# SHEFFIELD'S TEC TRANSFORMATION AND TESTS OF CHANGE

Sheffield City Council

NHS

Centre for Care

TSA
The voice of technology enabled care

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# Agenda

| | |
|---|---|
| **10:00** | **Sheffield's TEC contributing to an integrated care system health, housing, and social care**<br>Alexis Chappell, Strategic Director of Adult Care and Wellbeing, Sheffield City Council |
| **10:15** | **TEC the regional picture – South Yorkshire Integrated Care System (ICS)**<br>Dr Kieran Baker, Chief Digital and Information Officer, NHS South Yorkshire ICB |
| **10:30** | **TEC the national picture**<br>Alyson Scurfield, Chief Executive, TEC Services Association |
| **10:45** | **The need for intelligence led proactive and preventative care solutions supported by system interoperability**<br>Angus Honeysett, Head of Market Access, Tunstall Healthcare |
| **11:00** | **Speaker Panel - Questions & Answers** |
| ***11:20*** | ***Refreshment Break*** |
| **11:40** | **Sheffield's Test of Change**<br>Paul Higginbottom, Strategic Commissioning Manager TEC and Digital Services, Sheffield City Council |
| **11:55** | **Connected Care**<br>Paul Berney, Chief Marketing Officer, Anthropos |
| **12:10** | **A TEC savvy workforce fit for the future – North-East ADASS developments**<br>Fiona Brown, TEC Consultant |
| **12:25** | **TEC Research Sheffield University Centre for Care**<br>Dr Kate Hamblin, Senior Research Fellow ESRC Centre for Care, Sheffield University |
| **12:40** | **Speaker Panel - Questions & Answers** |
| ***13:00*** | ***Networking Lunch and Exhibition*** |
| **14:00** | **Conference Close** |

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# Sheffield's TEC Transformation contributing to an integrated care system

**Alexis Chappell**

Strategic Director of Adult Care and Wellbeing, Sheffield City Council

# A warm welcome we hope that you enjoy the event

# A vision for the future of TEC in Sheffield

Sheffield has created a vision of the future of TEC provision in the city that seeks to join health and social care with housing to deliver a more person centric service.

That requires the creation of a new TEC service delivery model that enables the combination of proactive care, reactive care and in-person care.

**Sheffield's Technology Enabled Care (TEC) Market Position Statement**

**November 2022**

***Please read in conjunction with the Adult Health & Social Care Commissioning Framework Market Shaping: Sheffield's Market Position Statement and Market Sustainability & Oversight Plan September 2022***

Sheffield City Council - Agenda for Adult Health and Social Care Policy Committee on Wednesday 21 September 2022, 10.00 am

**Our Vision:**

***That Technology Enabled Care enables people to use their strengths, assets, and networks to maximise their independence, staying safe and well in their own homes, as well as remaining connected and engaged within their communities***

NHS

Sheffield City Council

# Connecting services in Home care

- Sheffield City Council commissions home care services for 2,800 people across the City delivering 38,000 care hours each week

- Approximately 40% of people will reside in public/private sector housing with 51% having an active community health care plan

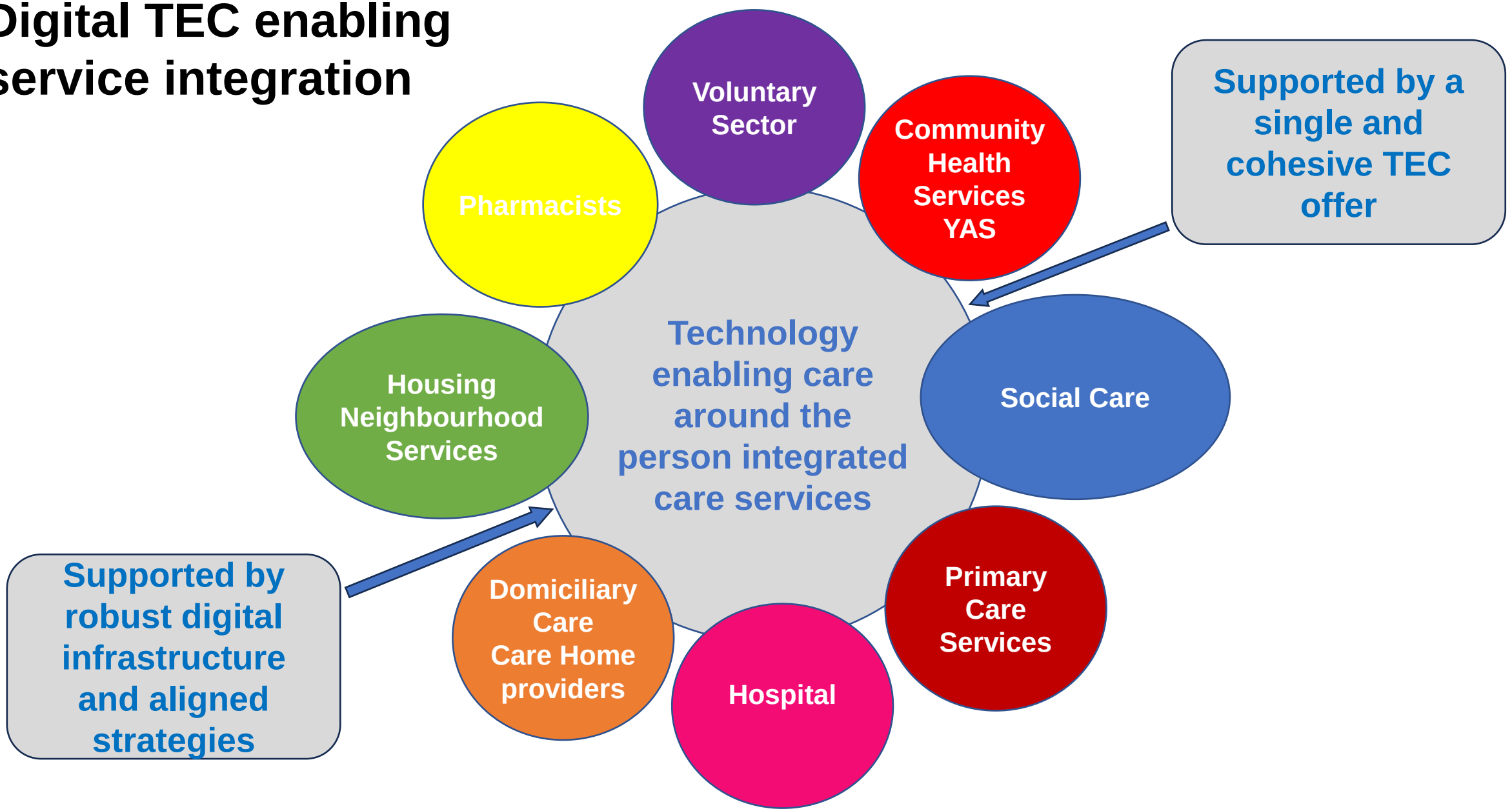
- Our new 7-year Care and Wellbeing Service Contract includes the requirement for our 16 home care providers to collaborate with us in the ongoing development of TEC services

# Digital Technology as an enabler to integrated care

- The new digital technology such as connected care is person centred and outcome based, enabling integrated care provision through wrap around services based on alerts and actionable insights with calls to action to health, housing, and social care practitioners.

- Integrated service redesign with TEC embedded as an enabler into care pathways allows data supporting the digital insights to be provide to the right place, at the right time, in the right format to deliver proactive care services

# Digital TEC enabling service integration



# Sheffield's TEC Transformation

Commissioned to support the development of a new TEC Services Delivery Model
April to November 2023

## Key principles

- ✓Better outcomes for people in receipt of care
- ✓Embrace new digital capabilities
- ✓Collaboration
- ✓Co-design/production
- ✓Shared learning
- ✓TEC offer strategically aligned as an enabler to deliver our Adults Health and Social Care Strategy and Adult Care Service Model
- ✓Inclusive – TEC benefiting all
- ✓Whole system – Jointly commissioned
- ✓Digitally connected

# Sheffield’s TEC Transformation

- ❑ Reviewing the current TEC Service identify gaps and opportunities
- ❑ Supporting the co-design/production of our new TEC service delivery model
- ❑ Advice on range management
- ❑ Advice on the transition from analogue to digital
- ❑ Design a TEC Digital Dashboard to enhance business intelligence
- ❑ Help inform the development of a Joint TEC Commissioning Strategy for submission to the Health & Social Care Policy Committee December 2023

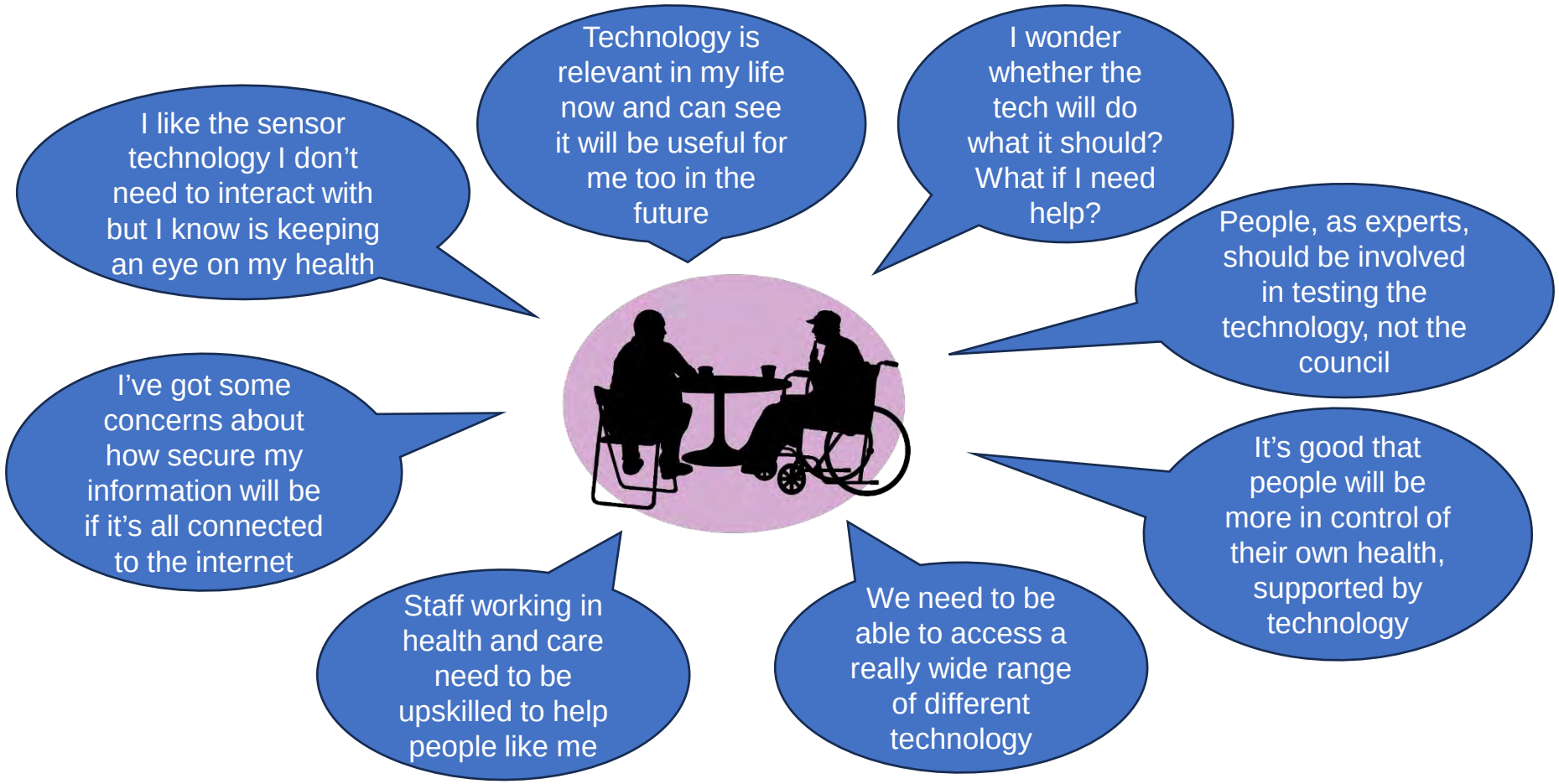
# TEC Marketplace Event May 2023 – bringing together stakeholders from across the whole system


Over 150 attendees visited the event with the opportunity to visit a range of TEC providers throughout the day to learn more about the products which included our Test of Change Partners.

A series of focus groups to help inform our new TEC Services Delivery Model ran throughout the day attended by representatives from health, housing, voluntary sector, and social care, along with people with lived experience.

