

# Technology Implementation in Care at Home Services Summary Report

IMPACT Facilitator Project 2022/23 (Scotland)

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## Background

The IMPACT Facilitator project in Scotland, 2023-2024, was focused on the implementation of technology in care at home services. It was based in the host organisation, Baillieston Community Care, with the Facilitator working alongside the Scottish Care technology project, specifically their Care Technologist role. IMPACT Facilitators support bottom-up change. They are hosted within a local organisation for a period of one year to deliver an evidence-informed change project, responding to local issues. Drawing on evidence from research, lived experience and practice knowledge, Facilitators co-design a local project, review evidence of what works, and work with diverse stakeholders to implement the project in practice. Findings and outcomes are then shared with others for learning and replication across the sector.

#### The host organisation

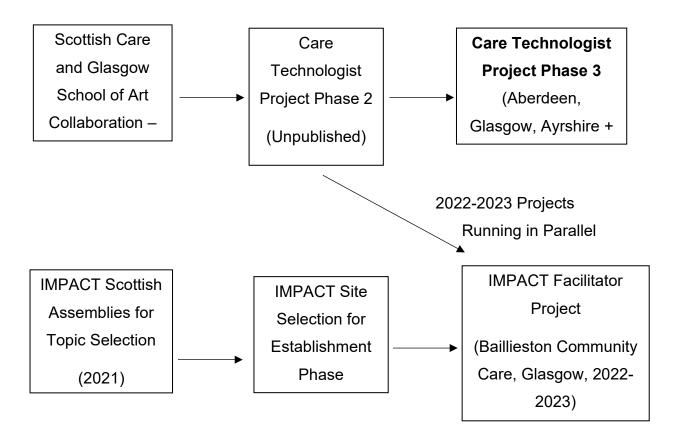
Baillieston Community Care is a care at home service in Glasgow, which acted as the host organisation for the Facilitator during the project because it was also hosting a Care Technologist from Scottish Care. This new role had been piloted previously to promote the use of technology. The Care Technologist Project (Scottish Care) was therefore the second trial of this role, across three care-at-home sites and care homes. Running the IMPACT Facilitator project alongside the work of the care technologist in Baillieston afforded the opportunity to explore in more depth how the technology was working in practice; what people accessing care want from technology, the long-term viability of a specialist role within an existing home care staff team. The diagram on the next page demonstrates the backgrounds of the Care Technologist and the Facilitator projects.

#### The role of the Facilitator

The Facilitator's role was primarily that of knowledge brokering – where the evidence is communicated to encourage use in practice. In this instance seeking evidence to understand what supported and hindered implementation of technology in care at home services. Evidence came from Scottish Care's pitot work; the existing evidence base across Scotland and the UK. It also required the need to understand the policy landscape around the use of technology in care.



# <u>Diagram of the project backgrounds and development of</u> both Care Technologist Project and IMPACT Facilitator Project.



#### The technology used

The Care Technologist Project used a variety of off-the-shelf technology during the project, the implementation of which was an important factor for understanding what helped or hindered use of technology as part of care at home services. The technology included items such as Amazon and Google voice assistants, voice-activated lightbulbs and blinds/curtains robots, ring doorbells and quality of life enhancing devices (e.g., robotic pets, or bone-conducting headphones). The technology was given to people participating in the project for free and was available for people to keep. These devices differ from telecare devices because they are available for the general public to buy, whereas telecare devices are installed



through the local authority and function as part of an existing care package through a council.

### Preliminary evidence reviewing

This included the evidence held within Scottish Care on the use of technology in care and their pre-project work and consultation to develop the Care Technologist role, see for example <a href="https://futurehealthandwellbeing.org/future-of-care-at-home">https://futurehealthandwellbeing.org/future-of-care-at-home</a>. An earlier, unpublished pilot project report had sought the views of twenty-three people who engaged with the project. This showed the potential for off the shelf technology to improve everyday quality of life. The IMPACT Facilitator conducted a literature review which included grey literature, academic evidence and relevant policy documents in order to understand the current landscape in care at home. This touched on evidence around how technology works with different demographics but also how the wider care sector aims to be digitised in line with the Digital Health and Care Strategy (2021) by the Scottish Government.

