

BRAIN INJURY REHABILITATION TRUST



Looking ahead

West Heath House

Annual Review

2008

54 Ivyhouse Road
West Heath
Birmingham
B38 8JW

Tel: 0121 459 0903/0909
Fax: 0121 459 0910
www.birt.co.uk

Number 7

Welcome ...

...to the eighth Annual Report of West Heath House. The past twelve months have been a busy period for the Brain Injury Rehabilitation Trust and for West Heath House. In September our sister unit 1101 Bristol Road was flooded on a Sunday morning. At a moment's notice we had to accommodate the staff and service users from this centre. At the time of writing they are still with us – but due to return to a refurbished Bristol Road very soon!

West Heath House is an integral part of a nationwide continuum of rehabilitation and support services from the Brain Injury Rehabilitation Trust (BIRT), a division of the Disabilities Trust. At West Heath we provide a specialist residential assessment and rehabilitation service for adults over the age of 18. We specialise in working with persons with cognitive and behavioural disturbance (often in combination with physical disability) arising from acquired brain injury. We try to be as inclusive as possible, accepting people with brain injury in the context of mental health problems (eg. depression, eating disorders, substance abuse) and a range of physical sensory and learning disabilities. The most important criterion when selecting people for admission to the service is whether we feel they can benefit from our service.

For many of our colleagues in the NHS and Social Services 'West Heath' is now familiar shorthand for the neurobehavioural rehabilitation process that emanates from the unit and into the surrounding areas of south Birmingham and well beyond, as we put into practice our philosophy of community integration. Many of our clients are transferred straight from hospital and are able to capitalise on their recovery potential to an optimal degree. This provides them with the greatest chance of making a successful return home after their stay at West Heath. For others, who may be experiencing difficulties in their existing placement, be it at home or in a residential setting, we are able to take a fresh look where problems have arisen and been able to address the areas of concern. In some cases this has led to a person being able to return to the previous placement with renewed impetus as a result of skills learned and understanding gained at West Heath.

Two years ago the Trust became the first rehabilitation service in England to be accredited by the Commission for the Accreditation of Rehabilitation Facilities (CARF). CARF is a North American organisation which, in the competitive marketplace of rehabilitation across the Atlantic, sets exacting quality standards for rehabilitation services. In the coming year we are due another visit from the CARF surveyors to ensure we have kept to these high standards.

West Heath House is now firmly established as an important rehabilitation service, and is achieving national recognition for the quality of its care. This is evident by the range of funding agencies across the UK who commission our services. Payment for services becomes increasingly difficult to obtain for all but the most critical of cases. In January 2006 we published in the journal *Clinical Rehabilitation* a study on the factors contributing to delayed discharge from the Trust's residential services, with one in three rehabilitation beds being occupied unnecessarily as the person is ready to leave. The difficulty is both financial and practical. There is a clear shortage of move-on and step-down accommodation, resulting in people remaining in more expensive rehabilitation beds (which in turn delays hospital discharges and increases the likelihood of people being discharged home prematurely if there are no rehabilitation beds).

In October 2006 a Department of Health consultation process was concluded and moves are underway to produce revised guidance for commissioning healthcare and NHS funded nursing care. It remains to be seen what will result from this process, but it is clear that brain injury will continue to be a difficult terrain in which to operate given financial strictures and the relatively low profile of brain injury compared to other forms of disability such as mental health and learning disability. The Trust continues to monitor events with interest and is eager to influence the debate where possible. In keeping with our commitment to evidence-based practice, and in recognition of the need to provide confirmation of not just clinical outcomes, but the cost-effectiveness of the Trust's rehabilitation programme, in 2006 we published a multi-centre outcome study in the journal *Brain Injury*. Many of you will have received a copy of this, and if you did not but would like to read more about this study, please contact us for further information.

We hope that those of you who are familiar with West Heath House will enjoy the retrospective of the service in this report, and we would encourage new readers to contact us, tell us about your own experiences, and find out what we have to offer.

Clinical Activity at West Heath House - 2008

Admissions

There were 16 admissions in 2008. Admission rates over the past nine years are summarised in table 1 below.

1999-2000	2001	2002	2003	2004	2005	2006	2007	2008
49	22	18	20	16	18	22	23	16

Table 1. Admissions 1999-2008

Who was admitted to West Heath in 2008?

