

Our impact on people with brain injuries

The Disabilities Trust
Brain Injury Report
2020-21



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**Our aim is to help thousands
of people living with brain
injury in the UK.**

This year in focus

Providing support at each stage of the brain injury journey



Time has flown since I joined The Disabilities Trust in summer 2021.

But on the other hand, time has, in some sense, stood still. It takes time to achieve measurable and meaningful outcomes for people with brain injuries. So, it seems right to now pause and reflect on what we have achieved since our previous brain injury outcomes report 12 months ago. We want to understand what drives us and how we achieve the outcomes described in this report.

The people we support in our services are at the heart of everything we do. For many people, an acquired brain injury has devastating, long-term consequences. Unfortunately, once people leave hospital, there are often significant gaps in the rehabilitation and support that is available. So, one of our primary goals over the past year has been to further develop our rehabilitation model to provide support at every stage of the brain injury journey.

Towards the end of June 2022, we published an article in the scientific journal *Frontiers in Rehabilitation Sciences* describing our clinical model and the different types of rehabilitation we provide. In this article, our data shows the excellent outcomes people with brain injuries achieve at each stage of their recovery journey with us.

The Trust's clinical pathway uniquely includes three types (or streams) of rehabilitation across time. The first occurs during the period immediately after discharge from hospital when restorative rehab, using repeated practice, is most beneficial to support natural recovery. The second stream is used during the medium-term post-injury stage where natural recovery has ended, and compensatory rehab, or finding a way to overcome lost abilities, works best. The third stream consists of the provision of long-term support at a time post-injury where it is important to prevent the person losing the hard-earned gains they made in the earlier stages of rehabilitation, and to maximise quality of life.



An acquired brain injury occurs in a split second but has long-term consequences.

It is difficult to truly understand how traumatic this must be for people and their families. To support people with brain injuries as best as possible, we need excellent staff in our clinical teams. Within our services, I have witnessed first-hand the amazing work staff do every day to change the lives of the people we care for. Many things stand out, such as their clinical competence, knowledge and compassion. They go the extra mile to support people with brain injuries.

But it is the time they give to people that has left the biggest impression on me. They listen, are patient, understand what a person needs and provide the best care possible. This is one of the most precious resources in healthcare.

Science and research inform our clinical practice. Indeed, clinicians, researchers, academics, and other staff involved in brain injury rehabilitation are passionate about science and research, but they also want to give something back. Through our research and other scientific activities, we are committed to sharing knowledge that could benefit the wider community of professionals who are involved in brain injury rehabilitation.



Over the past year, we have collaborated with partners in our research and scientific work. This has included several papers, conference presentations and teaching sessions covering a wide range of topics, such as: rehabilitation outcomes; case reports; work with prison leavers and survivors of domestic violence; and the use of mantras to communicate and develop people's knowledge of rehabilitation principles. Indeed, one of our mantras is 'things take time'. Practising this mantra ourselves, we are committed to continuing our work to achieve the best possible outcomes for the people we support, at each stage of the brain injury journey.

Dr Rudi Coetzer

Clinical Director at The Disabilities Trust and
Honorary Professor, Bangor University

About brain injury rehabilitation at The Disabilities Trust

Our brain injury rehabilitation improves the lives of people with brain injuries across the UK. Our two hospitals, 7 rehabilitation centres 12 residential care homes and 26 community support services help people with brain injuries to regain the skills they have lost.

We are the largest not-for-profit brain injury service provider in the UK. From rehabilitation to long-term care, our brain injury services help people to move forward with their lives.

This report explains how the people we support in our services become more independent following rehabilitation.

We use four things to measure the impact of our services:

1. How much supervision someone needs.
2. The type of accommodation someone needs.
3. How social someone is.
4. Someone's ability to take part in recreational, vocational and occupational activities.



This report shows

In 2021-2022, our services positively changed the lives of people with brain injuries. During this time:



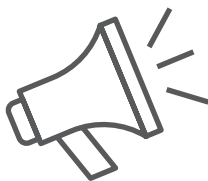
177 people were admitted to our services and **141** were discharged.



83%
Over **four** in five people needed less supervision when they were discharged.



86%
Almost **nine** in 10 people moved to more independent accommodation.



53%
More than **five** in 10 people participated more in social activities.



53%
Over **half** of the people supported improved their participation in recreational, vocational and occupational activities.



23%
Over **one** in five of the people discharged went back to education, employment, vocational training or looking after their home. Most people do not do this straight after being discharged from rehabilitation, as these types of activities require someone to be fully independent and able to socialise.

How we support the recovery of people with brain injuries

We use a neurobehavioural therapy approach¹ to support people with brain injuries to regain the skills they have lost. This type of treatment helps us understand the effects of a brain injury on a person's cognitive, emotional, physical and social skills. Our clinical teams use a range of assessments and evidence-based interventions to respond to changes in these skills. We know that every brain injury is different, and everyone will respond differently to rehabilitation. The aim of our approach is to help people to regain the skills they have lost after a brain injury, to the best of their abilities.

The people we support are at the heart of everything we do. Our teams work closely with each person to understand what they want and why. This collaborative approach guides their treatment.

Studies show that brain injury rehabilitation which looks at all aspects of a person's behaviour is most effective at reducing their cognitive and functional impairments.^{2,3} The severity of the injury, or time since it happened, are not determining factors.⁴

From music therapy to sessions with psychologists, our teams of specialists use different interventions to help people come to terms with what has happened to them and adjust to these difficulties. Our approach to rehabilitation focuses on increasing people's quality of life and helping them to take part in social activities.



¹ Coetzer, R., & Ramos, S. D. S. A Neurobehavioral Therapy (NBT) approach to the rehabilitation and support of persons with brain injury: practice-based evidence from a UK charitable rehabilitation provider. *Frontiers in Rehabilitation Sciences*, 150. <https://www.frontiersin.org/articles/10.3389/fresc.2022.902702/full>

² Worthington, A. D., Matthews, S., Melia, Y., & Oddy, M. (2006). Cost-benefits associated with social outcome from neurobehavioural rehabilitation. *Brain Injury*, 20(9), 947–957.

³ Oddy, M., & Ramos, S. D. S. (2013). The clinical and cost-benefits of investing in neurobehavioural rehabilitation: A multi-centre study. *Brain Injury*, 27(13–14), 1500–1507.

⁴ Cicerone, K. D., Goldin, Y., Ganci, K., Rosenbaum, A., Wethe, J. V., Langenbahn, D. M., ... & Trexler, L. (2019). Evidence-based cognitive rehabilitation: systematic review of the literature from 2009 through 2014. *Archives of Physical Medicine and Rehabilitation*, 100(8), 1515–1533.

Types of rehabilitation

Neurobehavioural therapy helps the brain to adapt to change after an injury. This means people can relearn some of the skills they have lost.

Our specialists support people to practise everyday skills such as shopping and making meals. This helps them to overcome any difficulties they have.

The teams also help people to adapt when their cognitive skills have been affected by using a range of assistive technologies. These include using scheduling and reminder apps and cognitive training games that help people to improve their memory and attention. Automated guides on tablets and smart assistants also help people to break up tasks into small steps with instructions on what to do at each stage.

Staff support people with brain injuries to interact with others and practise skills using real life scenarios. For example, practising how to speak to people in different social settings, such as colleagues in the workplace or friends. Staff also support people to develop ways to manage their emotions by using mindfulness or neurofeedback, a technique which uses sensors on the scalp to measure and monitor activity in the brain. With the support of staff, the goal is for people with brain injuries to relearn skills, so they become habit.

We offer rehabilitation at three key stages of the recovery journey. These are tailored to the different needs of the people we support:



Restoration rehabilitation is offered to people soon after leaving hospital

To benefit from this approach, the person typically needs to be able to understand what has happened to them and not show any behaviours of concern which could stop them from willingly taking part in care and treatment.



