braininhand
personal technology for independent living

Brain in Hand Project Evaluation
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Contents

1. Project Summary

<u>Adults Services – Community Links</u>

- 10 Brain in Hand (BIH) licences were deployed across 1 provider: Community Links
- 4 days of onsite support allocated
- 12-month licence duration starting from July 2017
- 10/10 licences were implemented across Dewsbury and Huddersfield
- Traffic light response was provided by the same day by keyworkers (during service hours of 9am-5pm Monday to Friday).

"Before Brain in Hand, I could not have worked, and I would not have been able to cope with everything. I do not think I would be in the situation I am in going into work every day."

Brain in Hand User

"I feel we are limited because we work with such large numbers of people, and because we work on a group basis, we are limited in outreach work, so we cannot go out and see the client in their own homes. So, if Brain in Hand had not come along, we are definitely limited in how independent we can make those clients be…For us it is fantastic to know that even when you can't be there… there is something that can."

Support Worker, Community Links

<u>Children and Young People – Kirklees College</u>

- 10 Brain in Hand (BIH) licences to be deployed at Kirklees College
- 4 days of onsite support allocated
- 12-month licence duration beginning on 01/09/17 and ending on 31/08/18
- 7/10 licences were implemented across Dewsbury and Huddersfield
- Traffic light response was provided by the end of the student's session by the ALPS team (between 9am to 5pm Monday to Friday).

"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."

ALPS Team Leader, Kirklees College

2. Return on investment

The below table outlines direct cost savings and potential avoided costs to each individual who has accessed Brain in Hand through Kirklees Community Links. Costs have been extracted from the Unit Costs of Health and Social Care 2017, issued by The Kent Academic Repository. Following interviews with staff and users, and survey responses, cost savings have been identified and attributed where Brain in Hand either has or is likely to have an impact. These cost savings have been confirmed by Community Links.

- The total saving across the 20 users identified so far is £66,003.40
- The total cost of the project was £13,600 giving a net saving of £52,403
- This saving comes from 10 users approached from the Adults project
- We have identified cost savings from 7 out of the 10 users from the Adults project
- From the 10 user adults project the saving per user is £6,600.34
- The 10 user CYP project is three months behind and so the cost savings are yet to be identified.

		529674	529468	529997	528873	529430	528872	529008	529302	528915	
	Length of BIH use ->	5 months/ 20 weeks	6 months / 24 weeks	4 months / 16 weeks	8 months / 32 weeks	6 months / 24 weeks	8 months / 32 weeks	8 months / 32 weeks	7 months / 32 weeks	8 months / 32 weeks	
Direct Costs	Cost of day care services				£ 4,264.00	£ 4,264.00		£ 4,264.00			£ 12,792.00
	CPN (estimated band 5)			£ 1,716.00							£ 1,716.00
	Psychologists (estimated band 8a)	£ 744.00	£ 744.00					£ 744.00			£ 2,232.00
	Psychiatrist (estimated band 9)					£ 1,548.00					£ 1,548.00
	Social worker										£ -
	Support to travel					£ 4,320.00				£ 4,320.00	£ 8,640.00
	Community Mental health teams			£ 2,028.00							£ 2,028.00
	Sub total	£ 744.00	£ 744.00	£ 3,744.00	£ 4,264.00	£ 10,132.00	£ -	£ 5,008.00	£ -	£ 4,320.00	£ 28,956.00
Potential Avoided Costs	Outpatient and A and E				£ 859.00						£ 859.00
	Accommodation (in residential care)										£ -
	Unemployment benefit					£ 7,445.40					£ 7,445.40
	Crisis resolution team			£ 9,388.00	£ 9,388.00			£ 9,388.00			£ 28,164.00
	Hospital services annual cost				£ 289.50			£ 289.50			£ 579.00
	Sub total	£ -	£ -	£ 9,388.00	£ 10,536.50	£ 7,445.40	£ -	£ 9,677.50	£ -	£ -	£ 37,047.40
	Total	£ 744.00	£ 744.00	£ 13,132.00	£ 14,800.50	£ 17,577.40	£ -	£ 14,685.50	£ -	£ 4,320.00	£ 66,003.40

Note: After discussions with Tony Bacon and Alan Laurie, in line with the methodology applied to other providers, we have attributed 30% of the potential avoided costs to the use of Brain in Hand.

