



Summary

Care Messenger's innovative Chatta TV project aims to reduce social isolation and loneliness among elderly care home residents in South Lanarkshire by using smart TVs as a digital communication hub. By connecting residents with their families, befrienders, and healthcare professionals, the project enhances wellbeing, strengthens social bonds, and delivers operational efficiencies for care staff. The initiative aligns with the Glasgow City Region's strategic priorities of connected care and wellbeing while demonstrating scalable and sustainable care solutions.

Introduction to Care Messenger TV platform. Watch the Care Messenger case study video.

Introduction

Context and Rationale

Elderly residents in care homes often face significant barriers to digital communication, with many unable or unwilling to use smartphones or tablets. This lack of connectivity increases social isolation and reliance on care staff for emotional and social support. Loneliness among older adults is as damaging to health as smoking or obesity and contributes to higher levels of anxiety and healthcare dependence.

The **Care Messenger Chatta TV** project offers an intuitive solution by utilising familiar technology (smart TVs) to bridge the gap between elderly residents and their families. This approach empowers residents to maintain meaningful connections, while simultaneously reducing staff workloads and improving care outcomes. Chatta TV allows families and healthcare providers to send messages, photos, videos, and video call (from the Chatta mobile app or Care Messenger Manager portal) direct to the TV overlaying the content so messages and incoming calls cannot be missed. The solution is a powerful application for connectivity including 5G in social care.

Project Objectives

- Reduce Social Isolation: Strengthen connections with family and friends through accessible video calls and messages.
- Improve Wellbeing: Enhance residents' engagement and reduce anxiety levels, improving overall mental health.
- Streamline Operations: Deliver efficiencies in care management through digital communication channels.
- Promote Scalability: Provide a replicable model for reducing social isolation across care settings in the region.



Background Statistics / Supporting Data

- Social Isolation: Studies show that 80–90% of panic button calls from elderly residents are social rather than medical emergencies. Vilente (2024). An analysis of 11 studies found that 61% of care home residents experience moderate loneliness, and 35% experience severe loneliness. According to Christina R Victor's thesis (Ageing Health, Brunel University 2012) care home residents report rates of severe loneliness that are more than twice the rate of people in the community. According to Age UK, 1.4 million older people in the UK experience loneliness often.
- Health Impact: Loneliness increases mortality risk by 26% and exacerbates health conditions such as depression and cardiovascular disease. (Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review by Holt-Lunstad, Smith and Stephenson 2015).
- Technology Adoption: The familiar interface of TVs makes them an ideal medium for engaging elderly residents who struggle with other digital devices while including them in the digital world (CM requires fibre or 5G to run).

National, Regional and Local Context

Scotland's recent Census 2022 (see diagram below) has highlighted our increasing 65 and over population – more than 1M for the first time. South Lanarkshire 65 and over population increased by 25.2% - significantly higher than Glasgow City Region 18.1% when comparing with Census 2011. Projected to increase by a further 20-25% by the next Census 2032. Digitally connected solutions are essential to address growing demand in a safe, timely and effective manner – truly bringing together technology and positive social impact outcome.

POPULATION IMPACT PAST, CURRENT AND FUTURE 65+

1	Scotland's 65 and over population, 2022 Census, is now 1091100 20.1%, over 1M for the first time. National Records Scotland (NRS) 2023 mid year estimate is 1114490 20.3%. The 65 and over population is estimated to grow to ~1318729 by 2033.						
2	Glasgow City Region (GCR) 65 + population is growing at a slower rate of than Scotland's - 18.1% (22.5%). Glasgow City HSCP increased by 6.0% - significantly lower than both Scotland and GCR trend increase.						
3	Significant variation in GCR Health and Social Care Partnerships (HSCPs) 65 and over population trends – from +28% across East Dunbartonshire HSCP (EDUN) / East Renfrewshire HSCP (EREN) to +6% across Glasgow City HSCP.						
Population 65 and over		2911 Census	2022 Census	Trend Number	Trend %	65+ % of Overall Pop	2033 Estimate*
Scotland (SCOT)		890334	1091100	200766	+22.5%	20.1%	1318729
Glasgow City Region (GCR)		281397	332400	51003	+18.1%	18.0%	399212
East Dunbartonshire (EDUN)		20428	26200	5772	+28.3%	24.0%	
East Renfrewshire (EREN)		16280	20900	4620	+28.4%	21.6%	
Glasgow City (GCC)		82165	87100	4935	+6.0%	14.0%	
Inverciyde (INV)		14776	17600	2824	+19.1%	22.4%	
Renfrewshire (REN)		29506	35700	6194	+21.0%	19.4%	
West Dunbartonshire (WDUN)		14916	17600	2684	+18.0%	19.9%	
North Lanarkshire (NLAN)						17.01	
North I	Lanarkshire (NLAN)	50383	61000	10617	+21.1%	17.9%	