Compensation rehabilitation

Is usually recommended within approximately six to 36 months after someone has had a brain injury. People are likely to benefit and learn from prompting and feedback to use specific strategies that help them accept the difficulties they face. This includes poor memory, problems with attention and planning skills, or impulsive behaviour. In some cases, people may be mobile and able to look after themselves. In others, people may have both cognitive and emotional difficulties and physical health needs.



Long-term support

Is offered to prevent relapse and maximise a person's quality of life. In 2021-2022, almost seven in 10 (65%) people admitted into our rehabilitation centres were discharged within 25 weeks or less, depending on the severity of their problems. But in some situations, people with more complex needs require ongoing care and support. In these cases, they will move into supported living services and may be discharged at a later stage.



Staff support people with brain injuries to interact with others and practise skills using real life scenarios.

Barry's story



Hospital rehabilitation
“To learn and adapt to life
after a stroke.”

In May 2021, Barry was found at home after he had a stroke. He couldn't communicate and had a left-sided weakness that stopped him from being able to move.

Barry had a large bleed on the right side of his brain because of an underlying aneurysm - a bulge in the wall of a blood vessel. A scan of Barry's head showed there were further complications, including possible early hydrocephalus, a build-up of fluid in the brain, and encephalomalacia, softening or loss of brain tissue, on the right frontal lobe.

Why Barry needed help

Barry was disorientated and had cognitive and high-level balance difficulties. He also experienced Charles Bonnet syndrome which was distressing because it caused him to see things that were not real (visual hallucinations). In July 2021, Barry was transferred to Graham Anderson House, The Disabilities Trust's brain injury rehabilitation hospital in Glasgow, for assessment and rehabilitation.

Barry's rehabilitation

Barry had a four-week assessment period with the clinical team at Graham Anderson House. This revealed severe difficulties in remembering new information, which meant Barry did not always know where he was. He would also vividly recall things that had not happened, which is known as confabulation. His thinking was slower and he had problems with multi-tasking. Barry had communication difficulties that, at times, meant his speech was not coherent. He had lost confidence in his ability to carry out everyday activities, including cooking and crossing the road. He could also be impulsive when he was shopping, buying things he did not need.

Barry's main goals were to be able to: care for and play with his young daughter; help around the home; go out and about independently; improve his memory and fitness levels; work on conversation skills; and return to work.

The rehabilitation team at Graham Anderson House worked with Barry to create an orientation board. This helped him remember what had happened to him, where he was and what his plans for the future were. The board was also very useful when Barry would wake in the night and feel confused and disoriented.

Barry started a 'memory book' in which he wrote down daily activities and what he had done during his home visits. After a while, Barry was able to spontaneously recall some of the events that happened during the visits. He also started to use strategies to remember things more often, such as writing notes and storing important information in specific places in his room.

The team helped Barry and his wife to understand how his brain injury had affected him. The psychologist helped him improve insight into his memory difficulties and confabulations.

He showed some understanding of his memory problems, but initially struggled to identify situations in which the erroneous ones would occur.

Occupational therapy sessions at Graham Anderson House and in Barry's own home allowed him to practise daily living skills, such as preparing meals and helping around the home. Over time, this led to improvements in his ability and confidence to do these tasks. Barry also wanted to be able to care for his daughter again and was supported to start doing this during home visits over the summer holiday, when his daughter was at home more.

Barry gradually began spending more weekends at home and the rehabilitation team set activities for him to try while he was there, such as helping with everyday tasks. He also practised road safety and orientation to time and place while in the community. Both of these things improved. He then started to independently take his daughter for short outings, such as collecting her from school, taking short trips on the bus and going to the local shop for groceries.

Our occupational therapist helped Barry to make links with his employer and occupational health team to explore returning to work. Before his injury, he had worked as a shop assistant at a supermarket and he was keen to return to some form of employment.

Barry's communication therapy initially focused on conversation skills. This included: taking turns to talk and listen to other people; being sensitive to who he was talking to; using fewer words to express himself; being more specific; and staying on topic. Barry engaged well in one-to-one sessions with the speech and language therapist and in communication therapy groups. This improved his skills over time. He also received support to interact with his daughter by reading storybooks with her.

Barry's individual physiotherapy sessions focused on reducing pain in his left ankle and shoulder and lower back. He received a tailored programme of stretching exercises that he could complete independently. Our team assessed Barry's swimming skills and found that he was safe to swim independently.

How rehabilitation helped Barry

“

“I worked with the clinical team to learn and adapt to life after my stroke,” says Barry. He engaged with his rehabilitation programme which included one-to-one clinical and group sessions and activities led by rehabilitation support workers.

Barry was discharged from Graham Anderson House in February 2022 to live with his wife and daughter. With support from his colleagues and management, he was able to start a phased return to work. Barry is gradually increasing his hours as his fatigue settles and he re-adjusts to the working environment. He is able to independently care for and play with his daughter – which was his biggest goal.

Barry feels that his time at Graham Anderson House was worthwhile.

“Without the help from all the staff I wouldn't be where I am now in my recovery. The work done at Graham Anderson House is astronomical.”

Barry. Previous resident at Graham Anderson House, 2022.

How our services are making a difference to people with brain injuries

We regularly collect data from our services to assess the impact rehabilitation has on people with brain injuries. The data for this report was gathered between 1 June 2021 and 31 May 2022.

The data cover two groups:

- 1 People who have left our services
- 2 Those still using our services

Rehabilitation services

These data cover people who have been discharged from the three programmes (restorative, neurobehavioral and wellbeing and complex care)



177
people were admitted to our services

141
people were discharged

On admission

Types of brain injury



48%
Stroke

30%
Traumatic brain injury (TBI)

22%
Other

People discharged from each type of rehabilitation

61%
Restoration

36%
Compensation

3%
support

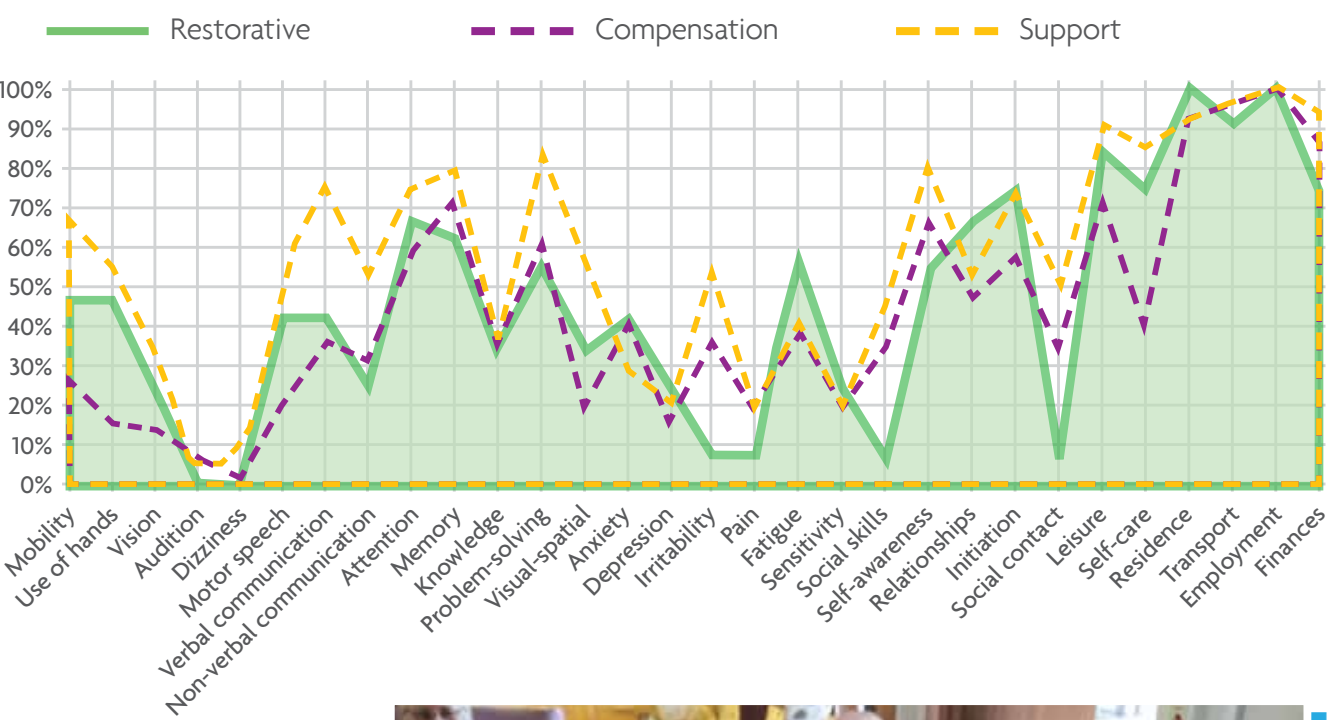
Time since injury:

	Restoration	Compensation	Support
Median	2 months	3 months	16 months
0-6 months	82%	80%	50%
7-12 months	11%	8%	0%
Over 12 months	7%	12%	50%

Why rehabilitation is needed

The figure below shows the types of issues people with brain injuries face and how common these are across the three types of rehabilitation. The larger plots indicate the areas where people have the most difficulty. This illustrates the differences in the nature and severity of the impact of brain injuries across the three types of rehabilitation.

What is the percentage of people with severe needs in type of rehabilitation?



Residency

Average length of stay:



17
weeks

Number of weeks people stay in services

13
Weeks
Restoration

22
Weeks
Compensation

66
Weeks
Support

Outcomes on discharge

	Restoration	Compensation	Support
With reduced levels of supervision	77%	80%	64%
Discharged to more independent setting	82%	90%	54%
Showing clinically significant improvement ² in social participation	66%	48%	50%
Showing improved participation in recreational, vocational and occupational activities	54%	71%	29%

“Progress from one level to the next on the SRS^{*} indicates substantial, moderate change.”

(Malec et al., 2017, p. 7).

^{*} The Supervision Rating Scale (SRS) measures the level of supervision someone with a brain injury needs.

What happens to people at the end of rehabilitation?



83% had reduced supervision needs on discharge



86% moved into a more independent accommodation



10% returned to education, employment or vocational training, or looking after their home



21% remained in a residential service

46% moved into transitional or supported living

22% went home without support



What does someone's overall improvement look like?



MPAL-4

A tool used to assess
disability after brain injury

The figure below shows people's changes in behaviour and function between admission and discharge. This was measured using the Mayo-Portland Adaptability Inventory (MPAL-4)⁵, a tool designed to assess disability after brain injury.

On the MPAL-4, scores reflect a person's level of disability.

Lower scores indicate more ability, so are a positive outcome.

The symbols represent different types of change:

● Smallest change in a person's ability to perform daily activities and be social that they would identify as important (minimal clinically important change)

◆ Larger, meaningful change in someone's ability to perform daily activities and have a social life.⁶

These include:

- The type of impairments people have after injury
- How the individual is coping with a brain injury, for example, mood, pain and fatigue
- Someone's ability to take part in day-to-day activities, such as carrying out a morning routine, getting on public transport and going to work.

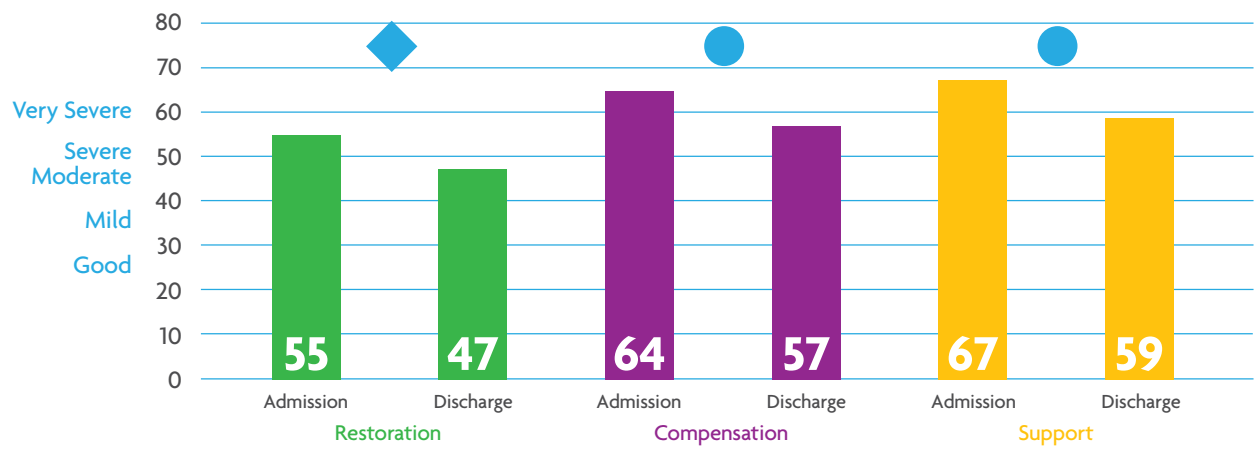
The MPAL-4 uses a range of indicators to measure impairments that have been caused by the acquired brain injury.

⁵ Malec, J. (2005). The Mayo-Portland Adaptability Inventory. The Center for Outcome Measurement in Brain Injury. Available from: <http://www.tbims.org/combi/mpai>. Retrieved 14 September 2020.

⁶ Malec, J. F., Kean, J., & Monahan, P. O. (2017). The Minimal Clinically Important Difference for the Mayo-Portland Adaptability Inventory (MPAL-4). The Journal of Head Trauma Rehabilitation, 32(4), E47.

To make improvements, clinicians promote recovery in specific areas. For example, supporting someone’s mobility or language skills. They also help people to compensate for their difficulties and develop strategies to work around these.

What improvements are achieved in each type of rehabilitation?

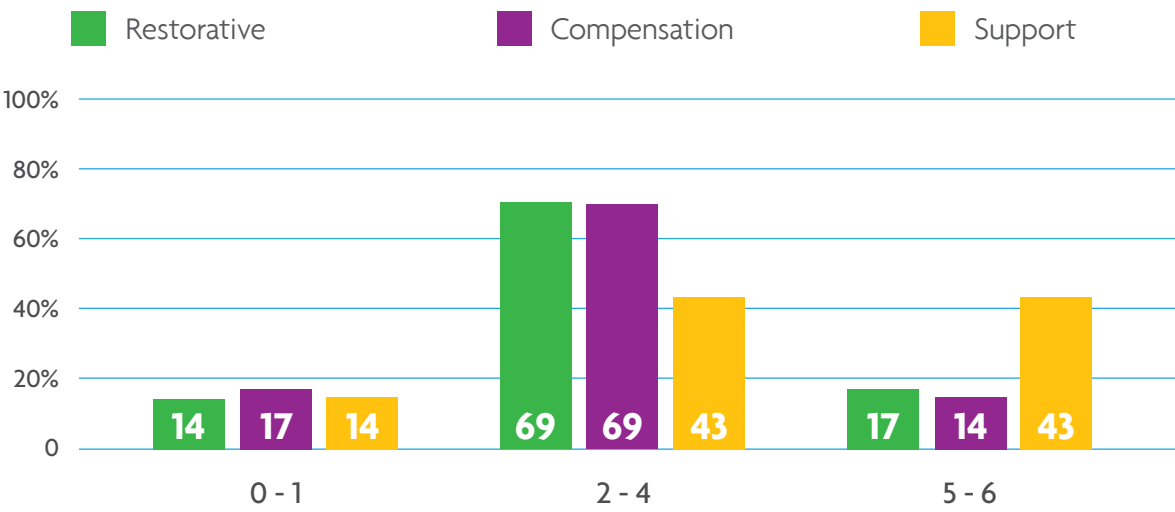


How many areas improve?