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3. Overview of users:

Adult Services

BIH User ID	Length of BIH use	About the user	Use of BIH	Identified benefits
529674	5 months	Has a diagnosis for autism. Currently at Kirklees college (pre-apprenticeship). Psychologist support (from Sept 2017). Engages a lot with the service (4/7 days a week) but doesn't necessarily ask for support.	Uses BIH predominantly for the diary. Presses green a lot.	
529468	6 months	Is already quite independent, part of the services' project 'go' team, good participation. Takes part in weekly anxiety course and confidence course. Currently receives support from a psychologist.	BIH is part of his support plan. Uses traffic lights regularly.	Feels more in control of his recovery and has a better insight of his needs and solutions using his reflection and the Brain in Hand app and support from family.
529997	4 months	Has anxiety, depression and is undergoing an assessment for autism or PD.	Uses traffic lights all the time and diary. Uses it for medication. Reminders for what to take out. Uses unplanned a lot.	Has a Community psychiatric nurse. Felt he was getting the same support from BIH as he does from a professional. Finding more independence from the app instead. Relationship with CPN is difficult and could have led to a relapse without BIH. Could have been 'disastrous'.
528873	8 months	Lives in own place and works. No other support listed. Has disengaged from the service so have therefore been closed to CLEAR.	Has disengaged wth using BIH and the service.	It is assumed the app may have helped and therefore no longer needed to use the service or BIH. They feel the user disengaged for a good reason.
529430	6 months	Used to become more independent. Still under psychiatrist. Having CBT privately - this is unlikely to change in the future.	Regularly uses traffic lights. Needs to use the diary less now.	Closed file early because of BIH. Only worry with discharge was with not using BIH. Could potentially have meant re-referral or other service involvement. In wellness recovery plan - for work. Work know to prompt to use app if mental health deteriorates.
528872	8 months	Low confidence, difficulty with emotional regulation. Anxiety. Possible BPD. Works full time. Had a psychologist.	Uses the diary regularly but not necessary pressing on responses. Uses the traffic lights.	Isn't engaging with the service.
529008	8 months	Diagnosis of psychosis - auditory hallucinations cause panic (anxiety and depression). Comes to the end of 2 years with service in March. Engages a lot with the service. Will now have a support worker with HOOT. Used to have a psychologist (Dr Downer Folleyhall).	Completes tasks all the time. Could benefit a lot more but struggles to engage. Perhaps just uses the diary and occasional traffic lights.	Support plan can go in her app at discharge meeting instead of being printed. Could stop with panicking post discharge. Could prevent referral and involvement from other services in the future.
529302	7 months	Quite independent. Getting married and positive changes. CBT, anxiety and mindfulness courses. No other support listed.	Hasn't used Timeline since October. Was using traffic lights regularly. Likely not used since Christmas.	
528915	8 months	Depression and anxiety. Referral for eating disorders. Currently seeing a psychologist.	Uses traffic lights and diary for reminders (e.g. medication) and solutions.	BIH has helped with travelling independently and living independently.

Kirklees College

Initials	Length of BIH use	Use of BIH	Feedback from College Support	Benefits
529760	5.5 months	SB has predominantly used Brain in Hand to regulate and monitor their anxiety through the traffic light system. The also occsionally registered solutions presses at the start of their BiH use.	Felt it got repetitive as it was on green all the time and he couldn't really connect with it. He says that he doesn't feel that he needs it at the moment, it doesn't really work for him. It might be that BIH would be better at a different time for him - we think in reflection that possibly he wasn't quite ready for it at this stage and needed actual people rather than an app.	
529761	5.5 months	OC has had sporadic use of Brain in Hand since their account creation. They have mosty registered traffic light presses to monitor their anxiety, but they have also used solutions on a couple of occasions.	He uses it when he generally feels anxious about things. When he feels in control it isn't something that he feels that he needs to use.	Generally a good tool to prevent spiralling.
529796	5.5 months	AM has soley used the traffic light system during their use of Brain in Hand. Since activity started on their account in April, they have only pressed on green traffic lights,	Lower anxieties, for example, class changes - he now shows more resilience to get over these small anxieties. He's now at a stage where he doesn't need BIH. Because the points that were causing anxieties were around public transport, with tracking and monitoring, looking for flash points, you could see visually that the majority of time he's quite settled. There were just a couple of areas that cause anxiety. because we've worked to put strategies in place, they're working so he's built longer term resilience.	Long term resilience to solving problems. After a bit of coaching, he got to the point where if he didn't want to verbalise the anxiety, he would communicate in the comments box on the timeline.
529588	6 months	Aside from a red traffic light and a solution response on the day of account creation, AN registered regular and consistent green traffic light presses up until usage stopped at the end of December 2017		Finds it very helpful to manage his anxiety.
530232	3 months	CN soley engaged with the traffic light system during their use of Brain in Hand. They used it to record and monitor their anxiety, and to occasionally ask for extra help when they needed it.		
529762	5.5 months	JS used the traffic light system to keep track of their anxiety, and to occasionnally request additional support when they needed it. JS had a pause in usage between 13/12/17 and 18/04/18	Doesn't use it much because he wants to use it to set new problems/solutions and would prefer to do that using the	
529536	6.5 months	Aside from a solution response on the day of account creation, HT soley engaged with the traffic light system, pressing green responses semi-regularly until usage stopped towards the end of November 2017	He likes it being there just in case, however he doesn't uses it that much. We thought he'd use it for travelling but he says that travelling independently is no problem but his dad says that he does have regular hiccups.	