Figure 1 below summarises the primary diagnosis of people admitted during 2008. Head injury (TBI) accounted for by far the largest proportion of admissions in previous years and again 66% this year (see table 2). The next most common group was cerebral neoplasms/abscesses (3 cases). The proportion of head injury versus other (predominantly non-traumatic) conditions has varied widely from year to year but overall represents about half of all admissions.

1999-2000	2001	2002	2003	2004	2005	2006	2007	2008
61.2 %	31.8 %	33.3 %	75.0 %	56.3 %	50.0 %	59.1 %	43.4%	66%

Table

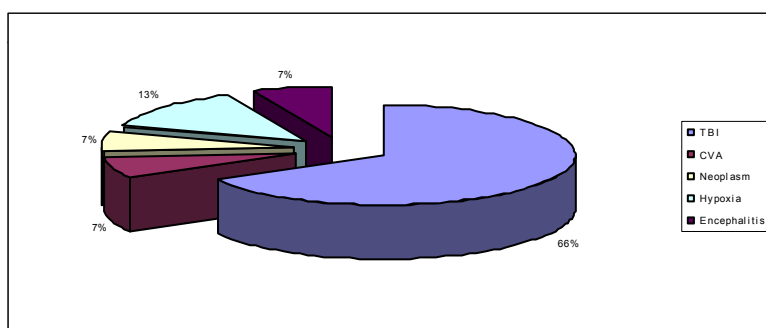


Figure 1. 2008 admissions by diagnosis

Table 3 below shows the referral source for those persons admitted in 2008, indicating that 13 referrals came directly from NHS sources.

Cons in Rehab. Medicine	Consultant Psychiatrist	Clinical Psychologist	Other NHS	Social Worker	Case Manager	Solicitor	Other BIRT service
4	1	2	3	4	0	2	1

Age at time of admission

Age distribution is shown in figure 2. The average (mean) age of persons admitted was 43 years, ranging from 20 to 66 (table 6), slightly older than previous years.

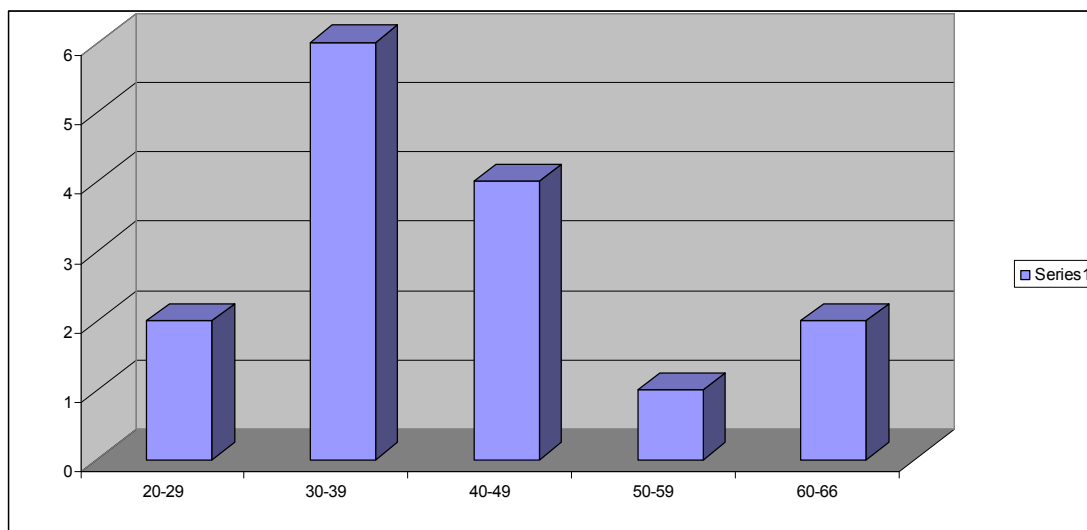


Figure 2. Age at time of admission

	1999-2000	2001	2002	2003	2004	2005	2006	2007	2008
--	-----------	------	------	------	------	------	------	------	------

Average age	40 years	38 years	40 years	32 years	42 years	34 years	35 years	41 years	43 years
Age range	19-71 years	22-63 years	22-66 years	18-51 years	21-60 years	18-49 years	18-63 years	20-63 years	20-66 years

Table 4. Mean age and age range of admissions: 1999-2008

Where were people admitted from?

The chart below shows the pre-admission placements of all people admitted in 2008.

