



# The Hubble Project Spey House, Johnnie Johnson Housing

## Information Pack

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# Introduction

Thank you for your interest in The Hubble Project and Johnnie Johnson Housing (JJH).

This pack is based on the information we provided to people who took part in the 'virtual visits' to Rashwood in 2020.

This information pack summarises the key issues discussed during the visits, and provides you with further details to support the choices you make about introducing digital technology into your care service.

You can use the information here to build your business case for investment in technology enabled care (TEC), and to support planning, implementation and evaluation of impact.

You can access all of The Hubble Project resources, which were developed by The National Care Forum, on the Digital Social Care website at [www.digitalsocialcare.co.uk/hubble](http://www.digitalsocialcare.co.uk/hubble).

This includes:

- Information packs
- Videos shown during your virtual visit
- Resources from all the suppliers, including technical specifications and brochures
- Templates, checklists and guides on commissioning and managing digital tech projects.

We see the Hubble Project as a brilliant opportunity to enable social care providers to see a range of digital tech in action, learning from their peers. We hope that we have inspired you to take the next step on your digital journey - wherever you are starting it!

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[www.digitalsocialcare.co.uk/hubble](http://www.digitalsocialcare.co.uk/hubble)

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# The Hubble Project

The use of digital technology has rapidly expanded during the coronavirus (COVID-19) outbreak. Yet many social care providers are still struggling to make the most of technology to improve care.

**The Hubble Project** developed by the National Care Forum with funding **from NHS Digital's Digital Pathfinders Programme**, aimed to help care providers to understand the benefits of technology, how to build a business case for investment, and how to successfully introduce, use and evaluate technology.

The Hubble Project offered senior decision makers the chance to virtually visit 'innovation hubs' (via webinar) to learn how other care providers have introduced, used and evaluated digital technology to improve care. The sessions – which were held in 2020 - covered a wide range of technology so that they would be of value to all care providers, regardless of where they are on the digital journey.

The films and resources from these virtual visits are now being shared with everyone in the care sector. They are available on the specialist website Digital Social Care which is a dedicated space to provide advice and support to the care provider sector on technology and data protection.

**Find all The Hubble Project resources at [www.digitalsocialcare.co.uk/hubble](http://www.digitalsocialcare.co.uk/hubble)**

Speaking at the start of the project in 2020, Vic Rayner, chief executive of NCF said:

*“Many care providers want to progress along their digital journey – but they feel they don't have the knowledge or confidence to make what can be big decisions about investment and implementation in technology. Being able to learn from colleagues who have been there and done that can overcome some of those concerns.*

*“These are warts-and-all sessions, where care providers will share the lessons they have learned. Our virtual visitors will also have access to a wide range of resources after the visits, including a toolkit to support building a business case, getting buy in, and implementation. And the tech suppliers featured during the sessions are also offering participants a time-limited reduction on the cost of their technology.”*

James Palmer, Social Care Programme Head at NHS Digital, said:

*“Involving care providers was a core founding principle of the NHS Digital Social Care Programme when it was established in 2015. All projects funded through the Pathfinders programme were required to support products and services that have the potential to make a big difference to the digitisation of the sector.*

*“We are delighted that NCF is using this innovative approach. It is so valuable to share direct experiences of introducing and using tech and these virtual visits will be accessible to a greater number of organisations than a physical visit would be.”*

The hubs were based in three care settings in England and showcased a range of technologies including, electronic care planning, eMAR, acoustic monitoring, circadian lighting, sensor technology and telecare.

During the virtual visits, managers and staff demonstrated the technology that they use, and share their digital journey, including how they came to adopt it, the challenges and the benefits of implementing and using it, and the use of data to improve the quality of care.

# Johnnie Johnson Housing's TEC journey

## About Johnnie Johnson Housing and Spey House

**Spey House** provides age and dementia-friendly, fully WiFi enabled extra care housing for people aged over 55 in Reddish, near Stockport. Managed by **Johnnie Johnson Housing (JJH)**, Spey House offers 61 one-bedroom flats, and two 2 two-bedroom flats. Residents have their own independent apartments, with access to a range of support services on site.

