

Improving Lives and Saving Costs with Brain in Hand

Home to 430,000 people, Kirklees in West Yorkshire is one of the largest and most populated boroughs in the UK. Serving the community, Kirklees Council's vision is to support vulnerable people and help them to stay in control of their own lives and supporting them to do more for themselves.

Approximately 42,500 people(1) in the region suffer from a common mental health disorder such as depression, anxiety, or obsessive-compulsive disorder. A recent survey of local residents indicated even higher prevalence, with 29% experiencing a mental health condition over the past 12 months; the highest reported incidence was amongst younger adults (43% of those aged 18-24 and 34% of those aged 25-34). Yet, in line with the national picture, Kirklees' mental health services have compared unfavourably with those to help physical conditions.

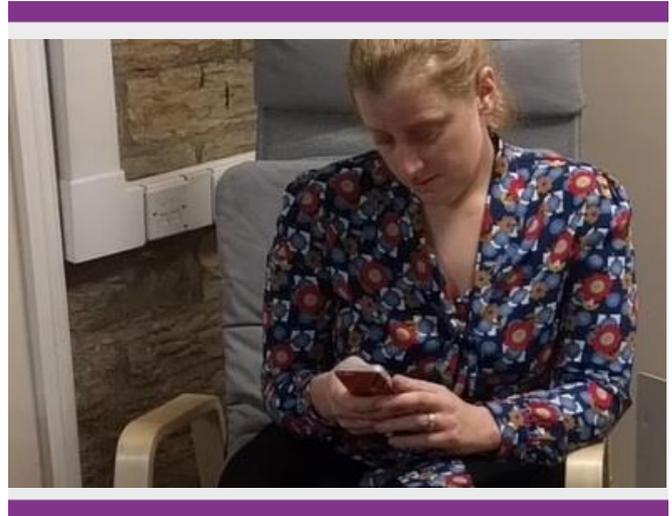
To urgently redress this, in line with the Five Year Forward View, commissioners from Kirklees Council have worked together with providers across NHS, social care, education, youth justice and the voluntary sectors, to develop Local Transformation Plans designed to deliver crucial improvements.

At a time when demands are rising and a budget shortfall calls for savings to be identified, as part of these plans the team looked at Technology Enabled Care (TEC); they hoped that this could unlock the ability to deliver the right care at the right time, transforming lives whilst also saving costs.

Solution

The mental health commissioner worked with the Council's Assistive Technology (AT) department to identify and fund technology to support its philosophy: to deliver mental health services that enable the individual to develop skills, self-care, and resilience for future independence. This was a new area for the team, as AT or TEC to date has primarily focused on providing equipment to overcome physical challenges.

The AT team identified and assessed Brain in Hand, an on-demand support system that arms individuals with a range of personalised support from their phone, including a vital link to their support network. It researched the results seen amongst other councils and NHS organisations, and tests by the National Autistic Society. The council decided to implement the system.



“Brain in Hand is an innovation I would recommend councils consider for their Local Transformation plans.”

Alan Laurie, Commissioning Manager,
Children's Services

One of the important decisions for the council was where to introduce Brain in Hand. In which service pathway would the technology succeed and achieve the best results? After all, the council must prove costs savings for every pound spent. After reviewing the range of services delivered, it identified two services that would benefit from adding Brain in Hand:

Firstly, the technology was to be introduced within the Community Links Engagement and Recovery (CLEAR) service, a non-profit provider commissioned to deliver support to around 500 adults with mental health needs each year. As every client is given a key worker who helps them to develop goals and plans personal to them, the key worker could use Brain in Hand to reinforce the coping strategies developed in between sessions. Knowing the individual, they would also be best placed to respond to requests for extra help made through the Brain in Hand system. It could potentially strengthen and extend CLEAR's service.

Secondly, to support the council's strategy of early intervention and prevention, Brain in Hand was also introduced within Kirklees College. Using technology to improve self-resilience at this stage in life may prevent escalation and possible later referrals into CAMHS; the service is already declaring a 20-week waiting list. It would also improve the pathway when a child transitions into adult services.