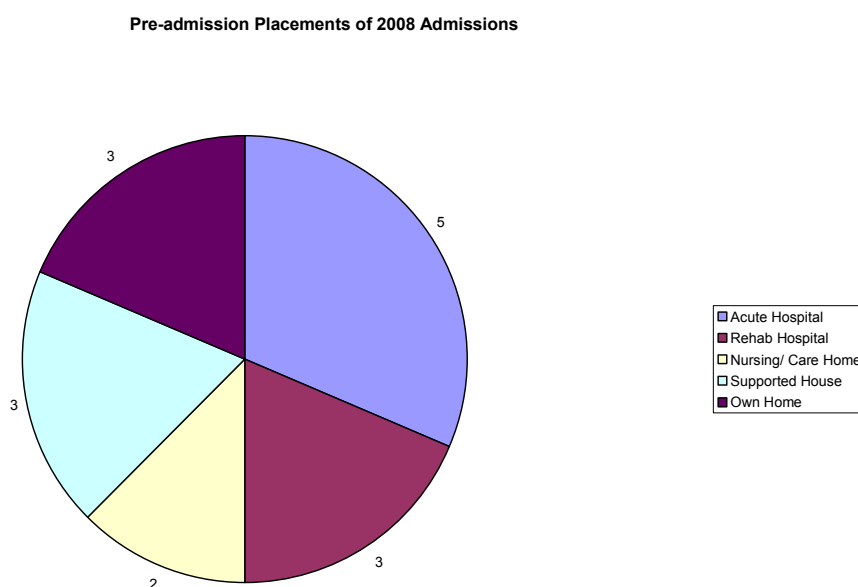


Figure 3. Pre-admission placement of 2008 admissions: acute hospital, rehabilitation hospital, nursing home, supported house or own home.

Half were transferred from hospital, and half of these were already in a rehabilitation ward. This suggests that the value of a neurobehavioural treatment programme is being recognised for those patients who are not responding to conventional rehabilitation.

Table 5 below shows the relative proportions of clients admitted from hospitals, residential and nursing homes, and from the community (supported housing or own

home) over the past seven years. In 2008 very few were admitted from existing residential placements, and roughly twice as many were transferred from hospital as were admitted from the community.

	1999/2000	2001	2002	2003	2004	2005	2006	2007	2008
Hospital	26 53%	12 55%	10 55%	12 60%	8 50%	11 61%	14 64%	12 52%	8 50%
Residential or nursing	13 27%	4 18%	1 6%	4 20%	2 12.5%	2 11%	1 4%	5 22%	2 12.5%
Community	10 20%	6 27%	7 39%	4 20%	6 37.5%	5 28%	7 32%	6 26%	6 37.5%

Table 5. Pre-admission placements: 1999-2008

How long after injury were people admitted?

The graph below shows the range of time elapsed since injury or illness for admission in 2008.

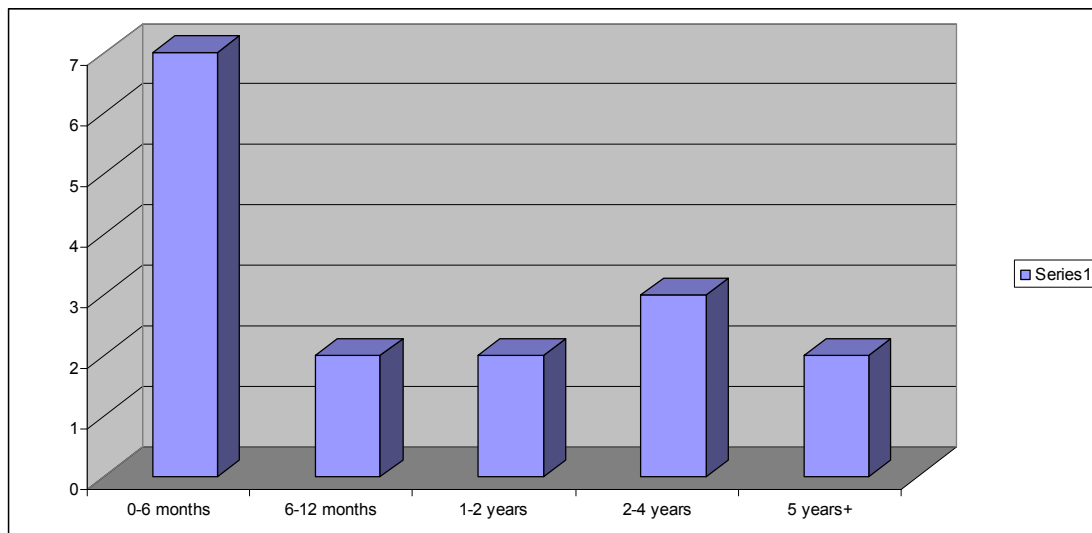


Figure 4. Time since injury

There is an extremely wide range of time since injury (2 months to 40 years) with a mean of just over 3 years 10 months. The mean value can be skewed by one or two clients admitted many years after injury. More than 50% of service users were admitted within a year of injury. The table below summarises admissions the over the past nine years in terms of time since injury.