# What we heard
## - Co-design of our new TEC Service Delivery Model

# Views from people who draw on care and support



# Feedback from health, housing and social care workforce

- **Workforce Development** - access to resources and training, continue to build knowledge and skills, help people use their own tech
- **Funding arrangements** – clarity around funding single budget?
- **Staff capacity** – want access to technical and professional support with cases
- **Culture Change** – lots of work to do to understand data insights, take this step by step, need support around decision making
- **People accessing TEC Services** – information and advice service needed and self-assessment
- **Infrastructure** – WIFI and mobile connectivity, interoperability, join up data, ability to see and share information
- **Teams and process flows to enable access** – could be used in pathways across all sorts of teams and services, TEC should be everyone's business
- **Mental Health** – needs to be age appropriate, help people before a crisis, engage people who don't want to engage with usual mainstream services
- **Transition** – apps, help with independent living, needs to look cool, involve young people in design
- **People with Learning Disabilities** – sensory aids, support with accommodation, accessing community and getting out and about, home vs residential / supported living

# We asked stakeholders

**If you were designing a TEC service for the future what are the things, you want to see in the new service?**

- ❑ Support for practitioners - access to face-to-face training, quick access to support to choose the right technology
- ❑ Better access to data to inform decision making and link with outcomes
- ❑ A one stop shop that integrates all things technology enabled care
- ❑ A support service for service users to get support to use technology they've been provided with
- ❑ Council should undertake a review of the charging policy - make sure the TEC service is easy to access and attractive for practitioners to refer to
- ❑ Consider digital inclusion and connectivity
- ❑ The service should change gradually over time
- ❑ Consider business continuity and back up plans for when technology goes wrong
- ❑ Integrate with LiquidLogic
- ❑ Access to a better range of technology to support a wide range to different people

# TEC Transformation - Timeline

| April | May | June | July | August | September | October | November |
|---|---|---|---|---|---|---|---|
| Discovery Phase | | TEC Service Audit | | Publish TEC Service Audit Report | TEC Dashboard Business Intelligence | | |
| | | TEC Range Review | | | Socialise the Reports | | |
| | | | | | Action Plan Delivery Reports Recommendations | | |
| | | | | Publish TEC Range Review Report | | Complete new TEC Service Delivery Model | |
| | | | | | | Business Case | |
| | | Co-design TEC Service Delivery Model | | | | Joint TEC Commissioning Strategy/Service Specification | |

# Thank you

# Digital, Data and Technology in SY

## TEC Conference

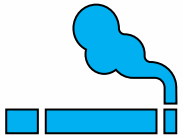
September 2023

# NHS SY ICB – an introduction

- ✓ Improve outcomes in population health and healthcare
- ✓ Tackle inequalities in outcomes, experience and access
- ✓ Enhance productivity and value for money
- ✓ Help the NHS support broader social and economic development

# Our Challenges in SY

Men and women living in South Yorkshire are on average **dying around a year and half earlier than** people living elsewhere in England.

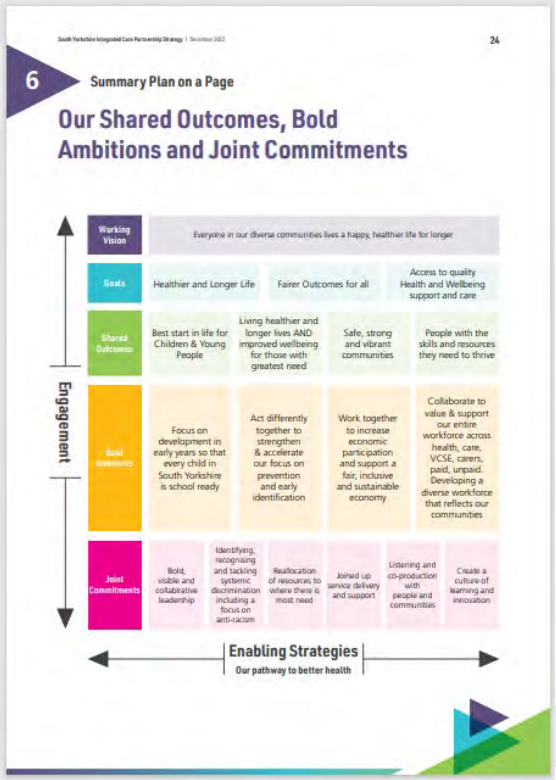


South Yorkshire **has higher than national rates of common, but modifiable, risk factors** such as smoking, poor diet, physical inactivity, harmful alcohol use and hypertension

**Obesity** rates for South Yorkshire in 2020/21 were **significantly higher than the England average** and have been getting worse

In 2020/21, **1 in 4 people (25%) in South Yorkshire reported they were physically inactive**. Only 14% of adults walked for travel which is comparatively low, given the largely urban geography of South Yorkshire.

# Our IC Partnership: strategic goals




Click for full strategy

- **ICP strategy focuses on our bold ambitions and joint commitments:**
  - ✓ Health and longer life
  - ✓ Fairer outcomes for all
  - ✓ Access to quality health and well-being support and care

- **Digital, Data and Technology:**
  - ✓ Critical enabler of our strategy and Joint Forward Plan
  - ✓ Create a **seamless and inclusive digital experience** for the people of SY to contribute towards improving clinical safety, supporting improvements in patient outcomes
  - ✓ **Build an insight-driven system** to support our focus prevention, improving population health and reducing inequalities
  - ✓ Have a strong focus on **user needs** to ensure we deliver inclusive digital solutions
  - ✓ Continue to **foster and utilise our fantastic partnerships** across SY, across all sectors, to ensure appropriate delivery responsibility across our place partners/ICS alliances/federations

NHS South Yorkshire Integrated Care Board

# DDaT - our influences….






# DDaT - key priorities…..

1. **Digital Services for Our Public**
   Provision of a system-wide approach to the use of digital communication to empower our public to take an active role in their health and well-being.

2. **Enabling the South Yorkshire Digital, Data and Technology Workforce**
   Providing digital tools and skills for staff to work safely and effectively, building a digitally-literate, resilient, and capable workforce in line with the Government Skills and Capability Framework.

3. **Integrating Digital Health and Care**
   Digitally transform health and care through improved user experience, information sharing and convergence of digital tooling to provide better, joined up and personalised care and to support frictionless movement of health and care staff around our system.

4. **South Yorkshire Data and Insights Strategy**
   Utilising user-centred design techniques, we will build a data and insights strategy and associated delivery plan in line with system insight requirements, underpinned by a collaborative analytical environment for the ICB and partners to co-create insights and utilise advanced analytical techniques.

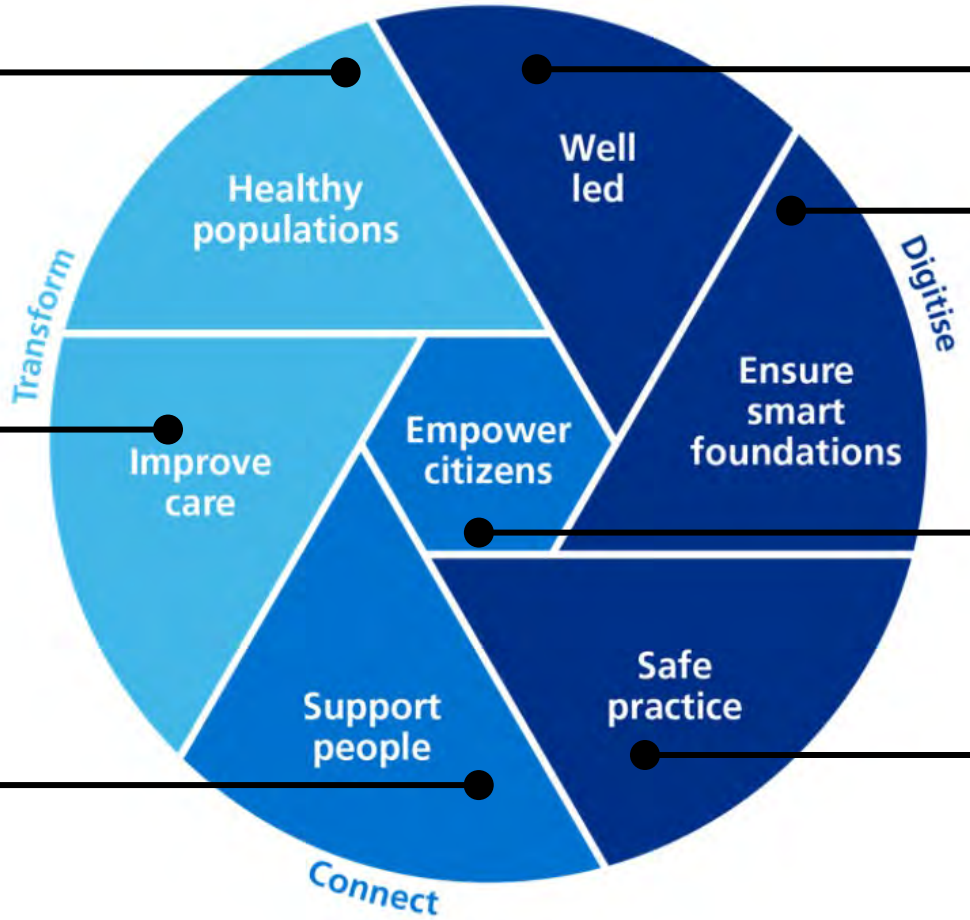
5. **Safe Practice and Infrastructure**
   Ensuring infrastructure for staff and the public is always available, cyber secure by design, efficient and meets expectations, providing a resilient working environment for today and the future.

# What Good Looks Like

- Data and Intelligence, South Yorkshire
- Research and Innovation System Delivery Group
- South Yorkshire Data Platform
- InSYghts Reporting Portal

- Single Cancer Instance
- Single PACs/Maternity
- Acute, MH, Community programme
- Virtual Wards/Remote Monitoring
- Technology-enabled care
- System Control Centre
- Clinical Application optimisation

- ICS Intelligence Alliance
- Data and Insights Strategy
- Digital Workforce Strategy




- Frontline Digitisation Programme
- Digital Convergence
- CCIO_CNIO Forum

- Shared Care Records
- Digitising Social Care
- Interoperability and out of hospital technical infrastructure

- Digital Service for Our Public
- Digital Inclusion Programme
- Patient Engagement Portals (PEPs)
- Online Consultations
- Robotic Process Automation

- South Yorkshire Cyber Forum
- Clinical Safety
- Digital Maturity Assessment

ICS Digital Roadmap and Strategy

# DSOP – pop health in action

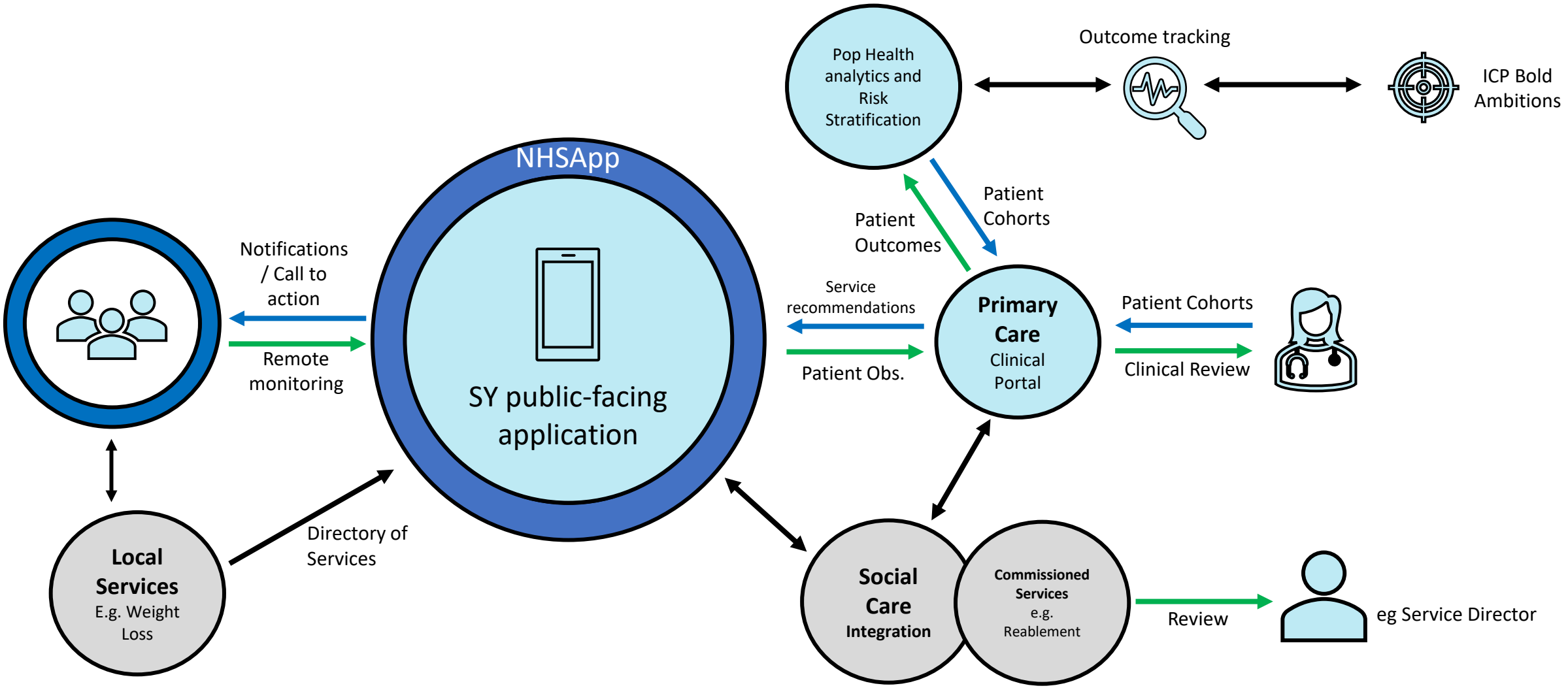
**Aim –** to provide a system-wide approach to the use of digital communication, sitting inside the NHSApp, which provides our public with access to local health services, guidance, alerts, signposting and the ability to submit electronic observations/screening,  in order to empower our public to take an active role in their health and well-being.