#### Results of the literature review

The literature review highlighted several important barriers to the implementation of technology. These included a lack of large-scale evidence concerning outcomes and impacts of technology on people accessing care at home, but also emphasised the importance of considering regional differences and practices when focusing on implementing technology. There were also few cost-effectiveness evaluations of technology in care at home, along with regional differences between available technology types, practices, assessment and care contracting procedures. These factors all have implications for using technology in care at home services. Some studies looked at specific views of technology, for example the suggestion that some older people preferred adjusting current technology to suit themselves rather than using specific technology that had been designed for the older demographic (as that was viewed as more stigmatising). For example, this means adjusting the accessibility of existing technology like phones, so that the buttons are larger, the text is larger, and the ringtones are easier to hear rather than specific technology for

# "Good support isn't just about 'services' – it's about having a life."



older individuals (some of these exist, which are 'simplified' phones for older people with larger buttons and fewer applications).

Conversely, some literature around personalised technology use for specific demographics (such as technology-enabled homes for individuals with learning disabilities and chronic conditions) showed promising results, though these studies needed to be replicated in the UK. The evidence in the literature suggested the strongest case for technology improving independence, in particular for people living with chronic illnesses and learning disabilities, and individualised technology.



# **Facilitator activities**

The Facilitator role in Scotland covered a range of areas following the abovementioned evidence review:

#### **Understanding the landscape**

The role of the Facilitator was to aid the implementation of evidence into practice and understand how technology was fitting into Baillieston care at home service by speaking to their staff, people accessing care, and wider stakeholders. Some participated in interviews and focus groups, whilst others were engaged with online surveys. The below table summarises who the Facilitator spoke to, and how:

Who did we speak to?	How?	How many?
Care at home staff at	3 Surveys (1 initial, 1	44 completed in total
Baillieston Community	understanding feelings	
Care	around technology, 1	
	about training	
	preferences)	
Care Technologists	Regular meetings	4
Social Work Scotland	Focus group	
Local	Interviews	2
Authority/Government		
People Accessing Care	In-person, open meetings	4
	alongside a Care	
	Technologist	
Care Organisation Leader	Interview	1
(at Baillieston Community		
Care)		

These activities sought to understand people's experience with technology on multiple levels: as a member of care staff, lived experience as someone using technology to help with their home care, as a member of a local authority or



organisation (e.g., local council or professional leadership body) or as the person delivering and implementing the technology. The surrounding infrastructure of technology in care at home services, as well as the personal experiences of individuals, was core to understanding the landscape as a whole.

#### **Developing resources and working with Baillieston Community Care**

The Facilitator sought to contribute to the aims of the host organisation in terms of use of technology in the service. Consequently, from their conversations with people accessing care, the Facilitator developed three case studies to demonstrate what helps and hinders the implementation of technology in care at home settings. Additionally, in conjunction with the Care Technologists, resources are in development for staff to understand the available technology for individuals and troubleshooting with these pieces of technology. The Facilitator also collated and forwarded information on staff training for Baillieston Community Care, alongside making connections to other organisations using technology in care.



# Local theory of change

A local theory of change was conducted with the host organisation, Baillieston Community Care, to draw together their aims for the IMPACT Facilitator project, and how they would like these aims to be achieved. This theory of change noted this down in the form of the background to these goals and their justification, the main activities desired to work towards these aims, and the key outputs, or desired products, from these activities. Benefits of these activities and goals were also noted for a wider context. The following section summarises the theory of change with host organisation.

#### **Background**

The local context was identified by Baillieston Community Care as an opportunity for introducing technology in the service, for clients (to enable individualised care) and for staff (to complement the support provided). Nationally, there is inconsistent usage of technology and geographical differences, with no coordinated approach to successful implementation and a lack of data on the topic. There is a need to understand what works and does not work for individuals but also in the context of a service. Understanding the acceptance, the response to, and the preferences of people and staff would greatly improve the sustainability of introducing technology. Bailieston wanted to identify what helped and hindered the use of technology in care at home, but also to contribute to changed outcomes for people who use the service and support the development of a new service model. This goal was coupled with the assumption that an understanding of why peoples' views and choices around technology needed to be gained, along with determining if a distinct route could be used to include more technology options in care.