	1999-2000	2001	2002	2003	2004	2005	2006	2007	2008
< 6 months	26 53%	9 41%	6 33%	7 35%	4 25%	6 33%	5 23%	9 39%	7 43%
6-12 months	4 8%	3 14%	1 5%	3 15%	2 12.5%	2 11%	3 13%	5 22%	2 13%
1-2 years	6 12%	2 9%	3 17%	2 10%	5 31%	2 11%	4 18%	1 4%	2 13%
2-5 years	10 20%	5 22%	3 17%	2 10%	2 12.5%	2 11%	5 23%	3 13%	3 18%
> 5 years	3 6%	3 14%	5 28%	6 30%	3 19%	6 33%	5 23%	5 22%	2 13%

Table 6. Admissions by time since injury: 1999-2008

How were clients funded?

Clients' placements at West Heath may be funded through PCTs, Social Services, a combination of both (joint funding), or through insurance payments (medico-legal funding). Figure 5 below shows the distribution of funding for 2006 admissions.

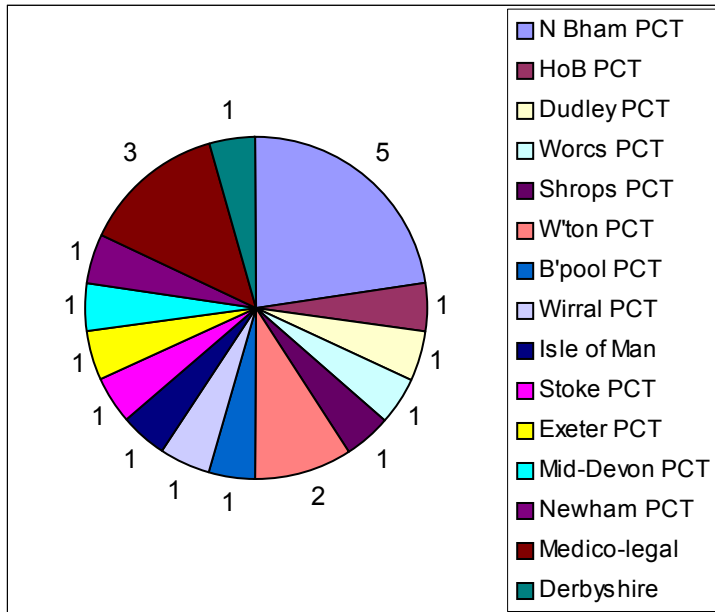


Figure 5. Admissions by primary funding agency.

It is interesting to consider this data given the change in 2005 in the registration status of West Heath House from its former existence as a dual registered facility. Four years ago in 2004 only one client was funded by Birmingham PCTs. Another seven clients came from the neighbouring PCTs of Walsall, Wolverhampton, Dudley, West Bromwich and Solihull. In 2005 three clients were solely funded and another one jointly funded with Social Services by Birmingham. In 2006 six clients were funded by Birmingham PCTs (five by N. Birmingham PCT, one heart f Birmingham PCT). Another six admissions came from neighbouring areas of Worcestershire, Dudley, Wolverhampton, Shropshire and Staffordshire. In all services were commissioned by 14 different PCTs. It is difficult to establish whether many of these were joint-funded as the trend is increasingly to invoice the PCT who cross-charge Social Services for an agreed proportion of the rehabilitation fees. Consequently no conclusions can be drawn as to the relative contribution of Social services, though it is believed to remain small (two admissions only to the best of our knowledge).

Funding agency	1999-2000	2001	2002	2003	2004	2005	2006	2007	2008
N. B'ham PCT	18 37%	11 50%	8 45%	5 25%	1 6%	3.5 19%	5 23%	3 14%	3 19%
Other NHS	19 39%	10 45.5%	10 55%	12 60%	11 69%	12 67%	14 64%	12 54%	8 50%
Medicolegal	1 2%	0 0%	0 0%	3 15%	4 25%	0 0%	3 13%	5 23%	1 6%
Social Services	11 22%	1 4.5%	0 0%	0 0%	0 0%	2.5 14%	0 0%	2 9%	4 25%

Table 7. Sources of funding for 2008 admissions

What happens when people are admitted to West Heath House?