- View GP record
- Book appointments
- Repeat prescriptions
- Wayfinder programme – outpatient appointment management

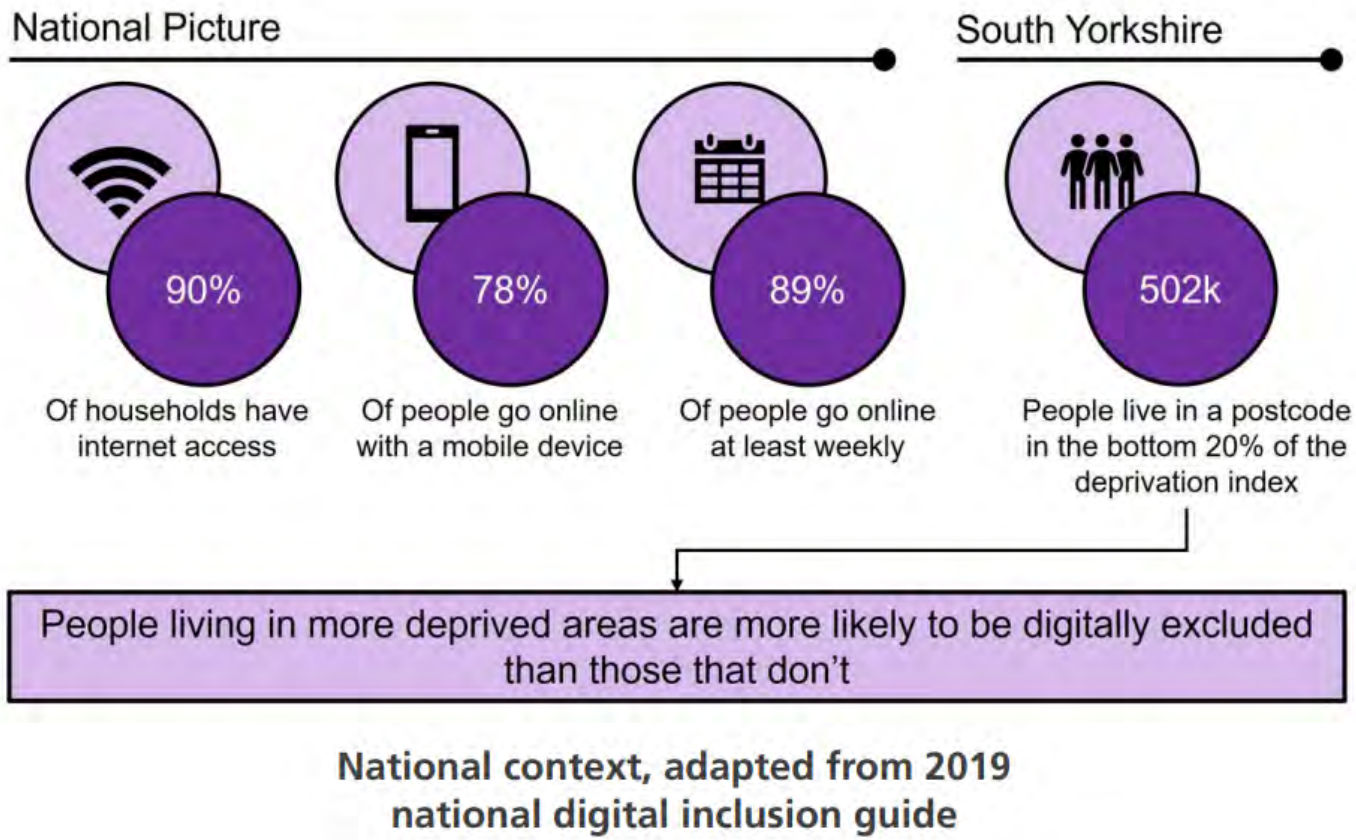
Rotherham Health App

- Signposting to local services
- Social prescribing
- Appointment management
- Access to care record
- Extended access hub

# How it might work….



# Digital Inclusion – Case Study




**National context, adapted from 2019 national digital inclusion guide**

- Continue connecting with communities to understand their needs
- Build an ecosystem of digital support, training and skills development
- Ensure we have the infrastructure in place (connectivity, device access)
- Work across our places with local businesses, colleges and voluntary groups
- Identify funding and support build a network of Digital Champions

# Digital Inclusion – Doncaster's Ecosytem

**Your Life Doncaster :** https://www.doncasterdigitalinclusion.co.uk

- ✓ Monthly group, with good attendance
- ✓ Improved links with the Team Doncaster communications workstream to help ensure we are communicating more effectively with partners and population
- ✓ **Partnership with Citizen Advice**
- ✓ **Partnership with Amazon through their Donation of Hours scheme**
- ✓ **Partnership with Enviro Electrics**
- ✓ Locality Triage Hubs and Family Hubs looking to support survey completion and refer people to the digital skills courses / support.
- ✓ NHS App Drop In Sessions across the city at community libraries / familiar community group locations
- ✓ Primary Care Optimisation Team working with practices to improve patient awareness and understanding of the NHS App

South Yorkshire
Integrated Care Board

# Thank you

# The Right Care
# The Right Place
# The right Time

Alyson Scurfield
Chief Executive, TSA

14 September 2023

# Our Purpose

TSA™

We are the trusted voice and source of knowledge to enhance the understanding, development and adoption of technology in care.

TEC Quality

We drive quality by setting standards for the sector to improve outcomes that matter to people.

People’s everyday lives enriched, enhanced and enabled by technology-enabled care

## Our Vision

# Unlocking Personalisation: Turning Strategy into Action


[People at the Heart of Care]

Dec 2021

Department of Health & Social Care


[Delivery plan for recovering urgent and emergency care services]

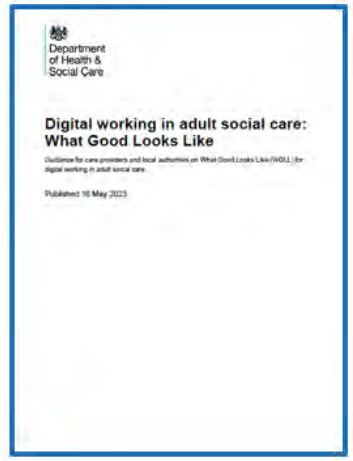
January 2023

NHS England


[Time To act]

April 2023

directors of adass adult social services




[Digital working in adult social care: What Good Looks Like]

May 2023

Department of Health & Social Care

# Delivering outcomes for people and providers


[Technology Enabled Lives]

March 2023

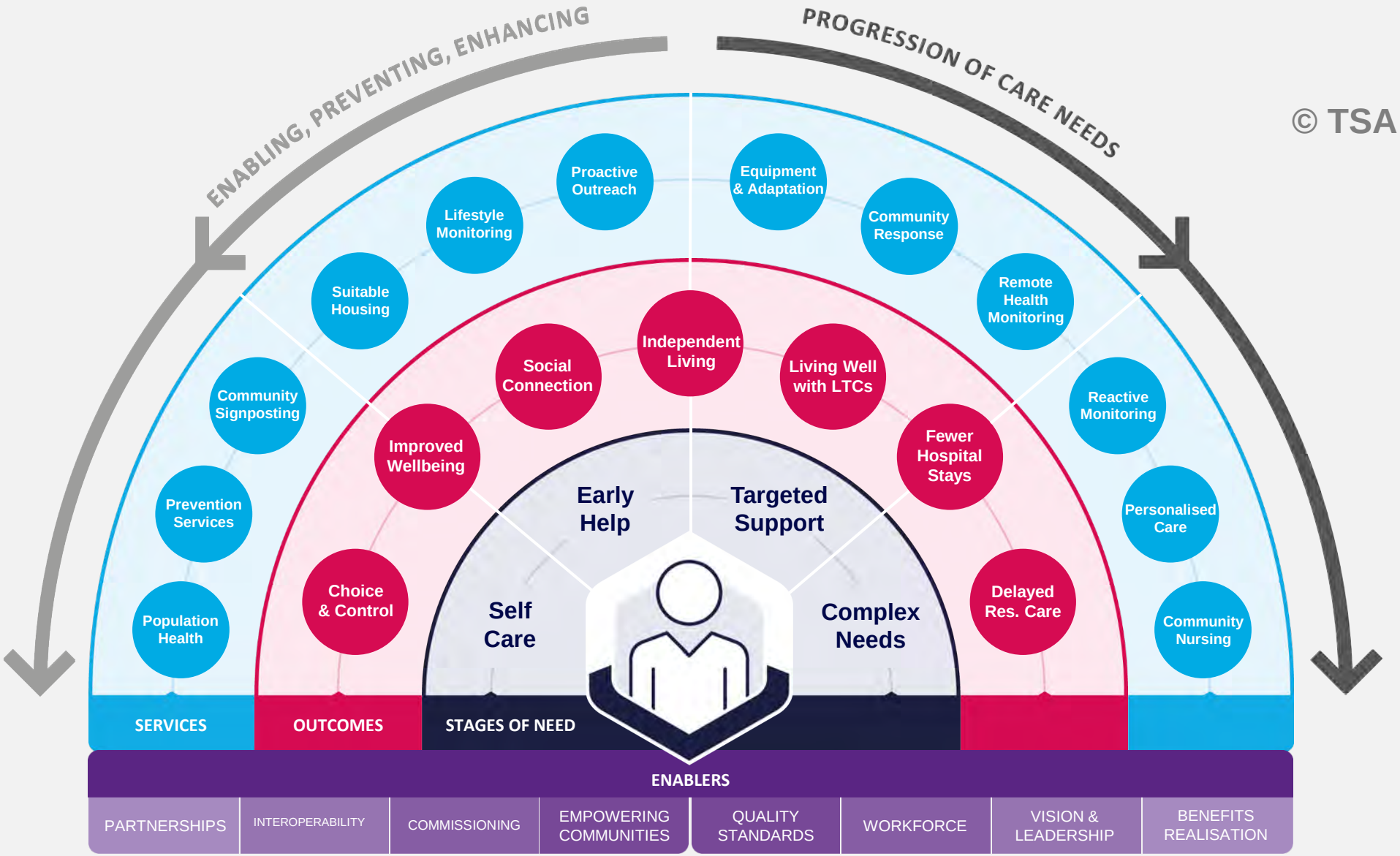

[A guide to getting started in Co-production]

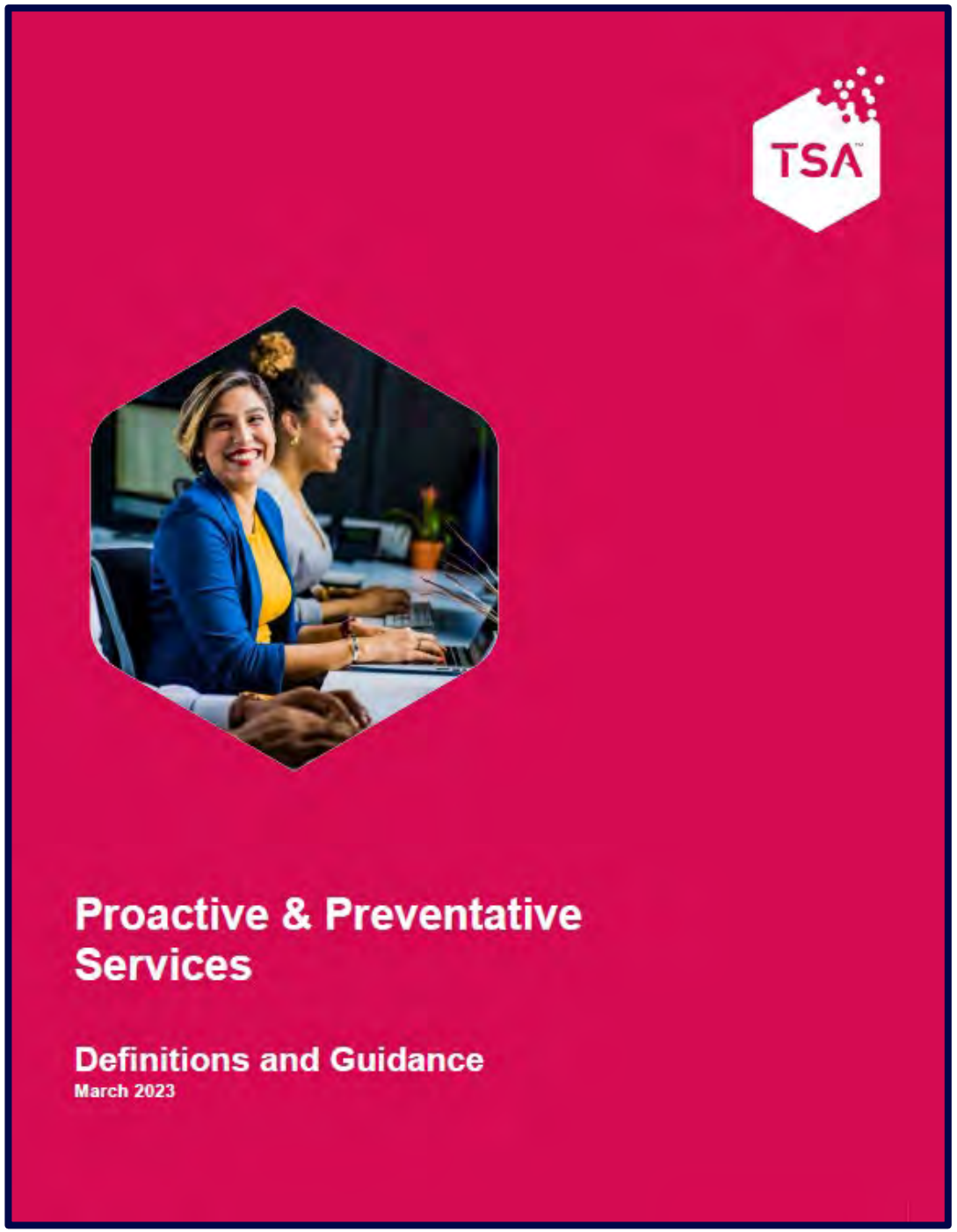
March 2023

> *Everyone has the right to lead their life in the way they want, with meaning and purpose, creativity and connection.*
>
> **Clenton Farquharson MBE**
> Co-Chair, TEC Action Alliance and Chair, Think Local Act Personal (TLAP)