4. Case Studies

User Case Study 1: L

"I like living independently, but I often forget important things and can feel very anxious. Brain in Hand has made a big difference, it's reduced my anxiety and helped me to grow in independence.

I find the reminder feature really, really useful. It's helped me to remember to take my medicine every day. Before I often missed days, forgetting to take my medicine or sometimes was left not knowing if I had taken it or hadn't. But now a prompt on my Brain in Hand reminds me every morning and I am able to tick that I have taken it, so that I know for certain.

The coping strategies also have made me less anxious, as when I am struggling with things, I now just look at my Brain in Hand and I can quickly find the solutions I have developed with my supporter, or that I have thought of when feeling calm. For example, I usually really struggle when appointments get cancelled, I don't know what to do with myself and feel very anxious. But a few weeks ago when one was cancelled instead I looked on my coping strategies and I was able to spot other things I could do. I also often feel anxious when travelling. Now, I look at my solutions and find things to do that distract me and keep me calm.

I have also used the red traffic light service. If ever my own coping strategies aren't working and I am struggling I have pressed red and someone from the support team has helped me. They call me and talk to me about what is going on and come up with solutions with me. There is nothing I don't like about Brain in Hand."

User Case Study 2: S

"I use (BIH) every day. I have the prompt reminder set up for every 3 hours for the Traffic Light, so I use it every 3 hours. It is mainly the prompts I use now. I don't use the Diary as much because now that I have got into a routine, I know the kind of solution I have put in I have gotten used to manging that by myself without the app.

I think my favourite part is the prompts, and I think that is because it makes me stop and take stock of the situation rather than just power through my day. I do some breathing to help ground myself a bit.

I used Brain in Hand for getting back to work. I do not think I would have got on the train and gone to work with it at the beginning. It is a bit like a security blanket, I know that if I did feeling very anxious on the way to work that I had that there for that situation. It has helped me get back to work and be a bit more independent.

I really don't think I would have been able to get back to work without BIH to be honest.

I work in an insurance company. It's helped just to be more independent. Just to go out and not be scared of being on my own, and it has helped with that. I am happy to go out and do things now.

Often when I am on the train to and from work, and it is really busy and there are lots of people standing around you that makes me really anxious. I have put that in as one of my sort of scenarios on my app for when it was really busy. So I looked I my app, I went to my solutions and one of the solutions said 'play a game on my phone', to distract me and it worked and I was able to continue my journey.

I have been able to get on a bus which I would not be able to before. I was reasonably comfortable with trains but buses no, no. And I have been over to Birmingham which I could not have imagined before.

I don't think I would have managed if I didn't have Brain in Hand. I really don't think I would.

Before Brain in Hand, I was with a local mental health charity. Going to groups and what have you. I could not have worked, and I would not have been able to cope with everything. I do not think I would be in the situation I am in going into work every day.

I think it is fantastic!"

For information about S's app usage, please see Appendix 1.

5. **Staff Interview**

Lauren, Support Worker at Community Links, Huddersfield

"I think Brain in Hand has helped with the support we offer as it has enabled service users to be a little more independent with themselves. They are able to take what we deliver in our groups and, the things we do in our one-to-one sessions with and the tools we give them to be more independent they are able to do it on an app, go away and it is readily available without out support being there.

It has also made the service users who used to be quite stressed-out or panicky about our support coming to an end, we work with people for a limited amount of time, when that come to an end, which can be quite daunting for people. It means they have a back-up, it is sort of a continuation of our support. Like a little bit of a back-up that helps that transition period too.