Johnnie Johnson Housing has 5,000 properties across Yorkshire, Derbyshire, north west and north east England. It employs approximately 210 people, 60 of whom are employed within **Astraline** – their telecare and response service. Astraline's 24 hour monitoring centre is based at their head office in Poynton, Cheshire.

Astraline supports more than 70,000 people in over 100 organisations across the country with what is known in the industry as technology-enabled care (TEC).

At Spey House, the following technology is connected to Astraline's response service:

- In-Home digital TEC
- Mobile devices
- Wearable TEC
- Passive sensors

## Key messages from Johnnie Johnson Housing

- Technology is an essential element of care and support and enables independent living and quality of life
- Involve residents, families, housing and care staff in the planning of digital services – ensuring a focus on how the TEC can be easy to use, can enable better care, and support independent living.
- Consider how telecare systems interconnect to provide an accessible, comprehensive picture.
- Ensure any TEC that you purchase is future-proofed and can adapt easily to future needs.
- Monitor TEC developments continuously in order to future-proof services.
- Remember that return on investment is not simply about money: be aware of other unexpected benefits and opportunities that TEC presents.

## Vision and rationale

JJH's retirement properties had previously been monitored by 17 different local authorities across the country. JJH decided to develop their own telecare and monitoring service for their properties. This service has now expanded, and JJH offer Astraline to more than 100 partner organisations including local authorities, housing associations and charities, as well as a growing 'self-funder' partner base. They also work with individuals and their families to support people to live independently for longer.

One of the key drivers for JJH's investment in digital technology was BT's plan to move away from analogue systems by 2025.

Joe McLoughlin, Director of Astraline at Johnnie Johnson Housing, was evangelical about technology and its potential to improve care, and, as the Board of Trustees changed over time, new members also recognised the value of technology, and became Board digital champions.

The leadership has seen the evolution of technology and its potential contribution to continuous improvement. It is no longer considered an optional extra, but is an essential element of the service that JJH offers to their tenants to help them maintain their independence for as long as possible, support them to live their best lives and provide reassurance to families as appropriate.

JJH and their Astraline team are continuing to review and improve digital services to ensure they are future-proofed and stay one step ahead of developments.

The Covid-19 pandemic highlighted the value of digital technology – enable the housing association and responders to support tenants remotely.

*“Even before the pandemic, we thought digital wasn't a nice to have, it's a must have. But I think over the last six or seven months, we have seen that digital is an absolutely vital part of our service offer. We have been able to keep in touch with our residents, Astraline keep in touch with customers, and we flexed and changed to keep up with people's needs.”*

Joe McLoughlin, Director of Astraline at Johnnie Johnson Housing

## Implementation and project management

In order to ensure that the technology introduced at Spey House and other JJH properties, Astraline worked closely with the housing, technology and care providers.

JJH's Astraline team set up a task and finish group to look at digital and how it could improve the quality of the services they delivered. The group included a range of staff, so that they could consider the technology from different perspectives.

Astraline reviewed all devices and kit available to consider what technology would work in the future and which TEC suppliers they should work with.

They tried out different technology in a semi-real environment, in order to learn and develop the technology and ran a series of 'discovery sessions' with JJH staff

The manager of Spey House worked with the Astraline team in the initial stages of planning, providing information on the diverse needs of residents of Spey House, and advising on what equipment might be more beneficial. She coordinated the consultation with residents and their family, and routinely fed back to the team on the views and experiences of residents.

During the initial consultation session, the manager explained why JJH was going to change to a new telecare system, and what the benefits were. The old system had been in place for 31 years – and inevitably it needed upgrading. This provided an opportunity to completely rethink the requirements. Tenants were asked questions, fed back on how it would impact on their lives, and how it would look in their flats and communal areas. A key focus of the discussion was on what they can do with the equipment and what benefits and peace of mind it can bring.

Residents needed to be reassured that they can cope with the change. And design really matters. One of the key benefits of the new system is that it doesn't look like a warden system.