Admission to West Heath House is initially on the basis of a 12-week period of residential assessment. The assessment includes formal neuropsychological and neuropsychiatric evaluation and may include additional investigations, such as an EEG or brain scan if appropriate. The emphasis of the assessment, however, is on the systematic and structured observation of behaviour and skills in everyday situations and tasks, informed by detailed clinical risk assessment. This allows the team to understand the nature of a person's disabilities and their potential for more independent living. A formal assessment meeting is convened towards the end of the assessment period in which the team present their observations, and recommendations for rehabilitation or support are made. The recommendations are discussed with the client, their family and the funding authorities and a plan is agreed for rehabilitation within a defined time period. Once this has been established the treatment goals are established with the client and formalised in a Rehabilitation Plan on which basis progress is reviewed. Review meetings are held approximately every 13 weeks following which treatment goals are modified and new Rehabilitation Plans formulated. Discharge planning really begins from the moment of admission. This is especially important if a person is unlikely to return home as it can often take many months for appropriate placements to be established and support to be arranged. Recent research undertaken by the Trust has highlighted that delays in moving clients through the care continuum often arise due to lack of appropriate accommodation or funding wrangles.

Discharges in 2008

In 2008 we discharged 20 clients. The mean length of stay was 9.7 months with a range from one to 42 months. The median duration of admission was eight months, as it was in 2007.

Length of stay	1999-2000	2001	2002	2003	2004	2005	2006	2007	2008
0 – 3 months	17 55%	6 30%	7 28%	1 9%	0 0%	2 15%	1 6%	4 13%	4 20%
3 – 6 months	9 29%	5 25%	3 12%	4 33%	1 7%	2 15%	7 39%	5 16%	2 10%
6-12 months	5 16%	4 20%	6 24%	3 25%	4 29%	7 55%	7 9%	11 34%	9 45%
> 12 months	0 0%	5 25%	9 36%	4 33%	9 64%	2 15%	3 16%	12 37%	5 25%

Table 8. Length of stay in 2008

As our research has shown, finding appropriate placements for many severely brain-injured young men and women can be a difficult process, made more difficult at times by funding constraints and the absence of appropriate move-on accommodation in many cases. Complex disability often requires a long-term commitment to the involvement of specialist services. We make no claims that neurobehavioural rehabilitation is a quick-fix or cheap option. However, when one considers the impact on individuals, families and carers the costs are placed in proper context. Hence we are pleased to have contributed further to the evidence base testifying to the cost-benefits of BIRT's rehabilitation programmes with the publication of a multi-centre outcome study.

The table above compares last year's length of stay with previous years' figures.

Where do people go when they leave?

We aim to achieve for every client a smooth, efficient transition through a continuum of care towards an agreed objective. This involves close working with other agencies and family members, and often our colleagues in other BIRT facilities. Premature or

delayed discharge from a rehabilitation unit, be it to another residential facility or a return home, can seriously undermine client progress and jeopardise the sustainability of any future support package. The chart below summarises the discharge destination for the 18 clients that moved on from West Heath House in 2008.