# Slowing down the progression of need

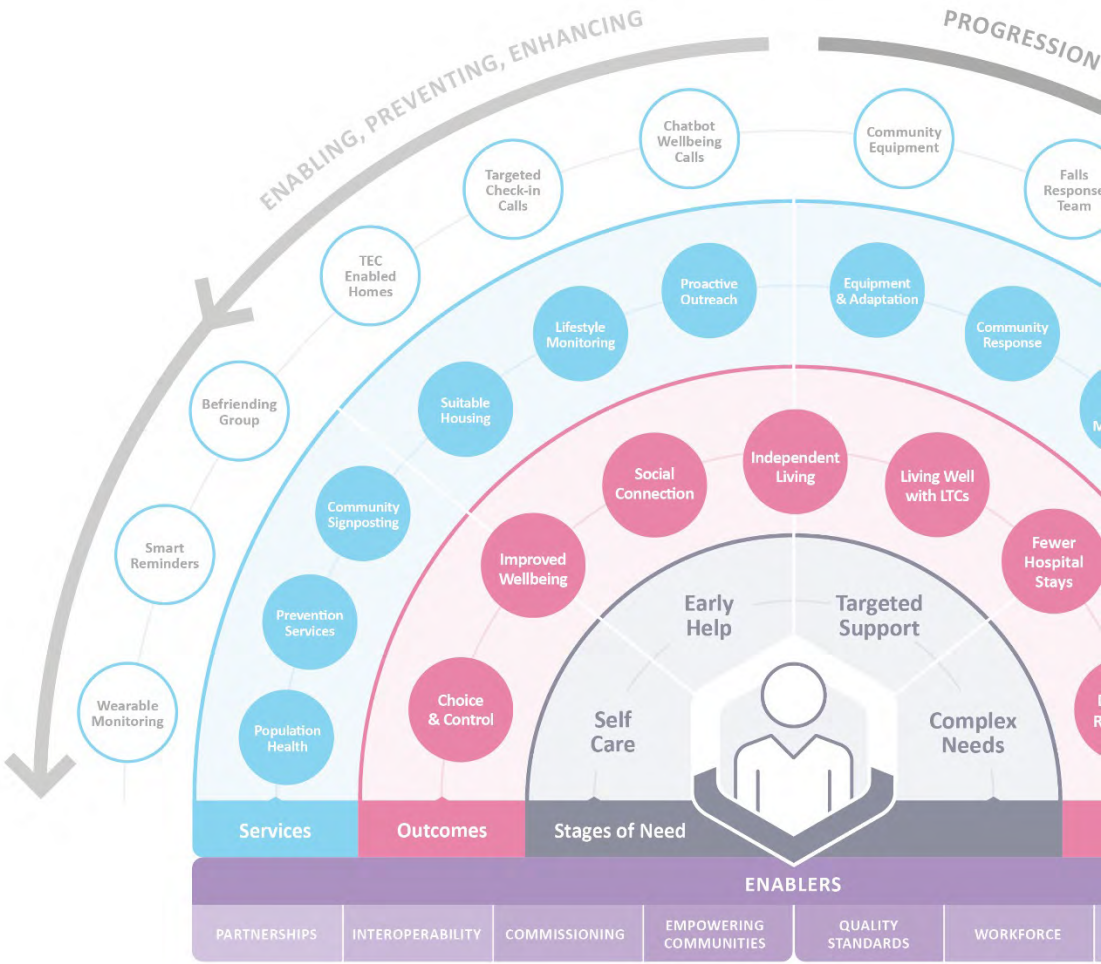







# Knowing into Doing

**Download your copy here:**
https://www.tsa-voice.org.uk/tec-guidance/proactive-and-preventative-services---definitions-guidance/



# Wider Adoption of Proactive & Preventative TEC

Common challenges of demographic change, frailty and workforce. Traditional models of social care not effective / sustainable

**Local authority trading company since 2018 offering a range of services including:**

- Alarm call handling for telecare and telehealth (35,000+ connections)
- Proactive calls
- The Blue Army – a hospital-based team providing support for patient admission and discharge

**94%**

remaining at home in the community; avoiding conveyancing into hospital.

*'With these solid foundations, this whole system approach provides West Wales the unique opportunity to safely transform the health and care landscape urgently and meaningfully to achieve sustainability plans'*

**Samantha Watkins**, Managing Director, Delta Wellbeing

# Moving to a Standardised Approach to Coordination of Care

WARRINGTON Borough Council

NHS BCHFT

NHS

**Warrington Borough Council** has integrated Urgent Community Response (UCR) with Alarm Monitoring & Falls Response Services.

They have adopted a **Home First philosophy** as an alternative to an ambulance calls.

**85%** of calls resolved by Falls Response team: successfully lifted, treated and remaining at home, with no Emergency Services escalation

*'An integrated approach allows us to join up the dots with a community model focus; integration of systems and services will enable us to identify the needs of the population at neighbourhood level'*

**Caroline Williams**, Director Adult Services (DASS), Warrington Borough Council

# Technology for our Ageing Population: Panel for Innovation

## From Principles to Implementation

TAPPI

BIELD FREE TO BE | Wiltshire Council | platform housing group | pobl | Haringey LONDON | Southend Care excelling in care enhancing lives

### Co-Production and Engagement Partner

CO-PRODUCTION WORKS

### Evaluation and Shared Learning Partner

Cambridge Centre for Housing & Planning Research


Remarkable research for healthy ageing
THE DUNHILL MEDICAL TRUST

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Housing LIN
Connecting people, ideas and resources

#TAPPI

# Proactive Outreach Leading to Better Outcomes

BIELD FREE TO BE

TAPPI

The right support, with a more **proactive approach**, focusing on **individual outcomes**, can ensure people are kept as independently as possible and supports the maintaining of **sustainable tenancies**.

**75%** Reduction in ambulance calls from the pilot cohort

**72%** Decrease in alarm use

*'Our findings from TAPPI has supported the development of our five-year strategy, with enabling technology at the front and centre of our tenant offer. We have aligned this work to our asset strategy and the development of a digital design brief, to support our approach to new builds and redevelopments'*

**Dr Lynne Douglas**, Chief Executive, Bield Housing and Care

# Quality, Safety and Continuous Improvement

## Driving Successful Innovation Implementation

**All test of change partners are certified**

**Within the Yorkshire and Humber region the following Local Authorities are either certified or commission a QSF certified service**

# Thank you

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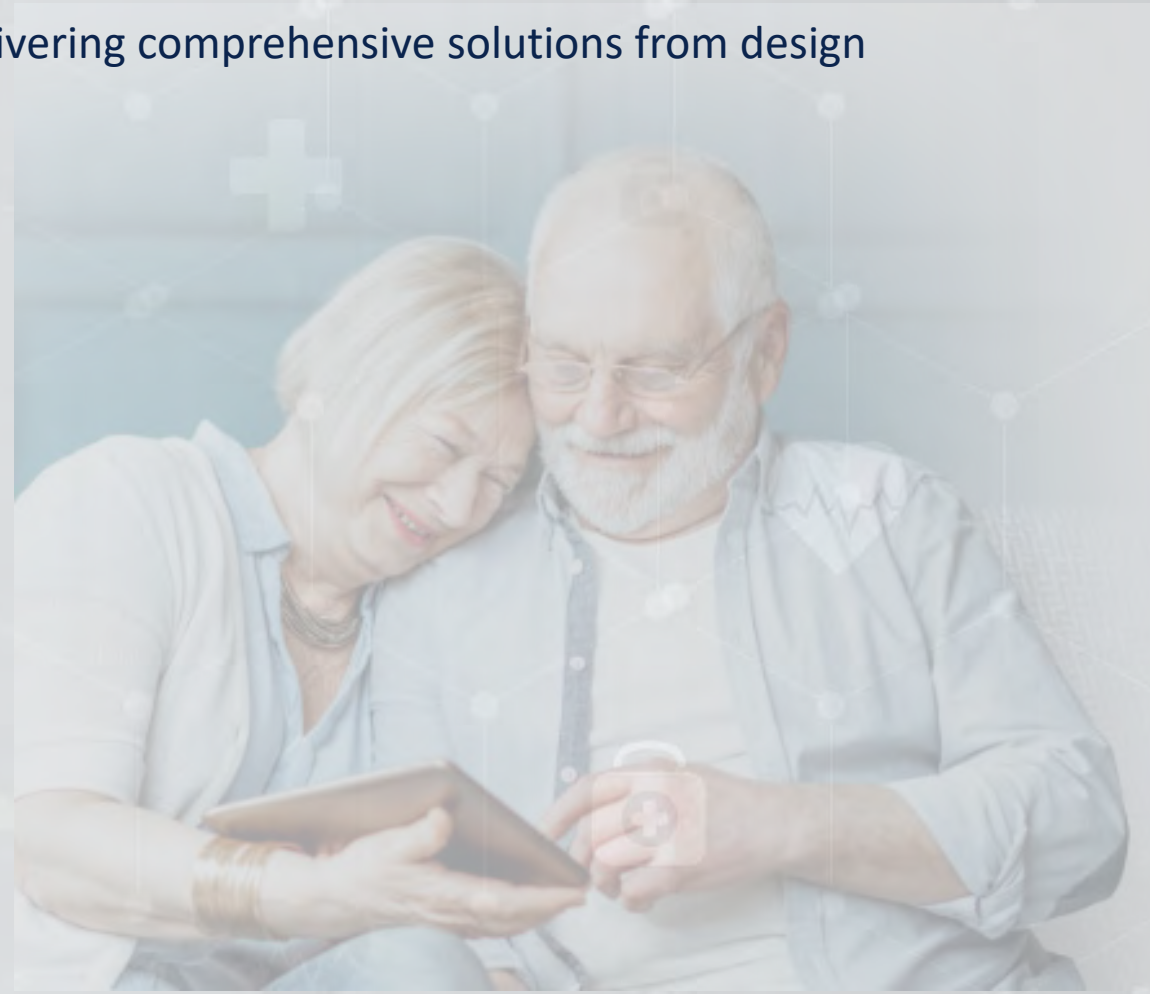
# The need for intelligence led proactive and preventative care solutions supported by system interoperability

**ANGUS HONEYSETT**
Head of Market Access
Tunstall Healthcare

# Who are Tunstall?

- UK based provider of technology care and support services delivering comprehensive solutions from design and manufacturing to installation and monitoring
- Over 3,000 employees, operating in 18 countries
- Work in the health, housing and social care sectors
- Directly monitor over 1.4m people
- Support over 5.4m people with equipment solutions
- Over 12,000 clients
- c. 200 monitoring centres use Tunstall's software



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# What is happening in the market?

Health and social care are merging

Expansion of public / private partnerships and collaborative working

Upgrades to national communications networks

Changing expectations

**"The social care system is broken, and people can't get what they need in a timely and effective way. There are 500,000 people awaiting a social care assessment or review and 165,000 social care vacancies."**

**Tec Action Alliance, March 2023**

Tunstall

# We need…

- To continue to evolve
- Social care reform
- The ability to cope with an older population
- To invest in the right systems
- To be bold
- To embed new ways of working
- To deliver sustainable change
- To think about how we commission services and challenge the status quo

# Proactive and Preventative solutions plus System Interoperability

**Intelligence-led proactive and preventative solutions:**

- Intelligence-led
- Proactive care
- Preventative

# Proactive and Preventative solutions plus System Interoperability

**Intelligence-led proactive and preventative solutions:**

- Intelligence-led
- Proactive care
- Preventative

**System Interoperability**

The ability of different health and care systems to exchange data and work together effectively

Allows information to flow seamlessly across different platforms

**Benefits**

- Improved outcomes
- Cost efficiency
- Citizen-centric support
- Resource optimisation

**Challenges**

- Data privacy and security
- Ethics
- Technological barriers
- Training

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# Digital Solutions

## Analogue

- Reactive (alarms only) service
- Limited use of data
- Limited customisation
- Mainly professionals providing services and support
- Hardware-based model

## Digital

- Proactive with reactive safety net
- Data providing actionable insight
- Customisation based on need
- Greater choice of support options e.g. family, carers
- Wrap around services-based model

- **Passive (in the background) data collection**
- **Addition of new services and solutions 'over the air'**
- **Solutions can be adapted as needs change**
- **Firmware updates: no need to upgrade hardware**

**Paradigm shift in how services are delivered**

# Gathering evidence

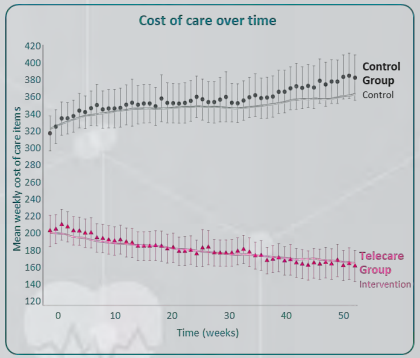
## Journal of Healthcare Informatics Research (JHIR) September 2021

**For proactive telecare:**

- Comprehensive data is collected
- It retains all aspects of reactive services
- Helps avoid or reduce critical situations arising

- Ambulance mobilisations reduced by 33.3%

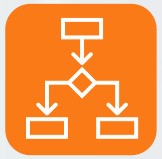
## York Health Economics Consortium Independent reactive study, 2018


Cost avoidance of **£4,500** per user per annum

# Things to consider

Radical change won't happen overnight



"It's not the kit it's the process!"

Engage with the workforce and communicate your plans

Work together to support citizen outcomes

Solutions should be simple to use and reliable

Drive mainstream adoption

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# Thank you

# SPEAKER PANEL QUESTION AND ANSWER

Sheffield City Council

NHS

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# Sheffield's Technology Enabled Care Tests of Change

**Paul Higginbottom**

Strategic Commissioning Manager TEC and Digital Services, Sheffield City Council

# Sheffield’s TEC Developments

Investment from both the Adult Social Care Discharge Fund and the Social Care Digital Transformation Fund - £450,000 2022-23

Embracing the opportunity to introduce new products with digital capabilities as part of the shift from analogue to digital

TEC predominantly deployed in people’s homes which supports proactive and preventative care enabling intelligence led service interventions

Collaborative development of a new TEC Service Delivery Model for Sheffield with a commitment to co-design/production

Ambition to develop a Joint Commissioning Strategy across Health, Housing, and Social Care presented to the Health and Social Care Policy Committee December 2023

Working with the Sheffield University Centre of Care and Oxford University supporting the qualitative and quantitative research of our Tests of Change.

