital technology has an increasingly important role to play in supporting the Government's vision for reform social care. However, for this to be implemented effectively, councils must also look at their organisational culture and think about how they might do things differently. *Employing Assistive Technology in Adult Social Care*, the predecessor to this report, highlighted that:

"Technology has historically been seen as a barrier in social care, and cultural change is required, which in turn needs early engagement. Social care departments must lead from the top to ensure practitioners have input at an early stage into how technology can help them and the citizens they support. There is still fear that needs to be addressed among many of those in the sector, particularly on the front line." 7

This importance of pushing technology further to the top of priorities for social care transformation is emphasised in the *People At The Heart Of Care* White Paper:

"The care system has been innovating for decades, yet there is a tendency for impactful innovations to remain on the margins, rather than becoming the mainstream way of delivering care and support. This must change.

Importantly, this means that local areas must have the capability, culture and ambition to adopt and scale up new models of care that deliver care in the way that local people want." <sup>8</sup>

Raising the profile of technology was further highlighted by ADASS in their 2022 Spring Budget Survey Technical Annex, illustrated in Fig.1 opposite. This showed that the importance of improved or better use of technology to maximise efficient use of staff time since 2018 has been low on recruited staff's priority list for how they can be better supported in doing their job. This creates an additional barrier – not only is it difficult to embed technology-based services, but staff do not see technology as a priority.

It's important to simplify messages around technology – particularly given recipients of social care are more likely to be older and less versed in modern technology in the first place. Using clear language for communications without jargon – whether that be via letter, social media or websites – will make it easier for people to understand the role technology has in their care and support, as well as how they can use it most effectively. It should also be remembered that this understanding is also important for the staff who will be supporting the use of the technology and helping to 'sell' it during interactions with service users on the ground.

Employing Assistive Technology in Adult Social Care encouraged consistency and simplicity of language when describing 'Assistive Technology'. Technology has enormous potential to do more to support individuals, carers, professionals and services, but the sector needs to be able to articulate these benefits clearly and not create 'language confusion' for citizens. At a base level service users don't care whether they are receiving 'assistive technology', 'technology enabled care', 'technology enabled living', 'TECS' or 'TEC'. They simply want solutions that work for them when they need them – and they need to understand how the technology can enhance their care, not see it as an additional worry.

Social care staff do not necessarily need to understand the intricacies of how equipment works and what it does in order for a technology partner to prescribe it effectively. However they do need to understand what outcomes are expected and in particular what their role is achieving these objectives with appropriate training and support – it

Fig.1 Relative importance of factors in the recruitment & retention of care workers

Options	2018/19	2019/20	2021/22	2022/23
Increase in salary	1	1	1	1
Improved working terms and conditions	2	2	2	2
Improved career structures and progression opportunities	3	3	3	3
A focus upon improving the quality of care provided (job satisfaction)	4	4	4	4
Improvement in management and leadership	5	5	5	5
Celebrate the care sector (raise the public profile of social care roles)	7	6	6	6
Affordable housing	6	7	7	7
Improved / better use of technology to maximise efficient use of staff time	8	8	8	8

[7] Employing Assistive Technology in Adult Social Care (CCN/Tunstall, 2021)

http://www.countycouncilsnetwork.org.uk/download/3604/

[8] People at the Heart of Care: People at the Heart of Care: Adult Social Care Reform White Paper (2021)

https://www.gov.uk/government/publications/people-at-the-heart-of-care-adult-social-care-reform-white-paper

[9] ADASS Spring Budget Survey 2022 Technical Annex Slide 1 (adass.org.uk)

[10] Employing Assistive Technology in Adult Social Care (CCN/Tunstall, 2021)

http://www.countycouncilsnetwork.org.uk/download/3604/



is no use an authority installing an 'all singing, all dancing' technology solution if its staff are not appropriately supported to know how to use it effectively.

Citizens need to understand why they have been given the solution they have. For example, when one goes to the doctor and is prescribed medicine, there is an expectation that the doctor will explain what the medication is for. The same principle applies with technology. When the user is fully engaged, understanding why a solution has been provided, it is more likely to be used effectively, delivering benefits for the user whilst avoiding expenditure to the system. Solutions must be person centred, proactive but importantly, also they must be solutions that can be

adapted and updated as required.