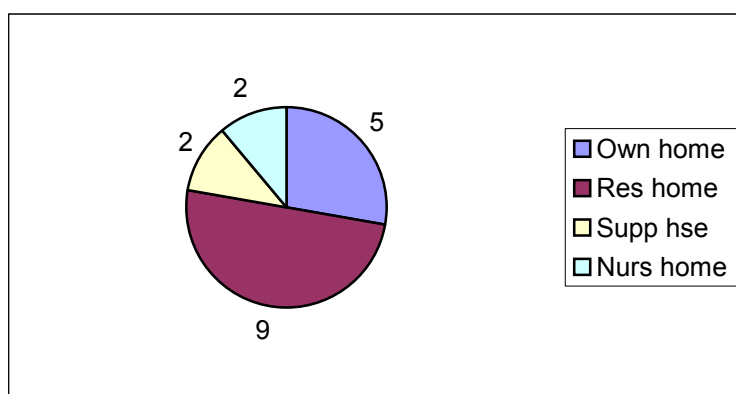


Figure 6. Placement on discharge

Discharge destination	1999-2000	2001	2002	2003	2004	2005	2006	2007	2008
Own home or parents	22 73%	11 55%	16 64%	9 56%	3 21.5%	4 31%	5 28%	12 34%	3 15%
Supported Housing	2 7%	3 15%	3 12%	1 6%	4 28%	1 8%	2 11%	8 23%	2 10%
Residential Home	5 17%	6 30%	3 12%	0 0%	2 14.5%	5 38%	9 50%	9 25%	7 35%
Nursing Home Cont. Rehab	1 3%	0 0%	1 4%	1 6%	3 21.5%	1 8%	2 11%	3 9%	4 20%
Other (eg. prison, psychiatric hospital)	0 0%	0 0%	2 8%	5 32%	2 14.5%	2 15%	0 0%	3 9%	2 10%

Table 9. Post-rehabilitation discharge placements: 1999-2008

Table 9 above summarises discharge placements for each year since the service has been open. The past two years have seen the highest number of clients being discharged into residential care. Half of all discharges in 2008 moved into residential

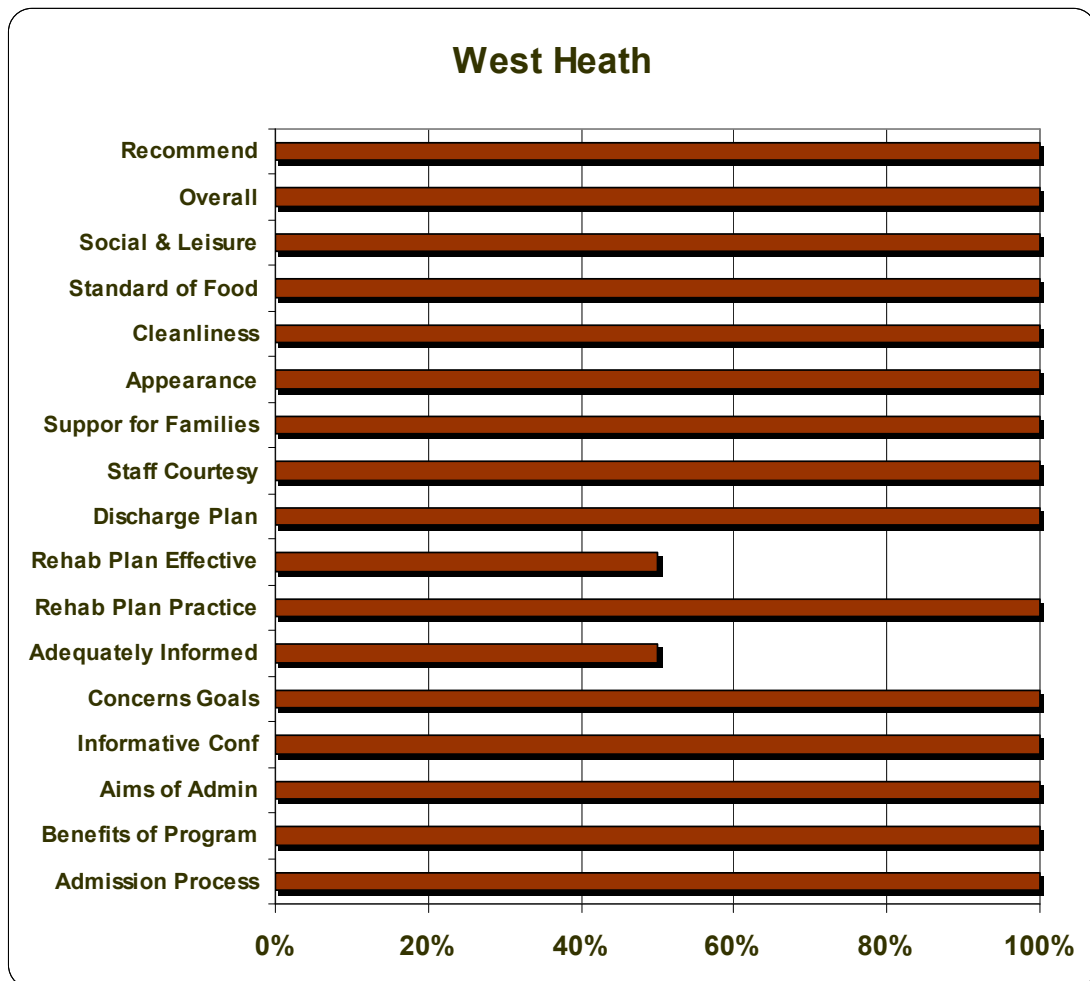
accommodation. The average length of stay was 9.7 months, with 50% of service users being discharged within 8 months.