Each person is different and recovery is influenced by many factors. This means some people may improve in one area but not another. The figure below shows the percentage of people who have improved across a range of areas.⁷ More than eight in 10 people (85%) discharged in 2021-2022 showed improvements in two or more areas.

What percentage of people show improvements in more than one area?



⁷ This analysis includes improvements in: (1) the amount of supervision someone needs, (2) the level of supported accommodation someone needs, (3) someone's ability to take part in vocational and recreational activities, (4) someone's abilities, (5) psychological adjustment, such as anxiety, depression and understanding of brain injury and (6) social participation.

Jane's story



Tailored rehabilitation to regain independence after a brain injury.

Jane was admitted to hospital in January 2022 after she had a stroke. She had experienced a left basal ganglia bleed on her brain due to a history of hypertension.

The stroke had affected the right side of Jane's body. She had expressive aphasia, when people know what they want to say but have trouble saying it, and receptive aphasia, which affects someone's ability to understand speech. Jane also had swallowing difficulties (dysphagia) and cognitive impairment, including memory and attention problems. She moved to a hospital stroke unit after a month and, in June 2022, was admitted to one of our services in the south of England for further rehabilitation.

Why Jane needed help

When she was admitted, Jane had various assessments. Speech and language therapy assessments showed she had a moderate cognitive communication disorder. Jane struggled to process what people said to her and had problems following more demanding conversations, such as talking with a group of people. When she spoke, her sentences were, at times, incoherent, and she could quickly lose her thread while attempting to formulate a response to a question or statement. She found it difficult to find the right words. This was thought to be related to memory, attention and processing problems (cognitive), rather than language or speech.



Assessments by the physiotherapy team found that Jane had problems with her balance and that having to divide attention between different things affected her safety while carrying out daily tasks. She also had a condition called ‘right-sided neglect’, which means that she did not have awareness of this side of her body or space. Jane’s physical fitness was reduced and she could not perform rapid alternating muscle movements (dysdiadochokinesia), like typing.

Jane’s rehabilitation

Jane’s main goals and objectives were to improve her: speech; attention (by managing and minimising distractions); and independence in areas like shopping, morning routine and preparing meals.

Throughout her rehabilitation, Jane attended clinical sessions and interacted well with the therapists. She mainly worked on increasing her balance to help with mobility. Her physiotherapy included: exercises to promote core stability; static and dynamic tasks to improve her balance; and using an upright bike and treadmill for cardiovascular fitness. Jane also worked on her outdoor mobility with our therapists and rehabilitation support workers, taking in different terrains and increasing the time she spent walking.

How rehabilitation helped Jane

While Jane says there are goals she still wants to achieve, she believes she is “much closer to reaching them”. Jane is now independent with most aspects of her self-care. Her balance and gait have improved and she is steadier on her feet. She is now able to use stairs safely and confidently. Jane’s cognitive and communication impairment has not changed since she was admitted to our service, but those who support her have a better understanding of what does and does not help her. For example, visual prompts, such as looking at photos and headlines in a newspaper support conversations more effectively than verbal cues.

Before her acquired brain injury, Jane spent a lot of time at home. When asked what she’s enjoyed the most during her rehabilitation, Jane said “gardening and the chats with the team”. Jane has received support to spend time doing things she is passionate about, such as volunteering at a local garden centre twice a week. Jane now hopes to volunteer at another garden centre when she leaves the service. She is looking forward to working on her own garden when she returns home.

“

I’m much closer to reaching my goals.

Jane. South of England resident.

What does improvement in carrying out daily activities look like?



AusTOMs
Australian Therapy
Outcome Measures

Alongside the measures used to monitor overall change shown above, our clinical teams also monitor improvements in specific areas.

We track the impact of occupational therapy using the Australian Therapy Outcome Measures (AusTOMs)⁸, which focuses on a range of everyday tasks such as washing and dressing, mobility, preparing meals, leisure and work.

The AusTOMs monitors four aspects of function:

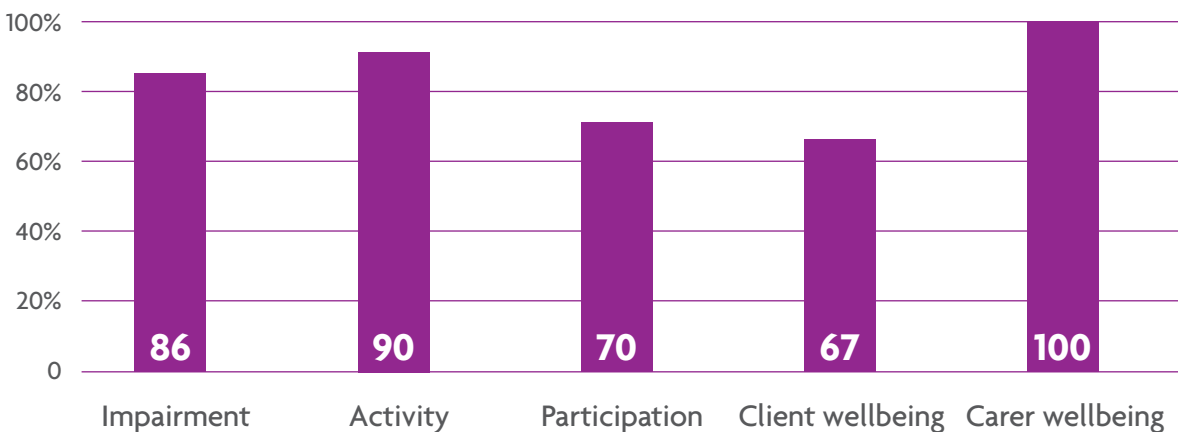
- **Impairments**
A reduction in function which may relate, for example, to weakness on one side of the body, or difficulties with memory.
- **Activities**
The ability to carry out an activity, such as washing or cooking.
- **Participation**
The ability to take part in normal life roles, such as being a worker or family member.
- **Wellbeing**
This looks at how people are coping, including feeling calm or angry, satisfied or frustrated and happy or depressed.

On these scales, higher scores reflect better function, so increases on discharge reflect a positive outcome. This is different from the measures described earlier in this report.

We found an average improvement in all four areas for the 30 people discharged in 2021-2022, who had occupational therapy and where data were readily available.

We also found that for most people with brain injuries, these improvements were clinically significant,⁹ especially the ability to carry out everyday activities, and the area of impairment. Carers' wellbeing also improved on discharge, but these data were only available for a small number of carers.

What improvements are achieved in each type of rehabilitation?

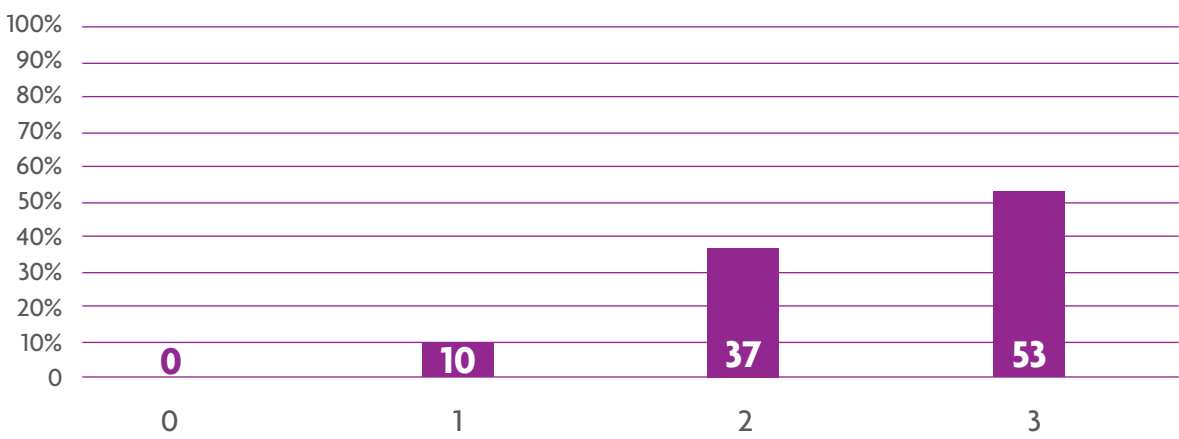


⁸ Unsworth, C.A. & Duncombe, D. (2014). AusTOMs for Occupational Therapy. (3rd ed). Melbourne, Victoria: La Trobe University.