*“TEC is not just about pressing a pendant – it's about looking at the whole person and how support can be enhanced in non-obtrusive way.”*

Manager at Spey House

## Daily usage

Each resident at Spey House has a base unit in their home. Unlike previous systems, this is not reliant on the telephone line, it is linked to the wifi system.

The technology includes:

- a base unit
- pendants that operate within the person's home (Chiptech EVA)
- a pendant that operates outside of the home at a distance (Chiptech GO). This can be used when a resident wishes to go out shopping, or visiting friends, or working in the garden. This connects directly to the Astraline receiving line when the person is out. If they press this pendant alarm, Astraline receives GPS coordinates of their location, so that they can quickly offer assistance
- a watch with a two way microphone, so that when the alert on the watch is operated, the emergency desk can speak directly to the person wearing it – wherever they are
- smart home monitoring: sensors, such as movement sensors, door sensors, smart plugs etc, which measure someone's normal activity, and alerts Astraline to any unusual activity or inactivity.

If the alarm is activated on any of the technology, it goes to the Astraline alarm system. The Astraline team then contact the tenant, assess the situation, and call in the appropriate responder. The speed of the connectivity between the devices and the call centre is very valuable.

Astraline coordinate the data from all of the technology, and creates a 'digital dashboard' on individuals and homes. With appropriate levels of consent, Astraline can share relevant information with other agencies so they understand what is happening with an individual in their home, and how they can be supported. The key to its success is that this monitoring



works in a non-intrusive way, enabling residents to live independently, but with back up available when required.

The connected system enables Spey House residents to remain independent, whilst providing housing and care staff with important information to enable them to provide timely and appropriate support. The system also enables Spey House to share information with family members, if agreed with their tenants, so that family members can also provide support.

Any new technologies introduced and implemented within Johnnie Johnson's housing schemes are interrogated in terms of functionality, ease of use, cost, customer feedback, adaptability and to what extent it is future proofed. This is then held against their data sets to evidence whether TEC is having a positive outcome on resident outcomes.

## Resources and costs

JJH spent between £40-60,000 remodelling Spey House including rewiring, cabling, purchasing hardware etc.

## Prerequisites

The systems in place at Spey House use wifi – not telephone lines to send and receive information. The cost of wifi is not included in the costs above.

## Information governance, data protection and consent

Information governance, privacy and consent need to be considered when introducing technology which involves sensors and tracking systems.

The wider adoption of such technology is a new phenomenon the sector is coming to terms with. As such, the sector needs to come to a consensus about what this means for Deprivation of Liberty Safeguards, best interest assessments and the Liberty Protection Safeguards.

Johnnie Johnson Housing and Astraline supply these technologies to their clients because the clients have asked for it rather than it being imposed. All of Johnnie Johnson Housing and Astraline's technology is based upon the consent of the user.

Howz, one of the suppliers of passive sensor technology points out that their tech is aimed at sending alerts when a routine changes significantly, rather than giving a relative/care agency a minute-by-minute account of what an individual is doing.

Most forms of sensor technology which generate alerts or build a picture of someone's day can be set up only to give specified people access to data. Often the family have control of the data and are able to specify others who need access such as an Alarm Receiving Centre or a Local Authority. Where a service user has capacity, they can also specify who can see it. Service users with capacity will also be informed by Johnnie Johnson that for safe and effective delivery of that service, personal data can and will be processed as long as this follows data protection principles.

When implementing the Howz passive sensor system, Johnnie Johnson Housing spoke to all the residents to discuss what their concerns were and allowed them to choose where the sensors went and how many they had to begin with. Johnnie Johnson was then able to show the benefit and unobtrusiveness of the system. When adopting new technology, you need to think about service design and engage with those the technology is supposed to be benefiting.

For those living in their own home, before the use of passive sensor technology, they found that families and loved ones would repeatedly visit their customers to check up on them, reducing their independence. The new tech only sends alerts if something substantially changes, allowing for greater independence.

## Benefits

Spey House, Johnnie Johnson Housing and the services that support residents have identified the following significant benefits to the use of these technologies.