We use various measures of 'outcome' to evaluate the success of our service.

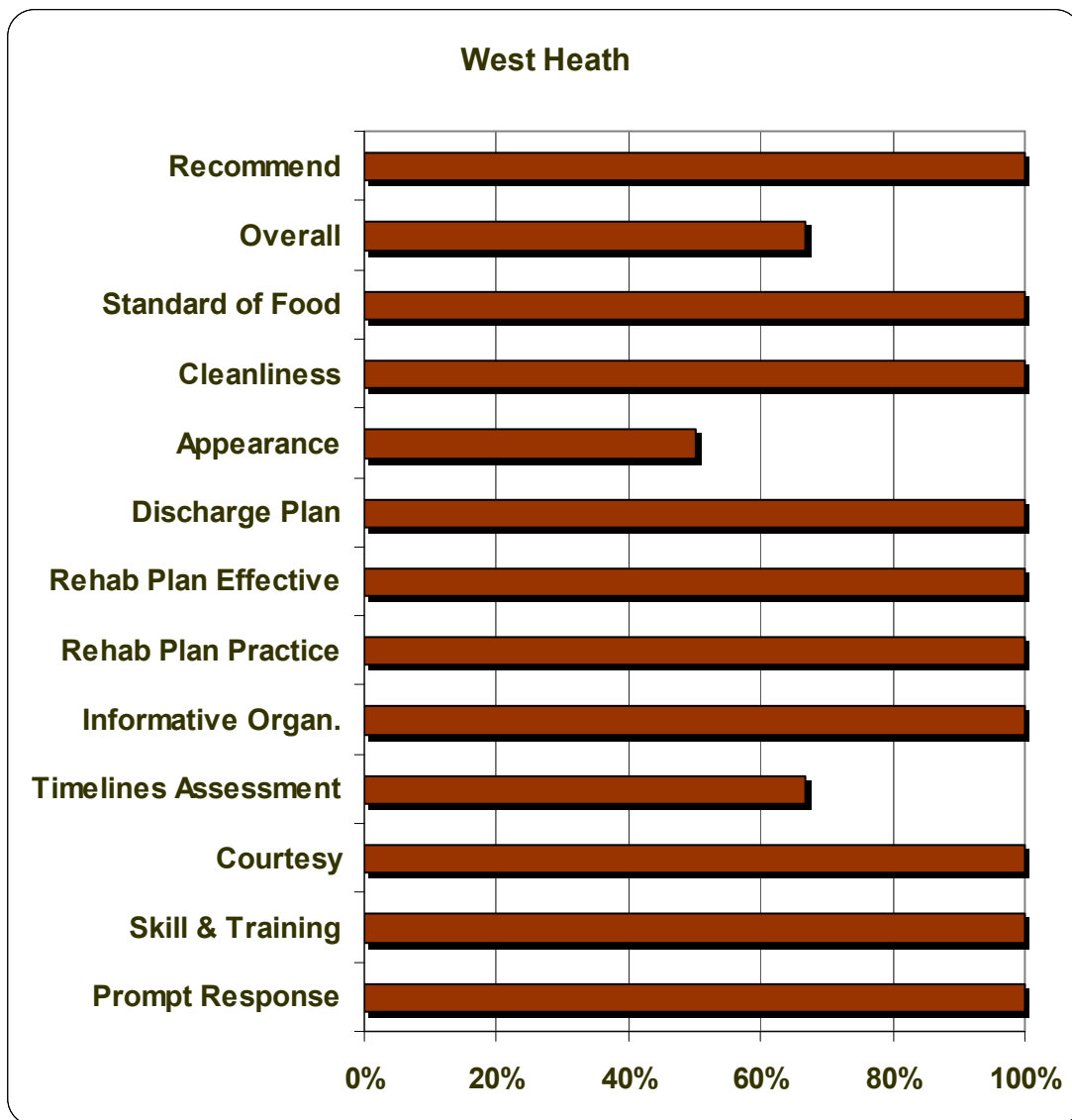
Challenging behaviour is measured using the Neurobehavioural Rating Scales and the BIRT Aggression Rating Scales. On average those discharged had reduced their score on the Neurobehavioural Rating Scale (NBRS) by 13 points. Similarly on the BIRT Aggression Rating Scale those service users discharged during 2008 showed a 20% reduction in their scores if one excludes one extreme 'outlier' who showed a different pattern to the others. These findings confirm that our Service Users showed a considerable reduction in their challenging behaviour over the course of their stay.