⁹ In this report the threshold for a clinically significant change in the AusTOMs was set at 0.5.

This chart shows that nine in 10 people with brain injuries improved in more than one area following occupational therapy.

How many areas show significant clinical improvement?



What does improvement in communication look like?



UKTOMs

United Kingdom
Therapy Outcome Measures

Our Speech and Language Therapists use a combination of the AusTOMs¹⁰ and the United Kingdom Therapy Outcome Measures (UKTOMs)¹¹. The name of the tools reflects where they were first developed. In 2021-2022 data were available for up to 23 people.

Impairments

Some examples of speech and language impairments that affect people with brain injuries include weakness in the muscles of their mouth and throat. This may result in swallowing or speech difficulties. Someone may be able to talk and say words clearly but not make sense as they are using the wrong words or do not understand what others are saying to them. People may also have difficulties with coordinating the movements of their mouth, which affects their speech. Or they can find it difficult to keep their attention, which stops them from communicating effectively – this is known as cognitive communication.

Activities

Speech and language impairments may have an impact on everyday activities. For example, people with a swallowing difficulty may have trouble with chewing food. People with a speech or language difficulty may have problems communicating what they need. Some people with a cognitive communication difficulty may find it hard to stay on topic or get to the point.

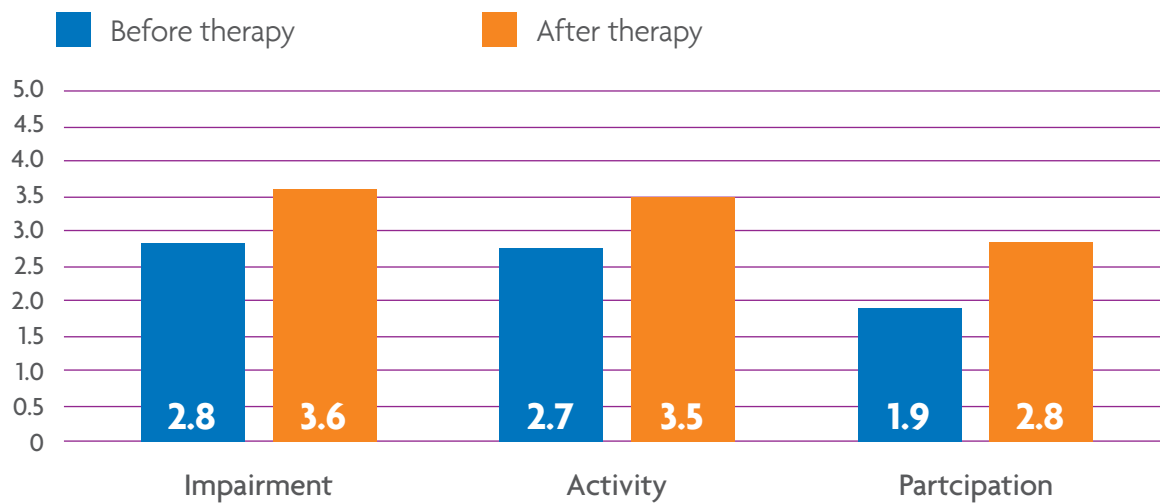
Participation

Speech and language impairments may affect a person's ability to participate in social roles. For example, someone with a swallowing difficulty might not be able to eat the same food as everyone else at a birthday party. Someone with difficulty in understanding others, may need support to carry out a request at work.

¹⁰ Perry, A. & Skeat, J. (2013). AusTOMs for Speech Pathology (2nd Edition) Melbourne, Victoria: La Trobe University.

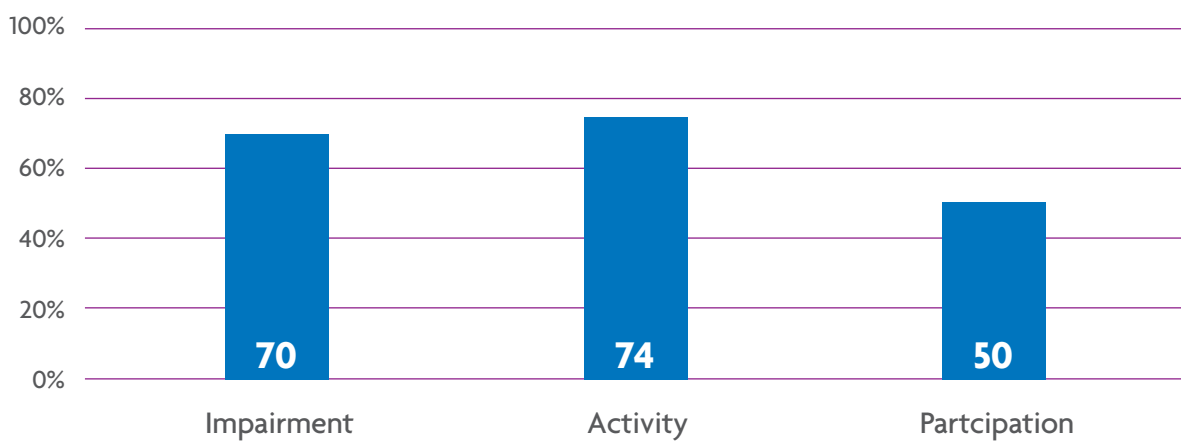
¹¹ Enderby, P. John, A. & Petheram, B. (2013). Therapy Outcome Measures for Rehabilitation Professionals Speech and Language Therapy, Physiotherapy, Occupational Therapy. Chichester: John Wiley & Sons.

What are the average scores on impairment, activity and participation before and after therapy?



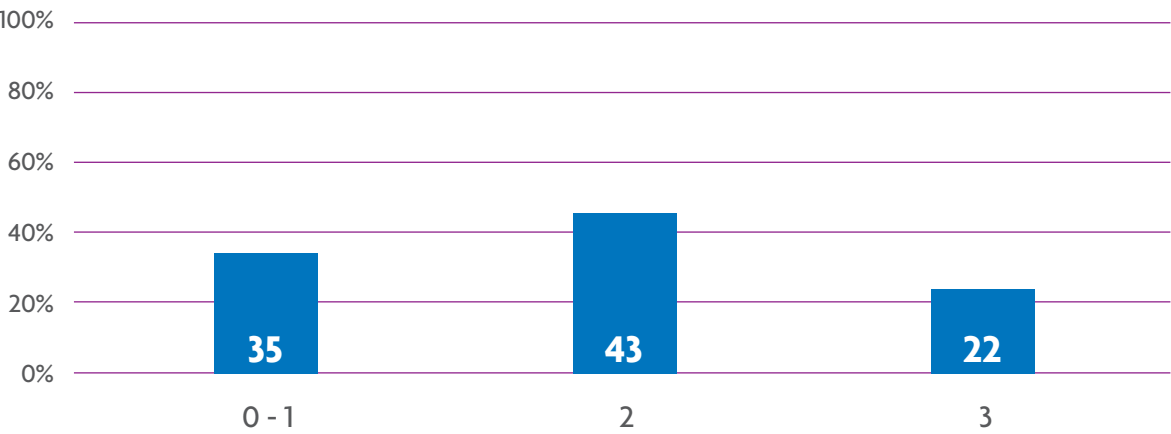
Nearly seven in 10 people showed clinically significant improvements in activity and impairment, and five in participation.

