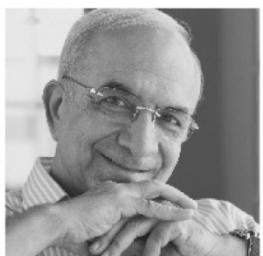
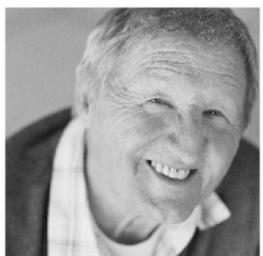
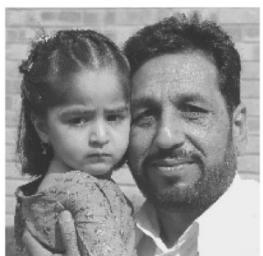
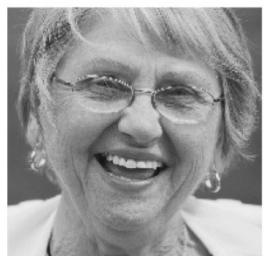
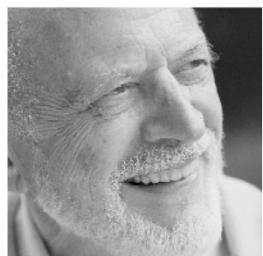
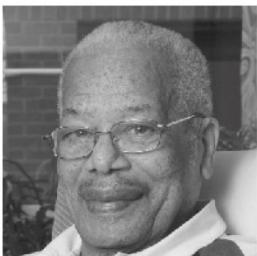


# Technology enabled housing with care

## Scenarios



Created in collaboration with the members of the South West Housing LIN Leadership Set

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*Photos in this document may have been posed by models to protect the privacy of individuals.*

# Introduction

Over the past year, the South West Housing LIN Leadership Set has been examining the challenges housing, health and social care face in the region and exploring solutions that have led to service improvements.

One of the core themes emerging from the meetings and workshops with key sector leaders has been to better understand how technology can play a key role in supporting staff to deliver better outcome for users of services. In partnership with Tunstall Healthcare, this has led to the production of a '[white paper on digital communications](#)'<sup>1</sup> and the need for further evidence and best practice examples of where technology has made a real difference to the housing with care provider and their residents.

This document is a culmination of the South West Housing LIN Leadership Set's shared learning across the region, and sets out a series of scenarios to demonstrate the improved outcomes from incorporating technology into the housing solution for different individual circumstances. In particular, it describes how technology is changing peoples' lives, reducing dependency and facilitating housing with care solutions for older people, focusing on the following themed case studies:

- Dementia
- Social isolation and loneliness
- Falling
- End of life
- Health
- Community Hubs
- Ageing
- Fuel poverty
- Reablement

We are grateful to members of the South West Housing LIN and the Leadership Set for sharing these examples of good practice, which show how the area has a proven track record in using technology to deliver tangible results.

More about their work is captured in *Putting Older People First: Our Vision for the next five years*<sup>2</sup> which takes a whole system approach to meeting housing, health and wellbeing outcomes for our older populations in South West England.



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March 2016

<sup>1</sup>[www.housinglin.org.uk/\\_library/Resources/Housing/Support\\_materials/Other\\_reports\\_and\\_guidance/Revolutionising\\_technology\\_enabled\\_housing\\_with\\_care\\_white\\_paper\\_final.pdf](http://www.housinglin.org.uk/_library/Resources/Housing/Support_materials/Other_reports_and_guidance/Revolutionising_technology_enabled_housing_with_care_white_paper_final.pdf)

<sup>2</sup>[www.housinglin.org.uk/\\_library/Resources/Housing/Housing\\_advice/HLIN\\_SW\\_statement.pdf](http://www.housinglin.org.uk/_library/Resources/Housing/Housing_advice/HLIN_SW_statement.pdf)

## 1. Dementia

### *Supporting cognitive and emotional needs*

#### 1a. Bath and North East Somerset Council

##### Technology libraries

###### Challenge

This project aims to use technology to support the cognitive and emotional needs of people with dementia and their carers living in Bath and North East Somerset. People living with dementia experience a diverse range of individual challenges in their daily lives. However, we know that there are a number of recurrent problems which many people experience. These are:

- Problems with personal, time or place orientation
- Task initiation or prompting i.e. preparing food or drink at tea time
- Anxiety i.e. when separated from a carer, or in an unfamiliar environment

Any one of these can have a major impact on the quality of life for the person with a memory loss, affecting the safety of the carer or cared for person and the availability of staff time and interaction, which may result in the individual concerned having to go into care or being referred to an alternative service.

###### Actions

Low technology products can be used to address these problems and maintain independence of the person with dementia. These products are based on simple low cost voice recorders or displays, which are widely available e.g. small digital displays providing personal messages at home, day clocks, computer and TV systems with customised web based software, solid state voice recorders providing short audio messages, low cost computer tablets providing text messages in a sequence or at a set time, and 'greetings card' voice messages to deliver a personal messages.



There are a number of reasons why they are not more widely used, these include: lack of awareness of the technology, uncertainty about the suitability or how to apply them for a particular individual or care environment and limited awareness of their effectiveness. These factors combine to limit adoption and diffusion of this technology, which could significantly improve the care of people with dementia. This project seeks to address these issues by engaging with carers and people living with dementia across the community to provide them with simple technology to support them.

