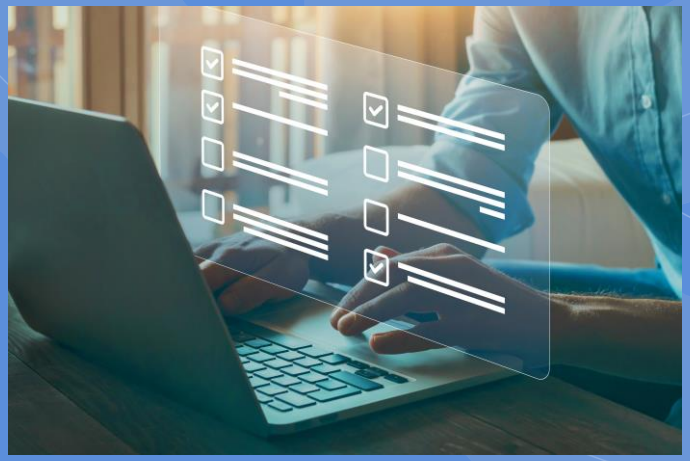
social care
institute for excellence

Webinar:
Digital innovation in Scotland

Showcase webinar from

the Social Care Institute for Excellence

30 August 2023



TEC Technology Enabled Care

Your panel

- Chair: Gerard Crofton-Martin. SCIE
- Sammi Allan. Project Manager at Technology Enabled Care
- Nicola Cooper, Technology and Digital Innovation Lead, Scottish Care
- Nicky Cronin, Senior Improvement Advisor, Care Inspectorate and Nicola McCardle, Senior Improvement Advisor at the Care Inspectorate
- Ruth Callander, Evidence Programme Lead, Scottish Commission for People with Learning Disabilities.

Digital Health & Care Scotland

Scottish Government
Riaghaltas na h-Alba
gov.scot

Digital Health & Care

Social Care Programme

Sammi Allan

Policy context

Aim 1: Citizens have access to, and greater control over, their own health and care data – as well as access to the digital information, tools and services they need to help maintain and improve their health and wellbeing.

Aim 2: Health and care services are built on people-centred, safe, secure and ethical digital foundations which allow staff to record, access and share relevant information across the health and care system, and feel confident in their use of digital technology, in order to improve the delivery of care.

Aim 3: Health and care planners, researchers and innovators have secure access to the data they need in order to increase the efficiency of our health and care systems, and develop new and improved ways of working.

Digital Health & Care Scotland

Policy context - Data

Vision

To improve the care and wellbeing of people in Scotland by making best use of data in the design and delivery of services.

Ambitions

Empower People
by giving greater access to and control over their health and social care data, where it is safe and appropriate to do so.

Empower Professionals
to have the confidence and ability to gather, safely use, and share data.

Support Research and Innovation
by ensuring data is readily accessible through secure and safe means for research and innovation.

Priority Action Areas

- Data Access
- Talent and Culture
- Protecting and Sharing Data
- Technology and Infrastructure
- Information Standards and Interoperability
- Creating Insights from Data
- Supporting Research and Innovation

Ethical Approaches to Data

Digital Social Care team

Sammi Allan

Project Manager, Technology Enabled Care Programme

Ruth Callander

Evidence Programme Lead, Scottish Commission for People with Learning Disabilities (SCLD)

Calum Campbell

Digital Social Work Policy and Practice Advisor, Social Work Scotland

Fiona Campbell

Digital Social Care & Digital Inclusion, Project Support Officer

Nicola Cooper

Technology and Digital Innovation Lead (Scottish Care)

Nicky Cronin

Senior Improvement Advisor, Care Inspectorate

Rikke Iversholt

Social Care Lead/Telecare Lead

Megan Williams

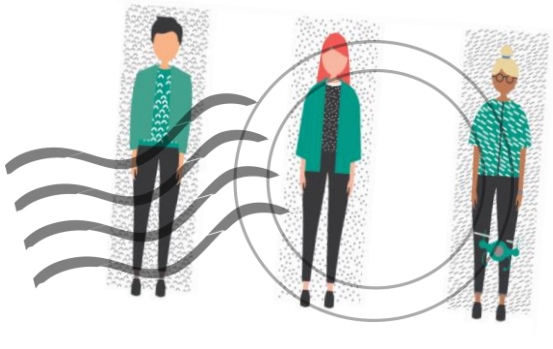
Policy Programme Lead CCPS

Digital Health & Care Scotland

Programme principles

- **Creating conditions and foundations** to foster innovations and drive forward local deployment and growth to facilitate transition to routine
- **Cross sector leadership/collaboration** and coordination with national delivery partners
- **Once for Scotland Approach** driving efficiencies, national models, procurement, knowledge exchange and evidence
- Supporting **cross sector excellence/expertise** – building capability.