#### **Main activities**

The theory of change planned activities included discussion with the host organisation and Scottish Care staff and people accessing care, as well as locality team managers. Other intended activities included a survey or focus group with care at home staff, shadowing and observation of a Care Technologist, the development



of case studies, discussions with external stakeholders and desk-based evidence gathering. Both internal and external staff were expected to participate.

#### **Key outputs**

The theory of change created with Baillieston Community Care identified key outputs as being individual case studies of what helps and hinders technology implementation, the development of a digital demonstration hub at Baillieston Community Care, the new role of Care at Home Technology Champion at Baillieston Community Care, and the development of a rolling programme of staff training. A Digital Champion (or in this case, a Care at Home Technology Champion) refers to an individual in an organisation who has undergone training on technology and digital assets who can then act as a point of contact in a service for staff or individuals accessing the service to ask questions to. There are several organisations who run these programmes, such as the Scottish Social Services Council.

#### Benefits in medium term (e.g., 3 years)

The benefits in the medium term are intended to be a more confident and knowledgeable staff team, increased use of technology, gauge of interest in the sector for a digital technology competency framework for staff development, and national networking for the development of a technology hub.

#### Benefits in long term (e.g., 5 years and beyond)

Baillieston Community Care identified long term goals as the potential for the organisation to contribute to competency frameworks around technology, and for technology to become embedded as a routine part of the care at home service. Baillieston Community Care recognised the potential of technology to support new clients, such as those in remote areas, and also those with complex needs.



# What have we learnt?

#### The wider implementation landscape

Based on the literature and evidence gained through the Facilitator Project, systemic factors appear to play a role in many of the challenges that are faced when implementing technology in a care at home organisation. This includes the fragmentation seen across the sector and between organisations - many care at home services operate independently of each other and span public, private, independent and charitable organisations. This means that information sharing between organisations, and even for a single individual accessing care, is not easy. As a result, technology that is placed in someone's home can interfere with other services without this being initially recognised, which reduces the immediate effectiveness of utilising the technology. On a wider geographical level, each council area has different procedures and assessments for care, which in turn affects the implementation of technology and means that there is not a consistent way to provide technology or practices around it. A unification of practice and protocol standards for technology may help this barrier to be somewhat alleviated, along with inclusion of technological solutions in assessments for care (for example, looking first at a care assessment to see where technology might be able to help someone, without compromising the human connection that carers bring).

#### Individualisation of technology

Both in the literature review and in practice, one of the key learning points from the project was the importance of personalisation of technology options. This was also one of the core successes for people accessing care and for the implementation of technology, during both the Facilitator Project and the Care Technologist Project. When meeting with people accessing care during Facilitator project, individuals mentioned that the technology they were using helped them feel more comfortable and more independent in their own home, and that it alleviated some of the burden that they felt relying on carers. Moreover, people mentioned that the technology "makes the things that aren't designed for disabled people in life less burdensome



and easier to overcome," and that they felt "safer at night being able to control things from bed" using voice-assistants like Amazon or Google assistants.

#### **Quality of technology devices**

Another key learning point in the project has been the importance of ensuring that technology installed works to an adequate standard. During the project, people accessing care mentioned that things going wrong was fairly common, usually solvable, but frustrating (e.g., voice assistant connected lights turning on and off by themselves, "it was like Halloween!"). Thus, glitches or things going wrong for people accessing care are an aspect of technology implementation that must be included in the planning and provision of technology. The ongoing support from the Care Technologist allowed someone to check if the devices were working and report problems to get them fixed, without which a piece of technology may be abandoned if found frustrating or not working. This also has some implications for the quality assurance of devices – to ensure the best experience for the individual, some way of confirming that devices conform to human rights and safety/usability standards (e.g., perhaps similar Portable Appliance Testing).