# TEC Tests of change

howz

Anthropos

YOURmeds

AQUARATE

Fosse Healthcare

No Isolation - Komp

**Exploring the value of:**

- ❑Pro-active and preventative care solutions
- ❑Digital hydration monitoring in Care Homes
- ❑Connected Care
- ❑Digitally enabled medication management
- ❑Virtual Home Care and Community Health Services

**Supported by:**

- ❑Clearly defined targeted outcomes and metrics to support the research and future economic evaluation

# Strategic in nature, defining a problem and then identifying a TEC solution as an enabler – Care pathway re-design

| Problem | Solution |
|---|---|
| People are not drinking enough in care homes so are at greater risk of dehydration and associated risks and complications – Falls, UTIs, Skin infections …. | Aquarate |
| People can be provided “too much care” on discharge from hospital because practitioners can at times be risk averse, with delayed discharges often to common | Howz |
| People with long term care and support needs often fall into crisis because nobody is monitoring changes in functional ability and picking up early warning signs to provide proactive and preventative support, often resulting in avoidable admissions to hospital | Anthropos Pro |
| People do not always take their prescribed medication correctly, leading to health complications and readmissions to hospital. Overcoming the barriers to self-medication can help build capacity or reduce costs associated with home care service provision | YOURmeds |
| People who are at high risk of falls are often the same people who forget to wear a falls detector. Long lies can have a detrimental impact on long term health and wellbeing. | Anthropos Connect |
| An estimated 10% of home care visits in Sheffield do not require personal care. People could potentially be better supported with virtual visits, which helps deliver least restrictive care, promotes independence, and builds vital capacity. | Komp |

# Howz Connected Care
## Short term care – 1 to 6 weeks

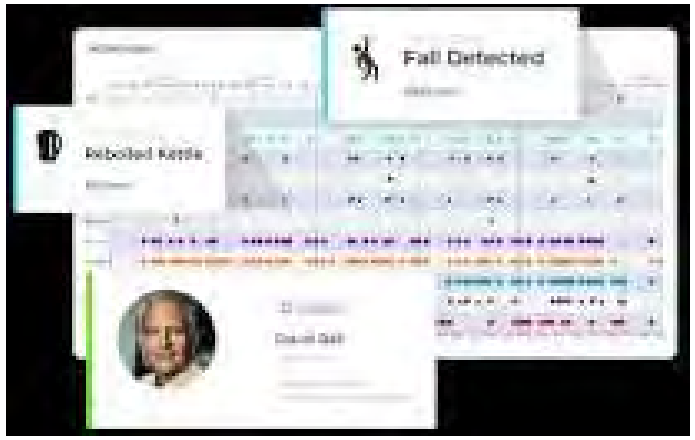
**Service Partners**

- ❑Hospital Social Work
- ❑Home First  Team
- ❑Acute Therapy Team
- ❑STIT Reablement Service
- ❑Intermediate Care
- ❑Active Support and recovery
- ❑City Wide Care Alarms

**Targeted Outcomes**

- ❑Patients discharged earlier once medically fit
- ❑More people are able to stay at home without readmission
- ❑Care packages are 'right sized’ to maximise peoples potential for independent living
- ❑Family are reassured and more engaged due to access to information
- ❑Practitioners benefit from better information enabling proactive and preventative care services which deliver better outcomes for people in receipt of care

# Anthropos Connected Care – Pro
## Long term care – Home Care services




**Service Partners**

- ❑ Intercare Services
- ❑ Ease Healthcare Services
- ❑ Fosse Healthcare
- ❑ Thames Home Care
- ❑ City Wide Care Alarms
- ❑ Tunstall Healthcare
- ❑ Primary Care Sheffield
- ❑ Housing
- ❑ Other community services as we develop

**Targeted Outcomes**

- ❑ People in receipt of care benefit from early diagnosis of UTIs
- ❑ Increased risks of falls are identified with mitigations put in place
- ❑ People are less likely to be admitted to hospital
- ❑ Monitoring of ADLs in home care services triggers trusted reviews of Care Plans enabling proactive and preventative care
- ❑ Care packages are 'right sized' to maximise peoples potential for independent living
- ❑ Public sector housing is monitored for Damp and Mould
- ❑ Fuel poverty is identified through environmental temperature sensors

# Anthropos Connected Care – Connect - in collaboration with Vayyar


## Service Partners

- ❑Carewatch Sheffield
- ❑Extra Care, Guildford Grange, Places for People
- ❑Extra Care, White Willows, South Yorkshire Housing
- ❑Buchanan Green, Older Peoples Independent Living
- ❑Appello
- ❑Tunstall Healthcare
- ❑City Wide Care Alarms

## Targeted Outcomes

- ❑Improved falls management minimises the time people spend on the floor and prevents long lies and hidden falls
- ❑People are able to stay safe and live independently in their own home for longer
- ❑Practitioners benefit from better information enabling proactive and preventative care services which deliver better outcomes for people in receipt of care

# YOURmeds

## Service Partners

- ❑Fosse Healthcare
- ❑Wicker Pharmacy
- ❑Adults Care and Wellbeing
- ❑Medication Optimisation Group
- ❑LPC

## Targeted Outcomes

- ❑More people in receipt of home care services are able to self-medicate or receive support to remind them to take medication supporting their independence
- ❑People’s medication compliance is improved benefitting their health and wellbeing
- ❑The number of home care hours used to deliver medication services is reduced
- ❑Home care system capacity is increased
- ❑Improved the satisfaction for people in receipt of care, families, and carers

# Komp Virtual Home Care and Community Health

**Service Partners**

- ❑Fosse Healthcare
- ❑Adults Care and Wellbeing
- ❑STH Community Health

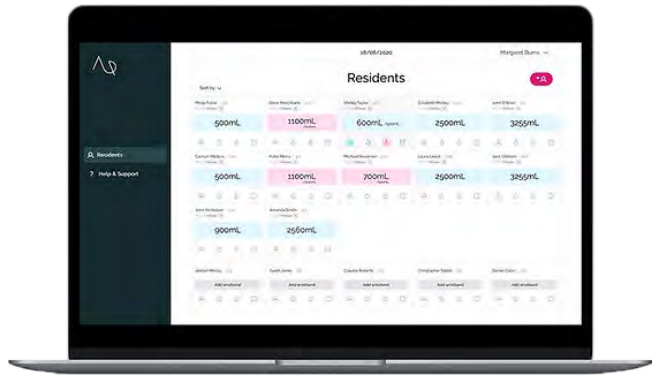
**Targeted Outcomes**

- ❑People receive least restrictive care where appropriate and benefit from greater choice and control in terms of how their care is delivered
- ❑Services are more flexible and responsive
- ❑A reduction in the number of face-to-face care visits helps build capacity in home care and community health services
- ❑Komp is positively received by people in receipt of care, family, and carers
- ❑Workers respond positively to the complementary introduction of virtual care services

# Aquarate – Digital Hydration Monitoring

**Service Partners**

- ❑Springwood Residential Care Home
- ❑Sevenhills EMI Nursing Care Home




**Targeted Outcomes**

**As a result of better hydration residents:**

- ❑experience less falls
- ❑have fewer UTIs
- ❑have fewer hospital admissions
- ❑receive a smaller number of unplanned GP visits
- ❑enjoy a better quality of life

- ❑Greater organisational efficiencies are delivered with staff having more time to care
- ❑Greater staff satisfaction due to better tools which deliver better outcomes for people in their care

# Workstream schedules

| Workstream | Number of Deployments | Dates to and from |
|---|---|---|
| W1 - Transformation new TEC Service Delivery Model<br>Strategic development | N/a | April to November 2023 |
| W2 - TSA Workforce Development<br>Strategic development | N/a | January to March 2024 |
| W3 - Connected Care (short term care)<br>Test of Change | 140<br>(6 weeks) | September to May 2024 |
| W4 - Connected Care (Long term care)<br>Test of Change<br>Anthropos Pro Home Care – 45<br>Anthropos Connect (Vayyar) Home Care/Extra Care - 20 | 65<br>(9 months) | September to May 2024 |
| W5 - Medication Management<br>Test of change | 30 | September to May 2024 |
| W6 - Virtual Home Care – Komp<br>Test of change | 50 | July to May 2024 |
| W7 – Aquarate Digital Hydration Monitoring Care Homes | 90 | September to August 2024 |

# Other key developments

- Collaborating with Primary Care Sheffield and Anthropos to develop a process to support the early detection of UTIs
- Collaborating with DSIT and 12 LAs to Beta test the Digital Playbook Secure connected places playbook - GOV.UK (www.gov.uk)
- Collaborating with TSA and industry partners Special Interest Group (SIG)19 - Connected Care Commissioning Strategy supported by benefits realisation
- Collaborating with LA partners regionally in a Falls Prevention stage 2 funding bid. Adult Social Care Technology Fund - Digital Social Care
- Collaborating with both Tunstall Healthcare and Appello to develop APIs initially with Anthropos Connected Care
- Action Planning in response to the recommendations in the Sheffield's TEC Audit Report published by NRS Healthcare
- Collaborating with BT and Openreach to deliver the transition from Analogue to Digital
- Ongoing work to align our Digital Strategies across health, social care, and housing including the South Yorkshire ICB, and strengthen the infrastructure


# DORIS care – Test of Change

Supporting early intervention and prevention in a collaboration between Housing, Adult Care, and Neighbourhoods.

❑**Adults 65 plus living alone**
- Falls risk, unwell, socially isolated
- Fuel poverty
- Damp and Mould Monitoring

❑**Vulnerable Families**
- Overcrowding
- Fuel poverty
- Damp and Mould Monitoring

❑**Adults- aged 18 to 24 living alone**
- Care and wellbeing
- Fuel poverty
- Reduce risk of homelessness
- Damp and Mould Monitoring

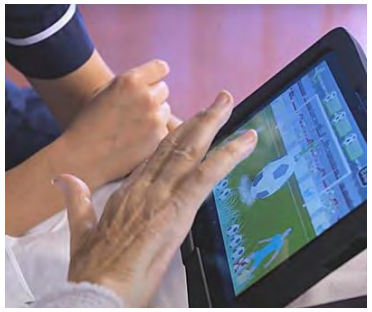
# Additional TEC investment – scaling previous tests of change

❑**Reminiscence/Rehabilitation & Interactive Therapeutic Activities (RITA)**

My Improvement Network | Breaking Boundaries in Person-Centred Care

5 additional devices (total 11) on 3-year leases deployed in a mix of Dementia and LD residential and nursing care settings.

An Introduction to RITA: What, why and how? – YouTube



❑**Happiness Programme**

Happiness Programme

Extended the initiative with10 devices on 2-year leases deployed across Extra Care, Older People Independent Living, Day-care, and Dementia Cafes

Download Video

# Thank you

Global Ageing Conference

# Connected Care:

## Make Better Informed Care Decisions

Paul Berney

Chief Commercial Officer
September 2023

Anthropos

# Spotting meaningful behavioural change proves to be a “life saver” in Sheffield

THAMES HOMECARE SERVICE
CARE IN YOUR OWN HOME

## The key question:

What role should Connected Care technology play in the new model of service delivery?



Anthropos

## In other words

How can we help you to support older people to stay safe, well and independent in a place of their choosing for longer?



Anthropos

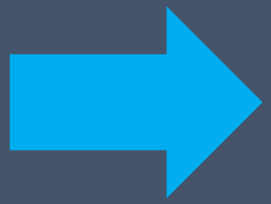
## How?

By providing intelligence that supports making better informed care decisions

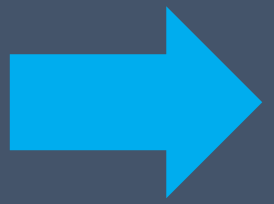
Anthropos

# Supporting the move towards new models of care

PAST
A combination of physical care and reactive services only



NOW
A blend of physical care, proactive care and reactive care services



NEXT
A blend of physical care, proactive care and reactive care services informed by data and predictive insights

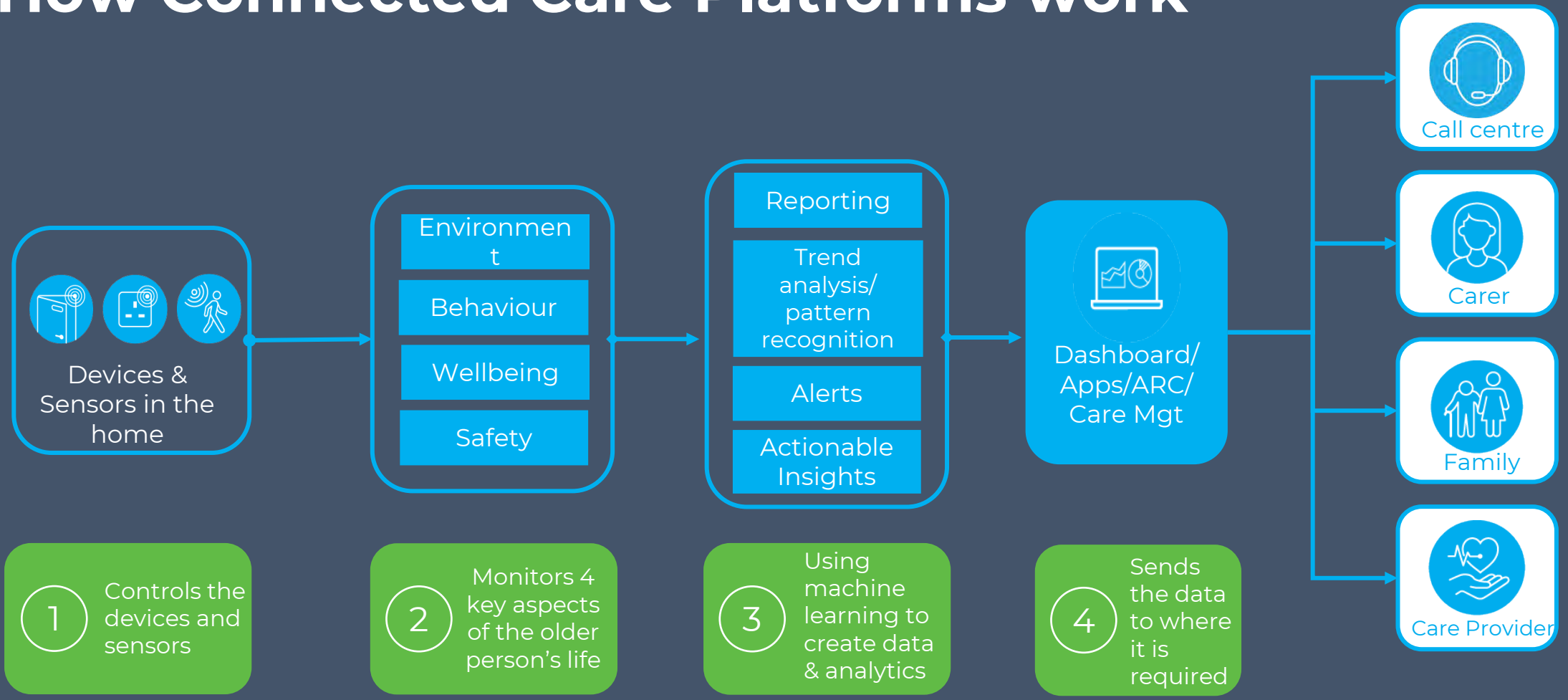
Anthropos

# Why shift to a more proactive service model?

| | | | |
|---|---|---|---|
| Support more person centric care models | Reduce avoidable admission/ readmissions to hospital | Support the delivery of better care experiences and better personalised care outcomes | Support effective capacity management |