Digital Health & Care Scotland



THE FUTURE OF CARE

c/o SCOTTISH CARE

Prestwick

KA9

Scottish Care
Voice of the independent care sector

Ageing Better. (2022). Age Positive Image Library [Online]

WHAT DOES OLDER AGE LOOK LIKE?

HOW WE IMAGINE OLDER AGE IMPACTS ON HOW WE DESIGN AND PROVIDE FOR IT

Olivia

EXPECTATIONS ARE CHANGING….
NHS & SOCIAL CARE ARE 75 YEARS OLD

GLOBALLY

2023, 1:11 over 65

by 2050, 1:4 over 65

UN projection

SCOTLAND

Health inequalities worsened in last 10 years

20 year gap between years of good health in most and least deprived areas, 48.2 years and 72.3 years respectively

Source:
Public Health Scotland, 2023

Unpaid carers

1 million people in Scotland are unpaid carers

1 in 4 over the age of 50

MIXED ECONOMY

Source – Scottish Social Services Sector Report on 2021 Workforce Data 30th August 2022

Figure 5: Map of Scotland with local authority areas coloured by largest employer type, 2021

DID YOU KNOW?

The majority of people in Scotland over 18 with long term care needs receive care at home, in comparison to care homes & hospitals.

DID YOU KNOW?

91,810

estimated amount people of any age who receive homecare in Scotland.

This means that

2% of Scotland's population receive homecare.

NHS in Scotland 2022, Audit Scotland, 23rd February 2023

Workforce capacity is the biggest risk to NHS recovery

There's been a 17 per cent rise in people who can't leave hospital because often the social care they need is not available

351 local people in Dumfries & Galloway awaiting 3222 hours of assessed social care at home, as of 27th Feb 2023

A BURNING PLATFORM…. UNMET NEED+ RECRUITMENT & RETENTION

DOING THINGS DIFFERENTLY

OUR APPROACH

the Design Council's Framework for Innovation

Put people first.

Start with an understanding of the people using the service, their needs, strengths and aspirations.

Communicate visually + inclusively.

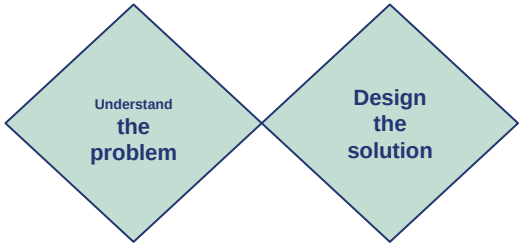
Help people gain a shared understanding of the problem and ideas.

Collaborate + co-create.

Work together and get inspired by what others are doing.

Iterate, iterate, iterate.

Do this to spot errors early, avoid risk and build confidence in your ideas.



.....what we did

The Care Technologist

Specialising in facilitating the interactions between assistive technology, people drawing on care and support, and the wider care team in order to provide meaningful and personalised support.

Care Connector

Specialising in facilitating meaningful relationships - both physical and digital - for people drawing on care and support at home and supports service users to work toward their aspirations and goals.

Care Navigator

Specialising in coordinating the multidisciplinary care team through gathering, making sense of and organising different flows of data in order to provide responsive, personalised and relationship-based care at home.