So although the aim is simple, the reality of embedding cultural change around technology into practice can be challenging. As such local authorities must get ahead of the process and signal their intent towards technological innovation to win the hearts and minds of social care staff and citizens and help them to see the benefits this can bring over the longer term – both in terms of service reach and quality. National government rhetoric and guidance can help with this, but leaders in local authorities and ICSs will need to be clear in championing and driving cultural and technological change through leading by example.

#### SMART change for digital systems

Culture change should be outcomes led and whilst as a nation we're improving, we still have a long way to go. Indeed, defining outcomes i.e. what we want to achieve, is difficult and can take a long time due to many stakeholders being involved. Setting SMART objectives (Specific, Measurable, Achievable, Realistic and Timebound) is important, but perhaps these can be adapted to support cultural change development and delivery, as follows:

**S** IMPLE

Define outcomes that are simple and easy to understand.

**EANINGFUL** 

Make sure the workforce understands what is expected of them and is engaged in the process of change.

A GREED

Work collaboratively with the workforce, seeking agreement to embed outcomes and cultural change.

R EVIEW

Include system review and continuous improvement as part of the service design process

T EST AND RETEST

Don't be frightened to change and if things don't work, fix them. Fail fast and fail quickly.



# **Delivering quality care to citizens**

The last section considered how digital technology can help to improve the efficiency of service delivery at a system level. But of course assistive technology is also available to directly support users in their homes and across their lives. There are an increasing number of options to support local authorities in targeting social care effectively at a service level. Embracing this technology will be a vital part of helping local authorities to be able to deliver effective services at a time where ageing demographics means pressure on the system is projected to grow for the foreseeable future. As such one of the main priorities for the investment promised as part of the social care reform package, should be in taking advantage of the growing ways in which digital technology can be used for getting the right care to the right people.

#### **Effective Commissioning**

Forward-thinking local authorities are looking at different ways to commission technology within social care, in particular looking at co-creation with developers. This makes sense as developers are better placed to keep up with the ever-expanding range of technologies available on the market and their capabilities. The main aim should be for local authorities and commissioners to understand and effectively communicate their needs, then letting solutions experts assess and provide it. For this to be effective, councils need to be able to clearly articulate the functionality they are looking for as part of the commissioning process, and provide an overview of what

support they are able to deliver during the development and adaptation stage.

Truly person-centred technology enabled support requires the use of equipment from a range of manufacturers. This can prove challenging and resource intensive for local authorities not only keeping abreast of the latest technology on the market, but also issues such as compatibility. Experts in the digital field are often better placed to understand these issues. The case study below describes how Nottinghamshire County Council have solved this problem by working with Tunstall to ensure the service users it supports get the telecare technology combination that is right for them.

#### **CASE STUDY: Enhancing Telecare services in Nottinghamshire**

Nottinghamshire County Council (NCC) has partnered with Tunstall to deliver a telecare service since 2006. In October 2018, Tunstall was also appointed to deliver a managed telecare service on behalf of the Council Referrals from NCC's Assistive Technology Team are received by Tunstall who process applications. Dedicated engineers support the service, undertaking demonstrations, installations, de-installations, maintenance and repairs with all equipment sourced by Tunstall on behalf of the Council.

In addition to providing Lifeline home units and telecare sensors such as fall, smoke and heat detectors, this also includes items sourced from other suppliers such as dementia clocks, smart speakers and smart plugs, with solutions individualised to support the end user.

Tunstall Response monitor the connections and refer to the NCC Responder Team, nominated contacts or the emergency services as appropriate. Depending on their needs, service users may have stand-alone equipment only, such as a medication dispenser, which doesn't require monitoring. Once de-installed, equipment is returned to Tunstall, where it is cleaned, tested and stored before redeployment.

Users pay a nominal fee each week for monitoring, but telecare sensors are provided free of charge if they are required to meet an identified social care need, subject to the fairer contribution policy for social care. NCC also has Reablement Assessment flats, with telecare in place to support people leaving hospital, helping them to increase wellbeing and regain skills to enable them to return home.