One particular service user I have in mind used our service regularly but was really struggling. The more she stabilised her own personal life, the more difficult is was for her to start coming into groups. So for example, she got a partner, she got a job, she got housing sorted. The more that stability happened is the rest of her life the less able she was to come to our service just because of other pressures. What Brain in Hand meant for her, is that where she was really reluctant to leave out service and admit she actually did not have time for us anymore but she was really reluctant to leave, it meant with Brain in Hand is that she could say "Ok, I can go away and leave that support there, because I have that extension of the project, I've got the app I am able to go away and use. I have all those tools I learnt from Clear, I am able to go away and be more independent."

Users have achieved all sort of goals I think. From tiny, little things like taking medications for some people it is a difficult, it is difficult to remember, so having a Diary, with an app, it is not like carrying a paper diary around. It is there, it's in your phone, and you've got those little reminders that come up. So even for the tiny things like that is has been fantastic for. Some service users had goals like to become more independent outside of service it has definitely helped with that. It means they have been able to attend appointments. For example, one service user had an appointment with the Citizen's Advice Bureau, which can be quite scary for people, to talk about benefits. What the app meant was that it was a safety net - "if I have a panic attack, I can reach into my pocket and find my solutions there". So instead of keeping the feeling of a panic attack inside, it removes that worry from their minds. So instead they can go in and face it head-on and, if, if worst case scenario something does happen the solution is in their pocket.

I feel we are limited because we work with such large numbers of people, and because we work on a group basis, we are limited in outreach work, so we cannot go out and see the client in their own homes. So, if this app had not come along, we are definitely limited in how independent we can make those clients be. But instead, we can give people a tool that can be used home when we can't be.

I think there are benefits to using the app for us as a service, as professionals working with services user, and service users themselves of course. For us it is fantastic to know that even when you can't be there, we are lucky we can work until 8 o'clock at night a lot can't, it is great knowing that when we can't be there, there is something that can. It is great that when we have, however many other clients we are in contact with, clients sometimes feel apprehensive about contacting us, that is always a worry for me that they won't get in contact when they need us. The app then enables them to do that by just pressing a button. So instead of having to dial our number, they can press red and they know we will call them instead. I think it is a little bit of peace of mind, if anything, knowing there is that option there for them. Benefit for them as well, independence is the main one for me. I think it give them the opportunity not to have to rely on us to be their safety net, because they are their own support. They have got their own Solutions, and it is not like a tool book someone has given them, it is something the they have made themselves. I think it really hits home when they press the solutions that "I put that there in the first place, it is something me with my good head on know that I can do and when I have my bad head on and I am in a bad place I can use my own support from earlier on". And there are other benefits. It is great to have something that gives a bit of structure. I have a couple of clients that have autism so for them, especially routine is a massive thing. So, it helps them to use the Diary side of things to put in things like medication, walking the dogs, that kind of thing. Not massive life changing appointments, just little everyday things it gives structure to their days. They are the main ones for me."

For more reported benefits and comments on the project, please see Appendix 2.
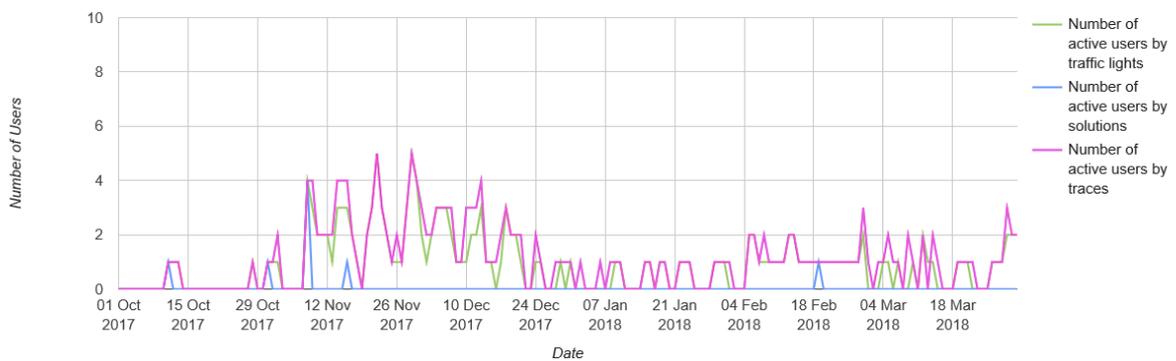
6. Brain in Hand System Data