FUTURE WORKFORCE ROLES

.....what happened

The Care Technologist

Specialising in facilitating the interactions between assistive technology, people drawing on care and support

THE GLASGOW SCHOOL of ART

ScottishCare
Voice of the independent care sector

6 month
Test of Change A

TEC Technology Enabled Care

12 month
Test of Change A
East Ayrshire
Glasgow

IMPACT Improving Adult Care Together

UKRI Economic and Social Research Council

The Health Foundation

6 month Test of Change
Housing + Proactive
Telecare + East Ayrshire
and Dumfries & Galloway
HSCPs

TEC Technology Enabled Care

2017	2020/1	2022/3	2023/4
PHASE ONE	PHASE TWO	PHASE THREE	PHASE FOUR

.....what happened

The Care Technologist

Specialising in facilitating the interactions between assistive technology, people drawing on care and support

…….enables greater independence, flexibility and choice for service users as a result of care and support needs being assessed and delivered *differently*.

- **Conversation about what's important**
- **Tech and digital as a choice**
- **Optimising existing tech**
- **Layering in new tech**
- **Bringing tech together in recipes e.g. morning routine; medication reminders; home automation; environmental monitoring; AI and data analytics**
- **5-6 home visits and/or calls**

…….what a CT does

Olivia

Olivia starts her day around 6am, she is an early riser. It's still dark outside so the light is on and is slowly becoming brighter. She enjoys the sounds of her favourite playlist.
As the blinds open she stretches and begins a guided yoga session with Adrian, which she does by her bedside. She goes to the kitchen when the smell of coffee floats through. The radio is on and she catches up on the news before being reminded of what's in her calendar for the day. She's not sure if she's hungary or even if she's eaten yet, but when the doorbell rings she goes to the door to find warm scrambled eggs with a side of vitamins and her medication, and she sits down to eat. There's another reminder and an update on the weather forecast - dress warm it's a little cold out. Olivia is going to meet friends. The hallway from the kitchen to the bedroom doesn't get much light but the sensors pick this up, so it's never too gloomy and in fact the lights seem to know that she'll visit the bathroom first, as they come on in there as well. Mila from the hub calls to check in. She helps Olivia pick out an outfit and sensible boots in case it's icey. She also reminds Olivia to make sure her wearable is charged and that she has it on. A vehicle will be along for her soon.
That evening, when Olivia returns, her home is warm and welcoming, and her streaming service is playing the show she likes. She can't explain why, but she doesn't settle and her mood is low. She drops in virtually on her daughter in New Zealand and they chat about the grandchildren, making Olivia feel brighter. Her son calls to talk about her appointment tomorrow - it's nothing to worry about he says, just a check up because there's been a change in her sleep pattern and visits to the loo. Olivia isn't sure she likes being told this but looks forward to seeing him anyway. She is satisfied that this small concession means people worry less about her and she gets to stay where she is, she isn't ready to give up her independence, not yet.