The service uses a tracking process in MOSAIC and NCC's Business Intelligence Hub to measure key outcomes for individuals receiving the service. Between October 2018 and December 2019 the following results were delivered:

- · 289 cases where a high and immediate risk of admission to residential care was delayed/avoided
- 739 cases where a delayed transfer of care was avoided
- 250 cases where a high risk of carer breakdown was delayed/avoided
- 655 cases where additional community care costs were avoided

Net cash avoidance savings to NCC after service costs, costs of home care for people diverted from residential care, and loss of client contributions were deducted were £2,243,665.



#### Maximising staff time and productivity

One of the principal reasons for investing in technology is so councils can maximise the use of staff time – this is an issue of growing importance given the most recent figures from Skills for Care have shown there to be 165,000 vacancies in the sector, or around 10% of the workforce. If staff time can be optimised using technology then it can reduce the pressure this is placing on services.

The example in the panel opposite shows how Stockport Homes successfully piloted a scheme to use technology that reduced the incidence of No Voice Contact calls within its telecare service. The value of the technology was in how the system enabled the service to confirm the safety of users remotely saving valuable staff time in travelling to follow up and provide an in-person check.

The service has increased the efficiency of Stockport even as a small metropolitan borough with minimal travelling time across the authority. Successful replication of the approach within the larger geographies of most CCN member authorities would be likely to accrue even more significant savings.

#### **CASE STUDY: Stockport Homes Cares Carecall Service**

Carecall provides 24 hour monitoring and response to more than 4,500 people, giving continuous reassurance and enabling independence. However, there are occasions when a service user presses their pendant accidentally but is then unable to hear or communicate with the operator as they are too far from the home unit; a No Voice Contact (NVC) call.

Carecall were experiencing a high number of NVCs, and 86% (calls recorded between April – June 2018 and July – September 2019) of these were false alarms, where the service user didn't need assistance. A number of technology solutions were identified that would help to address this, and Carecall undertook initial testing before choosing the Tunstall Sound Boost to trial in the community with service users. The centre's PNC monitoring software was used to identify a cohort of users associated with high levels of NVCs, and five took part in a trial over six weeks.

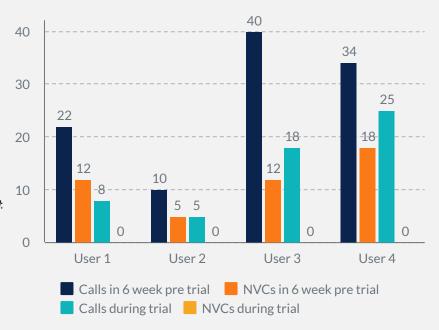
Tunstall Sound Boost is a telecare device that wirelessly connects to the Lifeline unit, providing extra audio coverage at home, enabling clearer communication between the end user and the monitoring centre. For example, the user may accidentally press their pendant whilst in bed, but because the Lifeline unit is in the sitting room they are either unable to hear the operator, or cannot be heard by the operator. Using a Sound Boost in the bedroom means the user can easily tell the operator they are ok, reducing the risk of them falling if have to get out of bed to get to the Lifeline unit.

"Tunstall Sound Boosts have been brilliant in enabling us to contact service users if we receive a No Voice Contact call. In all cases of the trial it has reduced the amount of times we have to ring or attend the property after a NVC. It makes our service more efficient and reduces anxiety for the people we support."

Aimee Teare, Senior Project Officer, Stockport Metropolitan Borough Council

All NVCs must be attended to check the resident's wellbeing, but in most cases the resident is found to be safe and well. False alarms can cause distress and inconvenience to residents and their family members, as they are a disruptive event. NVCs also use Carecall resource that could be needed for genuine emergencies.

The use of the Sound Boost significantly reduced the required emergency response for false alarms due to Accidental Activations (AA) and NVCs, as shown in the chart below. Residents and carers completed a survey before and after the trial, and as part of this were asked: 'How confident are you that you could easily reach and talk to Carecall wherever you are in your home?'. They rated their answers from 1 to 5 with 1 being not at all confident and 5 being very confident. Before the Sound Boost trial they answered 3.4, and post-trial they responded 5.0, demonstrating their increased reassurance.