Wednesday, 19 March 2025

Chatta TV fully aligns with Scotland's Recovering our Connections Strategy 2023-2026 Strategy – the delivery of a Connected Scotland through tackling social isolation and loneliness supporting the delivery of strategic outcomes – reducing Social Isolation and Loneliness (SIAL), reducing harm caused by SIAL and ensuring that positive outcome is widely shared across local and national settings. It is a powerful way to introduce and include an elderly audience in the digital world with a meaningful application that necessarily utilises connectivity and 5G.

Approach

Project Approach

The following key activities were undertaken;

- 1. Cultural Onboarding: Provide live system demonstrations and training for care staff, residents, and families.
- 2. Family Engagement: Train families to use the Chatta app for seamless connectivity with their loved ones.
- **3. Befriender Integration**: Pair isolated residents with befriending volunteers for weekly digital interactions.
- 4. Managed Service Support: Introduce memory stimulation content, quizzes, and factoids to enhance engagement.
- 5. Impact Evaluation: Conduct structured interviews and focus groups to assess the system's effectiveness.

Technology Features:

- Video calls and messaging directly on the TV screen.
- Easy-to-use interface requiring no prior technical knowledge.
- Integration with IoT platforms for future scalability.

Project Overview

Timeline: October 2024 – March 2025

1 October–November 2024

Stakeholder engagement, training, and preparation for installation. A late switch of host location and new engagement with a different HSCP who subsequent 'fast track' their processes within South Lanarkshire Council (including legal and DPIA requirements) delayed the Phase 1 project start date by a month to January 2025.

December 2024

Install Chatta TVs, onboard users, and connect families. Due to the HSCP governance process, this phase was delayed until January 2025.

February–March 2025

Analyse outcomes and report findings to stakeholders.

Key Milestones:

- November 2024: Training and stakeholder engagement completed. Due to the change in location, this milestone was extended and met early January 2025.
- December 2024: Chatta TVs operational in circa 20 care home rooms. Due to the council approval processes (as above) this milestone was extended and met mid-January 2025.
- ► February 2025: Interim analysis shared with management.
- March 2025: Due to success of the initial phase, all rooms across the Care Home was fitted with Chatter TVs. Final report delivered with recommendations for scaling.

Project Partners:

- South Lanarkshire Care Home Environment: David Walker Gardens. Testing site and participant provider.
- LG: Global TV manufacturer supporting Chatta system integration. The project was fully supported by LG's European head of healthcare offering special rates for the TVs. LG support CM at the highest level in their Korean HQ, as an approved application integrated with their operating system.

Location Change Challenge:

- Due to the change from our original location site, further investigation was required for assessing and establishing the suitability of connectivity in the new target care home site.
- There was no need to deploy external 'befrienders' from an external befriending agency like 'Adopt a Grandparent' as SLC's David Walker Gardens care home was already deploying SLC approved befrienders whom we could work with.

Expected Outcomes and Impact

Measurable Outcomes:

1. Wellbeing Improvement: A 25% increase in residents' perceived wellbeing as measured by the UCLA Loneliness Scale. Evidence of Care Messenger's effectiveness is captured in three independent written studies from Loughborough University (with Nottingham Community Housing Association), Northumbria University (with North Tyneside Council) and Ampersand. There is also written endorsement by the leading innovative Dutch care operator Vilente where CM is part of a collaborative partnership for next generation care based on a cost benefit model using technology to achieve efficiency.

[additional reference material can be obtained from Care Messenger]

- **2. Social Connectivity**: Increased frequency and quality of interactions with families and befrienders.
- **3. Operational Efficiencies:** Reduced care staff time spent on facilitating resident communication.



Broader Impacts:

- **Health Equity:** Reducing disparities by providing low-barrier digital communication.
- Care Integration: Supporting models like Virtual Ward and Hospital at Home to enable communitybased care.
- **Scalability:** Demonstrating a replicable model for addressing social isolation in other regions.