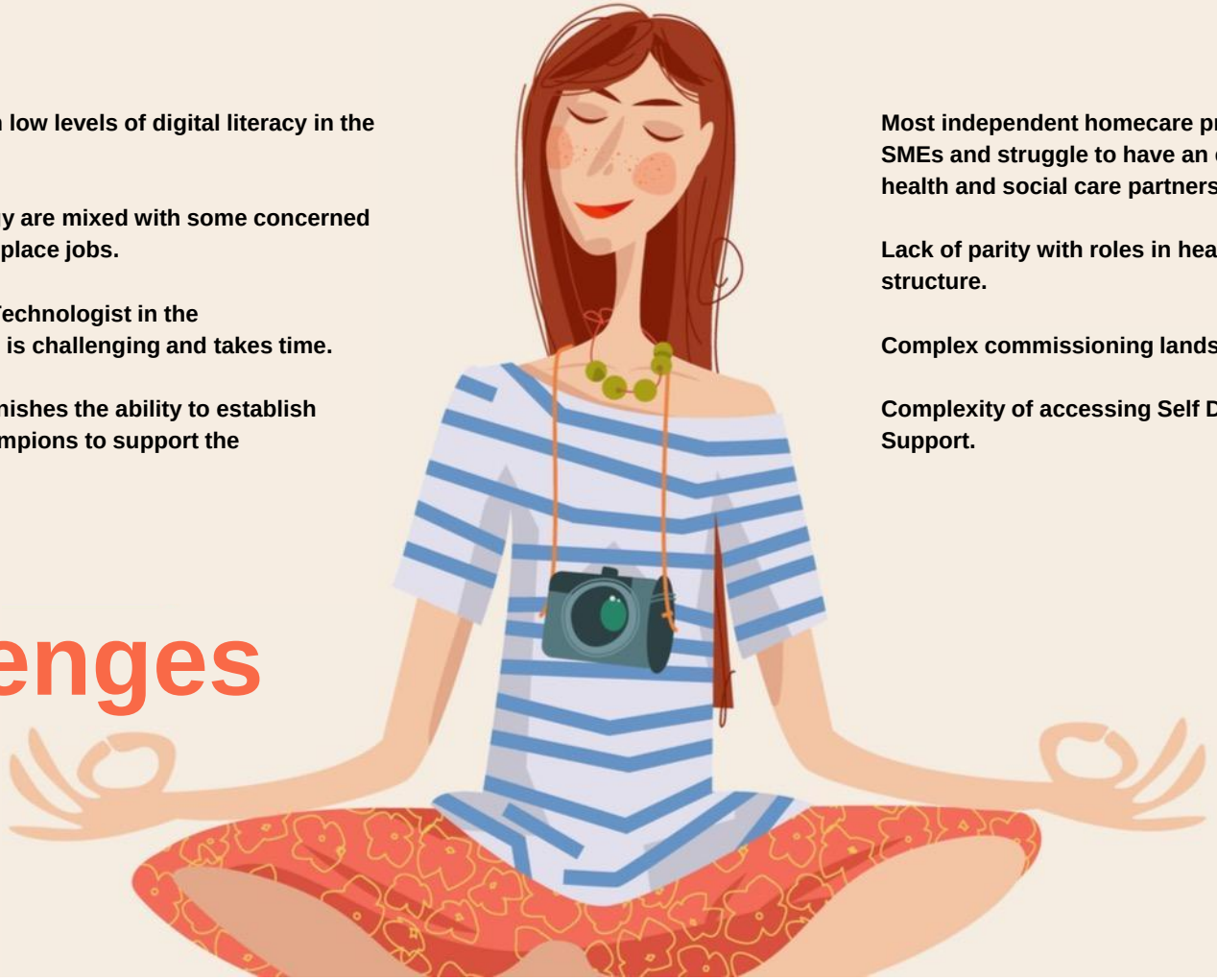
challenges

There are mixed, often low levels of digital literacy in the front line roles.

Attitudes to technology are mixed with some concerned that technology will replace jobs.

Embedding the Care Technologist in the multidisciplinary team is challenging and takes time.

Workforce churn diminishes the ability to establish workplace Digital Champions to support the transformation.



Most independent homecare providers are SMEs and struggle to have an equal voice in health and social care partnerships.

Lack of parity with roles in health and a career structure.

Complex commissioning landscape.

Complexity of accessing Self Directed Support.

Enabling the delivery of care and support in remote and rural areas where there is a limited workforce to draw on, and in areas of deprivation where demand for care packages is high.

Potential to reduce hours of unmet assessed need and support prevention, early intervention and reablement.

Choice, flexibility and greater control for service users as part of a human rights-based model of care.

Attracting a more diverse workforce, potentially adjusting gender balance – currently 77% of care at home workforce is female.

Sustainable services and businesses, less vulnerable to workforce shortages, energy price increases etc.

Unintended consequences

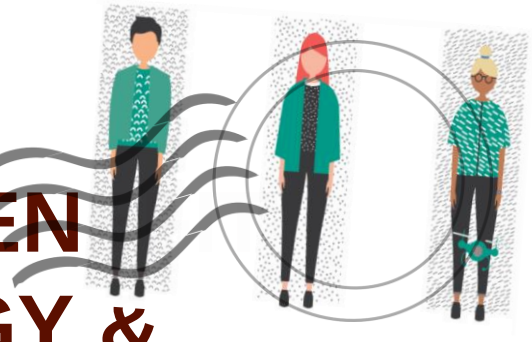
Some benefits were seen around the growing need for mental health support in the community, which technology helped with and could relieve carer burden to some extent too.

benefits

POSTCARDS FROM THE FUTURE

for a sustainable model of integrated care

Scottish Care
Voice of the independent care sector



EVERYONE CAN BEN FROM TECHNOLOGY & HAS ACCESS TO A SKILLED PRACTITIONER WHO CAN HELP

Scottish Care
Voice of the independent care sector

INTEGRATED TEAMS USE DIGITAL, DATA & TECHNOLOGY TO GET CARE & SUPPORT RIGHT FOR EVERYONE

Scottish Care
Voice of the independent care sector

DO YOU WANT TO DO THINGS DIFFERENTLY?