We also use the Supervision Rating Scale to measure changes in their degree of independence. Sixty per cent of our service users who were discharged in 2008 achieved a reduction in level of support they required of one or more level on the Supervision Rating Scale.

Few satisfaction questionnaires were returned by either family members or referrers during 2008. However, those that were indicate that 100% of family members were satisfied overall by the service provided (see chart below).



Amongst referrers 70% expressed overall satisfaction with the service yet 100% said they would recommend the service to others. Their main criticisms appear to have been the appearance of the Unit which has now been addressed and improved and the timeliness of reports. Once again with a new Consultant leading the service this will also improve in 2009.



Staff Training

As an organisation, the Brain Injury Rehabilitation Trust has a commitment to the training and development of all staff.

A rolling programme of mandatory training, including Food Hygiene, First Aid, Infection Control, Manual Handling, Fire Prevention, Care of Substances Hazardous to Health (COSHH), Non-Violent Crisis Intervention, Health and Safety and Infection Control has been on-going throughout the year. All senior support workers have received training in administration of medication. In addition to this they have received in-house supplementary medication training, which exceeds mandatory requirements. Staff members have continued to benefit from BIRT’s brain injury specific training.

In 2008 a further four staff members completed NVQ Level 2 or 3 in Health and Social Care. Eleven other staff members were registered on NVQ programmes during 2008. Courses included Level 2 and Level 3 in Health and Social Care, Registered Managers Award and A1 Assessors Award. Courses have been arranged through the Trust's own NVQ centre or through a local Higher Education College and funded by a Government scheme, Train2Gain.

Conferences and presentations

In 2005 the Trust organised the first 'Innovations in brain injury rehabilitation' conference in Manchester. This was followed in 2007 by a similar international conference in Leeds. In 2008 preparations have been underway for a similar event to be held in 2009, this time in Birmingham at the Burlington Hotel on 23rd and 24th September. Further details can be obtained from West Heath House or BIRT's head office at Millenium Court in Normanton, Wakefield.

Research

At West Heath we believe that we are undertaking specialist and innovative clinical work. We recognise our obligation to monitor and evaluate our services, and promote a culture of learning where research is valued and supported. Staff are encouraged to engage in inter-disciplinary research. Several staff members are completing post-graduate studies, including research projects.

As indicated earlier in the report, a large multi-centre research project on social outcomes following neurobehavioural rehabilitation has now been published. This will strengthen the evidence-base in support of rehabilitation and will help enhance the Trust's reputation for quality clinical services and research.

A smaller but equally important project was completed on the subject of delayed discharge from rehabilitation. This is a major impediment to the development of effective care pathways and undermines attempts to demonstrate the cost-effectiveness of rehabilitation.

Recent publications:

Worthington A D & Oldham J B (2006) Delayed discharge from rehabilitation after brain injury. *Clinical Rehabilitation* **20** 79-82.

Worthington A D & Melia Y (2006) Rehabilitation is compromised by arousal and sleep disorders: a survey of residential centres. *Brain Injury* **20** 327-332.

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

Worthington A D & Wood R L I (2008) Treatment of behaviour disorders. In: A D Tyerman & N King (Eds) *Psychological Approaches to Traumatic Brain Injury*. London: Blackwell.

Worthington A D & Riddoch M J (2008) Treatment of visual perceptual disorders. In: A D Tyerman & N King (Eds) *Psychological Approaches to Traumatic Brain Injury*. London: Blackwell.

Worthington A D & Merriman R (2008) Developing residential services. In: A D Tyerman & N King (Eds) *Psychological Approaches to Traumatic Brain Injury*. London: Blackwell.

Oddy M and Worthington A D eds (2008) *Rehabilitation of executive disorders* OUP

Acknowledgements

We hope that you have enjoyed reading our Annual Review, and whether you are familiar with West Heath or new to the service, we hope you have found at least some of the information useful.

A lot of hard work has gone into the preparation throughout the year. Thanks to all staff who participated in the preparation of this Annual Review and to all the Unit staff without whose enthusiasm, drive and commitment we would have nothing to report.

Prof Michael Oddy
Consultant in Neuropsychology & Rehabilitation