Measuring Success:

- Resident wellbeing tracked through structured interviews with residents and families.
- App usage metrics to monitor engagement levels.
- Qualitative staff feedback on operational improvements.

Sustainability Plan

The Chatta TV platform ensures long-term viability through ongoing user engagement and integrated hardware/software solutions.

Key Strategies:

- **1. Hardware Longevity**: Smart TVs and Chatta software will remain operational beyond the project's completion.
- 2. Volunteer Support: Partnerships with the care home, HSCP and DWG's own befriending agencies provide continued social engagement.
- 3. Broader Rollout: Collaborations with a range of broadband partners selected by local authorities for full care home or social housing coverage will support regional scalability. Where the 5G coverage

is strong, 5G is also a possibility for both primary and backup connectivity.

4. Cost Efficiency: Demonstrated savings from reduced staff time and improved resident health outcomes will justify expanded implementation.

Approach

David Walker Gardens (DWG) care home currently accommodates 41 residents in total at different stages of vulnerability (seven of the 48 rooms were vacant). Some of the residents had families living abroad e.g. in Dubai, Australia, and Canada with whom they had little contact.

DWG felt that the Chatta system would be able to connect these service users with families living at distances which they had not been able to enjoy pre-Chatta and felt they would be able to gauge how this contact increased the resident's wellbeing and sense of 'inclusion'.

Other residents without actively engaged families had SLC approved befrienders and DWG felt Chatta would significantly enhance the quality and regularity of communication with these befrienders. DWG were also interested to see how the system could help more vulnerable residents who may not be able to operate the buttons on the remote to interact with incoming calls or photos and videos from family, but for whom carers could accept video calls and help share photos. To that end and with these baseline positions, DWG identified 18 target residents for the pilot (44% of the care home) excluding only those who were either seriously ill, did not use their TV, or were at the more extreme end of the dementia spectrum.



Almost none of the residents at DWG were currently using the internet. Senior carers at DWG reported that during the COVID pandemic and subsequently, they had tried to use tablets to remotely connect residents with their loved ones, but the residents struggled with these devices and needed total supervision from staff to operate the devices which was very time consuming and not the best experience for the resident. The staff envisioned (evidenced in the evaluation) that video calling on TV would be a much smoother, efficient experience for all parties.

Since the Chatta TV solution required connectivity to work, this was **a great opportunity to evidence the**

transformative impact of fibre or 5G on an elderly demographic who would not otherwise have access to the herefite but using a device the wave already

to the benefits but using a device they were already familiar and comfortable with.

DWG were meticulous in both engaging with families to secure their support and permission for loved ones to take part, and in 'setting the scene' and helping vulnerable residents to understand and be comfortable with the 'change' (a new TV and a new system of communication they had never seen before). This meant the installation process itself was swift and non-onerous. DWG also assisted working in partnership with CM to arrange short 'induction' sessions (in-person and online) for families.

TV embedded or Set top Box

It is worth noting that CM had in previous years used a set top box (STB) to plug into any existing TV with an HDMI connection, but this had been less successful and while CM still could offer an STB solution, the TV embedded version had proven to be the most popular and successful for a number of reasons:

- An STB plugged into an existing TV could easily be unplugged with potential loss of service.
- Using an STB meant using two remotes (one for the existing TV, one for the STB) which was more difficult for the elderly user.
- Using a professional networked LG TV with Chatta embedded for all residents meant more efficient management and maintenance (TVs can be remotely accessed, tuned, fault diagnosed and maintained including firmware upgrades – this is not possible using an STB).
- Some key features (like auto switch-on) would not be possible with the STB option when the resident's TV was not part of the Chatta support protocol and in many cases not even a smart TV and not networkable for remote access as LG professional TVs are.
- There was little difference in the price of an STB against a high end 4K UHD TV (used for Chatta) so it was better value for money to go for the full TV embedded version.
- Using the TV embedded version was, for at least 95% of elderly users (who are the largest consumer group of TV), a superior TV experience (better picture definition and clearer audio to what they had on their old TV).
- Using the TV embedded version uniformly across a care home, housing association, or domiciliary provider, also capitalised on the benefits of connectivity and 5G in allowing remote access and maintenance of the TVs creating efficiencies for all stakeholders.