Spey House has identified the following significant benefits to the use of these technologies:

- Services are focused on prevention, rather than reacting to events.
- Reduction in the need for emergency services transport and hospital admittance due to better monitoring of emerging support needs (e.g. reduced risk of falls if sensors detect changes in mobility)
- Allows for the provision of more focused care (i.e. a 24hr view of activity using some digital equipment can allow on-site care staff to focus resources where they are most needed).
- TEC is easy to use, non-intrusive, giving tenants greater digital confidence and equipping them to self-manage, and live with greater independence.
- Increasing convergence of technology with combinations of telecare monitoring and passive sensor or telecare monitoring and bio-data collection in single devices, making TEC less intrusive.
- Spey House has seen a reduction in falls due to the combination of technologies used promoting safer mobility inside and outside the home.
- Telecare reduces social isolation, but enabling users to stay in contact with service providers.
- Technology doesn't need to be expensive: In some cases, Alexa and other assistive technology is intertwined with technology already in the home - a service-user version of bring your own device.
- Provides peace of mind to residents, and their family, as the digital equipment is always on (i.e. the device connected to broadband or via GSM will alert the Alarm Receiving Centre if it ever loses connection).
- Provides a service fit for the future and certainly beyond the end of PSTN telephone networks
- Do not require telephone connection, or telephone charges.
- Most upgrades and repairs can be carried out remotely and quickly, without the need for engineers to attend on site.

- Supports our 'Save the NHS £1million'
- Digital Data Security Auditing

*“Digital enables you to think differently about return on investment. The old model of you buy something and it’s going to deliver this, this and this – some of that thinking is broken. What we increasingly find is that an application of device or piece of kit we have installed we think ‘Ah this’ll really work in this setting or it will meet this particular need’, but once it’s in we actually find it’s addressing a whole other set of needs we hadn’t really thought about at the time.”*

Joe McLoughlin, Director of Astraline at Johnnie Johnson Housing

The main advantages of a passive sensor system such as Howz are:

- Minimal sensors required as analytics developed to work with low levels of data
- No interaction required from the user in the home
- Analytics create a bespoke set of alerts for each home
- Hardware agnostic and so always able to make the best use of new sensors on the market or hardwired devices
- For older people, it provides the reassurance that their family or monitoring service know all is well with minimal intrusion into their daily life.
- For family, friends and informal carers, it gives them insight into the normal routine of their family member and when changes are happening to reduce their anxiety and help them identify where more care may be needed.
- For care or housing organisations, it alerts when things are not as expected without the need to look through large amounts of information. A good first step onto the ladder for remote monitoring rather than straight to emergency pendant. Able to view multiple sites on a clear dashboard supporting decision making.

## Technology-enabled care at Spey House

The following technology was showcased during the virtual visit. The sensor technology showcased at Spey House falls into two categories: passive and reactive.

### Intelesant Howz – Smart home monitoring

This passive sensor technology can receive alerts for custom events such as the door is left open or no movement is detected in a home. Using sensor data from the home, Howz learns the daily routine and is then able to set alerts around that with no input needed from the resident or the care provider using the technology. The system then detects changes in that routine to alert staff of a potential change in circumstances, giving them time to investigate the cause and take action.

The system connects to a mobile phone App. Low activity alerts will de-activate when a movement is detected, but the alert will stay recorded in the system to support analytics. Escalated alerts are shared with monitoring services via a web portal displaying all sites in one view. Staff can then view more detail for each site as needed to support decision making.

The system can work with or without wifi. It can use mobile technology with a SIM card.

### Further information

Visit The Hubble Project [www.digitalsocialcare.co.uk/hubble](http://www.digitalsocialcare.co.uk/hubble)

Website: <https://howz.com/>

## Chiptech Go

This is a digital GPS telecare device with built-in loudspeaker phone system. It is designed to be used outside the home to call for help. Chiptech GO is a mobile personal help device with 3G cellular and global positioning system (GPS) technology. It can be used in and around the home, or taken out and about.