##### **Low level technology aids time/place orientation, task initiation and reduced anxiety.**

###### Outcome

The project has yet to be evaluated but anticipated outcomes include:

- Greater personal independence, wellbeing, motivation, orientation and confidence for people with dementia
- Delayed admission to residential care
- Avoid unnecessary hospital admission
- Increased competence in task completion
- Reduced anxiety and the need for medication, especially anti-psychotics
- Support for carers in their role; managing anxiety; increased communication/understanding
- Helping carers to understand and communicate with people with dementia
- Helping carers to reduce anxiety/agitation – reducing staff time and medication
- Re-orientating and maintaining safety at night to minimise falls and wandering

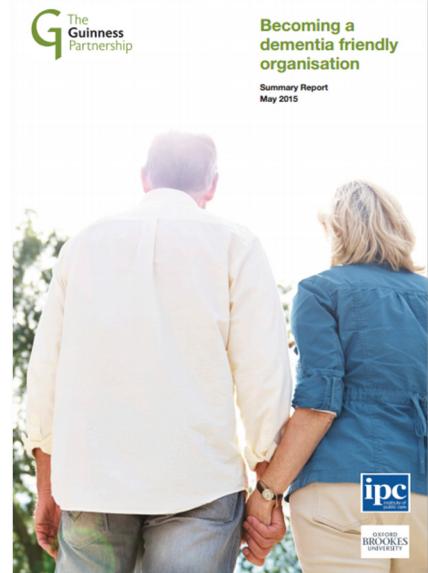
<http://dementiapartnerships.com/project/technology-libraries-in-bath-and-north-east-somerset/>

## 1b. The Guinness Partnership

### Becoming a dementia friendly organisation – May 2015

#### Challenge

The Guinness Partnership provides homes, care and support services to thousands of households across the country, many of them older people. The organisation wanted to understand how many of its customers are in households where there is somebody living with dementia, to enable them to live well and understand how it can help people with dementia to live independently for longer. It commissioned a report to understand how it could become more dementia friendly and what this would mean for Guinness and its customers.



#### Actions

The report was informed by a project undertaken by The Institute of Public Care at Oxford Brookes University between December 2013 and September 2014. It found that:

- There are approximately 17,000 people over the age of 65 receiving services from The Guinness Partnership
- Of these there are likely to be more than 1,000 people with dementia
- The majority of older customers live in general needs rather than specialist housing

Researchers then mapped service characteristics against what is important at each stage of the condition for the individual living with it, and so developed a picture of what a 'dementia friendly' housing, care and support organisation looks like. They then tested how dementia friendly Guinness is as an organisation against this picture by interviewing a number of senior managers, carrying out an electronic staff survey, and carrying out a focus group discussion with current customers.

#### Guinness takes a strategic and practical approach to being dementia friendly.

#### Outcome

Based on these tests, Guinness's approach becoming a dementia friendly organisation was based on the following:

- Focus our initial efforts – testing how the service offer can be adapted for customers living with dementia, initially in a pilot area, enabling partnerships with local agencies and community groups
- Involve customers and staff in developing our service – seeking their views on how to adapt services to be dementia friendly
- Embed proven, practical measures as quickly as practicable, for as many customers as possible – this will apply to measures which are easier to specify and deliver such as the development of new homes, and improving the range of assistive technology offered
- Raise awareness of staff, and improve the advice and support available to them to help customers living with dementia – recruiting Dementia Friends, developing or signposting information and advice including a web-based resource for staff
- Use our existing change programmes - to identify where we can integrate dementia friendly measures into our systems, processes and training programmes

[www.guinnesspartnership.com/about-us/our-publications/research-publications/dementia](http://www.guinnesspartnership.com/about-us/our-publications/research-publications/dementia)

### 1c. Curo Housing and Support

#### Dementia – managing memory loss, frailty, incontinence and carer stress

Curo is a not-for-profit housing and support organisation based in Bath, providing affordable homes and high quality care and support services across the West of England.

##### Challenge

Mr and Mrs D live in a small town outside Bath. Mr D has several health problems including Alzheimer's and was struggling to remember the day of the week and also whether it was morning or afternoon. Mr D had lost the ability to read a clock so could no longer tell the time which caused him distress and made caring for him more challenging. Curo's rural Independent Living Officer visited the couple at home and discovered that Mr D was experiencing problems with his continence both day and night, and this was affecting Mrs D's sleep. The couple hadn't wanted to discuss their concerns and so weren't being supported with the issue.



The couple already had a stair lift as Mr D is found it increasingly difficult to use the stairs, but he was finding it hard to remember how to use it, and his wife always had to be on hand to press the correct switch every time he needed the bathroom, which she found quite stressful.

##### Actions

Curo's Independent Living Service Officer arranged, via the assistive technology library, for a talking tile at both the top and bottom of the stairs so that Mr D could press the tile and hear recorded instructions for the stair lift. Working in conjunction with the assistive technology library, the Independent Living Service provided Mr D with a memory clock. A push button (telecare) alarm was installed so that Mrs D can summon assistance or receive advice about what action to take 24 hours a day. Curo also arranged for an assessment with the continence nurse for Mr D, and a referral to Pine Lea (Day Centre) which Mr D now attends weekly. It was also arranged for the couple to make monthly visits to the Memory Café for support and socialising.

**A range of technology and visits to a memory café support Mr and Mrs D's independence and activities.**

##### Outcome

The talking tile allows Mr D to use the lift independently and can now use the lift without concerning his wife. Mr D now knows what time of day it is as he is able to read the words on the clock provided. This has been essential for Mr D to be able to feel more involved in the workings of the day. The alarm provides a response to emergencies and additional safety for both Mr and Mrs D. A continence assessment has taken place and Mr D is now receiving the appropriate care and aids needed for his particular type of problem meaning that he is more independent with his toilet needs. Mrs D, as principal carer, is now under less duress with fewer requests to assist and respond.

Visits to the Café have allowed the couple to meet other people and have a social activity together which they had not recently been able to do. This has reduced their isolation. Pine Lea provides respite for Mrs D from the daily care of her husband and for Mr D to have some valued time and personal activities of his own on a weekly basis.

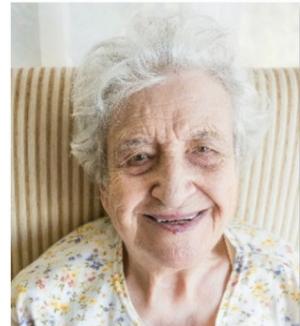
[www.curo-group.co.uk](http://www.curo-group.co.uk)

## 1d. Curo Housing and Support

### Dementia – managing hypothermia, fire risks and confusion

#### Challenge

Mrs N is in her eighties and has a diagnosis of dementia. She has a son, a daughter and several grandchildren that all live in a 15 mile radius of her. She has been a widow for many years and is a social and active lady who likes her own company but also enjoys the company of others. There is a family history of dementia and Mrs N had previously expressed her concerns to family about developing dementia and having to leave her bungalow to go into a care home, which she did not want to do.