How many people had significant clinical improvements in impairment, activity and participation?



Nearly two in three people with brain injuries showed clinically significant improvements in two or more areas of communication.

How many areas show significant clinical improvement?



What does improvement in mobility look like?

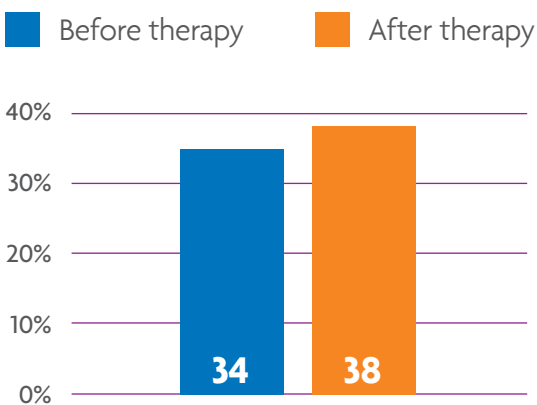
Our physiotherapists use a range of specialist measures to monitor someone’s mobility, which they select to match the needs and goals of each individual. They also use the Modified Rivermead Mobility Index¹² with all the people they see, to track their progress.

This tool covers **eight activities**:

- 1. Turning over
- 2. Lying to sitting
- 3. Sitting balance
- 4. Sitting to standing
- 5. Standing
- 6. Transfers
- 7. Walking indoors
- 8. Stairs.

Scores range from 0 to 40, and high scores indicate better mobility. In 2021-2022 data on admission and discharge were available for 16 people.

What are the average mobility scores before and after therapy?



18%

Nearly one in five people showed clinically significant improvements

Nearly one in five (18%) people showed clinically significant improvements, which were well above the minimal clinically significant threshold of 4.5 – they improved a lot.

56%

More than half of people showed more modest changes

More than half (56%) of people showed more modest changes, below the clinically significant threshold, but they had already scored close to the maximum (36/40) at the time of admission. This is because not everyone has severe and enduring mobility problems after acquired brain injury.



¹² Lennon S, Johnson L. (2000). The Modified Rivermead Mobility Index: validity and reliability. Disability and Rehabilitation, 22(18), 833-839.

Support

This section of the report looks at data from a sample of 37 people who are currently being supported in our support services. They were admitted between 1997 and 2022.

On admission



Types of brain injuries

57%
Traumatic brain injury (TBI)

35%
Other

8%
Stroke

Time since injury:

0 - 6 months	7 - 12 months	Over 12 months
18%	9%	73%

7 = Average length of stay:
years



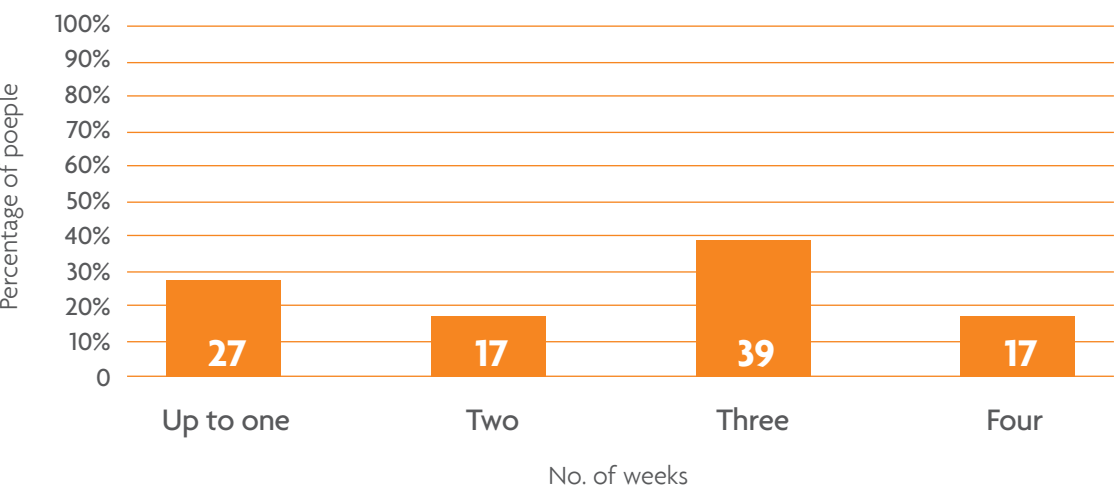
How many goals were achieved in 2021–2022?

We help each person who uses our services to set SMART objectives. This means they are ‘specific’, ‘measurable’, ‘achievable’, ‘relevant’ and ‘time bound’.

Our specialist staff regularly work with people to monitor how they are doing against these goals. For people receiving long-term support, goals are reviewed, on average, every three weeks, depending on the individual. For example, nearly two in three (**56%**) people had goal reviews every three to four weeks, while almost one in three (**27%**) had goal reviews at least once a week.

We monitor the total number of goals set and calculate the percentage that are fully or partially achieved. This helps us understand how well we are helping people to realise their aspirations. We have found that this is easy for our staff and the people we support to understand. “Partial” achievement reflects some progress towards the agreed goals. Goals are scored as ‘fully achieved’ when the outcome is as good as or even better than expected at the time the goals were set.

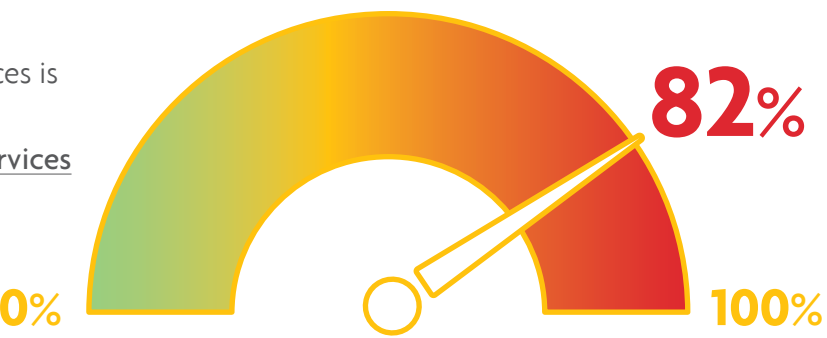
How often are goals reviewed in support services?



The figure opposite shows that, on average, people in support services achieved over four out of five of their goals. This statistic was taken from the most recent review of goals in May 2022.

Outcome data for our rehabilitation services is available on our webpage:
www.thedtgroup.org/brain-injury/our-services

How many goals did people achieve?





**We help each person who
uses our services to set
‘SMART’ objectives.**

Kate's story



Finding autonomy after brain injury through supported living.

Kate was found in her home several days after she had a severe stroke. She was then admitted to hospital and later moved into a nursing home.

Kate received a lot of input from her clinical team while in hospital but this changed when she was discharged to the nursing home. After a referral from adult social care services, Kate was assessed and admitted to one of our support services in May 2021.

Why Kate needed help

When she moved to the nursing home from hospital, Kate's mobility and speech were affected by the lack of access to physiotherapists and speech and language therapists. She also had profound difficulties with her memory and awareness, which affected her ability to keep track of important dates, as well as her passwords and pin numbers. This meant she struggled to keep on top of her finances.

Kate's support

In the year and a half since she first came to our service, Kate has received support to improve her mobility. Physiotherapists have developed programmes to encourage her to walk. Conversations with staff, visits from close friends and relationships with fellow residents have also improved her communication.

Achieving a sense of independence was important to Kate. Our staff team supported her to find ways to manage her memory difficulties, such as using a record keeping system.