Keeping people at home for longer and away from frontline services is the optimum goal for local authorities, the NHS and citizens alike. The citizen has a better quality of life, whilst local authorities maximise the financial and resourcing benefits.

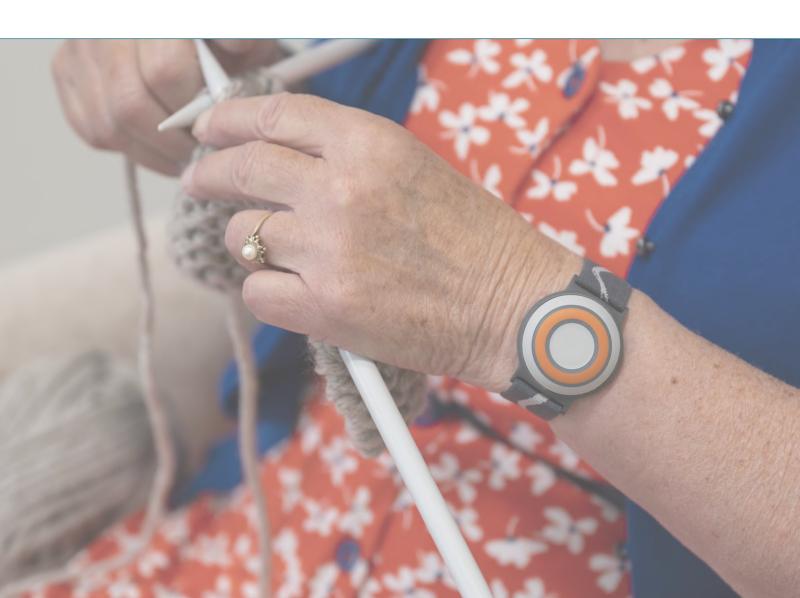
As shown in the previous section, when discussing the power of predictive systems that are emerging, technology can be a principal driver of improvement in the prevention sphere. As well as software and systems support, there are also increasing numbers of devices entering the market providing direct-to-user equipment to help prevent accidents and enable more efficient responses where emergencies do occur.

One such example, described in the panel opposite, is Carecom, a system developed by Tunstall for use by care home providers to enable them to monitor residents' safety and ensure a rapid response when a serious incident such as fall or a seizure requires emergency attendance. More broadly there are a wide range of similarly imaginative and effective technologies being developed all the time to address a wide range of other preventative

#### **CASE STUDY: Carecom**

Tunstall's technology-based solution Carecom is designed to use discreet wireless and digital hotspots to enable care to become more efficient, flexible and person-centred. Hidden wireless receivers placed around the building interact with smart pendants worn by residents meaning that help and support is always close by. Caregivers are able to manage the system on a mobile app, alerting them not just to events, but also the nature of the event (e.g. a fall or seizure), who needs assistance and their location. Care can be prioritised and delivered where and when it is needed most. Carecom enables a dedicated response from a nominated carer, avoiding disruption to other residents and creating a more peaceful environment.

activities such as ensuring medication is taken regularly; maintaining physical and mental wellness; and combatting loneliness. It is important that local authority social care teams come together with IT departments and developers regularly to conduct horizon-scanning so keep abreast of what potential solutions are available and consider where investment in preventative technology may help to make significant savings.





# **Ensuring the right devices work in homes**

The previous sections of this report have made some suggestions for how local authorities can invest in technology that will help to create efficiencies in adult social care. But this technology can only be as effective as the infrastructure that delivers it. This is a live issue at present as the UK's telecoms infrastructure is currently being upgraded to move analogue phone lines to digital, as well as the installation of 5G broadband coverage. This process may create the need for adaptations or upgrades to existing equipment already in use, or hold implications for commissioning processes already underway to install new assistive technology at local level. It is therefore key that councils are fully aware of how the upgrade may impact their services and are able to plan accordingly what they need to do to ensure they are getting the right devices working in people's homes.