Mrs N had several episodes of leaving her cooker on when boiling milk and forgetting about it, setting off the fire alarms and resulting in the Fire Service being called. She would also turn her heating off, not realising her property had become unhealthily cold, and would leave her door unlocked all day. As her condition progressed, Mrs N would also leave her home and become confused as to which bungalow was hers, needing help from neighbours to return.

One morning, during a welfare call via the telecare alarm system, Mrs N seemed unwell and confused. A Curo Independent Living Service Officer attended and called the paramedics, resulting in Mrs N being admitted to hospital with hypothermia. At a discharge assessment the hospital social worker suggested one option would be for Mrs N to go into a residential setting but knowing that she had stated she wished to remain at home the family asked if it was possible for her to return home for a month's trial to see how she managed.

#### Actions

Following a multi-agency meeting at the hospital, Curo put in place a number of services to help keep Mrs N safe:

- Alarm and speech module fitted by the door telling Mrs N not to go out if she opened the door and also sending a warning message to her daughter's mobile. The front door was also fitted with an alarm that beeped if it was left unlocked, prompting Mrs N to lock it
- Falls and movement sensors were fitted by the bed to enable evaluation as Mrs N was wandering in the night and at risk of falls
- It formed part of Mrs N's care plan that everyone responsible for her care and support must check she was wearing her telecare alarm pendant at all times
- Central heating controls and thermostats were put in a locked box which could be accessed by family, the sheltered housing officer or carers to ensure the bungalow remained warm
- Memory clocks were put in the lounge and the bedroom to remind Mrs N of the day and time
- Medication was put in a locked box and administered by carers and recorded
- A GPS device was provided to help Mrs N if she went out and became lost
- The care and repair team undertook a home risk assessment and addressed issues such as trip hazards.
- Mrs N received 4 visits each day from the enablement care team, and a key safe was fitted to allow them access
- The cooker, which was only being used for boiling milk, was removed from the property and a microwave put in its place. This was also used by the carers to cook Wiltshire Farm Foods to ensure Mrs N was eating properly

#### Outcomes

**Mrs N came home to familiar surroundings, as she wished, with risks to her safety managed by her care package and technology.**

Mrs N has now been home for 8 months and is managing well at home with the adaptions to keep her safe. Her care package has been reduced to one visit a day to assist with medication and lunch.

Social Return on Investment for Mrs N has been calculated as:

	Number of occasions Jan – Dec 2015	SROI £ total
Homelessness Source DCLG August 2012 (calculated at 6 months prevention - £12,000 per person)	1	£12,000
Hospital Admission NHS JSNA (2012) (Saving calculated at £1806 for 4 weeks stay)	2	£3612
Average cost of A&E visit £363 - NHS	2	£726
Local Authority weekly Res Care payment £450 (x 4 weeks as accepted cost saving)	4	£7,200
GP Attendance - £25 accepted as cost per GP visit	3	£75
	<b>SROI £ total</b>	<b>£23,613</b>

[www.curo-group.co.uk](http://www.curo-group.co.uk)

## 1e. Bath and North East Somerset Council

### Dementia – purposeful walking

#### Challenge

Mr B is 77 and has a diagnosis of frontal and temporal lobe atrophy, an uncommon type of dementia affecting the front and sides of the brain. He lives alone in a two bedroom extra care supported housing flat where he receives domiciliary and personal care. Mr B enjoys walking but sometimes becomes disorientated and on two occasions was found by the police, on one occasion in another city with bruising and grazes as the result of a fall.



#### Actions

Following this episode, an emergency review was called and appropriate measures put into place to safeguard Mr B, including a property exit sensor. This is switched on following the last care visit and will discreetly alert staff via their handsets should he leave his flat at night. His step-daughter has also purchased a GPS phone system to support Mr B. When discussing the idea with him, he agreed to try the technology to give peace of mind to his family and the care team, because it would enable him to still leave his flat and go for a walk. Mr B keeps the phone in his jacket, and his step-daughter can discover his whereabouts using an online portal should he not return to his flat by 10pm.

#### Outcome

The telecare and GPS device is helping to manage risks to Mr B's welfare and enabling him to retain his personal freedom. He enjoys not having to answer to anyone.

Although the use of tracking devices for people with dementia must be considered on an individual basis and taking into account capacity, ethics, consent and best interests, for Mr B the system is helping to manage the risks to his welfare, and also enabling him to retain his personal freedom. Mr B says that he enjoys being able to go out when he wants to without having to answer to anyone. His family are also keen for him to live his life the way he wants to and now have the reassurance of being able to find him if they/the carers are concerned for Mr B's welfare.

[www.bathnes.gov.uk](http://www.bathnes.gov.uk)

## 2. Social Isolation and Loneliness

### 2a. Wiltshire Council

#### Challenge

Loneliness affects millions of people in the UK, and as well as being a social issue it can have a detrimental effect on health.

- 3.5 million people aged 65 and over 2 million (49%) of people aged 75 and over live alone
- Over 1 million older people say they are always or often feel lonely
- 2.9 million older people in the UK feel they have no one to turn to for help and support
- Loneliness can be as harmful for our health as smoking 15 cigarettes a day
- People with a high degree of loneliness are twice as likely to develop Alzheimer's than people with a low degree of loneliness

*Statistics from Later Life in the UK, Age UK, August 2015*



#### Actions

Local Senior Forums, such as the 55+ group in Melksham and District, which is part of the South West Network of Seniors' Forums, supports activities of ageing well as a key part of wellbeing programmes. There are various initiatives in place to give older people the opportunity to develop the skills and access the facilities to enable them to benefit from technological advances. As well as developing online quizzes and sing-a-longs, the Forums are improving communication links with families and friends, such as using FaceTime on iPads and iPhones to enable older people to contact their grandchildren and other family members.