Kate originally moved into a bedsit within the service. She later decided that she would prefer to stay further away from the dining hall, as she found this too noisy. So, the team supported her to move into one of the service's flats, which she loves. She was offered a place at another service but chose to remain at The Disabilities Trust because she enjoys the environment, sense of freedom and it feels 'safe'.

How support helped Kate

Kate has made fantastic progress since coming to our service. Although the stroke has affected her movement on her right arm and foot, through specialist support from our team, she has regained much of her independence. Kate's physical mobility has improved. She can walk for short periods of time and her range of movement is much better. For example, when she receives support to attend health appointments, Kate can now get in a vehicle herself rather than needing to be transported in a wheelchair on a minibus.

Kate still sometimes gets 'tongue-tied' but is more able to communicate effectively with the people around her. For example, she enjoys conversations with fellow residents.

Kate has benefited from support to increase her autonomy in other ways. With support, she can manage her finances, which has helped her to regain more financial independence. The support Kate has received has allowed her to engage with the local community on her own terms. She enjoys shopping trips, going out for meals and spending time with her friends.



Our specialist teams

Specialist teams of clinicians and support staff work together to deliver our services, 24 hours a day, seven days a week.

They are skilled in brain injury rehabilitation. Clinicians include consultant neuropsychologists, clinical psychologists, occupational therapists, physiotherapists, speech language therapists and rehabilitation support workers. They work closely with the people we support to develop individual care plans. This includes setting personal goals for rehabilitation and deciding what therapies will best suit the people we support.

Clinical teams provide care and treatment with the help of rehabilitation support workers. Detailed monitoring and observation is carried out to assess the behaviour and skills of the people using our services and evaluate the effects of different therapies. Teams use monitoring data to motivate and encourage the people we care for and show them the progress they are making.

By working as a team, we support all aspects of a person's recovery. For example, to make sure a person can shop at the supermarket by themselves, a speech and language therapist will work on improving someone's communication.

A physiotherapist will support them to walk stably while holding a trolley. And an occupational therapist and psychologist will work together to improve the skills the person needs to locate items on a shelf and use lists or an app as a memory aid.

Working together to provide person-centred care

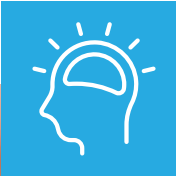
We have multidisciplinary teams working in our brain injury rehabilitation services. In our **hospitals**, a consultant neuropsychologist and neuropsychiatrist lead on rehabilitation work, with support from nurses.

Consultant neuropsychologists provide clinical leadership in our **rehabilitation centres**. They are supported by consultants in rehabilitation medicine and neuropsychiatry, as well as community nurses.

In our **community support services**, support workers look after the mental wellbeing and physical health of those we care for. This work is overseen by clinical psychologists.



Ian's story



Brain injury education to gain insight into behaviour.

How Ian's brain injury occurred

Ian described his childhood as difficult; he grew up in a strict household which he attributed to his father having been in the armed forces.

He described his upbringing as 'abusive', with violence 'being all that he knew'. He explained that he would often sustain injuries of a severity such that his parents would withhold him from school until his injuries had healed. Ian suffered repeated concussions due to this abuse and stated that in later adolescence he was involved in 'countless street fights'. He further described developing temporal lobe epilepsy at age 13 but could not remember the details.

Why Ian needed help

It was observed that when out in the community, Ian struggled to cope with all aspects of life. He became anxious and could not manage activities of daily living on his own. Ian's probation officer found herself in a support worker role, going with him to do his shopping, attend house viewings and anything else he required. Ian also had difficulty managing his anger and would become easily frustrated, leading to outbursts. These outbursts often led to him engaging in criminal behaviour.

Ian's rehabilitation

Rehabilitation involved brain injury education to help Ian understand how the brain works and the common consequences of brain injury. Time was spent empowering Ian to be able to better understand and explain his difficulties to others. Ian identified that memory was a particular issue for him. He and the Brain Injury Linkworker (BIL) worked together to establish what memory strategies he found helpful. These were shared with staff working with Ian so that the whole system could support him.

Given the context of Ian's anger outbursts, he and the BIL explored the meaning of executive dysfunction and how this might be impacting on his ability to monitor and modify his behaviour. Working collaboratively with Ian we identified common triggers for him and thought about alternative ways of viewing them. Relaxation exercises were discussed and ways to implement them when faced with a frustrating situation. Time was also spent thinking together about how he could apply what he had learnt in real life situations.

How rehabilitation helped Ian

Ian's understanding of his repeated concussions, their consequences, and his ability to cope significantly increased from the start to the end of intervention, as indicated by his scores on the impression of change questionnaire. He made great improvements across all domains, stated he gained a lot from the service and looked for prospects that would benefit him in the long term. He wanted to progress in his rehabilitation and sought transfer to a therapeutic prison. Prison staff also observed positive changes in Ian's behaviour and he benefitted from a more positive relationship with them.

Of the support received, Ian stated:

“

I am grateful for the help in understanding myself, this service should be open to more prisons and I am 100% grateful.

Ian.

Creating a community of support for people with brain injuries

The Disabilities Trust improves the lives of people with brain injuries across the UK.

Our hospitals, assessment and rehabilitation centres and community support services help people with brain injuries and their families to find a new way to live. Research shows that good specialist rehabilitation plays a key part in the long-term recovery of people with life-changing brain injuries^{13, 14}. But this support is not always available to everyone who needs it. We want to change this.

Our new strategy sets out how we will build a community of support to reach even more people with brain injuries. This includes:

- Growing our services for people with brain injuries so they support thousands more
- Amplifying the voices of the people we support, as well as other people with brain injuries
- Raising awareness of the problems faced by people with brain injuries so more people join us to demand better support
- Sharing our clinical expertise with others so we can improve more people's lives.



¹³ Knox, L., & Douglas, J. M. (2018). A scoping review of the nature and outcomes of extended rehabilitation programmes after very severe brain injury. *Brain Injury*, 32(8), 1000-1010.

¹⁴ Oberholzer, M., & Müri, R. M. (2019). Neurorehabilitation of traumatic brain injury (TBI): a clinical review. *Medical Sciences*, 7(3), 47.

How we helped people with brain injuries this year

In 2021-2022, we carried out a range of activities to improve the lives of people with brain injuries. These included:



Developing a comprehensive information resource about living with a brain injury for people and their families, due to be published in 2023.

This will help people to understand the effects of a brain injury and what they and others can do to manage those.



Inviting people with brain injuries to feedback on our services, including what the organisation is doing well and what we can do to improve in the future.

This will help us to shape our services and make sure we continue to improve. We used a creative process, called “appreciative inquiry”, to get feedback from people with brain injuries. This encouraged people to use their imagination to think about what an ideal service would be like, and what we could do even better. We are currently examining the results of two workshops and will develop a plan of action, sharing the findings in the next year. We have also used the feedback from those that use our services in our annual Tell Us What You Think survey to gain insight into their experience of their support and to understand more about what is important to them.



Surveying people with brain injuries, their loved ones and the health professionals that work with them.

The results of this poll have increased our understanding of the needs of people with brain injuries, and how well-equipped health and social care staff are to support them. The information will be used to campaign for improvements to services, in particular better training and awareness for staff.



Working with universities and other research partners to carry out research into brain injuries.

We will share this research in academic publications and at events. This will improve our clinical practice and build our reputation as a leading brain injury rehabilitation provider. Importantly, it will help us to share our expertise with others, which in turn will help improve the lives of people with brain injuries.



Working to raise the voice of people with lived experience of brain injury through campaigning with and for them.

For example, the Foundation has been involved in the ‘all reference group meetings’ for the Government’s ABI strategy, helping to shape its priorities and direction. We have also provided insights to a number of other national bodies, such as the National Police Chiefs Council on their mental health in custody checklist and have started to create new relationships and attend key events in the domestic abuse sector in light of our ongoing research.