Chiptech GO is a multifunctional device, featuring an easy button press to alert for help, a handsfree speakerphone system to talk with the Alarm Receiving Centre (ARC) operator, and GPS location reporting ensuring user safety is covered every step of the way.

Chiptech GO is reactive and includes fall detection technology that can be enabled on request. It contains accelerometers which are able to detect short, sharp falls or movement that may indicate a fall. These devices can then send an alert to a loved one or an Alarm Receiving Centre.

Chiptech GO is supplied with a hypoallergenic chain and split ring, so can be worn around the neck as a pendant, fixed to a belt, or added to a key ring.

### Further information

Visit The Hubble Project [www.digitalsocialcare.co.uk/hubble](http://www.digitalsocialcare.co.uk/hubble)

Website: <https://chiptech.uk/chiptech-go/>

## Chiptech Eva

This is an at-home digital telecare device with voice guided assistance and 'Pearl' pendant transceiver. It can be monitored via an app. The Eva base-unit can also report if the pendant is out of range.

The simple voice guided process ensures good cellular coverage is available, that range testing is completed and connection with the monitoring centre is secured in line with industry standards.

EVA's advanced technology is presented in an easy to use system for both the customer providing safety and reassurance and for the installer, providing both local and remote programming.

EVA uses IP to its full potential offering the option to be monitored by an Alarm Receiving Centre (ARC) or to the Chiptech Response App for monitoring by family, friends, or caregivers with escalation to the ARC if required.

## Further information

Visit The Hubble Project [www.digitalsocialcare.co.uk/hubble](http://www.digitalsocialcare.co.uk/hubble)

Website: <https://chiptech.uk/chiptech-eva/>

## Smartwatcher Essence

This is a wearable GPS device with built-in microphone and loudspeaker. It has a geofencing and inactivity sensor. With Smartwatcher call watches, in case of an emergency, appropriate help can be arranged with the press of a button. The emergency call watches can be called and geolocated, also inside buildings.

Essence is a waterproof emergency call watch. It fits also smaller wrists and is comfortable to wear every day, at home or on the go. Essence's replaceable straps can be switched to any standard watch strap design and colour. Its IP67 waterproofing makes it usable in both shower and bath. The audio quality has been designed to be hearable even for people with reduced hearing ability.

Like other similar wearables, the watch contains geofencing technology which sends a warning when someone goes beyond a certain boundary. This is particularly helpful for someone who may be prone to wandering such as someone with dementia.

There are currently new iterations of such wearables being developed which can measure heart rates or other biometric data. The wearables on display at Johnnie Johnson and Astraline are not telehealth devices as once you collect biodata it becomes a clinical device which needs to meet health regulations as well as having oversight from a Clinical Safety Officer.

## Further information

Visit The Hubble Project [www.digitalsocialcare.co.uk/hubble](http://www.digitalsocialcare.co.uk/hubble)

Videos:

[How does the Smartwatcher Family and Friends subscription work?](#)

[How does the Smartwatcher Family and Friends Plus subscription work?](#)

[How Smartwatcher emergency call watches can help in the fight against social isolation](#)

Website: <https://www.smartwatcher.com/>

# Resources and links

## [The Hubble Project](#)

Access information from all three services involved in The Hubble Project.

## [The Hubble Toolkit](#)

Guides and templates to help care providers to introduce tech-enabled care including:

- Business case template
- Project management guide
- Project plan template
- Writing a tech specification
- Tech supplier checklist

Care providers can download and adapt these resources to meet their own needs.

## [Digital Social Care](#)

Digital Social Care is a dedicated space to provide advice and support to the sector on technology and data protection.

## [Suppliers of tech-enabled care](#)

The Care Software Providers Association (CASPA) has a list of many tech and data software suppliers.

## [The TEC Services Association \(TSA\)](#)

The TEC Services Association (TSA) is the representative body for technology enabled care (TEC) services.

## [National Care Forum](#)

NCF is the membership organisation for not-for-profit organisations in the care and support sector. NCF delivered The Hubble Project as part of NHS Digital's [Digital Social Care Pathfinders Programme](#).

# Contact the NCF Hubble team

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