



Dundee Advanced Interventions Service

Six-month Report

1 April 2010 to 1 October 2010



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1. Foreword

In this report, Dundee Advanced Interventions Service (AIS) describes the activity undertaken in the first six months of the financial year 2010/11. As before, we intend to make the annual report the primary focus for reporting of outcomes and so this report does not cover outcomes. We believe that reporting of outcomes for small numbers of people is less preferable and less informative than reporting outcomes of a larger cohort of individuals.

For more background to the service, readers are advised to refer to previous Annual Reports or the website. Although the Annual Report 2009¹ covers outcomes in detail, the 2008 report² provides much more information about the interventions offered, the service, and the staff. The URLs in the footnotes below will take you directly to the reports and the website³.

¹ [http://www.advancedinterventions.org.uk/pdf/AIS Annual Report 2009.pdf](http://www.advancedinterventions.org.uk/pdf/AIS%20Annual%20Report%202009.pdf)

² [http://www.advancedinterventions.org.uk/pdf/AIS Annual Report 2008.pdf](http://www.advancedinterventions.org.uk/pdf/AIS%20Annual%20Report%202008.pdf)

³ <http://www.advancedinterventions.org.uk>

2. Activity Data: 1 April 2010 – 1 October 2010

2.1 Overview

Table 1. Overview of Activity Data for April – October 2010

	Actual	Planned (Whole Year)
Assessments	11	24
Vagus Nerve Stimulation (VNS)	0	7
Anterior Cingulotomy (ACING)	3	5
Follow-up	6	12

2.2 Follow-ups

Follow-ups (ACING): 1

Follow-ups (VNS): 5

In the case of two patients who were undergoing a second procedure, their baseline assessments also represented a *de facto* follow-up from the previous procedure. However, these are not included in the above figures.

2.3 Referrals

2.3.1 Referrals Received during reporting period

During the first six months of 2010, 24 referrals had been received. The referring organisation is given below in Table 2. The male: female ratio was 1:2.4.

Not all referrals progressed to an assessment, and reasons for this will be detailed in the Annual Report when 12-months of data have been compiled.

2.3.2 Referring NHS Organisation

The majority of referrals (87.5%) continue to come from Scotland. Of the three patients from England, one patient has been seen (out with this reporting period); funding was not approved for another; and the third is awaiting assessment.

Table 2. New Referrals - NHS Organisation referring

NHS Organisation	Country	No. of Referrals
Bradford District Care Trust	England, UK	1
NHS Borders	Scotland, UK	1
NHS Dumfries and Galloway	Scotland, UK	1
NHS Fife	Scotland, UK	2
NHS Grampian	Scotland, UK	1
NHS Greater Glasgow and Clyde	Scotland, UK	2
NHS Highland	Scotland, UK	2
NHS Lanarkshire	Scotland, UK	1
NHS Lothian	Scotland, UK	3
NHS Tayside	Scotland, UK	8
South West Yorkshire Partnership NHS Foundation Trust	England, UK	1
Sutton and Merton Primary Care Trust	England, UK	1
	Total	24

2.4 Assessments

2.4.1 Total Assessments

So far, 11 assessments have been conducted. Details are below. One patient was appointed but did not attend. In this instance, a full case note review had already been conducted, and after further discussion with the referring clinician, treatment recommendations were made on this basis. The patient was not reappointed, but re-referral may occur depending on the outcome from the recommendations.

2.4.2 Referring NHS Organisation

The NHS organisation (Board or Primary Care Trust) referring each assessment is shown below in Table 3. All assessments in the first half of 2010 have come from Scotland. Further assessments are currently planned as of the time of writing; two of which are to take place in England.

Table 3. New Assessments: NHS Organisation

NHS Organisation	Country	No. of assessments
NHS Borders	Scotland, UK	1
NHS Dumfries and Galloway	Scotland, UK	1
NHS Grampian	Scotland, UK	1
NHS Greater Glasgow and Clyde	Scotland, UK	1
NHS Highland	Scotland, UK	2
NHS Lanarkshire	Scotland, UK	1
NHS Lothian	Scotland, UK	1
NHS Tayside	Scotland, UK	3
No. of assessments not covered by SLA:		0
Total Number of Assessments:		11

2.5 Procedures

2.5.1 Procedures performed

A summary of procedures is given below in Table 4.

Table 4. Procedures performed between 1 April 2010 and 1 October 2010.