GET IN TOUCH

Nicola Cooper, Technology & Digital Innovation Lead
nicola.cooper@scottishcare.org
@digitalme_NC @CareTech_Scot

PainChek

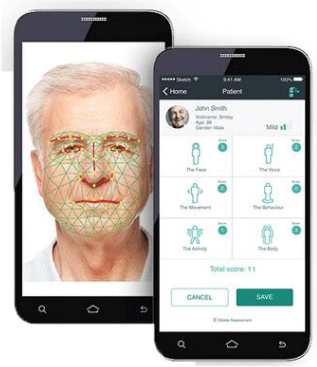
- The use of innovative technology aligns with the Scottish Government Digital Approaches in Care Homes Action Plan and National Dementia Strategy
- PainChek® is an app which uses artificial intelligence (AI) technology and smart automation to assess pain in people who are unable to verbalise pain
- This improvement project aligns with the CI's strategic outcom q y care for all and improved outcomes for all; and with the pillar o

- As a person's dementia progresses the prevalence and inte increases whilst their ability to express pain diminishes
- Pain is often under-recognised and undertreated in people cognitive impairment
- In care homes up to 80% of people with dementia regularly experience pain

What is PainChek?

PainChek® is an app which uses artificial intelligence (AI) technology and smart automation to assess pain in people who are unable to verbalise pain

PainChek
Intelligent Pain Assessment



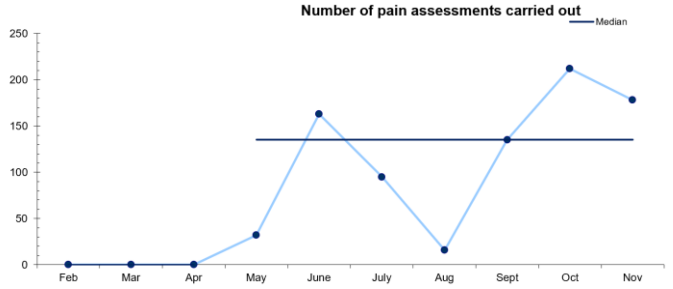
Scoring Domains

- Facial analysis
- Behavioural
- Activity
- Voice
- Movement
- Body

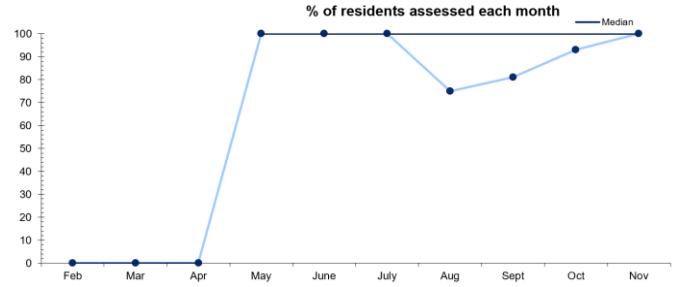
PainChek: Ease of use

The number of staff competent to complete pain assessments increased from 9 to 27 with assessments now being seen as the responsibility of the wider care team

Baseline data highlighted 0 documented pain assessments; 831 pain assessments completed in the 6 months since PainChek® introduced (median of 135 assessments per month)



Median of 100% of residents now have had at least one pain assessment per month



PainChek: Medication

Analgesia
22% reduction in prescribed rate

Laxatives
24% reduction in prescribed rate

Other psychoactive medications
No significant changes - low prescribing rates

PRN (when required) medications

- 4 people who had prn analgesics prescribed and used in both baseline and test periods - in each case the rate of use was significantly changed in test period. The average change was 51%
- 4 people who were prescribed but rarely given prn analgesia in baseline period. In each case the pain scores at the start of the test period indicated low or no pain, and the analgesia was discontinued