Digital infrastructure is a particularly pertinent issue for CCN member authorities which cover large rural areas. CCN has long highlighted the disparity in the reach of broadband access to these parts of the country compared to urban areas. As the use of digital technology to support the delivery of social care increases, it is easy to see how this disparity may begin to translate into inequality if it means some technologies are not available to some citizens based purely on where they live.

This point is reinforced in *Closing the Digital Divide*, a report produced by CCN with BT earlier this year. This paper captured the views of senior leaders from CCN member councils on evolving importance of digital technology in all our lives. One key finding was how the experience of the pandemic had highlighted the growing importance of internet access as not only a desirable luxury, but a necessity:

"It was no longer viable to see connection to digital devices and utilities as a desirable luxury – it was increasingly becoming a functional essential" <sup>12</sup>

The need to improve the UKs digital infrastructure is increasingly understood, with the former Prime Minister even paying a nod to this issue in her set piece Conservative party conference speech in 2022:

"We will make it easier... to get superfast broadband" 13

Mobile UK's recent paper *Connected Care: How mobile* connectivity can help councils overcome the challenges of delivering adult social care highlighted that:

"Digital technologies that are enabled by mobile connectivity are part of the answer, as they can support

cost efficient and higher-quality social care provision, as well as a reduced cost burden for councils, both now and in the future."

#### The report continued stating that:

"...significant advances are being made in digital technologies that are enabled by mobile connectivity. These advances enable councils to deliver adult social care more cost effectively, without compromising on quality. One example is the range of new digital devices that will mean residents can live independently for longer. For every week that someone can stay living independently rather than going into residential care, a council could save £648 a week, or £33,700 a year (or 80% of cost)."

Perhaps most importantly for councils, it predicts that investing in future technology solutions and services will save significant amounts of money for local authorities stating that "5G-enabled telecare will reduce council social care budgets by 5%, saving £890 million." <sup>14</sup>

There is massive potential in how infrastructure improvements will allow technology to enhance services and progress does appear to be being made. As such the present programme of work to upgrade national digital infrastructure is rightly seen as essential to the UK's future prosperity.

Whilst this is a welcome development, it is also important that councils are fully cognisant of the possible impact this work may have on local households as the rollout reaches

[12] County Councils Network Closing the Digital Divide (CCN, 2022) <a href="http://www.countycouncilsnetwork.org.uk/download/4130/">http://www.countycouncilsnetwork.org.uk/download/4130/</a> [13] Liz Truss Speech, Conservative Party Conference 2022 <a href="https://www.conservatives.com/news/2022/prime-minister-liz-truss-s-speech-to-conservative-party-conference-2022">https://www.conservatives.com/news/2022/prime-minister-liz-truss-s-speech-to-conservative-party-conference-2022</a>



their area. Whilst the process of converting analogue landlines to digital is meant to be 'seamless' in terms of experience of the user, it's not as straight-forward as simply connecting a new router or technology device and may require professional support to ensure landline phones and other devices operate correctly on the new system.

Putting this into context, there are multiple stakeholders involved. Organisations such as BT Openreach and Virgin Media look after the network infrastructure.

Communication Providers, of which there are around 650, look after the communications services the user receives. The council delivers the telecare service and suppliers provide the equipment. All of these parties need to work together to make sure the citizen is not put at risk. The issue however is that to date, no agreement has been reached between them with the Office for Telecoms Adjudication (OTA) getting involved to try and direct what needs to be done, by whom and by when. Simply, it's exceedingly challenging to get to the right solution and this hasn't yet been achieved.

One of the key issues is that when upgrading routers, communication provider engineers may not be aware that telecare is being used, removing this option when the line is upgraded. To mitigate this risk using a simple solution, we are aware of one authority that wrote to all of their telecare users to let them know what was likely to happen with the upgrade. The authority included a sticker with the letter for the user to put on their Lifeline unit stating they had telecare. This highlighted to any engineer delivering an upgrade that telecare was in use and to proceed with caution.

Furthermore, notwithstanding the scale and cost of the transformation which may in itself cause problems [see inset], there also is the threat of power outages – a risk heightened by recent warnings from the National Grid that blackouts are a possibility during early 2023 – as well as IP phone lines not working, poor signal strength, and most importantly, keeping people cyber secure.