Collaborative Design

CM provided a 'suitability checklist' from previous experience to assist DWG in their choice of residents to participate in the project. DWG identified 50% of residents who could use the system completely independently and 50% who would still gain benefit from it (including those with some cognitive impairment) if the carers assisted. This latter category was a group we had not previously envisaged CM as targeting, but DWG took this 'in their stride' and **immediately saw how CM** would be a much more effective resource than using a tablet or a smartphone which in the past had seized swathes of staff time who had to sit with service users to operate the tablet for the duration of the call (if there was a tablet available and charged).

DWG felt that having a Chatta TV in individual rooms meant that worst case carers would (for the more vulnerable 50%) just need to press 'accept' when a call came through (calls may also be pre-arranged) and would then be able to leave the service user in privacy to talk to their family while they attended to other pressing work – the call would automatically revert back to the TV content the resident was watching at the end of the call.

DWG staff also envisaged being able to assist more vulnerable residents so they would be able to view photos and videos their family had sent them on their TV. Thus, before we commenced the project, during preliminary planning, DWG anticipated that the CM system would both increase the wellbeing of the resident and be more efficient and saving of staff time than using a tablet or smartphone.

In parallel with the DWG as our host care home partner, The Digital Health Institute (DHI) met with our independent consultant, a former ambassador to the Campaign to End Loneliness, to agree the evaluation approach including the format and timing of the structured interviews (results and data attached to this case study as Annex 3) and how evidence would be collected.

Implementation

Three of the five months of the project were taken up with selection, approval and compliance processes (legal and DPIA) leaving three months to ship, install, 'culture embed', train, run, and then evaluate. The approval process was faster than had been predicted elsewhere (four months). As it was, **the engagement and support of the South Lanarkshire Council and South Lanarkshire University Health and Care Partnership team under the leadership of the HSCP's Chief Executive reacting to such a tight time frame, was remarkable and critical to the project success.**

A revision of the approvals process for innovation projects in the future or elsewhere may result in a reduced governance compliance period. Equally with clarity over expectations of all parties, the governance process could be run in conjunction with implementation to increase deployment speed.

The professionalism and leadership of DWG meant that we were able to recoup some of this time. The selection and sensitive informing of the residents; the pre-engagement of families to secure their support and involvement; allowing us to use the Cinema Room as a 'staging' base for hardware commissioning; working with us to minimise disruption to residents by arranging an install timetable that coincided with most of the participants being out of their rooms at lunch or dinner; ensuring that most of the DWG staff (>45 including domestics as well as carers and even catering staff) were appraised of the Chatta TV project and attended one of eight 'project introduction' sessions so that they would be able to support participating residents where needed; contacting families to arrange in-person or online 'induction' slots in partnership with CM; all of this helped to make the implementation process efficient and largely without issue.

In two cases residents had a technical problem with their TV aerial (which would have created a problem for any TV, not only Chatta TV) where the programme content stream was buffering or corrupted. When DWG approached the council (who have the maintenance contract for this) to fix the problem, they were told it was not an emergency, and it might be April before they could send someone to replace the cable or repair the broken aerial box. To expedite the issue (knowing the project was formally due to complete by March) CM supplied and fitted a replacement cable and agreed with DWG to rearrange the layout of the room so the TV could plug into an alternative working aerial box.

Given the demographics of the participants, it was agreed (between CM and DWG) to allow a full week for users within the home to get used to the new TV before presenting any messages or video calls and we would use this time to more fully 'onboard' the families. Given LG Chatta TVs are 43" and 4K, UHD professional units, they were in almost every case a better experience than residents' existing TV: larger; better quality picture; clearer audio, and a remote with larger buttons for easier navigation.

Evaluation Framework

Watch a short video of Chatta TV at David Walker Gardens.

Key Insights

It became clear during the project, and evidenced in the independent evaluation, that there were multiple ways that the Chatta TV system could be used between the relevant parties (resident, family member, carer) all adding value to the care delivery service:

- 1. Residents operating the Chatta TV system independently to open, read and respond to messages and access photos and videos or accept video calls from families and carers - an interactive and engaging experience they had not been able to enjoy before Chatta was installed.
- 2. Where residents were more vulnerable or with a degree of cognitive impairment, families would send photos or videos ahead of their visits and open this content on their Chatta TV when they were there in person with their loved ones. They used this content as the basis for their discussions to interact with it - families reported that seeing this 'writ big' on TV was a much better experience for both resident and families than sharing on a small smartphone as they used to do (they reported that viewing photos on a small mobile phone screen made little impact on their elderly loved ones as they struggled to make out the images). It brought things 'to life' ('life size' as the carers put it) and as the evaluation shows, the residents would 'light up' and engage with this content. Where families were geographically distant and unable to regularly visit, they could send photos and videos to the TV and the residents themselves, or the carers could open these for them which would spark a lively discussion.
- Where no family support was available, carers (or befrienders) would also send photos of topics of known interest to the residents (e.g. cats, cycling, the Royal Family etc) or open quiz questions sent to the Chatta TV and use these to interact with residents

 as the evaluation shows this would increase the engagement of the residents, stimulate, and 'include' them.
- Where family members lived more remotely or even 4. abroad (e.g. in Dubai, Australia, Canada) residents could see and hear their families including grandchildren on the 'big screen' with an **'incoming video call'.** Some residents with one click of the remote could accept the call themselves or the carers would accept the call on their behalf. As the evaluation shows, carers commented on how they wished they had had this system during Covid as it was so much easier and more efficient to use. Previously, to make it possible for residents to have a video call with their loved ones (most residents did not have or were not familiar with smartphones or tablets), staff would have to bring in a tablet or smartphone and sit with the resident holding it for them or they would turn it the wrong way, push the

wrong button and lose the live call. With Chatta TV the staff only needed to push the 'OK' button on the remote to accept the call on TV and then leave the resident in privacy with their family member on the call. The larger TV screen meant the quality of the experience was so much better for the resident (bigger screen, clearer audio) but it also meant it saved time for the carer who could get on with other things while the call was in progress.

5. Care staff also commented on how they could use the system to gauge feedback on services by sending multiple choice questions to the TVs e.g. "what did you think of dinner"? Or "what did you think of the entertainment today"? And they could more efficiently alert all the residents about activities or events of the day with a simple message on their TV.

5G Router option

Although SLC had fibre available in all rooms (which worked well for Chatta TV even though staff reported common issues trying to get online with their laptops for non-Chatta activity), a 5G router option was trialled in two rooms. This demonstrated (a) the speed with which 5G connectivity could be provided to a resident to support Chatta TV if required (same day up and running) and (b) the possibility of using 5G as backup to the fibre network if there was a loss off service. However, the 5G signal in the DWG area was poor and inferior to the fibre reducing the quality of service (particularly for video conferencing) for Chatta TV. This flagged up an important issue: while 5G could be quickly implemented (compared to for example equipping a care scheme with fibre if not already in place as it was in DWG), the success of its deployment depended heavily on the strength of signal where the project was taking place.

Stakeholder Feedback

Rebecca Thompson, former national Ambassador for The Campaign to End Loneliness, has experience working in adult social care for Northumberland County Council carried out an independent evaluation in collaboration with the Scottish Digital Health & Care Institute. (Full findings can be obtained from Care Messenger. The following represents highlights from Rebecca's independent evaluation report).

Metrics

From the point of completed installation and following family inductions (late January) to the start of the independent evaluation (Feb 22nd):

- ► 173 unique messages had been sent by stakeholders to residents' Chatta TVs.
- 16 family members had successfully downloaded the Chatta TV app and were using it to share photos and videos or initiate video calls.
- ► 95 video calls had been made, including international calls from Dubai, Australia, and Canada.



sent

successfully downloaded Chatta TV

DWG Resident responses

Five residents were interviewed directly. Three with a degree of dementia or cognitive impairment were 'observed' reacting to the system with assistance in operation by the carers.

Of those interviewed directly, 80% of the respondents said that **Chatta TV made their TV experience better** – it was a clearer picture and better audio than their old TV. This was significant evidence for using the TV embedded version rather than the set top box version as the STB version would make no material difference to their TV experience.

80% of respondents said the Chatta TV system had helped them feel more connected to their family and more included in what is going on.

60% said **Chatta TV had made it a lot easier to know what is going on in the care home** with a further 20% saying it made it easier.

Residents commented...

"It helps me feel connected to my family who used to be nearby and now are far away, especially my daughter who lives in Dubai. I think the TV is fabulous."

"I love the quizzes and the photos. I have received messages from my family in the south of England."

"Easier communication with residents/service users; more family members can connect; helps reduce loneliness; simple and easy to use."



"Communication has increased very much so; we can ask questions and consult. We can ask the residents follow up questions about their meals and evaluate their responses. Several of our service users' families live abroad and the big screen on calls, makes such a difference."