Anterior Cingulotomy (ACING)	
As first operation:	0
As second operation:	2
As third procedure:	1
Total:	3
Vagus Nerve Stimulation (VNS)	
As first operation:	0
As second operation:	0
Total:	0
Total number of Procedures:	3

At the time of writing, two patients are due to undergo Anterior Cingulotomy during October 2010.

2.5.2 Indications for surgery

All three patients underwent bilateral Anterior Cingulotomy for Chronic, Treatment-Refractory Depression.

2.5.3 NHS Organisation Funding Surgery

The NHS Organisation responsible for patients undergoing neurosurgery is shown below in

Table 5.

Table 5. NHS Organisation responsible for Neurosurgical patients

NHS Organisation	Country	Procedure	No. of procedures
Bolton, Salford & Trafford Mental Health NHS Trust	England, UK	ACING*	1
Cornwall Partnership NHS Trust	England, UK	ACING*	1
NHS Fife	Scotland, UK	ACING	1

2.5.4 Procedures not covered by SLA

Two procedures have been performed for patients from English PCTs. These are indicated by an asterisk in Table 5 above.

2.5.5 Durations of Inpatient stay

Details of inpatient admissions are shown below in Table 6.

Table 6. Duration of inpatient stay (all categories)

All durations in days. Means not shown due to low numbers

	N	SLA	Non-SLA
Total inpatient stay - all NMD patients, Carseview (days):	3	26	52
Mean inpatient stay - all NMD patients, Carseview (days):	-	-	-
Total inpatient stay - all NMD patients, Ward 23 (days):	3	2	4
Mean inpatient stay - all NMD patients, Ward 23 (days):	-	-	-
Total inpatient stay - Inpatient ERP, Carseview (days):	0	N/A*	-
Mean Inpatient stay - Inpatient ERP, Carseview (days):	0	N/A*	-
Total inpatient stay - Other, Carseview (days):	0	-	-
Total inpatient stay - Reviews (days):	0	-	-

* NMD includes ablative neurosurgery and VNS.

** Inpatient ERP is not included in the SLA and must be funded by the referring NHS organisation.

2.6 Comments on activity levels

In the first six months of the financial year, the service has seen 46% of the planned assessments for the year and conducted 50% of the planned follow-ups. This is broadly comparable to the activity seen in the same period last year and it does not raise any concerns about meeting planned activity levels.

2.6.1 Assessments

It is predicted that by the end of the 2010/11 financial year, the service will have met the planned number of assessments. Between the time of this report (1 October 2010) and the time of compilation of this report, two further individuals have been seen, and appointments have been given for 3 referrals. Funding is currently awaited for a number of patients who have been referred from out with Scotland.

There is notable variability to the pattern of referrals/ assessments over time. This is shown (per quarter) below in Figure 1. The referral rate has reduced a little in the last few years. It is acknowledged that the number of assessments depends on the rate of referral and the service continues to work to ensure that services in Scotland are aware of the service.