In social care there is the additional risk the transition may provide short term disruption in terms of upgrades and resets to ensure existing or newly purchased technology functions in the way it should. Of significant concern are vulnerable citizens currently receiving technology services that require these solutions to be connected to monitoring centres using their existing phone line. Equipment manufacturers are looking to address these issues, but councils should be aware of the risk of these citizens may

not be able to continue receiving services, therefore becoming disadvantaged as a result.

As work on the programme has progressed BT have identified these potential challenges:

"We underestimated the disruptive impact this upgrade would have on some of our customers. With hindsight we went too early, before many customers – particularly those who rely more heavily on landlines – understood why this change is necessary and what they needed to do. We also recognise we have more work to do on getting better back-up solutions in place for when things disrupt the service like storms and power cuts." 15

Councils have a role to play in helping these potential issues to be overcome. *Closing the Digital Divide* stressed the importance of local authorities working in partnership with the digital sector to deliver effective solutions:

"Councils – and indeed national government – need to ensure that they are regularly drawing from a full range of expert advice and guidance when developing their digital strategies, particularly given the pace at which technology was advancing. There needs to be a joined-up approach across different strands of infrastructure roll out, with clearer and consistent language used so that informed decisions are made strategically" 16

In the first instance councils should be finding out what equipment they are currently using that may be affected by the digital upgrade. Telecare providers for instance are working hard to test their analogue units over digital lines with good success rates. Providers also understand the importance of moving to robust, standards-based digital solutions and are moving fast to make sure this becomes reality.

Local authorities can ensure they are well prepared for the impact of this transfer. This will mean working with a range of stakeholders involved in the digital transition in partnership to ensure success. Whether this is BT Openreach or Virgin Media who are conducting the network infrastructure upgrades; a manufacturer supplying the equipment; a care home provider or district council/housing association operating a building; a telecare operator monitoring the end user; and indeed the citizen receiving services – all need to work together to provide an effective solution that mitigates the risk of a disruption in the delivery of services for vulnerable people.



#### Upgrading telecare services to digital: the scale of the task

Upgrading existing analogue telecare services to digital will need an extensive programme of work to shadow the conversion.

The Telecare Services Association (TSA) refer to around 1.8 million people 18 receiving analogue telecare services. Assuming that 65% of services are for people living in their own homes (dispersed) this will require around 1.17 million connections to be upgraded.

If four jobs per day were carried out with 500 engineers focused solely on this activity, the task would take around two years and three months to complete.

#Units	Jobs per day	Available	Days required	<b>Working Days</b>	#months requi	#years require
1,170,000	4	500	585	22	26.6	2.22

A moderate cost estimate for swapping out telecare equipment alone is around £300 million meaning the money outlined by the Government in its reform plan would be spent twice over. This may result in authorities either having to cut services or asking users to pay for them. At a time when there is a cost of living crisis, high inflation and likely increases in interest rates, the likelihood of success is further diminished.

The Government must consider what additional resources need to be devolved to local authorities to ensure that the necessary infrastructure upgrades to the communications network do not jeopardise the welfare of vulnerable citizens.



#### Preparing for the upgrade

#### • Determine timing of upgrade

Councils should liaise with network providers to determine when the upgrade work is scheduled to reach the local area. This will ensure that there is a clear timescale to work within to put appropriate risk strategies in place. Whilst this work is urgent, there is still time to plan effectively to make sure the right solutions are implemented rather than turning to 'knee jerk' solutions that may need to be upgraded in a matter of months.

#### • Map technology to identify what upgrades may be needed

Authorities should map where technology is currently being used both in council premises and in service users' homes, working with Openreach and developers to identify which are at risk of being affected and how this can be addressed.

#### • Public and service user communications

Make sure that local communities are aware of the work required around the upgrade highlighting the value to both them and their families, clearly stating what they need to do (e.g. providing access to engineers etc.)



# **Embedding The Change**

The first three sections of this report have intended to provide local authorities with some ideas to start thinking about how the sector can strategically invest in technology to enhance their adult social care services. This final section concludes by examining some of the cross-cutting issues that need to be considered to ensure that this investment leads to change being successfully embedded across the council.