**Wiltshire Council uses a number strategies to combat social isolation, such as technology skills, online groups and the Casserole Club.**

National initiatives are also in place, such as the Casserole Club; volunteers share extra portions of home-cooked food with people in their area who aren't always able to cook for themselves. They share weekly, monthly, or whenever works best for them using an online portal. Slivers-of-Time, is an online time bank which makes it easy for people to volunteer their spare time to help charities or their local community, and for charities expand their volunteer base. The system can be locally configured and branded to be used by any organisation looking for volunteers or part-time workers. Bristol, Hertfordshire and London Borough of Greenwich councils are all using the system.

#### Outcome

The aim is to steer people away from statutory services and generate self –supporting communities. This approach frees up paid staff to deliver essential services such as personal care. This kind of organic support is more sustainable, and contributes to thriving local communities. The model is successful when the local authority aims to provide ideas and stimulate interest but let communities run and develop their own projects.

<http://www.southwestseniors.org.uk/about-us-1/>

## 2b. Bath and North East Somerset Council

### Challenge

The number of older people living in rural areas is increasing faster than in urban areas, and as people age they inevitably increase their use of health services and other facilities. Cuts to public funding have meant that many older people are now faced with difficulties in accessing services which were previously available locally. Yet transport options for older people, to attend appointments, go shopping or socialise are limited in many areas. Chew Valley in North Somerset is an example, where the local bus service to Bath runs just once a week.



Transport has a major role to play in combatting social isolation and loneliness, acting as an enabler for many other initiatives.

### Actions

A pilot is in place in North East Somerset to examine options such as borrowing mini buses to care homes when they are not in use, and an Age UK bus service has been established to transport people to Gadget Busters sessions (described in the Ageing section of this document) to measure the impact of the lack of transport. There are some volunteer driver schemes in place, such as in Hinton Charterhouse where local volunteers will offer transport to people attending the weekly lunch club. The aim is to create an app which makes it easy for people to access information about what transport and activities are available. A trial has also been undertaken to assess whether technology can be used on transport to help people with dementia.

**A bus has been fitted with a day clock which shows people the day, date and time in an easy to understand format.**

### Outcome

At the time of writing, this pilot has not yet been evaluated.

[www.bathnes.gov.uk](http://www.bathnes.gov.uk)

### 3. Falling

#### 3a. Curo Housing and Support

##### Challenge

HB is an 85 year old gentleman who lives alone. He had been coping well until he started having trouble with his right knee. His GP was aware of the problems with his knee and he was waiting for a date to have surgery.

One night HB went to the toilet at 4am, and as he tried to exit the bathroom, he tripped and fell and could not get up. The fall had happened from a sudden deterioration in HB's balance, due to his knee swelling. He pressed the telecare pendant (which he had been wearing) which connected him to the Careline service where operators could hear him calling out for help.

Careline phoned for an ambulance and the paramedics came and helped him off the floor. Mr HB was taken to hospital for this incident.



**Without the Careline alarm, he could have potentially have been stuck on the bathroom floor for days.**

##### Actions

Curo's Independent Living Service (ILS) acted quickly, working alongside Sirona (Hospital Social Worker) to support HB's return home from hospital. ILS also referred HB for an OT assessment, and for a Community Care Assessment to evaluate HB for a home care package, as well as informing HB's GP of the fall. Curo also fitted grab rails in both toilets, by front and back doors, in the hallway and also for a long hand rail to be fitted down his garden path and garden steps.

##### Outcome

HB continued to wear his pendant, enabling him to ask for help 24 hours a day, and avoiding dangerous stays on the floor should he fall again. Following the OT's assessment, the ILS officer arranged for the doorstop to be removed from the bathroom floor, as it was creating a trip hazard, resulting in safer movement between rooms and rails installed outside so reducing risk of falls. A bed handle has been fitted to assist HB when getting into and out of bed. HB is currently receiving two care visits a day, and remains living in his own home, with a reduced risk of falling and the support he needs.

Social Return on Investment for Mr HB has been calculated as:

	Number of occasions Jan – Dec 2015	SROI £ total
Average cost of A&E visit £363 - NHS	4	£1,452
Local Authority weekly Res Care payment £450 (x 4 weeks as accepted cost saving)	2	£3,600
GP Attendance - £25 accepted as cost per GP visit	3	£75
<b>SROI £ total</b>		<b>£5,127</b>

<http://www.curo-group.co.uk/>

### **3b. Taunton Deane Borough Council (Deane Helpline)**

*Taunton Deane Borough Council runs the Deane Helpline. It has over 14,000 alarms connected in the Taunton Deane area and also further afield.*

#### **Challenge**

A Taunton housing tenant aged 86 faced challenges to continue to live independently and safely until able to move into a new home with relatives. The tenant had Parkinson's disease and was hearing and mobility impaired. Difficulties in communication and other disabling effects of this condition varied considerably from day to day. The tenant could be alert and able to manage with the support of carers, communicating and able to request help when needed on some days and not able to do any of this at other times.

The tenant was not always able to take medication at the right time and this was in turn affecting their ability to eat, thrive and be alert. There was a significant and real risk of falls from bed or a chair and in attempting to transfer independently especially during the nights. The tenant's health, mobility and ability to manage was deteriorating, and needs were beginning to outstrip the care and support available. The tenant was determined not to move into residential care and family were very supportive of this.

#### **Actions**

The tenant was keen to engage a live-in carer to enable them to continue to live in their home until suitable accommodation was available with family. Assistive technology (telecare), helped keep the tenant safe, crucially before the live-in carer was in place. To ensure that the tenant was safe, additional wellbeing calls and visits were made, a waist clip falls detector and wrist worn alarm were put in place as well as a bed occupancy sensor installed by the Deane Helpline. These enabled the staff to monitor the tenant's support needs and respond quickly to any falls or problems promptly regardless of whether the tenant was able to press their pendant for help, and provided additional reassurance whilst the tenant was waiting to move.

#### **Outcome**

**The technology reduced risk and enabled more holistic and personalised responsive care and support at the times the tenant needed and wanted it.**

Assistive technology played a critical part in enabling this tenant to continue to live safely and independently in their own home until suitable accommodation and arrangements were in place for them to successfully move in with family. The tenant gained weight, started to thrive and was able to continue to live safely and independently before their move.