The below graphs show the usage of Brain in Hand over time since service users were first set up with their Brain in Hand website and app. The graph shows continued and consistent usage since Brain in Hand was implemented.
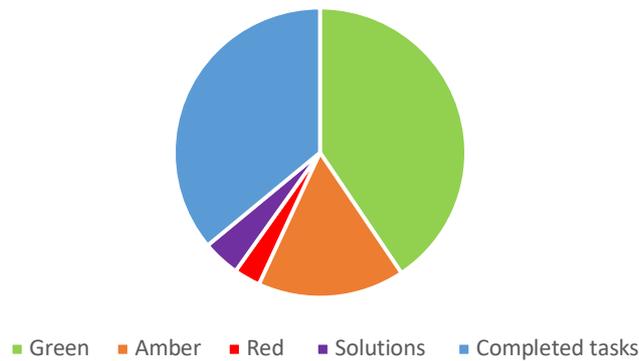
Community Links

Kirklees College

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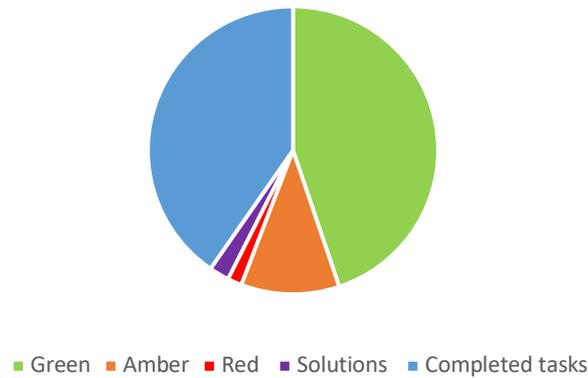personal technology for independent living
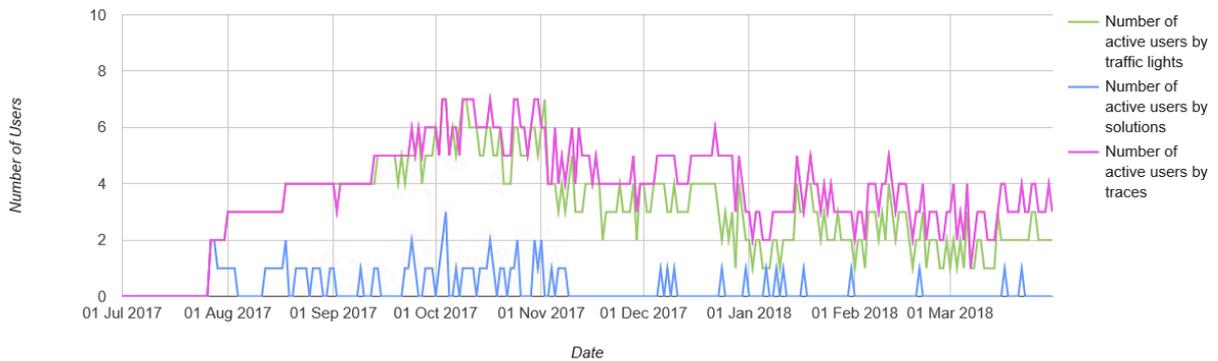
The below pie charts show that across 10 users at Community Links, over a 9-month period of using Brain in Hand, there was a significant increase in green traffic lights and completed tasks along with a reduction in red and amber traffic light presses.

The pie chart also shows a reduction in solution presses over time. This might indicate a reduction in the need to press on solutions during difficult situations because using the solutions has become more habitual.
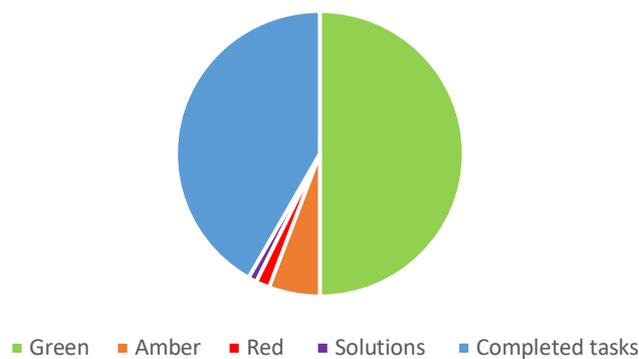
Jul-Sept 2017

■ Green ■ Amber ■ Red ■ Solutions ■ Completed tasks

Oct-Dec 2017

■ Green ■ Amber ■ Red ■ Solutions ■ Completed tasks

Jan-Mar 2018

■ Green ■ Amber ■ Red ■ Solutions ■ Completed tasks

7. Survey Responses

Users reported that they used Brain in Hand for: anxiety, independence, bus journeys, evaluating stress levels, and keeping a check on how they are feeling and reducing anxiety levels in difficult situations.