With implementation of the current reform agenda already underway, as well as the already significant pressures on existing services, it is understandable that the bandwidth in councils for addressing yet another issue such as technological change may feel peripheral when compared to the scale of, say, charging reform or workforce challenges. However, high-performing authorities understand that technology needs to be front and centre of any strategy for change. It is likely to provide the best route over time to enhancing the capacity of adult social care whilst at the same time reducing pressure on the workforce and maintaining high quality services. Councils should be thinking now about where technologies could reduce expected pressures in the future.

There is certainly the potential for better solutions and services that deliver cost avoidance and savings to the health and social care economy. However implementing new solutions and culture change separately, let alone at the same time, can be difficult and time consuming. Getting it right requires excellent co-design, outcomesbased solutions and investing the right time and money in a way that maximises cost effectiveness. This may involve working with and outsourcing services to a provider that is experienced in end-to-end solution delivery.

As such, the sector needs to be constantly evolving, adapting, and delivering effective innovative solutions. This involves ensuring that the right questions are asked to stakeholders to genuinely understand what families engaged with the care system really want and need from technology. It's also important to consider how service providers and citizens are involved in the digital transformation process. When these factors are executed correctly councils will give themselves the optimum space to innovate, embracing technology fully and successfully to deliver new approaches that create benefits for both citizens and the system.

It is an especially good time to be doing this. The £150m promised within the reform proposals, whilst small in the context of the wider budget for the sector, is a great opportunity to demonstrate how effectively local authorities can provide a return on this investment. Significant examples of efficiencies that emerge in the system will strengthen the case for further resources down the line to ensure that social care remains at the cutting edge in how it can offer services that improve the lives of

their users whilst minimising the bureaucracy required in doing so. Additionally councils should consider how this money might be co-ordinated with the use of the new upper limit for the Disabled Facilities Grant (DFG) announced as part of the reforms, either internally or in partnership with District Councils depending on how DFG is administered in their area.

There are also major opportunities at this time to better align investment in technology between social care and the wider health system through the government's integration agenda. As highlighted in earlier sections, the emerging ICS model is already supporting greater dialogue between the two services at local and place-based level. It is to be hoped that these important new bodies will better enable co-ordination of procurement and utilisation of technology given the interlinked nature of the benefits to both systems that technology has the potential to provide – it is now in the power of NHS and councils to make this happen working together at local level.

But for the potential of this investment in technology to be fully realised, local authorities also need to be in regular dialogue with wider stakeholders in addition to health. It is essential that social care teams are regularly in communication with their colleagues in IT, Finance, and Service Delivery who are most likely to be networked in with developers in the tech sector. Such dialogue both within the council and with external experts is vital to gain a better understanding of what options there may be for technological investment.

This is just as important for those in the tech sector – providers and software developers need to be regularly talking to policy makers, ICS leaders, local authorities, understanding their issues and challenges and responding with solution-focused outcomes. Where providers understand what the problems are, they are in a better position help solve them. The quid pro quo is local authorities need to describe to developers the solution they want, as well as the problems they have, in order to co-create the best solutions together in partnership.

For the benefits to be fully realised it is important that developers and local authorities collaborate effectively and co-creatively to ensure that both understand the ultimate aim for the technology. This needs effective communications between the different specialisations.



Local authorities also need to make sure citizens and their families are consulted when developing digital strategies. Tech cannot be a one-size fits all and what works for some users may not work for all. Together, projects should be asking questions like 'what is the need of the user?'. This might not be just a physical need, but maybe an emotional or psychological need. For someone it might be a robot vacuum cleaner for others it may be connection to community remotely or otherwise.

When commissioning technology councils should also consider who is receiving the support whilst also thinking about who actually needs it – is it the user, the carer or both? Statutory funding and support focuses on the person needing the help. Whilst that's right and appropriate, councils should also consider how better supporting the carer can be hugely beneficial for both the user and the system overall. Technology can be a crucial means by which this can be made achieved – whether it's by enabling better communications between family through the simple issuing of a tablet or similar device, or supporting carers to use technology which can minimise the burden of caring responsibilities in some of the ways set out in this report with regard to staff time.