[www.tauntondeane.gov.uk](http://www.tauntondeane.gov.uk)

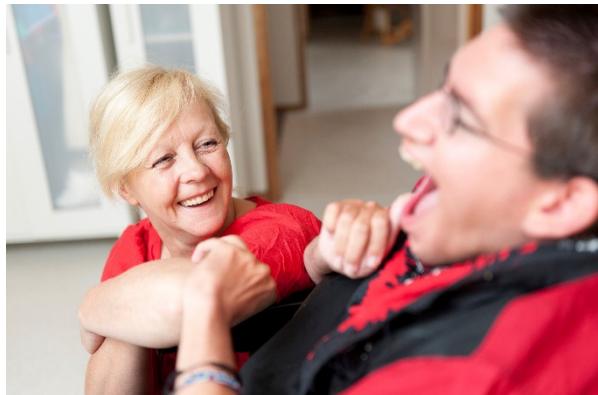
## 4. End of life

### Using telehealth to support end of life care

#### 4a. SEQOL

##### Challenge

John is a 21 year old man, with complex needs including profound learning and physical disabilities, and asthma. John is a wheelchair user and is fed via a PEG tube. He lives in a five bedroom supported environment with four other young males. When John was referred to the Community Matron, he was assessed for telehealth and he was considered to be palliative, in critical condition, and end of life planning had taken place. He had a history of being a high intensity service user with multiple hospital admissions. For over a year John had been in a cycle of asthma exacerbations, which were often reported by care staff out of hours and as a result he was taken to hospital and given strong intravenous antibiotics, which in turn aggravated his bowel condition. John then contracted C. Diff during his time in hospital which required further treatment.



##### Actions

During a meeting with John's mother and members of his care and support team, it was agreed that the introduction of the telehealth service may help to detect exacerbations at an earlier stage and enable them to be treated differently, helping to keep him out of hospital. Telehealth monitoring quickly identified that John's oxygen levels were fluctuating significantly, which prompted an assessment and led to John being put on a permanent oxygen concentrator to stabilise his condition. John's GP and the Community Matron developed clinical managements for the care staff to follow if John's telehealth readings indicated a change in his condition.

##### Outcome

**Telehealth has helped to stabilise John's condition to the point that he is not currently considered to be palliative.**

Telehealth, linked with these plans, has enabled his asthma to be controlled, as any drops in oxygen saturation are picked up early, and he can be treated with antibiotics and steroids at home rather than being admitted and requiring intravenous antibiotics. Management at home also reduced John's anxiety and distress at being in an unfamiliar environment. As telehealth enabled care staff to respond to the changes in condition by prompt management they have not only reduced multiple admissions and the use of intravenous antibiotics but John's quality of life has improved. John's condition has improved enormously since the introduction of telehealth. He has had no further unplanned hospital admissions, and therefore no more hospital acquired infections. John is able to go for days out and enjoy weekend visits home.

Telehealth has resulted in:

- Reduced non-elective admissions from fifty, July 2011 – June 2012 to zero July 2012 – May 2013, **a cost avoidance to the CCG of £150,000**
- 1:1 overnight care no longer required, **reducing costs by £61,500**
- Reduced community nurse visits from daily to weekly; at £40 per visit this **releases £13,500 of efficiency**
- Reduced GP visits from 4 times weekly to once a week; at £100 per visit, **releasing £19,000 efficiency** to the Practice

<http://uk.tunstall.com/Uploads/Documents/SEQOL%20-%20using%20telehealth%20to%20support%20self-care%20for%20people%20with%20long-term%20conditions%20and%20learning%20disabilities.pdf>

## 5. Health

### 5a. SEQOL

#### Social Diabetes and the West of England AHSN

*SEQOL is a social enterprise that provides quality care and support for adults in Swindon and the surrounding area. Its integrated approach provides a balance of high quality support and care to enable people to live life as they want to.*

##### Challenge

With diabetes prevalence on the rise and projected to continue, this was already a major challenge for SEQOL's local commissioners and can have a real impact on people's lives and their ability to stay safe in their own home. Whilst most diabetes care is in the form of self-management, there are still challenges for many people in managing their diabetes safely and effectively – particularly around taking blood-glucose readings and interpreting them correctly. With the increased availability of lower-cost glucometers and new approaches using web-portals or apps, SEQOL began working with suppliers to evaluate how technology could bring improved care and self-management, at a price that would allow for wider adoption than more comprehensive approaches such as telehealth.



##### Actions

Given this was still a new and emerging market place, SEQOL decided that the technology and models likely to have the biggest impact would be those that were either in development or new to market. As with any new approach, initial evaluation often identifies product or system refinements that need resolving before implementation can occur. Two products were evaluated and, following clinical evaluation, further deployment was put on hold. Even though neither were taken forward, this rapid evaluation approach provided invaluable learning that has informed SEQOL's wider adoption of technology and 'app' based approaches across health and social care.

With this learning, an opportunity arose to work with the local AHSN (West of England Academic Health Science Network) on a more comprehensive study of a proven product through their Diabetes Digital Coach programme. The additional resource, evaluation backup and contacts provided by working with the West of England AHSN offered a more effective way to help move technology to mainstream use as well as providing capability that would provide guidance for other technology adoption and roll-out.

After a national procurement call, the product chosen was 'Social Diabetes' – a comprehensive web-portal that allows individuals to monitor their blood sugar readings and diet, then provides advice and guidance including using intelligent algorithms for advising on insulin dosage. It also allows the individual to share their information with carers and professionals, and gives the ability to interact with them. The support offered extends to all aspects of managing their diabetes and it is a proven technology, winning a World Summit Award.

**Early and appropriate management of diabetes can help people stay independent longer and avoid premature admission to hospital or care homes.**

It was decided to run the trial with a focus on two groups:

1. Those who are newly diagnosed, allowing a new paradigm of care from the outset
2. Older people with dementia and diabetes.

Older people with dementia is potentially a high risk group so initially the study would be in a specialist dementia care home, allowing risks and potential points of failure to be identified and safely managed before moving to trials in people's own homes.