1. 6/7 users found Brain in Hand easy to use.
2. 3/7 users found that Brain in Hand helped them to manage anxiety and 4/7 users thought that Brain in Hand had maybe helped them to manage anxiety.
3. 3/7 users reported that BIH made them feel more confident and 4/7 said Brain in Hand maybe made them feel more confident.
4. 4/7 users found Brain in Hand helped them to be more independent and 3/7 users felt it maybe helped them to be more independent.
5. 3/7 users found Brain in Hand helped them to achieve goals, while 4/7 found it had maybe helped them to achieve goals.
6. 3/7 users found that Brain in Hand had a positive impact on their life, and 3/7 felt it had maybe had a positive impact on their life.

When asked what might have happened if they didn't have Brain in Hand, answers included:

"I would have continued living in a hole with no way out"
"I would have struggled with the constant swapping of support workers"
"I would not have been able to control my anxiety"
"I would have ended up having a panic attack"

When asked how Brain in Hand has helped with their support, answers included:

"It has given me means of monitoring myself"
"It is with me all the time whereas the people who support me cannot be"

8. Appendix 1

User app usage data: User S

Date Sent	Type	Activity	Problem	Solution
22/09/2017 09:17	Solution	Put school clothes on	Phineas won't get dressed	Start phone timer to time him
22/09/2017 09:17	Solution	Brush Phineas' teeth	Running away from me	Turn it into a game https://www.youtube.com/watc h?v=Ku-ForS6G3I
22/09/2017 10:04	Red			
22/09/2017 10:04	SupportInformed			
22/09/2017 10:05	Green			
22/09/2017 13:06	Green			
22/09/2017 16:16	Amber			
22/09/2017 16:51	Solution	Going shopping	Phineas misbehaving	Sit him in the trolley
22/09/2017 18:32	Green			

The above table demonstrates how Brain in Hand system data can capture when individuals apply solutions, potentially preventing the requirement for additional support. In the above table, a problem led to a red traffic light alert and an intervention from support. Later that day, another problem occurred but this was dealt with independently by the user and they subsequently returned to 'green' instead of requesting additional support.

9. Appendix 2

Staff Questionnaire (requested and completed on behalf of Bradford City Council).

Name & Details

- Lauren Bradley – Recovery Support Worker CLEAR

What are the benefits you have found of using Brain in Hand?

- Peace of mind knowing that clients who are usually too anxious to call us for support, have a method of contact via the traffic lights.
- Helps service users be more independent and take more responsibility in managing crisis situations/panic etc before contacting us, which in turn gives them a feeling of empowerment.

Have you seen any improvement for your clients in their quality of life once they have started using Brain in Hand?

- Independence and being able to use solutions they wrote themselves, as well as using tools at home.
- Becoming more reflective in their lapses to learn and take forward rather than escalating to crisis.

How many people currently use Brain in Hand through your organisation?

- 9 licenses currently in use.

What Issues have you come across when using Brain in Hand?

- Engaging some of the clients in continuing to use the app. Not due to brain in hand, but due to clear service requirements as we do less 1:1 it can sometimes be difficult to see service users regularly to encourage they add new solutions/update diaries.

What suggestions would you have in regards to tackling these issues?

- Would solve the above problem by having all clear staff trained as 'trainers' so we can all set service users up and know the website/app well. Currently myself and Fran/Kate were contacting key workers, to contact service users, and then back which was very lengthy when coupled with difficulties seeing clients often on a 1:1 basis. Having us all trained in use of the app as 'trainers' would mean we could all go straight to our own clients and set them up, chase up and use the app with them.

Any examples of how Brain in Hand has benefitted your clients?

- Independence
- Organising their day
- Remembering to take medication
- Using solutions to get themselves out of crisis
- Using diary to make sure housework etc is done
- Helping eating disorder clients to remember to eat
- Helping client with difficulties regulating emotions to monitor moods.

Would you say Brain in Hand is cost effective?

- Preventing re-referrals and crisis/relapse after closure of file with clear following 2 years. One client at the moment is coming to end of her 2 years and use of the app has massively helped giving her skills in independence and I feel risk of re-referral or relapse is lowered because of this.