Finally, it is hugely important that central government plays its role too. The Departments of Health and Social Care andDigital, Culture, Media and Sport must work in lockstep to drive this agenda through consistent jointed up working and messaging. The White Paper emphasises the need for strong leadership and partnership and it is vital this rhetoric is supported by the actions of the new government taking up the reform agenda:

"Councils – and indeed national government – need to ensure that they are regularly drawing from a full range of expert advice and guidance when developing their digital strategies, particularly given the pace at which technology was advancing. There needs to be a joined-up approach across different strands of infrastructure roll out, with clearer and consistent language used so that informed decisions are made strategically" 18

Underpinning all of the points made is the urgent need to deliver change. This requires strong leadership – all those in leadership positions in local authorities should ensure that they emphasise the importance of investigating technological solutions as part of the reform process.





#### Practical steps to consider when introducing new technology into adult social care

#### • Don't underestimate the time it takes to embed change

Organisational and cultural change needs to be led from the top and embedded throughout the ICS and local authorities. If all stakeholders are working to the same plan, implementation is easier and more likely to be accepted.

#### · Think about what good procurement processes look like from a market perspective

When tenders are released, they are often complicated and time consuming to complete. Questions are often open to interpretation and word counts can be up to 3,000 words in length.

The following suggestions may be useful:

- Understand the outcomes you want to achieve and state them clearly.
- Make sure questions are specific and to the point. Don't leave them open to interpretation.
- Keep the word count short (e.g. 500 words maximum). All suppliers should be able to respond clearly and succinctly in order to get their message across.
- Provide enough time for suppliers to respond to your tender. If it's a large tender that requires cultural change, a fully managed service, innovative suggestions and responder services, you may need to give a longer time-frame in order to receive good answers.

#### • Work in partnership with providers to deliver effective TEC and data led practice

Don't think you have to go at this alone. Outsourcing services may feel like an expensive option, but experts in their field, especially technology can i) remove considerable pain of having to set up and run services yourself; ii) use their technical expertise to advise about the best solutions and service delivery; and iii) run the service for you and iv) implement new technological solutions as they come to the market and v) it might not be as expensive as you think it is, especially when cost avoidance of other services are taken into account.

#### Think about how to track outcomes and financial savings effectively

You can have the best service in the world, but if you can't measure the outcomes and financial savings effectively, the service aims and objectives could be challenged. To do this, make sure your outcomes are well defined and measurable. If financial savings can be applied, do this from the start so that the whole service can be evaluated rather than elements of it.

#### Think about how to measure non-financial benefits

The benefits of technology based services aren't all financial and the social return on investment should be considered. According to Loop, the Social Value People:

"...social value is about individuals and organisations developing an understanding of the social, environmental and economic outcomes that are created through their activities and/or projects.

There are a range of approaches that can be adopted to measure social value, Social Return on Investment (SROI) has, however, become one of the most widely discussed and most dispersed methods on the practical landscape.

SROI measures social, environmental and economic outcomes and uses monetary values to represent them. This enables a ratio of benefits to costs to be calculated."<sup>19</sup>

Again, it's important to be clear on the outcomes and measures but using social value calculators it's possible to measure the SROI of things like:

- Fiscal savings to Government and Taxpayers through reduced impact on NHS and welfare benefits.
- Economic Benefits to HMRC and in increased earnings.
- Social Value through improved wellbeing.

These added to additional economic measures such as Local economic multipliers (LM3) through local supply chain spend and Gross Value Added (GVA) created through labour productivity per job filled demonstrate the benefits of excellent services that add value.



#### **COUNTY COUNCILS NETWORK**

Founded in 1997, the County Councils
Network is the voice of England's counties. A
cross-party organisation, CCN develops
policy, commissions research, and presents
evidence-based solutions nationally on
behalf of the largest grouping of local
authorities in England.

In total, the 23 county councils and 13 unitary councils that make up the CCN represent 26 million residents, account for 39% of England's GVA, and deliver high-quality services that matter the most to local communities

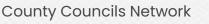
The network is a cross party organisation, expressing the views of member councils to the government and within the Local Government Association.

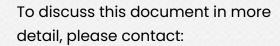
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County Councils Network

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