The use of a comprehensive web-portal can provide a 'remote' support model, shifting the concept of care to being focussed primarily on self-management and to being provided at home, not a specialist/medical facility. Whilst the process and product is focused on diabetes, the intention is to create learning that is transferrable to other long-term conditions and co-morbidities, with the corresponding shift to improved self-management at home. This will allow people to stay safer, longer in their own home.

### Outcome

The Social Diabetes web-portal has a proven ability to increase confidence, independence and freedom as well as reduce the health risks to individuals, with resulting benefits to their well-being and ability to manage a long-term condition. For commissioners and providers, the improved self-management will offer reductions in admissions and the need for specialist support, avoiding costs and resources that are better used elsewhere.

Working collaboratively with the West of England AHSN enabled additional learning with wider application, as well as capability and capacity to accelerate effective technology implementation.

[www.seqol.org](http://www.seqol.org)    [www.weahsn.net](http://www.weahsn.net)

## 5b. Curo

### The Wellbeing House

The Wellbeing House, which Curo provides in partnership with Sirona Community Interest Company, is a beautiful temporary retreat for those experiencing mental health distress or concerns. Located in the surrounds of a Victorian House; it is a place where people living anywhere in Bath and North East Somerset can receive support to stabilise themselves and prevent crisis.

Part of the support offer to people utilises Somerset Council's '5 Ways to Wellbeing' social prescribing App which is completed with all customers who choose to take this approach. Customers' use the tablet based support App which enables a social prescription to be agreed and designed which identifies continued ideas for activating their plans and providing support for customers once they move on from this service.



### Customer use a tablet-based support App which enables a social prescription to be designed.

The App has proved to be very successful in identifying how people feel about their lives and social situation, enabling Curo to support them to make achievable changes, no matter how small, and therefore improving their general wellbeing.

As part of the support package offered, courses that might be suitably delivered by The Wellbeing College are considered as part of a social prescription, and the Hope Guide is also used to explore support groups and activities that could be of interest.

One of the first people to use the House, James, has already made positive changes in his lifestyle and wants to 'give' as stated in his social prescription. He is now considering being a live-in volunteer at the House and said that staying there has "felt like a weight has been lifted from my shoulders".



<http://www.curo-group.co.uk/care-and-support/the-wellbeing-house/the-wellbeing-house/#ad-image-0>

## 5c. SEQOL

### Using telehealth to support self-management and improve health

#### Challenge

SEQOL has been using telehealth to enable people with long-term health needs to be supported in the community since 2007. The service aims to improve patients' quality of life by supporting them to self-care, providing better information to primary care professionals and reducing admissions to hospital.

Len is 62, and in 2001 he contracted a virus which left him with cardiomyopathy. As a result, his heart swelled to twice its normal size, and Len was admitted to the Great Western Hospital no less than 143 times in nine years; more than once a month. The approximate overall cost of these admissions was £357,500. Len has had a pacemaker fitted as well as an internal defibrillator as his heart regularly goes out of rhythm. Len's condition means he retains excess fluid in his body, which has to be regularly managed to avoid further loss of heart function and overall physical condition.



#### Actions

In 2010 the SEQOL team provided Len with a telehealth system to monitor his symptoms at home, in particular his blood pressure, which is often low, and his weight, an increase in which is an indicator that he is retaining fluid. The system will raise an alert if Len's readings are out of the parameters set for him, and his Community Matron will be notified.

#### Outcome

Telehealth has enabled Len to become much more knowledgeable about his condition, and better able to manage it. If his weight increases he can take additional diuretics in accordance with his self-management plan, and he knows the signs when his renal function is good or bad. Use of the system has also helped Len to reduce his weight to the point where he has recently been deemed clinically fit to go onto the heart transplant waiting list. Since telehealth has helped the Community Matron to stabilise Len's condition, he has had no unplanned admissions to hospital, and his quality of life has improved greatly.

**The cost of Len's care has also significantly reduced since 2010, with the annual recurrent savings to the NHS estimated at £250,000 per year.**

#### Update

Since writing the case study Len has had his heart transplant and reports dramatically improved health.

<http://uk.tunstall.com/Uploads/Documents/SEQOL%20-%20using%20telehealth%20to%20support%20self-care%20for%20people%20with%20long-term%20conditions%20and%20learning%20disabilities.pdf>

## 6. Community Hubs

### 6a. Gloucestershire County Council

#### What is a Community Hub?

The term Community Hub is used to variously describe a number of models. Broadly speaking, Community Hubs bring together a range of services, provided by a diverse range of organisations into one central community building. They provide a focal point to foster greater local community activity, providing advice, support, learning and activities for a wide range of groups and individuals.



#### Challenge

As people age it can become more difficult for them to remain an active and social member of their community and engage in new activities. How has Gloucestershire County Council's decision to implement a network of Community hubs helped to engender an ethos of active ageing and contribute towards positive outcomes in wellbeing?

#### Actions

There are 19 Community Hubs for Older People operating countywide in Gloucestershire, offering a broad range of activities within a safe, comfortable environment. They are either purpose built within Extra Care Housing Schemes or are situated within traditional Sheltered Housing Schemes, Village Halls and Day Centres. They offer drop-in daytime opportunities or half and whole day opportunities for people over 55 upwards, or lower if the health and care need is applicable. By providing a broad range of activities within a safe, comfortable environment, Community Hubs engender an ethos of active ageing and positive outcomes in wellbeing will follow. With the growth of social prescribing on the horizon, the Community Hubs represent a very viable option for health professionals to refer/recommend into. Advice and information on telecare and telehealth is available at all the hubs, and regular demonstrations take place to allow older people to become familiar with telecare aids.

#### Outcome

##### Community hubs have enhanced social contact, activity, independence, health and wellbeing.

An evaluation of the Community Hubs took place between 25 April and 22 July 2015, during which time 288 evaluation forms were completed independently or with help from hub leaders or carers. The evaluation design consisted of six subjective questions with before and after Likert Scale scores out of ten in order to measure how attendance at a hub could impact upon health and wellbeing.