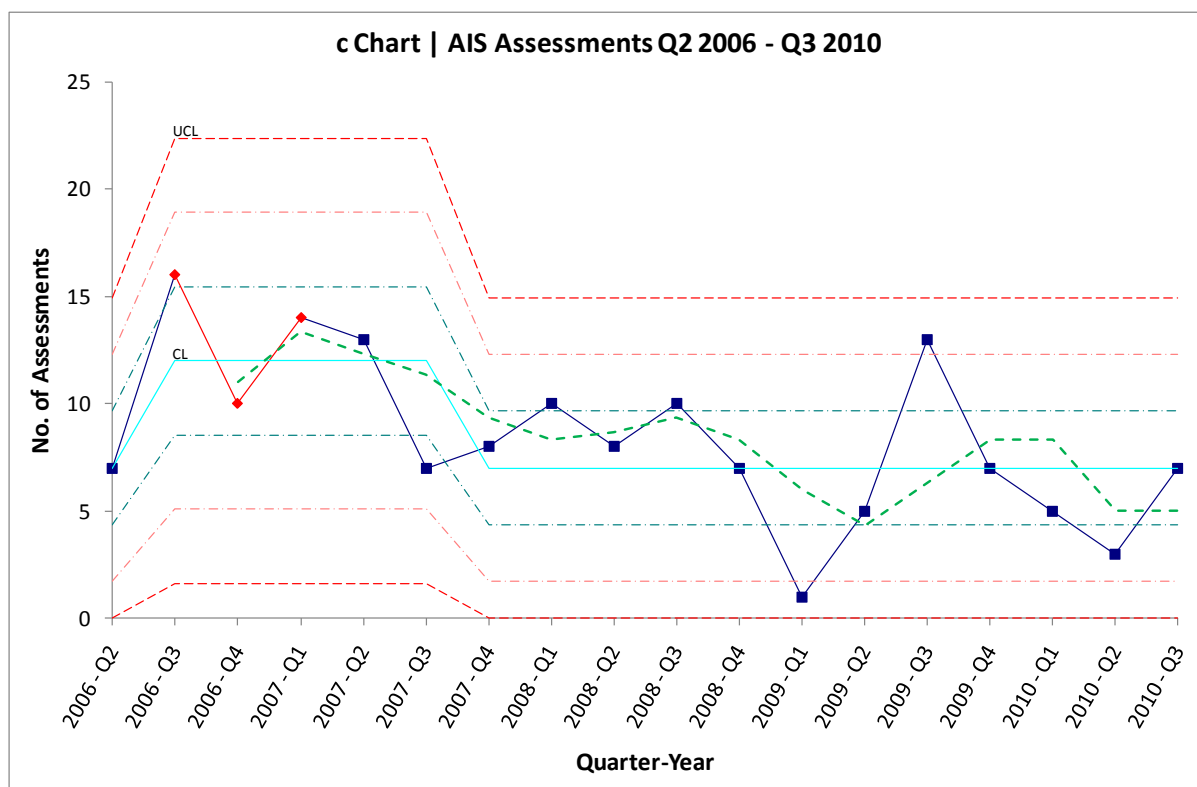


Figure 1. Control chart showing numbers of assessments conducted per quarter 2006-2010. Broken line shows 3-period moving average.

Whilst there has been a slight reduction in the later quarters of 2007, the level of activity tends to fluctuate around 6-7 assessments per quarter, which is consistent with at least 24 new assessments per annum.

2.6.2 Procedures

In terms of procedures, the service has performed 3/5 (60%) of planned procedures and a further two ablative procedures are scheduled for November 2010.

A number of procedures are in the latter stages of planning. It is difficult to predict when these will be undertaken and there is a possibility that the service will exceed the planned number of ablative procedures in the 2010/11 financial year.

Given that overall numbers of procedures are low, it is to be expected that there will be a degree of year-to-year variation in neurosurgical activity levels.

3. Mortality and Morbidity Data

3.1 No. of Deaths

No deaths occurred during the reporting period and at the time of writing, Dundee AIS is not aware of any deaths relating to neurosurgery having occurred during the lifetime of the NMD service (1992 – October 2010). As reported previously, there have been no suicides of patients who have received neurosurgical intervention in Dundee in the last seventeen years.

4. Waiting Times

4.1 Introduction

Scottish patients do not require additional funding for assessment or treatment. However, patients from outside of Scotland require funding approval and this may incur delays over which Dundee AIS has no control. The service tries to work closely with referring services to minimise delay in patients outwith Scotland being seen.

4.2 Waiting times from referral to assessment

An overview of waiting times over the previous six months is given below in Table 7. These are averages for all patients who did not have additional factors affecting the time taken to assessment.

Table 7. Waiting times for the service

All times expressed in weeks from date that referral is received to date of first consultant assessment

	N	Mean (average) waiting time from referral to assessment (\pm SD)
 Scotland	11	9.2 \pm 3.5

Please note that the number of patients included in this table may be less than the total number of assessments reported in Section 2.4.1 above.

4.3 Waiting times from assessment to surgery

For patients proceeding to ablative neurosurgery (Anterior Cingulotomy), there will be a delay of approximately 6-8 weeks in order that the Mental Welfare Commission for Scotland can assess them. This process is specified by Section 235 of the Mental Health (Care & Treatment)(Scotland) Act 2003⁴.

Once Dundee AIS has received the necessary paperwork (Form T1), there is a further 6-8 weeks whilst operating theatres, admission to hospital, and the necessary preoperative assessments are arranged.

The service is currently using the receipt of the T1 form in the context of the current NHS Scotland waiting time initiatives. The 'clock' starts when the form is received and stops when surgery takes place. There is a range of factors outwith the control of the service that impact upon the time

⁴ <http://www.opsi.gov.uk/legislation/scotland/acts2003/20030013.htm>

from assessment to treatment⁵ and such an indicator is not always considered appropriate for interventions such as these; where rushing patients to neurosurgery is not necessarily a good thing.

The small numbers, and numerous reasons for variation in times, makes reporting at this stage impractical. However, we will endeavour to report on this particular measure in due course.

⁵ Such as the need to plan post-operative care, and liaise with local services. Many patients may require additional visits to discuss treatment and plan care.