Future plans

In 2022-2023, we will continue to further improve our services through our new strategy. We plan to:

Extend the reach of our brain injury services, from hospitals to community support services. This will give people with brain injuries the support they need at every stage of their recovery.

Continue improving our clinical practice by applying leading-edge approaches, such as new technologies and interventions, and by using research to drive our thinking.

Share our clinical expertise with the wider community by making our knowledge and research broadly accessible and offering continuous professional development opportunities.

Ramp up our policy, influencing, education and training activities, and seek new and innovative partnerships and commercial opportunities.

Increase our engagement with academic institutions through teaching, conference presentations, seminars, and workshops. This will extend recognition of our field of work and consolidate our contribution to the scientific community.

Implement a new competency framework for therapists of all disciplines and re-define the roles of our therapy assistants. This will reinforce our clinical standards and help develop the skills of staff at all levels, while also recognising individual expertise and achievements.

Implement a comprehensive induction programme for our rehabilitation support workers to help them to carry out their roles more effectively.

Offer apprenticeships to grow talent and develop skilled and qualified brain injury rehabilitation specialists.

Continue to use outcomes data to evaluate the effectiveness of our work and improve all of our services.

Reinstate our flagship conference to provide a platform to share our knowledge and expertise.



Our services



We have a range of services across the UK that meet the changing needs of people living with brain injuries. These include two hospitals, 7 rehabilitation centres, 12 residential care homes and 26 community support services.

To make a referral, contact our Business Development team on:

☎ **0330 0581 881**

@ **business.development@thedtgroup.org**

Visit www.thedtgroup.org/brain-injury to find out more.

Where we are

● Independent hospitals

- 1** Graham Anderson House, Glasgow
- 2** York House, York

● Rehabilitation centres

- 3** Daniel Yorath House, Leeds
- 4** Fen House, Ely
- 5** Kerwin Court, Horsham
- 6** Redford Court, Liverpool
- 7** Thomas Edward Mitton House, Milton Keynes
- 8** Ty Aberdafen, Llanelli
- 9** West Heath House, Birmingham

● Residential care centres

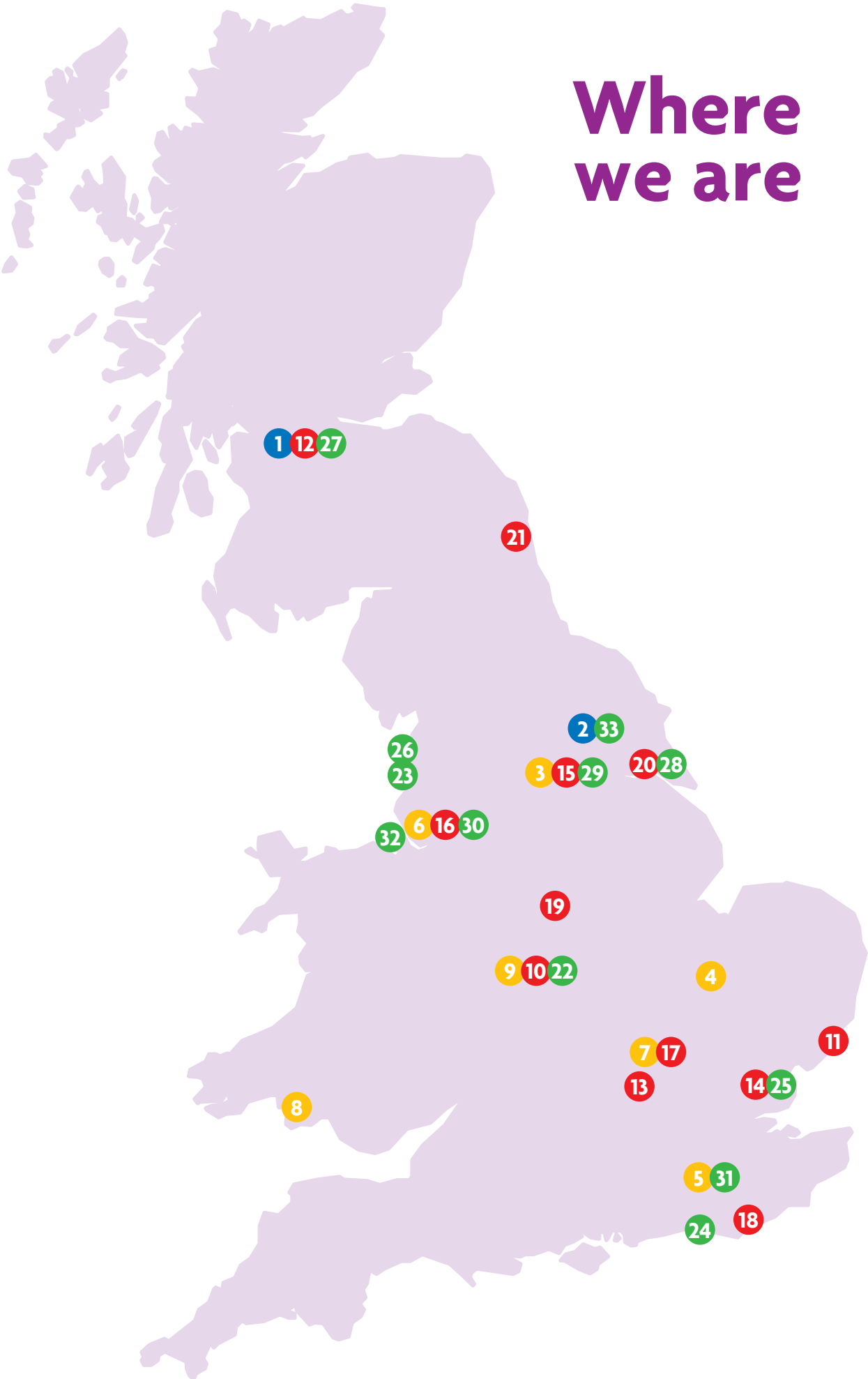
- 10** Bristol Road, Birmingham
- 11** Dover Court, Harwich
- 12** Eastfields, Glasgow
- 13** Kent House, Aylesbury
- 14** Myland House, Colchester
- 15** Osman House, Leeds
- 16** Redford Court Lodge, Liverpool
- 17** Brownswood Reserve, Milton Keynes
- 18** Shinewater Court, Eastbourne
- 19** Gregory Court, Nottingham
- 20** Victoria House, Hull
- 21** Jane Percy House, Cramlington

● Community support services

We have services in:

- 22** Birmingham
- 23** Blackpool
- 24** Brighton
- 25** Colchester
- 26** Fleetwood
- 27** Glasgow
- 28** Hull
- 29** Leeds
- 30** Liverpool
- 31** West Sussex
- 32** Wirral
- 33** York

Where we are



About The Disabilities Trust

The Disabilities Trust is a charity that works alongside people with acquired brain injury to help them recover and live as independently as possible.

We improve the lives of people with brain injuries across the UK. Injuries include encephalitis, or inflammation of the brain, and hypoxia, when the brain is damaged because it does not get enough oxygen.

Our two hospitals, 7 rehabilitation centres and 12 residential care homes support people with brain injuries to regain the skills they have lost through neurobehavioural therapy. This type of treatment helps us understand the effects of a brain injury on a person's cognitive, emotional, physical and social skills. Our clinical teams use a range of interventions to respond to ongoing assessments of these skills, including physiotherapy, psychological therapy and music therapy.

We also have 26 community support services in 12 locations across the UK. Our dedicated teams of specialists work closely with each person with a brain injury to understand what they want and why to prevent their relapse and support social participation.

From rehabilitation to long-term care in supported living accommodation, our brain injury services help people to move forward with their lives. Our aim is to support them to achieve their rehabilitation goals, become more independent and improve their quality of life.

The Disabilities Trust

First Floor, 32 Market Place

Burgess Hill

West Sussex

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