# What impact have we made?

# For Baillieston Community Care

There were several important impacts made for the host organisation. The following table displays what work was done in relation to the aims of the organisation:

Area of work	Theory of change	What difference was made
Case Studies	Develop case studies	Three case studies were created which
	to exemplify what	told some of the stories heard during
	works and does not	the project and opportunities and
	work in technology	barriers of technology implementation
	implementation in care	for people accessing care.
	at home.	
Demonstration	Development of a	The leader of Baillieston Community
Hub	Digital Demonstration	Care was given a tour of Leuchie
	Hub for individuals to	House, a respite charity in Scotland,
	come and try	aiming to become a National Centre of
	technology before	Excellence in the Provision of
	using it at home.	Technology Enabled Care. The Care
		Technologist Tech Catalogue also
		allowed Baillieston Community Care to
		begin scoping the types of technology
		to place in a hub, and funding is being
		applied for to create the hub in-house.
Digital	Creation of the new	Training courses to enable Baillieston
Champions	role of Care at Home	Community Care to put staff forward for
	Technology Champion	established courses on becoming a
	at Baillieston	Digital Champion were distributed to the
	Community Care.	leader of Baillieston Community Care
		for future investment. Information on
		what these training courses can provide



		to contribute to this role was also
		included.
Staff Training	Development of a	The Care Technologist Tech Catalogue
	rolling programme of	was decided the best way to distribute
	staff training.	information to staff about technology,
		through meeting with the Training and
		Development Coordinator at Baillieston
		Community Care and the resident Care
		Technologist. It was thought that
		training at present would not be
		possible due to capacity in the staff
		team, therefore an information-leaflet
		form was preferable. A rolling
		programme of staff training was
		unfortunately not developed during the
		timeframe, though it is thought that this
		will take shape in the coming years. To
		help shape this upcoming development,
		the Facilitator engaged 15 staff in a
		survey asking people what they would
		like from technology training and what
		they would like to see included.

#### For staff at Baillieston Community Care

Feedback on how staff felt about technology and what they wanted from technology training was passed directly to the head of the organisation to give direction to future training and innovations in the organisation. To help staff understand what technology was available, what common problems there may be with the technology and identify some types of technology already in people's homes, the Tech Catalogue written by the Care Technologists is undergoing a repurpose for staff. This detailed all types of off-the-shelf products used by Care Technologists during



the project, and as such it was decided that an edited form of this booklet would be useful for helping staff understand options. Alongside this catalogue, details of training for a Digital Champion at Baillieston Community Care were passed on to the organisation with a hope that a member of staff may be put through to become a 'point of contact' for technology queries. The aforementioned interventions are aimed at helping staff become more knowledgeable about technology, but also more confident in navigating technological solutions (either working with, or around) in their everyday professional activities.

The development of a digital demonstration hub and a rolling programme of staff training was not achieved during the time of the Facilitator. However, it is hoped that the project has allowed the organisation to begin its journey into technological development, with the foundations set for successful placement of a Digital Demonstration Hub in future. The timeframe for this to happen is beyond the scope of the Facilitator project, though with the technology catalogue, the referral for Digital Champions training, the feedback from people accessing care, and the feedback from staff, the next steps for physically setting up training and a demonstration centre are clearer. The organisation has a list of technology which can be used going forward and have managed to gain some funding to begin working on the demonstration hub – a project which may be continued in the coming years and allow technology to be tested by people looking to include it in their home before they purchase it.

#### For people drawing on care and support, and families

The experiences of three people accessing care working with a Care Technologist were compiled into case studies which exemplify what works and does not work for people accessing care and technology. This included a section to note the learning points for each case study. The case studies highlighted how technology has a place in care at home and could improve lives so people felt more in control of their everyday surroundings. They also underlined how the individual and everything that impacts their life remains central to the use of technology in social care. Whilst the impact on families was not specifically captured in these case studies, reports from Care Technologists across the three regions (Ayrshire, Aberdeen and Glasgow)



have mentioned how people accessing care are able to contact their families and friends more using the technology installed.

#### For wider implementation

The learning gained which contributes to the wider implementation of technology in care at home will be invaluable to future projects in the sector. A thorough understanding of technology implementation in care at home services in Scotland was gained during the project, from which implications for improving sustainability and scalability of projects can be drawn. These include what people accessing care liked about the technology, their preferences on how it is implemented (and the value of personalisation), how technology implementation involves different services and therefore implications of how these work in conjunction to ensure there are no individuals who miss out on opportunities to improve their life at home. Furthermore, the project highlighted some key topics for consideration in future policy and practice, including how technology is quality assured, and ensuring standardisation with practice guidelines. Moreover, the importance of individualised care and personalisation was emphasised during the project and was influential in the success of the Care Technologist role. This is a crucial aspect of both the Facilitator and Care Technologist projects, and it is hoped this will become embedded into technology implementation.