

# Assistive technology

## What this means

Throughout the first two years of the Social Care Digital Innovation projects, several projects aimed to introduce assistive technology to help the delivery of care by supporting the independence of service users and avoiding unnecessary carer visits or hospital interventions.

Projects differed, some focused on developing or streamlining processes to introduce the correct assistive technology and others produced new assistive technology that could be used in homes.

## What we've learnt

### Both adapted and new technologies can be effective

Projects introducing new assistive technology needed to either develop new software compatible with existing technology in people's homes (such as TVs and iPads) or introduce brand-new digital products (Wirral, Isle of Wight, Barnet). In all cases, interventions were tested through user research to ensure that they met the need case and the specific problem that they were being introduced to solve.

Some projects attempted to adapt mainstream consumer products to care needs. For example, in **Sunderland**, they sought to incorporate Internet of Things technology (i.e. interrelated 'smart' devices) to support adult social care delivery, although this was not achieved within the programme timeframe. In **Hampshire** the focus was specifically on the features provided by Amazon's Alexa, where users reported increased independence and reduced isolation as a result.

Some assistive technology was designed specifically with the carer in mind. For example, in the **Isle of Wight**, a prototype for a 'Cobot' (a robotic exoskeleton) to provide lumbar support for at home carers was trialled. More work is now being done to understand the perception and business case of this approach.

### Smooth processes are needed to introduce new technology

Beyond designing a new *product*, several projects also focused on developing new *processes* to define, procure and install the correct technology that responded to relevant need cases. For example, in **Sunderland** a scorecard was developed to identify the required functionality and interoperability needs for the new assistive technology and the

core software platform to integrate data. This scorecard could then also be used to monitor whether the technology was effective. They also worked closely in partnership with digital specialists to provide technical advice, which, along with the scorecard, helped to overcome procurement issues. Most other projects faced issues working with procurement teams given as a result of working with new suppliers, new products and within very short time frames.

The **Stockport** project focussed on developing a streamlined process to install new assistive technology into people's homes using their triage and assessment team to do installations during initial assessments. This meant that individuals were able to get the right equipment quickly, did not require multiple visits and that they were more likely to adopt the technology.

### **Take up of new technology can be a challenge**

Beyond the challenge of selecting, procuring and installing the correct technology, a further challenge faced by projects was take-up. For some individuals with more complex needs, using technology to replace care visits would never be appropriate, and some projects struggled to find the right number of individuals willing to test the new approach to provide evidence for their potential impact. A few individuals were sceptical of using new technology and adequate training and buy-in was needed from staff to ensure that they were integrating the technology correctly within the services that they offer.

This lack of acceptability from end-users and staff was exacerbated where technology did not immediately function as expected or where individuals required more support. To avoid this issue, in-situ testing of the product is required to ensure that it works correctly within the context in which it is being applied.

### **Outcomes**

Some cost savings were seen in projects that successfully introduced new assistive technology, notably where there was a reduced need for staff to attend a visit for reassurance. Additional benefits of these projects were to increase individuals' digital capabilities, independence and means of communication with family and carers.

## **Recommendations**

- Begin with determining the correct use case for the technology prior to selecting and implementing a new piece of technology (don't let the technology lead).
- Ensure that you work closely with procurement and engage them with the project at an early stage to avoid issues further down the line.
- Design clear processes for selecting, installing and using technology within a care package.
- Make sure that you are iteratively testing the technology and monitoring its impact to make sure that it is the right piece of kit for the problem at hand.
- Test technology and the processes for introducing and installing it in situ, including in patient homes.