The Brain in Hand team worked with these services to help identify people who would benefit most from the system. They also visited CLEAR and Kirklees College and over four days trained the individuals on how the system works, how to set up a user on the system to achieve the best results, and how to use the monitoring and reporting software.

The CLEAR and College teams, now fully trained, moved ahead with setting users up on the system. For those without a smart phone, the council purchased devices, ensuring the right hardware was in place. From then, over a period of a month, almost twenty people were up and running using the Brain in Hand system alongside the support they already received.

Results

To deliver its Local Transformation targets and value to its residents, the questions to be answered by the project were: Could this assistive technology help people to increase their mental health and self-resilience? Could it provide effective early intervention and ease the strain services faced with increased demand? Could it save money?

“Providing effective early intervention, it provides immediate support at a time when young people need it.”

Alan Laurie, Commissioning Manager,
Children's Services

60% of users felt Brain in Hand had definitely helped them to become more independent

The outcomes for adults using Brain in Hand have been assessed, and interviews with users and service delivery staff have been conducted. The results are encouraging. Giving people Brain in Hand has increased independence, enhanced services, and delivered annual savings of £6,600 for every person using the system, which represents a 10 times return on investment. If such a saving were made for all of the 500 adults using the CLEAR service, it could represent a saving of £3m.

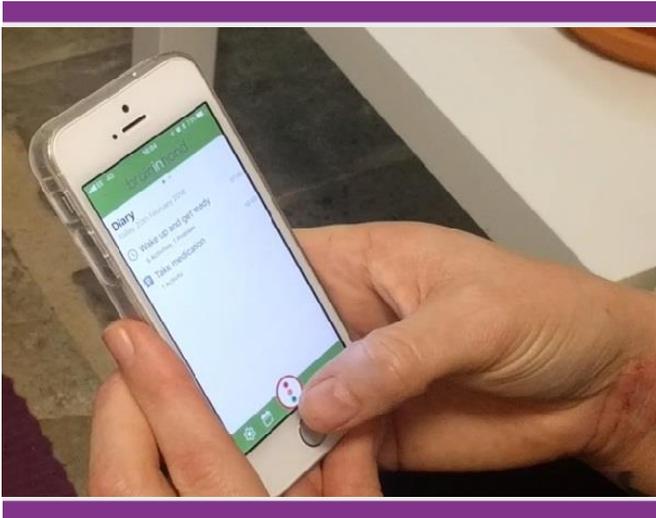
Positive outcomes

Most importantly, the project has demonstrated that by arming people with access to their own coping strategies and giving them the option of requesting additional support when they need it, they are able to make good progress towards improved mental health.

Usage data shows that people used Brain in Hand regularly over the programme. The anxiety monitor measured a gradual reduction in red and amber presses over the period and similarly a 19.4% growth in green presses over a 6-month period (between July 2017 and March 2018).

Perhaps most importantly to the programme, 60% of users felt Brain in Hand had definitely helped them to become more independent, with the remaining 40% feeling that maybe Brain in Hand had helped with this.

To illustrate these figures, there have been a number of independence goals achieved during the programme, including travelling independently and returning to work after long periods of absence. Even goals that may sound small, such as remembering to take medication, have been achieved that have actually represented significant transformations in quality of life.



“It is fantastic to know that even when we can’t be there, our clients have Brain in Hand.”

Lauren Bradley, support worker at CLEAR

Extending support services

Initially staff at both CLEAR and Kirklees College were a little apprehensive of the system: fearful that it represented another item for their packed task list, that they would be inundated with alerts from service users or students looking for support.

However, since using the technology, staff say that it has improved services, helping them to improve the access to their support, better embed advice, and encourage more independence. Plus people haven’t requested lots of extra help – only when they really needed it.

It has enabled clients to take the advice discussed in their group or one-to-one session, and apply it to Brain in Hand, so that they can access it anytime, anywhere. This may be coping strategies or reminders such as “take medication” or “remember to eat”. The team see clients using solutions to get themselves out of a crisis; taking more responsibility in managing a situation before contacting the team is also giving clients a positive feeling of empowerment.