"Great communication tool. It's very important that no-one wants to come into a care home, and this gives them a tool that allows them to feel in control. Families have a lot of guilt about going on holiday and video calls allow them to stay in touch and see each other".



"Many come into the care home needing emotional support and even when they are a sociable person, they can still feel lonely. One resident has received calls from her daughter in Dubai and she can see both her daughter and her grandson regularly. It benefits her and the family."

"All the information received was very well executed. When we saw it, we all thought 'wow'!"

"Sending messages are great for notices, such as daily menus, or particular visits e.g. the mum and baby group who come regularly to meet our service providers."

"We have nicknamed the system 'WhatsApp for the house' and that says it all. We love it!"

"The more you use it, the more familiar and easier it becomes."

"You can be in a room full of people and be lonely. Seeing distant relatives on a big screen whether they are far away or just not able to visit due to being ill, for example, makes all the difference. It is actually the key part of the system."

"We have three facilities for older people and other homes have visited and seen the demonstration. They would like to have it and know that it would improve their homes. I personally know a CEO of a hospice and they have stated it would be good for them too."

Of the five senior carers interviewed 100% said communication had increased a lot **between families and their loved ones**. 100% said communication had increased a lot between carers and residents. 100% said it **allowed more family members to connect with their elderly relatives including younger relatives**. 100% said it was very easy to use the system. 100% said that the feedback they got from family members about using the system was that they enjoyed using it a lot. 100% said it makes it easier for residents to communicate with friends and family. 100% said that using Chatta TV increases residents' confidence to communicate with others a lot. 100% said that Chatta TV addresses loneliness and isolation a lot.

Families responses

Of the five family members interviewed ...

80% said their initial thoughts on Chatta TV so far were that it was excellent, the remaining 20% good. 80% said that Chatta TV makes it very easy and remaining 20% easy to stay in touch and communicate with their loved ones. 80% said it was very easy to use, 20% easy. 80% said it had been very effective, the remaining 20% effective. 60% said it was excellent in reducing loneliness or isolation for their loved one and the remaining 40% said it was good at doing this.

"G and I have video calls with Mum now, G is four years old and really enjoys having video calls with his family abroad."

"Family members have downloaded the app, and they are spreading the word."

"The carers sent instructions by email, and no-one has had any issue with it. He [care home resident] isn't very technical but has found it easy, he talks about the messages he's received."

"She smiles at the photos and recognising some of the family members. She loves seeing the smiling photos of the grandchildren." "I think the system is absolutely fabulous, its allowing me to have weekly video calls with Mum, which is great to see her, see how her health is and assess her mood / happiness level."

"Gives us something to talk about through the photos. Being on the TV is a lot bigger and if she has more than one visitor, they can look at them at the same time."

"Video calling [most used feature], but will use photos and videos going forward, as with more time, I will be familiar with the system. Will be sharing photos of holiday places that mum is familiar with."

"[We use] the video calling and photos - Both are wonderful features."

"He doesn't answer his phone but does communicate with his [Chatta] TV system!"

Key Considerations

Facilitators

Vital to the success of the project was:

- 1. The **current internet connectivity in all rooms** at David Walker Garden so the Chatta TV systems could be connected to a reliable network to support messaging and video calls. This was provided by South Lanarkshire Council/HSCP and already in place at the point of implementation. Elsewhere, connectivity is sometimes only provided in communal areas and the office so this 'pervasive' availability in all resident rooms which is essential to the functionality of Chatta, was an immediate facilitator. **Depending on strength of signal this baseline connectivity could be delivered by fibre or 5G but evidences the fundamental need for good quality connectivity and bandwidth to support the Chatta TV service.**
- 2. The **support of the David Walker Gardens Care Home management**. It is not easy to replace such an integral device (TV is important for older people) for so many without disruption or protest and the support and sensitivity of the care staff was critical to make the installation seamless, quick, and without issue. The enthusiasm and 'buy in' to the system from carers who were quickly up and running with the Manager portal sending messages was also a key factor in the project being a success as well as their commitment to engaging families and enlisting their support and involvement in the project.

Barriers to implementation

Although installed and operational for only a few weeks, reports from all three stakeholder groups indicate that the process and the platform was straightforward and seamless with no issues. It was a given from the beginning that there were two distinct resident groups (those confident to operate the remote themselves and those with a measure of cognitive impairment who needed assistance from carers or families) but both groups saw the system as still having strong value. Carers also reported that they were pleasantly surprised when some residents they would have categorised as being 'dependent' on staff help were able to manage the system themselves after some initial help.