5. Quality of Care

5.1 Formal Complaints

No formal complaints have been received during the first six months of 2010/11. After being seen, one individual fed back some comments on aspects of the assessment that they found difficult. This was discussed with the individual, and the service acknowledged the feedback that this provided. The AIS explained the process and the possibility of making a more formal complaint, but the individual did not want to pursue this route. After these discussions with the patient, clinicians from the AIS reflected this contact back to the referring psychiatrist to ensure that they were aware of some of the issues arising.

6. Clinical Audit and Outcomes

6.1 Specific Issues

6.1.1 Survival Data

Survival data are of lesser relevance at the current time since the survival rate for neurosurgical interventions (VNS and Anterior Cingulotomy) is 100%. Only one patient is known to have died since 1992, and this was from an illness unrelated to neurosurgery.

No patients have died during this reporting period.

6.1.2 Number of Hospital Acquired Infections

None.

6.1.3 Number of Critical Incidents

None.

6.1.4 Readmissions

No patients have been readmitted to the neurosurgical wards during their inpatient stay. Admission durations have not exceeded planned stays.

6.2 Clinical Audit

6.2.1 Outcome Data

As previously intimated, we do not consider outcomes prior to 12 months to be a meaningful indicator of an individual's recovery. In addition, reporting of outcomes in a 'piecemeal' fashion six-monthly does not permit sufficient numbers for meaningful conclusions to be drawn. Since a patient's outcome at six-months may not truly reflect their response to the interventions provided, we continue to assess outcomes 12-months after the procedure. Although we closely monitor treatment response in the interim, these data are not used to make decisions about overall response.

Therefore, in accordance with the principles intimated in our previous annual reports⁶, we will continue to report outcomes annually.

7. Developments

7.1 Clinical trials

7.1.1 Multi-site, International Study of Deep Brain Stimulation for Treatment-Refractory Depression (the BROADEN Study).

Dundee AIS is participating in a multi-centre trial of Deep Brain Stimulation (DBS) for chronic, treatment-refractory depression. The trial is industry-sponsored and is called the BROADEN⁷ study. Between 8 and 10 patients with chronic, treatment-refractory depression will be entered into a randomised, double-blind trial of DBS, with two-thirds of patients receiving active stimulation and one-third receiving 'sham' stimulation during the first six months. All assessments will be conducted blind to treatment. After six-months, all participants will receive active stimulation.

Neuropsychological performance, social functioning, and quality of life will be measured alongside clinical assessments of outcome. The trial has been adopted by the Scottish Mental Health Research Network (SMHRN).

7.1.2 Intensive psychotherapy for chronic, treatment-resistant depression: a pilot investigation of clinical effectiveness and mediators of learning in the Cognitive Behavioural Analysis System of Psychotherapy (CBASP)

A significant minority of depressive episodes (20-30%) respond poorly to antidepressant medication or standard psychological therapy and run a persistent course. Current clinical guidelines recommend a combination of psychotherapy and pharmacotherapy; the evidence base for which rests almost entirely upon a single North American clinical trial in which the Cognitive Behavioural Analysis System of Psychotherapy (CBASP) was significantly more effective than previous psychological or pharmacological therapies, especially in patients with a history of childhood adversity. A more recent clinical trial of comparing CBASP with supportive psychotherapy as an adjunct to pharmacotherapy did not lead to a repeat of the positive results reported in the initial trial. The primary purpose of this trial is to conduct an extended case series of CBASP therapy in order to test the viability and acceptability of this approach in a UK NHS context.

At the current time, Dundee AIS is one of the few UK centres with experience and expertise in this form of psychological therapy, which is the only one specifically developed for chronic depression.

⁶ http://www.advancedinterventions.org.uk/pdf/AIS_Annual_Report_2008.pdf

⁷ BROADmann Area 25 DEep brain Neuromodulation; <http://www.broadenstudy.com/>

7.1.3 Diffusion Tensor and Functional Imaging of Chronic Treatment Refractory Depression and Neurosurgical Treatments

This study will use Diffusion Tensor Imaging (DTI) and functional magnetic resonance imaging (fMRI) to relate neuropsychological performance and clinical status (symptoms) with measures of white matter integrity and grey matter function in 'emotional-processing-relevant' brain networks. This will lead to a greater understanding of the consequences and side-effects of neurosurgery. Using DTI in addition to fMRI will help to map lesion topography and subsequent effects on communicating white matter tracts with great precision, helping to develop our understanding of the functional architecture of depression. This will help guide the development of novel and more effective treatment strategies.

8. Financial Statement

Please note that the financial statement will be sent subsequently, following reconciliation and confirmation of accuracy.