A new approach to supporting people with complex needs using integrated technologies

The challenge
There is an urgent and growing need across the UK for cost effective accommodation and care for adults with a variety of disabilities. More than 300,000 disabled people are on housing waiting lists across Great Britain¹ and around one in five people with a learning disability live in housing arrangements that need improving². In order to meet demand from the growing number of people with a learning disability, there would have to be an additional 1,324 registered care home places and 941 supported living places created every year until 2026².

How is technology helping to deliver a new model of care which is more cost effective than traditional provision and ensures vulnerable adults are given the same life choices as others?

What we did
Tunstall and ATEL offer a range of technology enabled care solutions for people with learning disabilities, physical disabilities, complex needs and behaviour which challenges living in supported living environments.

Working closely with local authorities and developers, we ensure that the infrastructure of the scheme can support a range of people from the moment they move in, and for years into the future. Uniquely, we assess individual’s needs and create a bespoke, integrated solution to meet them. We then monitor the success of the package, making any necessary adjustments, and report on outcomes.

Our platform ensures a range of solutions can be integrated to create a unique living environment which helps the individual live safely and independently. Users can benefit from:

- Telecare sensors which manage risks such as fire, flood or gas leaks
- Personal pendants which enable them to request assistance
- Sensors which will alert staff if the user may have fallen
- Epilepsy sensors which reduce/remove the need for intrusive night-time checks
- Environmental sensors to control curtains, heating and lighting
- Access control and automatic door openers
- Aids to support bathing and toileting
- Cognition and communication aids
- Medical and therapeutic products

The system can also support site-wide Wi-Fi provision, and VOIP telephony, enabling residents to benefit from low-cost calls and internet access. Depending upon capacity, people can also use Walled Garden, a portal which enables the user to pay bills, go shopping, contact their GP and access social networking sites in a safe environment using easy icons.

Highlights
- Cost effective alternative to traditional residential care for people with complex needs
- Technology enables personalised care, choice, dignity and control
- Out of area placements and residential/care home placements can be reduced
- Technology enabling increased independence for individuals with behaviours which challenge
- A significantly improved user experience, enabling freedom, managing risk and enriching lives

¹No place like home, Leonard Cheshire Disability, 2014
²Housing for people with a learning disability, Mencap, 2012
Moorgate Mill in Blackburn is a development containing 20 apartments for people with complex needs including physical and sensory, learning disabilities, and some with behaviour that challenges. ATEL and Tunstall have worked together to provide a managed service for the provision of a communications platform, telecare, environmental controls and access control at Moorgate Mill. The scheme’s specification included the installation of Communicall Vi supported living communication system which provides real-time information, bespoke management reporting and a flexible platform to offer needs-based telecare solutions for residents with diverse, changing requirements.

Communicall Vi is an interactive system which can be configured onsite using its advanced system control panel or remotely via WiFi or the internet, and has been designed to operate with Tunstall’s Housing Services Portal (HSP) tablet-based scheme management application to help prioritise and manage care delivery.

Telecare sensors such as flood, fire and smoke detectors will be supplied as standard in every apartment, helping to manage risk. Other devices, such as epilepsy and bed occupancy sensors and fall detectors, will be supplied according to the individual’s needs following an assessment.

Moorgate Mill has been wired using Cat6 cabling, which means the scheme will be able to take advantage of future developments in communications and telecare, such as the cost-effective provision of broadband, telephony and WiFi direct to residents. Other facilities to support social inclusion can be included, such as electronic noticeboard and digital kiosk and the myworld tablet.

Tunstall and ATEL have also equipped the apartments at Moorgate Mill with aids such as lighting and heating controls, automatic door openers working with biometric readers and blind/curtain openers. The installation and ongoing maintenance of the integrated technology platform is completely managed by Tunstall. Other devices can be supplied according to need, such as suck/blow and eye controls.

Once an assistive technology/telecare support package is in place, this will be reviewed regularly to ensure it is meeting the users evolving needs. Software is also in development which will enable data from the technology to be gathered to create detailed reports which measure the benefits for the individual.

HB Villages is at the forefront of harnessing available and emerging technologies to promote the independence and dignity of the people it supports, delivering the best possible outcomes and making sustainable care possible.
Case Studies

Andrew’s story

Andrew moved to Moorgate Mill from a specialist hospital placement out of area, where he had a very low stimulus environment in order to manage his significant autism and challenging behaviour.

After a prolonged transition, Andrew now lives at Moorgate. He is supported by staff who have been trained to understand how best to minimise triggers to his anxieties and to de-escalate behaviour which challenges through positive management strategies. His flat has been designed to be a safe place for him, minimising the risk of him harming himself or others when he becomes distressed. He can control the lighting in his flat at the touch of a button, and the electronic blinds close on a timer to reinforce his awareness of the time of day.

Andrew will incrementally be supported to do more with less support, and to develop his independence.

Jayne’s story

Jayne is profoundly physically disabled, and has been dependent on others for her care all her life.

Moving to Moorgate Mill is the first time Jayne has been able to live in a flat on her own. She has 24-hour background support, and uses a reassurance pendant that allows her to speak directly to the office at the touch of a button whenever she needs assistance. Jayne can now operate her own blinds, lights, television and keep in contact with her family and friends via Skype, all at the touch of a handset, or with a pillow control. Jayne also has a wet room with a Clos-o-Mat toilet, giving her more privacy and dignity with personal care.

For the first time Jayne has a sense of control and independence.

Names have been changed and photos posed by models to protect privacy.
Assisted living

Results

Including integrated technology enabled care solutions in specifications for supported living environments enables a new model of care delivery which is more cost effective and provides a home for people which helps them to live the life they choose.

Improved outcomes and sustainable change demonstrated at Moorgate Mill include:

• 24 hour extra care provision for people with complex needs, and personalised care with robust technology can replace residential and nursing home care, providing more choice and control.

• Out of area placements and residential/care home placements for people with complex needs can be reduced. Two individuals from the local authority Winterbourne Review List will benefit from the Moorgate Mill development.

• Extending the traditional range of social care services using technology previously utilised in luxury private homes to provide personalised care, dignity and control.

• Providing a completely new model of housing with care that gives individuals choice and control not possible in other environments.

• A financially sustainable model which will deliver cost savings as a result of individuals becoming more independent, reflected in changes to care arrangements.

• Technology enabling the least restrictive models of supervision and support to individuals who are at risk of offending, as a result of their previous challenging experiences, and/or illness/disability. Their independence, privacy and dignity are supported, whilst protecting them and their community from a breakdown in their support/wellbeing.

• A significantly improved user experience, enabling freedom, managing risk and enriching lives.

Our technology-enabled developments are a new concept, delivering high quality care and accommodation for people living with a range of disabilities, which is more cost-effective than traditional provision. We’ve worked with Tunstall on Moorgate Mill to ensure it offers the latest solutions to support people with complex needs both now and in the future. We want to ensure HB Villages is at the forefront of harnessing available and emerging technologies to deliver the best possible outcomes for the people we support.

Matthew Warne, Director, ATEL (Adaptive Technology Europe Ltd)