SLC and the HSCP were very helpful and rigorous in working with CM to ensure CM's Chatta TV solution was compliant with all legal and data protection (DPIA) requirements for public sector implementation.

Although CM out of concern for not placing barriers to fast adoption and use by care staff who by their own admission were not always IT confident, had by design not built in Multi Factor Authentication (MFA) to the Manager portal, it was recognised that MFA needed to be implemented beyond the pilot and CM agreed to work with SLC, the HSCP and senior care staff at the pilot site to introduce a form of MFA that would meet council compliance requirements but would also not be obstructive to care staff discouraging them from using the system (which they currently embraced and found very easy to use).

Learnings

Key points of learning:

- 1. Stakeholder Engagement The importance of culture change and change management the buy-in and adoption of the platform from staff across the board was pivotal in making the project a success and time spent fostering and managing this 'onboarding' at the outset with staff and family induction sessions even before the TVs are shipped is very important.
- 2. Set up From a practical perspective, the care management's making the Cinema Room available as a 'staging room' or 'workshop' store to unbox and prepare all the TVs is something we came to see as a necessary or desirable requirement for future scaled installations. To minimise disruption to residents and reduce any anxiety associated with the solution, the care staff worked with us to arrange the room installs when residents were out their rooms (lunch, dinner, or sitting in a communal area). This worked so well we would recommend it as a way of conducting future installs in other facilities.
- 3. Communication We learned from the care staff

the importance of letting them briefly explain the new TV system as the residents knew and trusted the carers, and they could put service users at ease where an unknown contractor explaining things to them could be unnerving to vulnerable people. The system needed to be perceived by the residents as something that was happening 'from within' rather than external and the residents were more accepting when they could see this new TV system was something their carers had confidence in and an integral part of the care home service provision.

- 4. **Change** - We also learned that it was a good idea having swapped out their old TV to leave them for about a week just to get used to the TV as a TV before the Chatta messaging and video calling functionality came into play. In almost every case the Chatta TV was bigger, brighter and with clearer audio than their old TV, the remote simpler with bigger buttons. Since they were all familiar with a TV, this better TV experience endeared them to the Chatta messaging and video calling when it was introduced. The research shows they all liked the better picture and clearer sound of the Chatta TV so that was a 'win' from the start. We did not want them to associate any new learning or strangeness (though Chatta requires very little) with the new TV.
- 5. Demographics Where we had expected the system to be relevant only to those service users who could operate a TV remote and the Chatta functionality (accepting calls, opening and closing messages and accessing photos etc) we learned that the system was equally valuable to those who needed support from carers or families for this, evidenced in the evaluation observations (see Annex 3D) – viewing full-screen photos of family or a call from family members abroad was still very powerful and transformative for residents even if they needed some help.



The happiest residents were the ones that had regular contact with their families. They would light up and come alive whenever they saw their children or great grandchildren whether physically or virtually. This would make their day.



6. Enhancing Elderly Engagement – Value was gained by families sending photos in advance to any visit, to their loved one's via Chatta TV allowed for stimulating and inclusive experience when visited. When families visited, or carers opened the photos, it allowed triggers for discussions with the residents, with more engaging content, helping residents to feel more included in wider family activity and talk about familiar topics. 7. New Residents – with new arrivals, they often presented with enhanced cognitive profile, compared to previous residents, with families showing immediate enthusiasm to quickly communicate with their loved one through Chatta TV. Account details were changed with ease.

Broader benefits of the Chatta TV were gained by full site implementation, compared to just focusing on more cognitively able residents. The evaluation evidences the impact of the system on those with dementia in addition to a wider spectrum of service users.

Early Project Successes

Arising from the success of the first phase of installs at David Walker Gardens, Care Messenger was awarded an extension to the project to make Chatta TV available to all rooms in the care home (a further 30 systems added to the 20). The care staff are fully supportive of this comprehensive equipping of their home with the Chatta system. This sets a 'gold standard' showcasing how Chatta TV can become an integral part of communications and service delivery for a care home.

Following the visit of the managers of two other care homes in South Lanarkshire to David Walker Gardens and their enthusiasm to have the system in their facilities, South Lanarkshire University Health and Social Care Partnership has expressed interest in making Chatta TV standard across South Lanarkshire as an HSCP showcase for how communications and wellbeing can be transformed utilising the most familiar technology of all to elderly service users: a TV.