	Before	After
How active were you before attending a Community Hub and how active are you now?	4.99	6.60
How would you rate your level of social contact before and after attending a Community Hub?	5.15	7.05
Please rate stimulating new things you were trying before then after joining a Community Hub	4.60	6.88
Please rate your ability to cope with activities of daily living (ADL) before and since joining a Community Hub?	5.50	6.81
Please rate your level of independence before/after you started attending a Community Hub	6.01	7.17
Thinking about your health and wellbeing, please rate your before and after level of health and wellbeing through joining a Community Hub	5.53	7.03

[http://www.housinglin.org.uk/\\_library/Resources/Housing/Practice\\_examples/Housing\\_LIN\\_case\\_studies/HLIN\\_CaseStudy\\_106\\_CommunityHubs.pdf](http://www.housinglin.org.uk/_library/Resources/Housing/Practice_examples/Housing_LIN_case_studies/HLIN_CaseStudy_106_CommunityHubs.pdf)

## 7. Ageing

### 7a. Bath and North East Somerset Council

#### Somerset Social Prescribing

##### Challenge

Demands on primary care continue to increase, but in many cases patients with social, emotional or practical needs could be supported by local non-clinical services. How can social prescribing help to utilise existing resources to improve their mental health and wellbeing?



##### Actions

Following a successful three year pilot, Bath and North East Somerset Council and Bath and North East Somerset CCG have commissioned a Social Prescribing model. The aim is to enable clinicians to redirect suitable patients, often frequent service users, away from the NHS and support them in the local community. Patients may have mental health needs or long-term conditions, or practical issues affecting their mental and physical wellbeing. They may lack support.

Initiatives include:

- Well Aware, a signposting and information service for health and wellbeing organisations and events across the region.
- Rova, an app that has been developed to integrate health and social care information and make it accessible to anyone in the community and which will produce a social care prescription using information from a range of sources.
- Gadget Busters, an initiative to counter rural isolation in Chew Valley. The Stoke Inn pub hosts a weekly session in which older people are encouraged to bring in devices such as smart phones and tablets and local people volunteer to help them with technical support to get the most out of their technology.

**Examples include learning how to use Facetime to contact family members who don't live nearby.**

##### Outcome

Social prescribing aims to reduce future GP/health service attendance, acting as a conduit for involving patients in their community and opening the channels between service sectors. Metrics include:

- Evidence of clients undertaking assessments with Social Prescribing Advisers, and receiving a social prescription which meets their needs
- Evidence of service user involvement in socially engaged activities and services across B&NES which meet their needs.
- Improved joint working and contact between primary care / voluntary and community groups / statutory services.
- Reduction in frequent attendance at GP practices by referred 'high attenders' and reduction in A&E admissions
- Evidence of service users experiencing improved quality of life, defined through their general health, contentment with life and subjective wellbeing
- Evidence of the set-up of self-support groups, or networks which are supported as required
- Increased number clients take up of volunteering
- Increased numbers of people acting as volunteers within the Social Prescribing Service

## 7b. St Monica Trust

### Community Fund and LinkAge

#### Challenge

Some people who are older, have a physical disability, dementia or long-term physical or mental health problem, may need financial help because neither they nor their carer can earn a regular income. The St Monica Trust Community Fund aims to keep people independent and living in their own community for as long as possible.



#### Actions

The Fund can either award a gift to purchase essential items or offer a short-term grant of monthly financial support for a short period of time to help in a crisis.

The average amount of money awarded is £300 for items including:

- Mobility aids, assistive technology
- Adaptations to the home.
- Domestic appliances e.g. washing machines and cookers.
- Furniture and flooring.
- Bedding, clothing and shoes.
- Health costs e.g. pre-payment prescription certificates and glasses.
- Communication aids e.g. computers, software and page turners.
- Education course fees and work tools.
- Bills and debts.

St Monica Trust also funds LinkAge, an organisation which works with individuals and local groups to improve the wellbeing of older people, such as creative painting, tea dances and an over 60s cinema club. LinkAge also has a number of groups operating, which include an art group, woodwork group, snooker club and a digital photography class, among others. LinkAge also runs a befriending scheme where volunteers visit older people once a week to chat, and provides information and advice on benefits, services, finance and safety.

#### Outcome

LinkAge helps people to learn new skills, become more confident and have the chance to socialise and make new friends. It also signposts them to other services such as Care and Repair, Bristol Community Transport, and the Police Senior Citizen Liaison Team.

<http://www.stmonicatrust.org.uk/>

## 8. Fuel poverty

### 8a. Gloucestershire Affordable Housing Landlords' Forum (GAHLF)

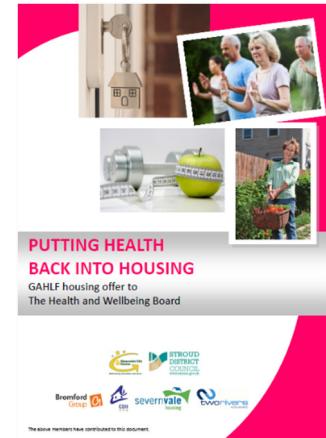
*Gloucestershire Affordable Housing Landlords' Forum (GAHLF) brings together seven local housing providers to achieve improvements for the benefit of their tenants, the neighbourhood and the wider community.*

#### Challenge

Links between housing and health are widely recognised. Living in poor quality housing can lead to physical and mental health problems, often caused by damp, cold or structural defects. Investing in building houses to modern standards can dramatically improve people's lives and sense of wellbeing, making their homes and neighbourhoods places to be proud of.

In 2011 there were an estimated 500,000 homes in the poor energy-efficiency bandings of F and G in the South-West. These are regarded as 'excessively cold' and cost the NHS approx. £27 million in associated health costs. It would cost an average £5,000 per home to lift them out of the 'excessively cold' band.