Commenting on this extended reach of services, Lauren Bradley, support worker at CLEAR, said: “Because we work with such large numbers of people, we are limited in outreach work, so we cannot go out and see the client in their own homes. So, for us it is fantastic to know that even when we can’t be there, they have Brain in Hand. It also gives us real peace of mind knowing that those clients who are usually too anxious to call us for support, have a method of contact via the traffic lights.”

Brain in Hand has also enabled more informed sessions, with supporters better able to pinpoint triggers and so create useful coping strategies. Stuart Davies, Team Leader, Kirklees College, said: “With tracking and monitoring flash points through Brain in Hand, you could see visually that the majority of time the student is quite settled. There were just a couple of areas that cause anxiety. Because we’ve worked to put strategies in place for these areas, they’re now working so he’s built long-term resilience.”

The team felt it was positive to know that even when they can’t be there, there is something that can. Also, while some clients can feel apprehensive about contacting the service, Brain in Hand enables them to get in touch by pressing a button.

The biggest benefit stated of Brain in Hand, as stated by the support services team, is independence. Service users are given the opportunity to not rely on support services to be their safety net; with Brain in Hand, they can be their own support. The personalised nature of the system was found to especially help with this. The team felt that Brain in Hand is not like giving a tool-book; because they have built and written it themselves, it ‘really hits home’. Knowing that they put the advice into Brain in Hand with their ‘good head on’ means that when in a bad place, they can retrieve their own counsel straight away.

Finally, Brain in Hand has also helped ease the step-down of services. Rather than get panicky about support from CLEAR coming to an end, they know they have access to Brain in Hand: an extension of the service, which they can go away and use independently.

Saving costs

Amongst the ten adults using Brain in Hand through the CLEAR service, increased independence was seen and a subsequent step down in services was achieved for 9 of the 10 users. This resulted in an average saving of just over £6,600 per year, which represents approximately a ten times return on investment within the first year.

The cost analysis that Kirklees used is as follows. Across the ten users, support services costs the Council £150,451 each year. However since using Brain in Hand, this budget has reduced.

The users reduced demand on £28,956.00 of planned services; equivalent to £3,000 per user. A further £100,000 of expected costs from responsive services such as crisis resolution were not needed. Assuming only 30% of these potential avoided costs were attributed to this project, a saving of £36,445.70 were made; or £3,644.57 per user. The breakdown of costs saved can be seen in the table below.

The cost of delivering the Brain in Hand system to 10 individuals, including training and management support to the service delivery team cost £6,800. This gives the adult services project an in-year net saving of £58,601.70; or a saving of £9.62 for every £1 invested.

This gives the adult services project an in-year net saving of £9.62 for every £1 invested.

Commenting on the outcomes, Tony Bacon, Commissioning Manager for Mental Health, said: “Around one in three GP appointments will involve a mental health component; approximately one visitor to A&E every day is due to mental health. Our goal is to be proactive in commissioning services that provide early intervention and arm residents with the skills for good mental health.

“The early findings of our programme with Brain in Hand are encouraging. With improved outcomes and cost savings, Brain in Hand demonstrates how Assistive Technology can complement services and shape our service model to improve effectiveness, quality, performance, efficiency, and value for money across the Kirklees footprint.”

“Our service providers and users have taken to Brain in Hand very quickly and we have seen encouraging results. The cost is very low compared to other services, especially when looking at impact, and so we plan to extend our programme.”

CLEAR service & Brain in Hand, cost savings identified across 10 people	
Direct costs	Reduced demand
Day care services	£12,792.00
CPN	£1,716.00
Psychologists	£2,232.00
Psychiatrists	£1,548.00
Supported travel	£8,640.00
Community mental health services	£2,028.00
Total	£28,956.00
Potential avoided costs	Avoided cost
Outpatient A&E	£257.70*
Unemployment benefit	£7,445*
Crisis resolution team	£28,164.00*
Hospital services	£579.00*
Total	£36,445.70*
Grand total saving	£65,401.70