In the intervening period between the first 20 and the next 30 Chatta TVs being installed an unannounced inspection took place at David Walker Gardens. The inspectors appeared to be impressed with the Chatta TV system for adding value to care provision and although DWG scored a high '5' the inspectors indicated that had the Chatta TV system been installed as standard across the whole scheme (i.e. if the additional 30 had been installed at the time of the visit) DWG would have achieved a '6', the highest score. **This was a powerful indicator that CM/Chatta was viewed as adding value to a facility and facilitated achieving higher scores for an inspection.**

Additionally, as Care Messenger was developed to integrate with other IoT monitoring and sensor technologies (and is already integrated with Verkerk's Novi Healthcare platform in Holland and the UK IoT device aggregation platform Archangel) there is opportunity to extend the Care Messenger solution linking it with other solutions in the GCR Innovation initiative to further enhance care and wellbeing of our elderly citizens.

For example, **Archangel is an IoT aggregation software** allowing valuable data to be processed and accessible to

management for a more efficient delivery of Telecare - CM can make it possible for this data to be 'translated' into messaging and alerts or to trigger video calls directly to elderly service users on their TVs.

Similarly, Docobo's **patient monitoring** through wearables and various devices, **facilitating a virtual wards approach can (via CM) make this information available on the TV to include patients directly in the process.** And in the case of **Smplicare** which is a falls detection application currently delivered through mobile tablet or smartphone devices, the **data and alerts can, by integration with CM, be sent to TV, a more appropriate and accessible medium for the elderly demographic.**

Also, arising from our experience at DWG and in discussion with the DWG staff, there are some valuable enhancements we can make to the Chatta TV system making it even more effective to support elderly care. We intend to work with DWG and the South Lanarkshire University Health and Care Partnership to further explore these and build into our development pipeline.

Sustainability Plan

Care Messenger had already agreed to support the project through to April 2026, but **our engagement with DWG and the wider GCR initiative is further increased by the Fund's award for an additional 30 systems at DWG making Chatta TV standard across the entire care home.** And we will continue to provide similar support for the additional systems.

We will explore with the SL HSCP and GCR councils extending the Chatta TV system to other care homes utilising DWG as a national showcase and we will work with relevant parties to create an integrated 'suite' of next generation IoT support technologies with Care Messenger's Chatta TV as the 'screen hub' in parallel with our work in Holland.

We will also continue to meet with the DWG care home staff and the HSCP management and steering group to further explore how we can introduce other stakeholders to use the system (e.g. GPs, OTs, clinicians, other HSCP agents) and develop additional or enhanced features from the learning of the project. This will include MFA for the Manager portal.

Business growth

As CM's Chatta TV is such a fundamental communication platform bridging the digital divide with elderly users by connecting families and healthcare professionals through the TV, and providing a meaningful appropriation of internet connectivity, including 5G for the elderly demographic, the GCR DSIT project has powerfully showcased a 'whole-scheme' approach and led to CM being engaged by other councils and care customers to make the Chatta TV system a standard 'lifeline'. This inevitably supports business growth and an increased human resource infrastructure to respond to demand.

We will utilise the project's case study, evaluation and film to promote to other care homes, sheltered housing landlords, and domiciliary care providers and by agreement with SLC management herald DWG as a 'centre of excellence' to show others 'how it is done'.

Conclusion

As the evaluation makes clear, Care Messenger's Chatta TV is impactful to all stakeholder groups (resident, families, carers). The two central objectives of (a) addressing social isolation as well as (b) adding quality and value to care delivery can be judged to have been met. It is clear how the system could be rolled out to other David Walker Garden resident rooms and to other care homes in South Lanarkshire and the wider Glasgow region.

The Chatta TV project represents a transformative approach to combatting social isolation and loneliness in elderly care settings. By leveraging familiar technology, it empowers residents to stay connected, enhances their wellbeing, and reduces the operational burden on care staff.

With its scalable and sustainable design, the project aligns with regional health and social care priorities, offering a replicable model for improving elderly care outcomes across Scotland and beyond.

Find out more about the project on the Glasgow City Region website.

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Disclaimer

The findings presented in this case study reflect the independence of the project and the collective efforts of all stakeholders. No conflicts of interest have been identified.

For any additional information either contact <u>5gfund-gcr@glasgow.gov.uk</u> or Care Messenger directly.