Anthropos

# How Connected Care Platforms work






Anthropos

# Supporting short term care needs

1. Supporting early discharge from hospital where people are medically fit and have capacity, targeting Dementia and Frailty
2. Monitoring people at higher risk through passive sensors, which provide insight, alerts, and reporting.
3. Technology installed at discharge and provided short term through step-down care pathways
4. Collaborating and interfacing with inhouse reablement services, hospital teams and external care agencies, social care teams and installation providers.
5. 100 discharges over the project period

howz

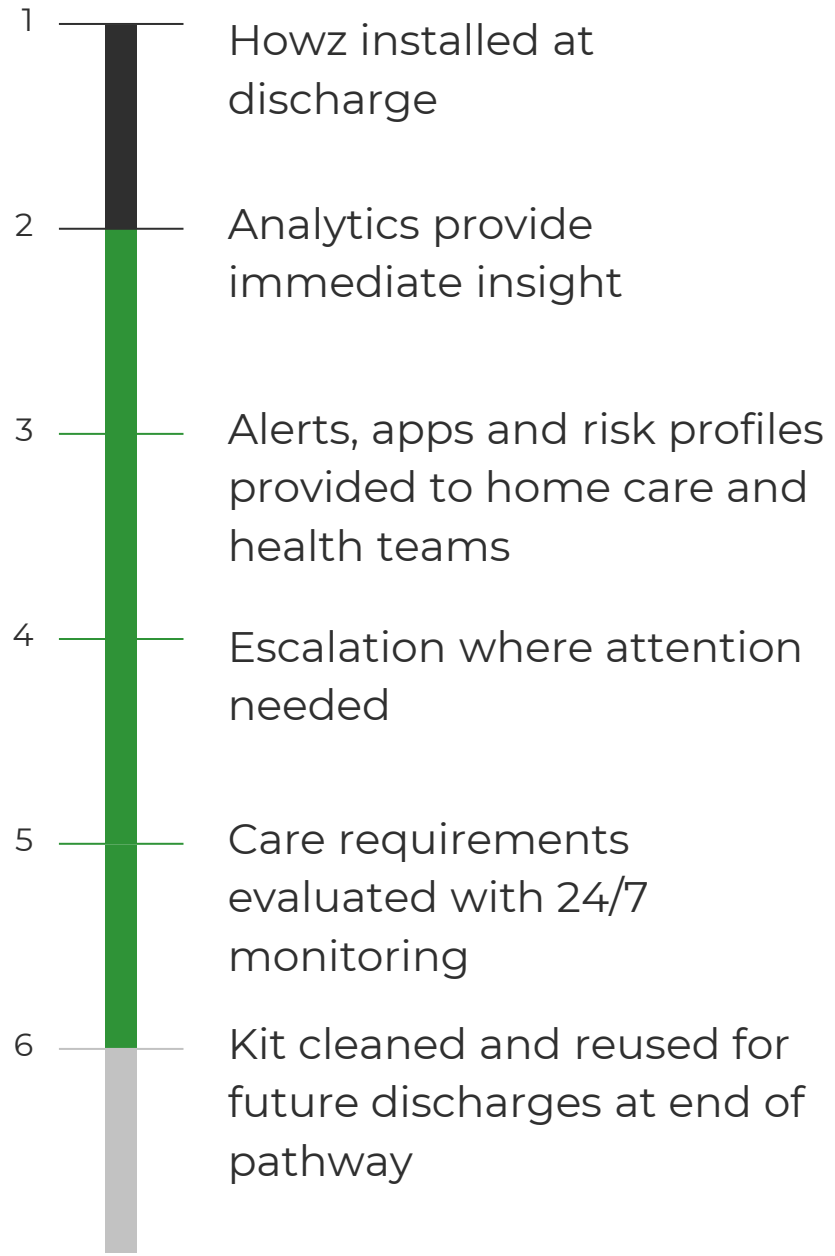
# How the service works

Remote monitoring kit: 6x motion sensors, 2x door sensors, 2x smart plug, 1 x fridge sensor + a hub

Machine learning tracks post discharge risks

Local teams and families informed of issues to investigate

Enabled intervention at the point of need, prevents readmissions



# Expected outcomes

1. Identification of behaviour patterns or changes that increase risk of an adverse event such as falls
2. Objective evidence to support care planning decisions
3. Reduction in care package - size or timescale of package
4. Identification of key risk factors affecting discharge
5. Reduction in bed days where medically fit for discharge
6. Population level understanding of behaviours post-discharge

howz

# Supporting long term care needs

**Anthropos Pro**

45 clients in the community

**Anthropos Detect**

45 clients care homes, extra care & community

**Falls Risk Index**

Clients in every care setting

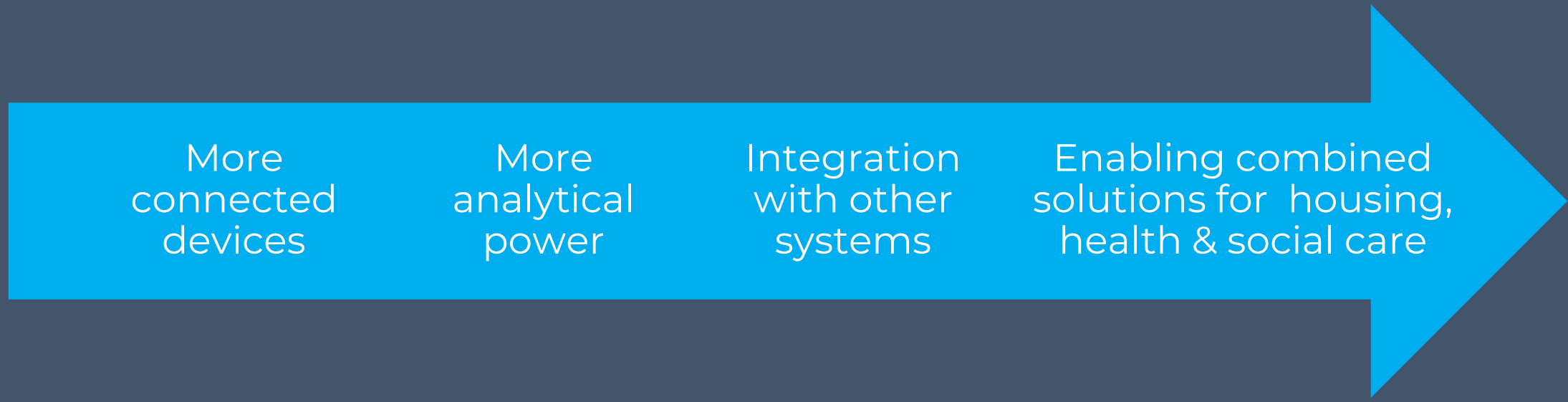
Anthropos

# Supporting long term care needs

- Supporting older people to stay safe, well and independent for longer
- Monitoring ADLs to look for changes that prompt an intervention
- Reducing hospital admissions
- Providing an evidence base for delaying or reducing care support
- Reducing long lies and hidden falls
- Large scale automated assessment of risk level
- Risk stratification
- Identification of future care pathways

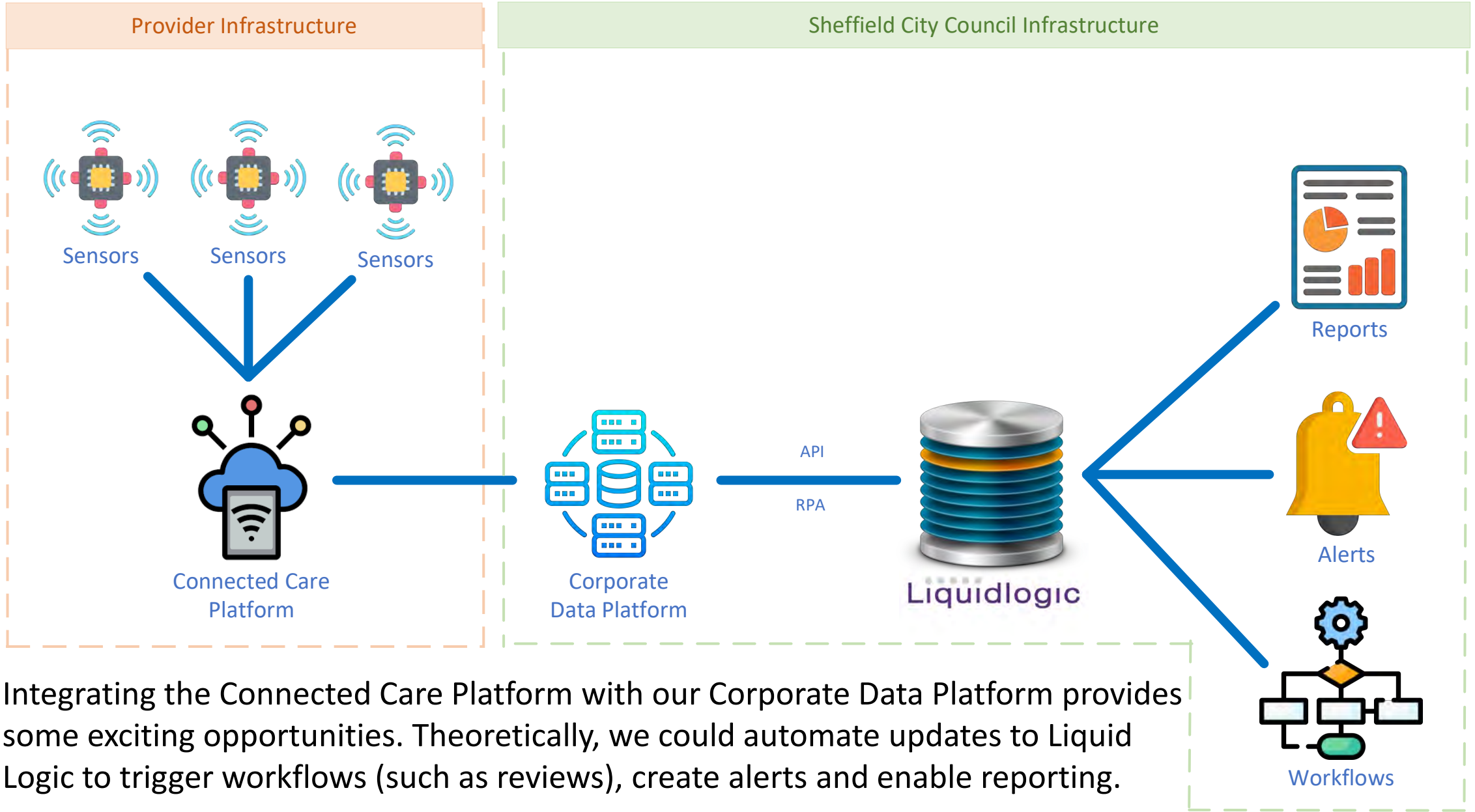
Anthropos

# Connected Care Roadmap




Anthropos

# Connected Data: Art of the Possible




Integrating the Connected Care Platform with our Corporate Data Platform provides some exciting opportunities. Theoretically, we could automate updates to Liquid Logic to trigger workflows (such as reviews), create alerts and enable reporting.