(Source: *The Health Costs of Cold Dwellings. Building Research Establishment, 2011*)



#### Actions

GAHLF's Safe, Warm and Well energy-efficiency programme is tackling fuel poverty; examples include:

- **Two Rivers Housing** has built an additional 500 new low-energy homes for affordable rent in the last 10 years. All its homes are built to modern standards and the majority exceed the minimum levels of energy efficiency required. They are heated and insulated to a level that will keep tenants warm and comfortable and their fuel bills to a minimum. This helps tenants to manage their finances and increase their disposable income, and benefits the wider environment.
- **Stroud District Council** is investing £12 million over five years to improve the quality of housing stock and reduce fuel poverty for tenants. Stroud has been upgrading the heating supply in properties, replacing electric heating with mains gas, installed uPVC privacy panels, replaced porches with insulated cavity brick walls and fitted new double-glazed windows. The works have improved tenants' quality of life, helping them to live more comfortably and reduce their fuel bills. Many of the tenants have never had gas central heating before, so educating them to be able to use the new system has been very important. Engineers explained how to use the room thermostat, thermostatic radiator valves and programmers, and a refresher course was held a few weeks later.

#### Results

Over the three years ending March 2013, GAHLF has improved over 14,900 homes and we estimate the savings to the NHS to be around £1.4 million per annum.

- *Respiratory health:* Assume one less visit per child to the GP per annum would save local GPs £33,790 per annum
- *Mental health:* The average cost per case for mental health treatment in the UK is £10,658 (Source: Office of National Statistics). The saving to the NHS and society, on 430 residents, would be £1.39 million per annum (allowing a 70% downward adjustment)
- *Prevention of accidents:* Preventing accidents to 44 residents would realise savings of £4,612 per annum

**Hospital admissions:** By avoiding three hospital admissions for one week's care the saving would be £2,844 per person.

## 9. Reablement

### 9a. SEQOL

#### Challenge

Reablement offers the potential to enable people to regain their independence, typically after a major event such as a hospital admission. SEQOL have been developing a comprehensive, integrated health and social care reablement service for many years. The key is to adopt a personalised and proportionate level of support that balances supporting independence against creating dependence on support that could be unnecessary.

#### Actions

SEQOL's reablement team continuously reviews the ways assistive technology can support their work and help individual's achieve "the best they can be". Their journey starts with a very early assessment for aids and equipment, typically from SEQOL's Community Equipment Service, and often needed on short notice and 24/7, to support a discharge from hospital. Where that assessment identifies a role for telecare, this is incorporated in that person's plan but increasingly SEQOL is also exploring how using relatives or carers as the responders, can provide a lasting support network.

Extending this to the support visits themselves, towards the end of many people's time on reablement, their need for a worker to visit can be variable – on some days they may be able to manage independently and to do so would be a positive part of their plan. SEQOL is about to begin a pilot which uses rapid-install, low-cost devices with an automated messaging function to improve care and privacy, help manage resources and make plans more effective. Appropriate risk assessments will be made to establish where this approach is appropriate. The device resembles basic mobile phone, which can be programmed through a web portal with questions such as "Do you need your support worker to visit tonight?". The user will answer YES or NO using simple buttons. If they answer NO, a corresponding message can be sent to the coordinator, allowing that worker to be released to provide care elsewhere.

The non-install and quick set-up allows the devices to be moved from individual to individual very rapidly, in line with the short term nature of the service. The low-cost enables it to be rolled out on the principle that "if it only saves one visit a month, it's proved cost effective", enabling far wider rollout than traditional approaches

#### Outcome

**SEQOL's reablement service, using technology as a key enabler alongside integrated professional support, consistently enables nearly 80% of people to come off the service with no long-term care package, well in excess of typical approaches and without extending the time on the service.**

The 'do you need a call' pilot has the potential to not only provide a service with increased privacy and dignity, but by allowing better allocation of worker time, increases overall service capacity within a finite resource.

<http://www.seqol.org/health/intermediate-care>



*Members of the reablement team*

## Conclusions

We hope this paper has provided some valuable examples of the many ways in which different types of technology can be used to underpin the delivery of improved housing with care, and how the South West region has creatively utilised a range of technologies, both established and new, to provide better support to older people.

Although it is beyond the scope of this document to answer all of the questions which have been raised during the course of its creation, we hope it has gone some way towards providing practical, proven solutions to common challenges.

There remains, of course, a number of interesting topics which merit further debate, such as:

- What is the absolute definition of a Community Hub?
- How can we encourage digital inclusion, for example, by providing in community-wide hotspots?
- How can the NHS and Local Authorities improve engagement with older people to give them the opportunity to contribute to decision making processes relevant to them?
- What more can be done to encourage Local Authorities to fund improved digital facilities for older people?
- How can housing providers help to share good practice and develop more consistent services across the public sector, private providers, the voluntary sector and health?

We look forward to working together in the future to help to explore the answers to these and to share further examples of the latest approaches.

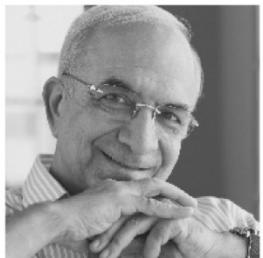
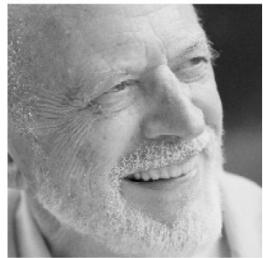
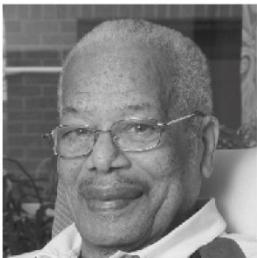
In the meantime, I continue to be amazed at the wealth of innovation that is instigated and carried out by housing organisations. This document tries to bring these stories to life. From technology on buses, social prescribing, using smart phones to keep in touch with friends and family, enhancing social contact all the way to saving lives, preventing hospital admission, reducing carer stress and enabling people to live life to the full, technology is changing lives for the better across the South West.

Alison Rogan  
External Affairs Director  
Tunstall Healthcare (UK) Ltd

## Further resources

Revolutionising housing with care with life enhancing technologies - your questions answered  
**This paper provides essential "did you know?" questions and answers for housing providers, commissioners and managers of adult social care when it comes to considering the best use of technology enabled care, as we enter the digital world.**

[http://www.housinglin.org.uk/\\_library/Resources/Housing/Housing\\_advice/HLIN\\_Telecare\\_your\\_questions\\_answered.pdf](http://www.housinglin.org.uk/_library/Resources/Housing/Housing_advice/HLIN_Telecare_your_questions_answered.pdf)



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