Impact: Quality of life

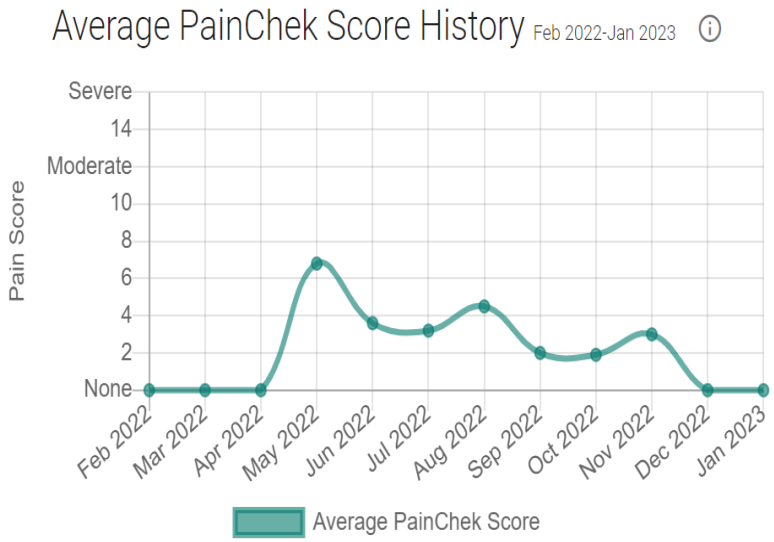
Falls
Initial reduction (first 12 weeks) of 75%
Overall reduction (24 weeks) of 42%

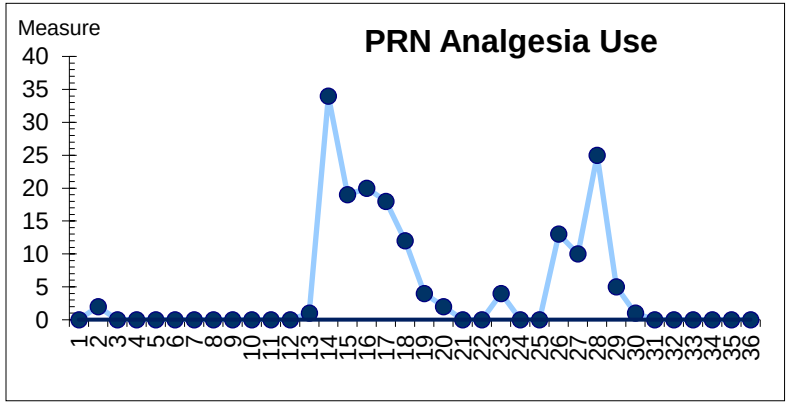
Stress and distress
Initial reduction of 42%
Overall – no change

Body Mass Index (BMI)
Half of residents had an increased BMI at end of project

Dependency
Half of residents had a reduced dependency score at end of project

Case Study – Resident A





Baseline Period	**Test Period**
6 stress and distress incidents in 12 weeks	4 stress and distress incidents in 24 weeks

Key learning from Phase 1

- The impact of sector challenges
- Current practice around pain assessment
- The benefits of digitally maturity
- GP engagement where pain assessments inform prescribing
- Relationship building throughout the project

Phase 2

- Upscale the use of PainChek to test in different contexts
- Test in different user settings, service types, user groups and geographical locations.
- User groups: Adult learning disabilities, older adults not requiring nursing care, adults with substance dependency, adults with autism and adults with mental health conditions
- Service types: Local authority, independent providers, and voluntary sector

Phase 2
Service Engagement stage

- Working closely with the Care Inspectorate's scrutiny teams to identify services
- Early engagement with services, GPs, social work and inspectors
- Engagement webinar and on-going in person support
- Monthly data review to identify when additional support may be required
- When required in person support from the project team throughout phase 2

Phase 2 – timeline

- Phase 1 – **Identification and agreement from services.**
  September 23
- Phase 2 - **Training and onboarding – rolling programme**
  October to March 2023
- Phase 3- **Live test period**
  November 23 to September 24
- Phase 4 **Reporting**
  Reporting throughout the duration of the project
- Phase 5 **Evaluation and key learning**

Thank you

social care
institute for excellence

If you or your colleagues haven't done so already, why not register for SCIE's occasional newsletter, SCIELine

https://www.scie.org.uk/myscie/register

scieline

www.scie.org.uk