## Connected Care

Provides intelligence that supports making better informed care decisions

Anthropos

# Thank you

## Come and talk to us in the exhibition area

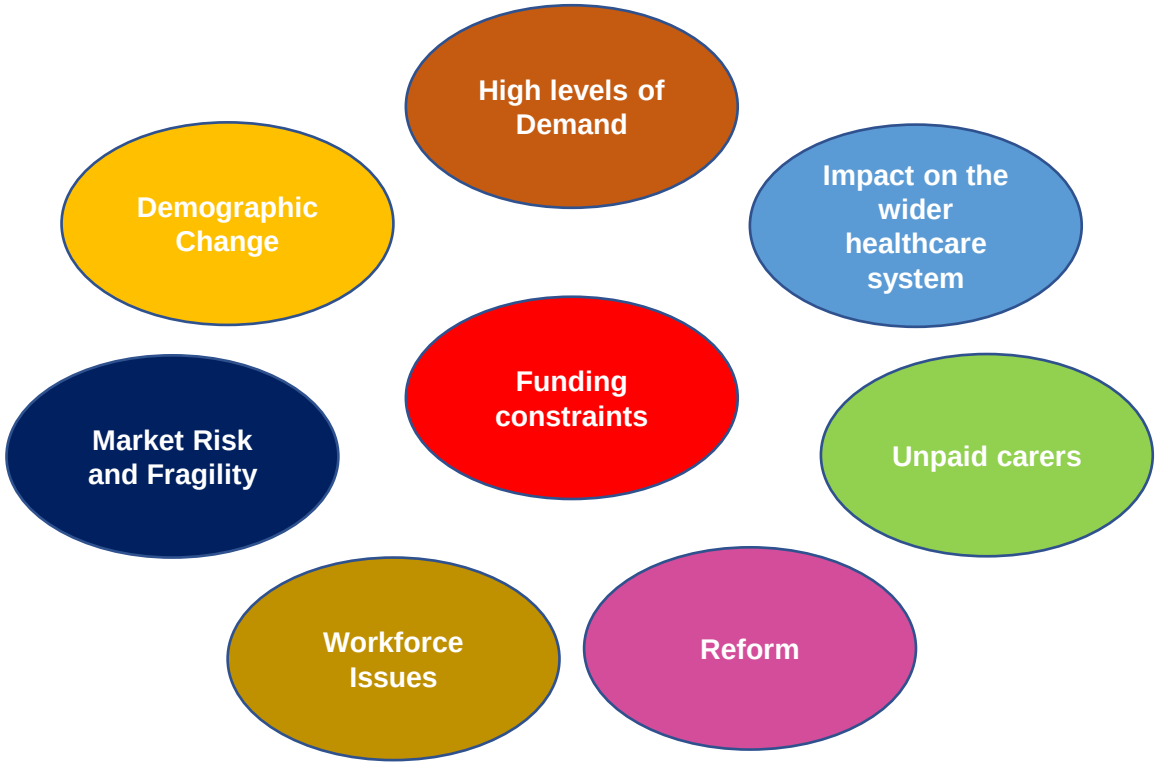
howz Anthropos

# Building Your TEC Knowhow Project

directors of adass
adult social services
North East

Fiona Brown
Associate

# Challenges and constraints



# Spending on Adult Social Care

directors of adass adult social services North East

## Demand for care drives significant Local Authority spend

- £1.1bn Gross Current Expenditure
- £850m (77%) on long term care

## NHS funding at the interface with Health

- £294m NHS-commissioned spend

## Self-funder contribution

- £182m self-funded residential care
- £88m self-funded homecare (65+)

## Unmet need

- Estimated £388m extra needed to fully meet demand

# Workforce Context

83,000 people work in adult social care in the North-East (in 91,000 jobs)

There were 6,500 vacancies on any one day in 2021/22 with another 19,500 vacancies projected by 2035

The vacancy rate is around 8.7%

In 2021/22 there were an estimated 600 organisations with 1,900 care providing locations in the region.

Pay among private provision is 39% lower than public sector and NHS counterparts

¼ of the workforce on a zero-hour contract (domiciliary care = 46%)

Source: Skills for Care 2021/22 Workforce Report – published October 2022

# Test & Learn

## NE Workforce Strategy

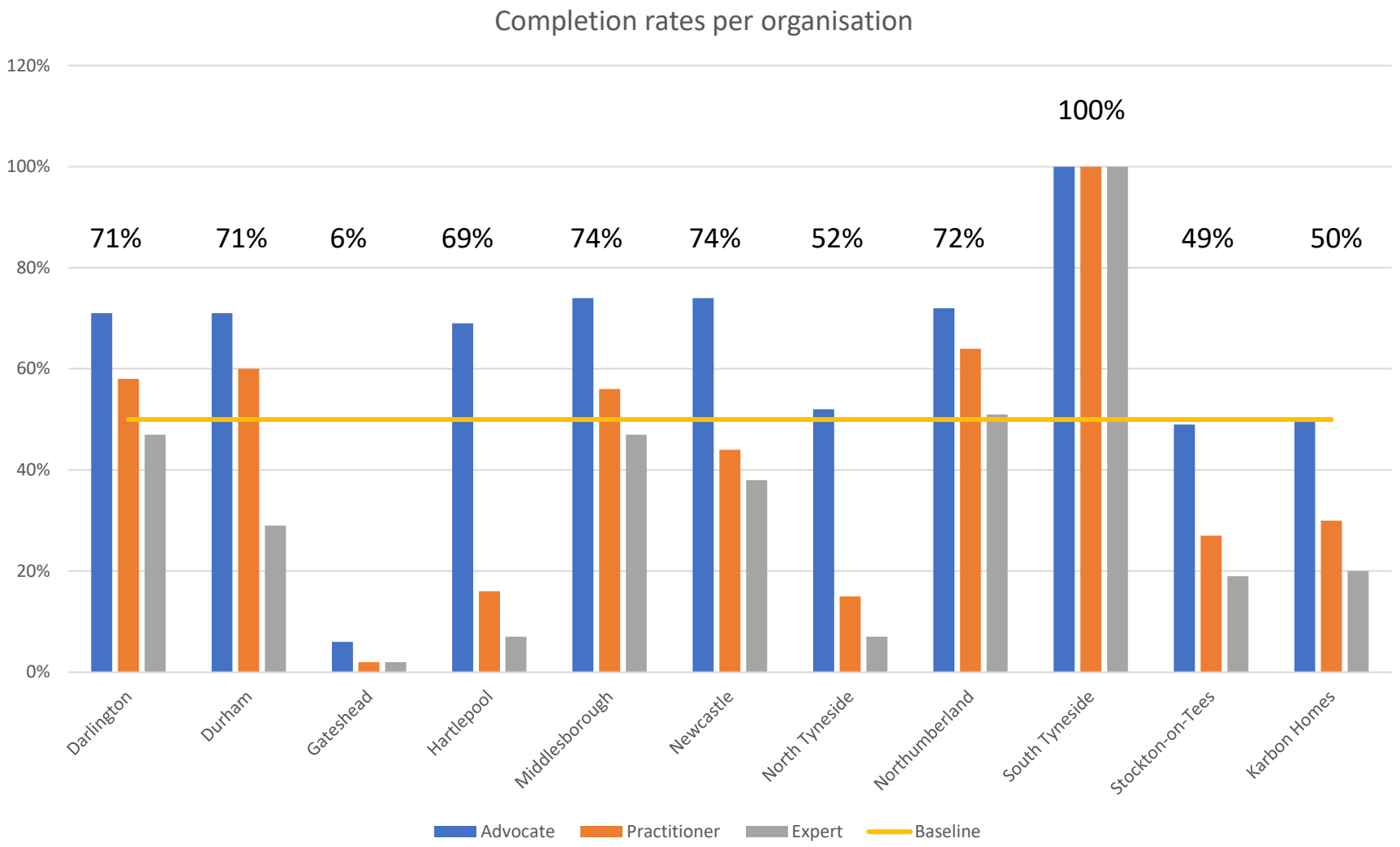
- A valued social care workforce where staff are recognised, valued and rewarded
- Effective workforce planning with investment in career pathways
- Expansion of the workforce roles which are designed in co-production with people who draw on care and support
- More care and support in our homes and communities
- To ensure the effective use of technology and digital opportunities to effectively support the increasing demand for services

## Linked in PSW and workforce SLI themed groups

## Working at scale and doing things once rather than 13 times

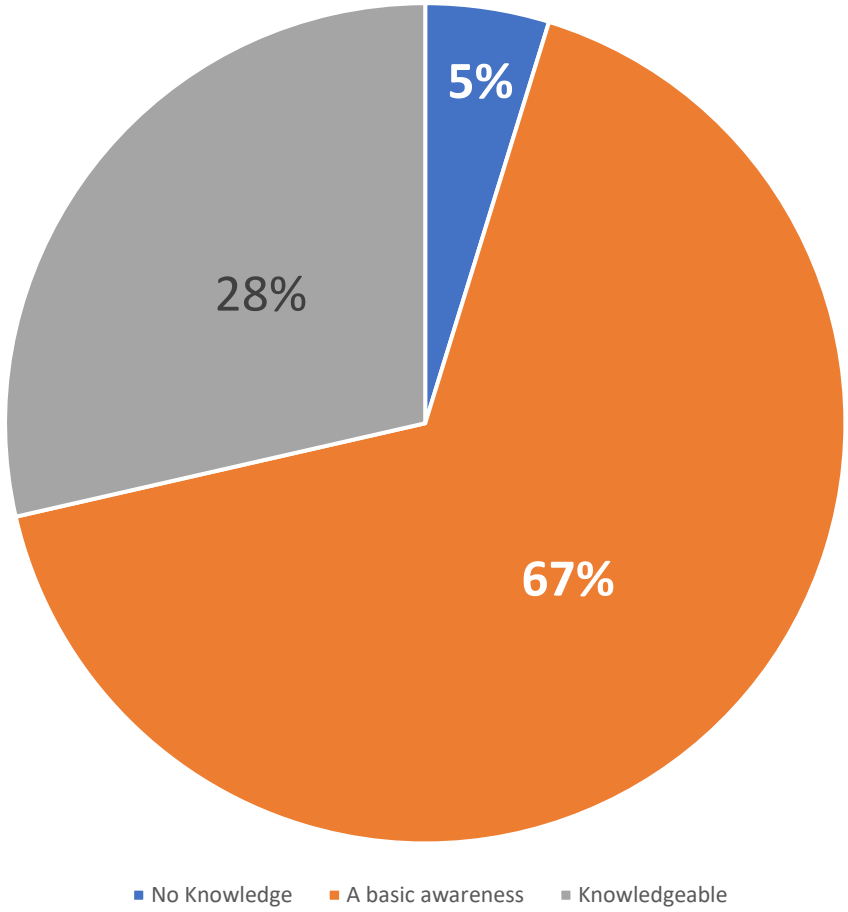
- Target of 30 users per organisation
- 50% completion rate for the Advocate module to raise awareness of Technology Enabled Care
- 25% of staff reported confidence in recommending / using digital
- Need for targeted learning and development, from basic skills training through to support for digital leaders.

# Progress to date – eLearning completion



# Survey Feedback

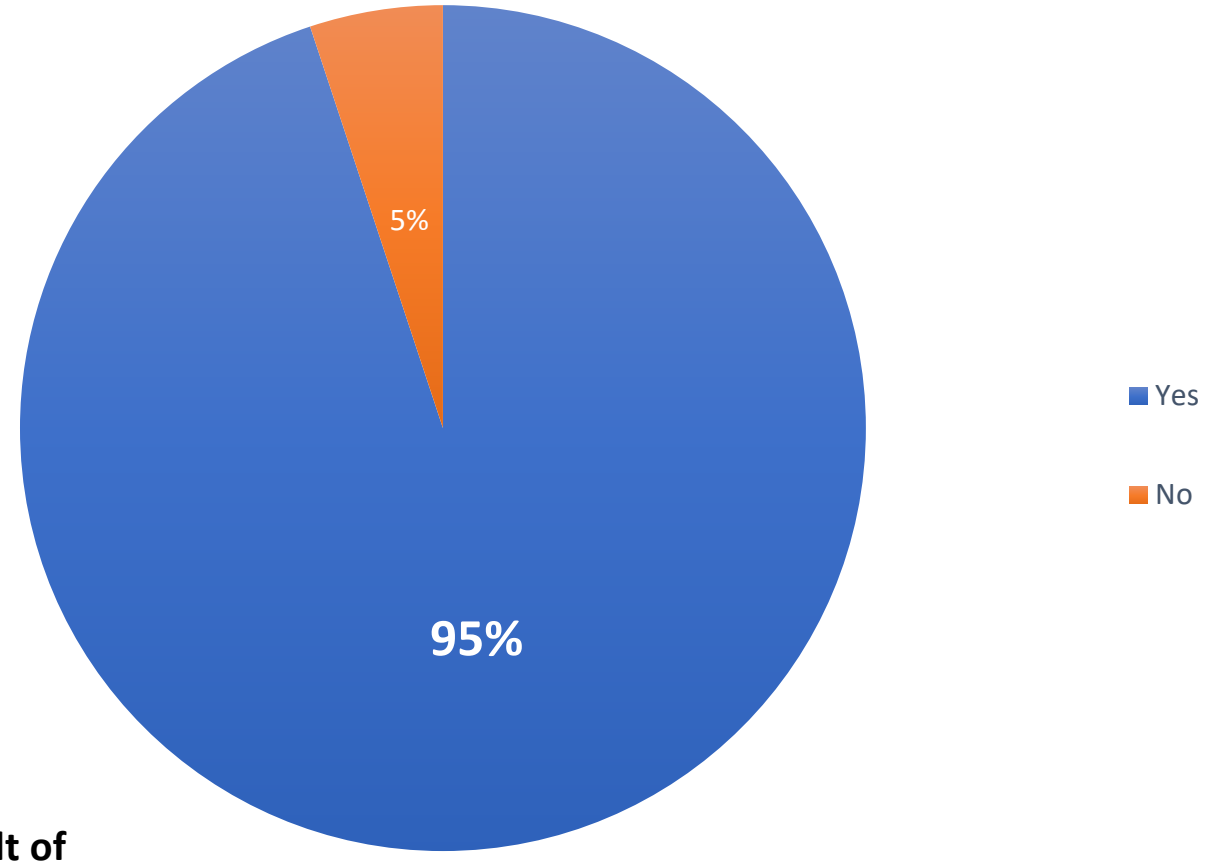
Prior to completing the training, how would you rate your knowledge and understanding of TEC?




**72% indicated no, or a basic knowledge and understanding of TEC.**

# Survey Feedback

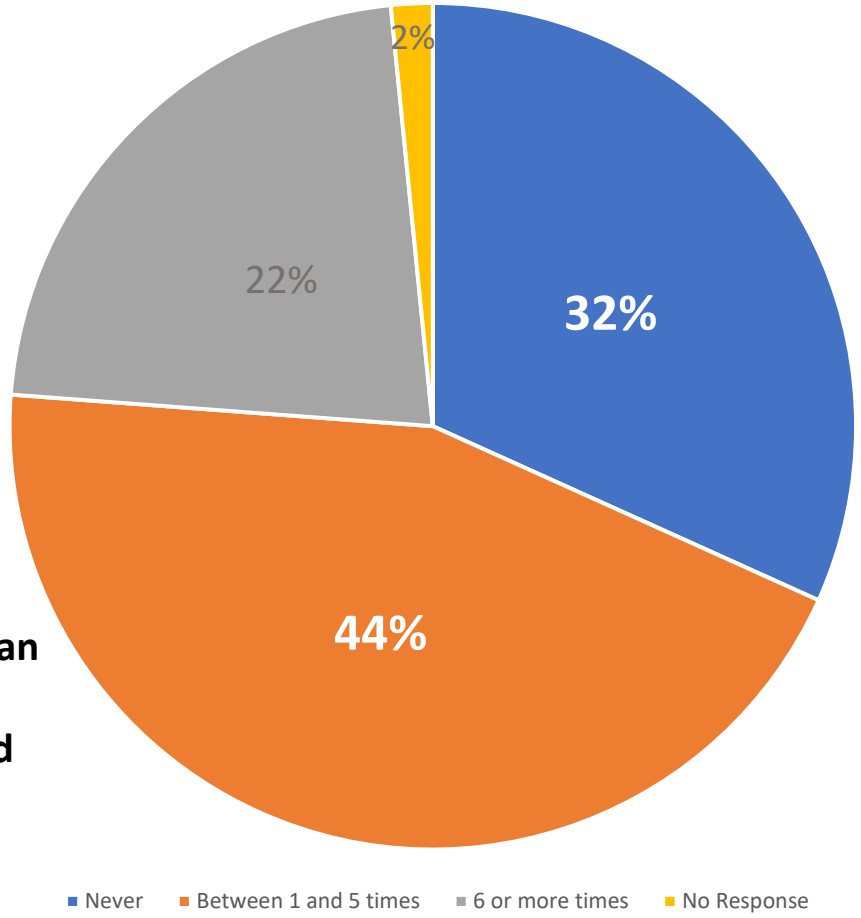
**Did the training support you to become more knowledgeable of what TEC is available, and how it can empower someone to live independently?**




**95% reported they felt more knowledgeable of TEC as a result of completing this training.**

# Survey Feedback

Prior to completing this training, how often did you refer into your TEC service in the last 6-months?




On average referral rates increased by 30%

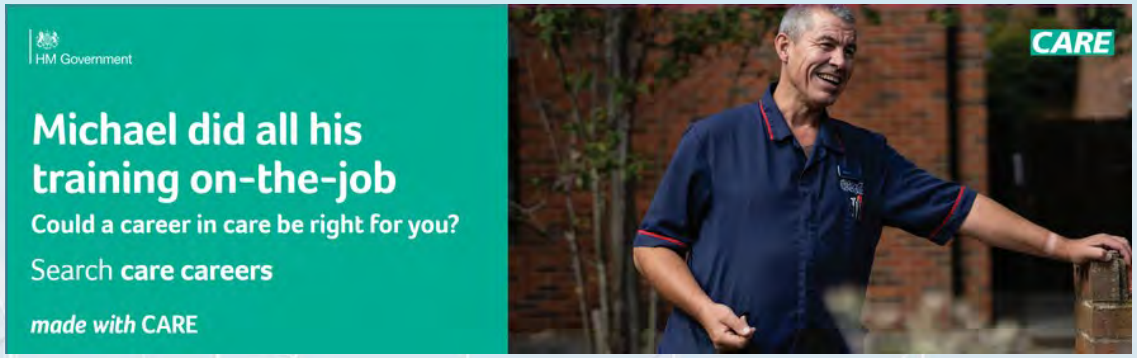
**75% reported having referred less than 5 times in the previous 12-months, 32% of this cohort had never referred for TEC.**

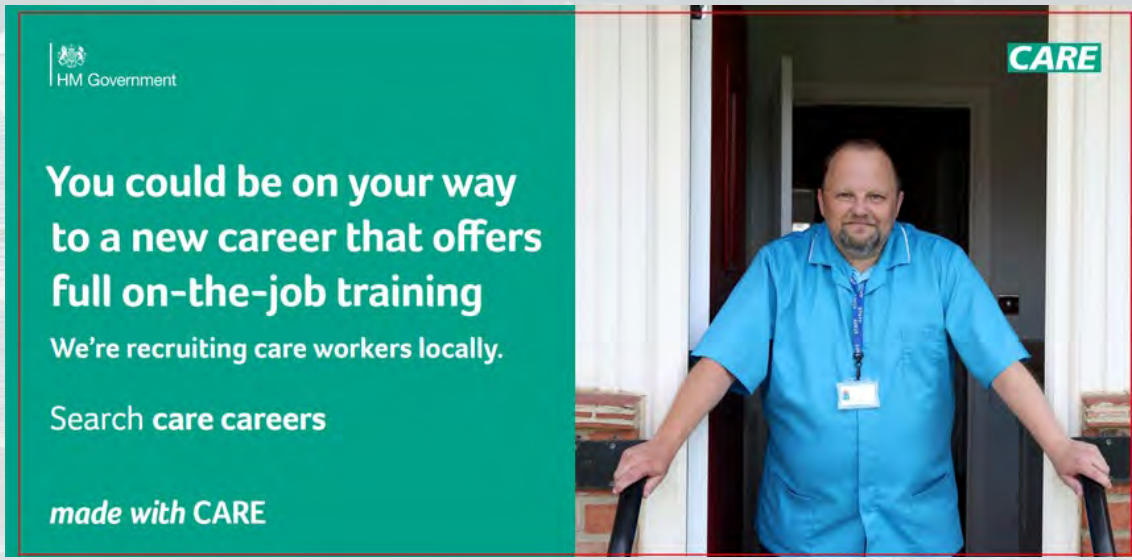
# Made with Care North East

Delivered in January and February 2023, the campaign aimed to:

- Make the care sector more visible and relatable, using real people
- Change the narrative and dispel the myths around working in social care
- Promote the opportunities for career development
- Support home care and care home providers to recruit staff

We also delivered sessions to providers to help them engage with the campaign. We held tailored “myth busting” sessions in job centres within the region in partnership with *Reed in Partnership*.



# Care Academies

- Regional development session on Care Academies due to be held in July 2023
- To develop a shared understanding of what a Care Academy is, and what they are seeking to achieve
- To look at options for regional and sub regional working
- Exploring funding for a 5 year longitudinal study into the early careers of social workers.

# International Recruitment

- Funding from the Department for Health and Social Care to support providers with the recruitment of health and social care workers from overseas.
- Two year fixed term staff post
- Financial support to providers for costs associated with recruitment
- Support to share the learning from those who have already recruited from overseas
- Resources for the successful induction of new workers.

directors of adass adult social services North East

# Thank You

# Questions

directors of adass
adult social services
North East

Centre for Care

# Centre for Care: Technology-Enabled Care Research

Kate Hamblin: k.a.hamblin@sheffield.ac.uk

***Sheffield's TEC Transformation and Tests of Change Conference***

*14th September 2023*

The University Of Sheffield.

UKRI Economic and Social Research Council

FUNDED BY NIHR | National Institute for Health and Care Research

# Presentation outline

- Introduction to the Centre for Care
  - 'Origin story’- how the Centre for Care builds on the Sustainable Care Programme
- Two proposed projects for collaboration with SCC
  - Complimentary work: qualitative and qualitative
- Proposed outputs
- Next steps

# Centre for Care

- Awarded Economic and Social Research Council Centre funding (£10 million) in 2021 for initial five years
- Includes element of Department of Health and Social funding via NIHR, and participating universities' contributions

Collaboration between:

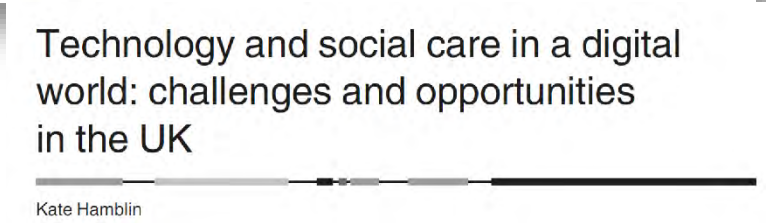
- Universities of Sheffield, Birmingham, Kent and Oxford, London School of Hygiene & Tropical Medicine
- ONS, Carers UK, the National Children's Bureau, Social Care Institute for Excellence.
- Academic associates.

# Building on Sustainable Care Programme (2017-21)

- ESRC-funded *'Sustainable Care: connecting people and systems'* programme – PI Sue Yeandle, some Centre for Care researchers, international and policy and practice partners.
- **Core concepts:**
  - **Wellbeing**- a combination of what people have (material); what people do (relational); what they feel about what they have and can do (subjective) (McGregor, 2007)
  - **Sustainability**: 'triple bottom-line' (economic, social, environmental)
    - **"sustainable care, […] requires the wellbeing of the different actors in care arrangements"** (Keating et al., 2021: 2).
- Specific project focused on TEC: *Achieving sustainability in care systems: the potential of technology*

# Achieving sustainability in care systems: the potential of technology

- Policy mapping
- Cross-national policy comparison
- Stakeholder consultations
- England: funding used to pilot/ trial new technologies: ‘Innovation Hubs’; mainstream devices, robotics (‘cobots’), 5G mesh networks/ LoRaWAN; aggregation of data
  - A2D switchover/ COVID-19 pandemic- some local authorities redesigned services/ redrawing lines of responsibility- ‘curators, not providers’ of technology
    - Importance of ‘wraparound services’


# Centre for Care themes and groups

Groups:

- Care trajectories and constraints: requiring, receiving and giving care
- **Inequalities in care: consequences, planning and place***
- **Care workforce change: organisation, delivery and development.***

'Themes' cross-cutting these groups:

→ **Care as a complex, adaptive ecosystem***

→ **Digital care***

→ Care data infrastructure.

**involved in proposed research with SCC on TEC.*

# Project 1: Qualitative research

Part of a project where local authorities across England are ‘focus localities’

Analysis of the new ‘Care and Wellbeing’ home care contract and ‘Technology Enabled Care and Digital Service Transformation’ – with an aim of understanding:

1. How home care markets are shaped and transformed to be more outcome-focused
2. The role of TEC in the transformation process.
   - ➔ Real-time insight into the new TEC-informed approach to home care
   - ➔ Work with SCC to feed the learning back into the ongoing transformation process
   - ➔ Outputs guided by Sheffield City Council (e.g., creative media outputs, presentations to stakeholders, reports)

# Project 1: Qualitative research

Involving researchers at University of Sheffield, University of Birmingham, and London School of Hygiene & Tropical Medicine to:

- Understand the care ‘ecosystem’ in Sheffield
- Analyse how the new outcomes-based approach to home care works in practice
- Carry out a ‘deep dive’ into two home care providers who are part of the TEC ‘Test of Change’ to examine how care workers integrate new devices in their work.

Methods

- Analysis of key policy documents
- Observations of public meetings
- Interviews with commissioners, technology providers, care providers and care workers

# Project 2: Quantitative Research

Quantitative (/computational) approach

Ultimate [broad] goal of our wider work stream:

**‘Use holistic data from TEC to create a more robust system of service provision’**

**‘What is necessary in a TEC ecosystem to facilitate more accurate “Early Warnings”?’**

Specific ‘Research Question’ for this project:

**‘How accurately can we predict urgent demand for care?’**

TEC has had great effect, while mostly acting as a reactive service (e.g. pendant alarms).

Can TEC generate data which allows us to be potentially more proactive?

# Project 2: Quantitative Research

First, preliminary stage (understanding and evaluating the TEC data ecosystem):

- Undertake a stock take of all of the information held on TEC service-users.
- Analyse the ‘data flow’ schema between TEC providers in this space.
- Who contributes which data into the ecosystem (SCC, Anthropos, Howz, Fosse)?
  - Which parts of this data ecosystem are available to whom?
  - Are there gaps, efficiencies, or legal barriers to realising value from this data?

# Project 2: Quantitative Research

Second, more substantive stage (preliminary estimates of predictive accuracy):

- Utilize time-stamped data and highly granular information. E.g., from Anthropos alone:

**Alerts:**

- No morning activity
- No movement in a room
- Too Long in a room
- Door left opened

**Actionable Insights:**

- Increased activity at night
- Room temperature too hot or too cold
- Microwave not used frequently
- Fridge door not opened frequently
- Kettle not used frequently
- Kettle being re-boiled
- Change in bathroom visits

- Combine with socio-demographic information/other triangulated sources.
- **Use deep-learning "event-history" based methodologies to predict demand for care before it happens.**

# Next steps

- Research governance approval – as per requirements of SCC; then University of Sheffield and Oxford Sponsorship. Limits to what can be sponsored
- Various Non-Disclosure Agreements
- For the quantitative research, setting up a ‘Trusted Research Environment’ (TRE)
- Discussion re. what outputs would be helpful for SCC and other stakeholders
- Formalised in Memorandum of Understanding
  - Outlines roles, responsibility and accountability
  - Also outlining issues such as Intellectual Property – typically data generated by the research team is the property of the Universities involved.

Centre for Care

The University Of Sheffield.

UNIVERSITY OF BIRMINGHAM

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

UNIVERSITY OF OXFORD

University of Kent

carersUK
making life better for carers

NATIONAL CHILDREN'S BUREAU

Office for National Statistics

scie social care institute for excellence

**Centre for Care Director**: Professor Sue Yeandle
**Centre for Care Deputy Director**: Professor Matt Bennett

**Please get in touch if you would like to know more, or to work with us on related issues, by contacting our support team:**

**Centre Manager:** Dr Kelly Davidge k.s.davidge@sheffield.ac.uk
**Centre Administrator**: Sarah Givans s.givans@sheffield.ac.uk

**Web**: www.centreforcare.ac.uk

**Twitter**: @CentreForCare

**LinkedIn**: https://www.linkedin.com/company/centre-for-care/

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# SPEAKER PANEL QUESTION AND ANSWER

Sheffield City Council

NHS

Centre for Care

TSA
The voice of technology enabled care

SPONSORED BY: Tunstall

# THANK YOU FOR ATTENDING

Sheffield City Council

NHS

Centre for Care

TSA
The voice of technology enabled care

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