

Darwin Centre for Young People

Annual Report

April 2012 – March 2013



Contents

About Us.....	3
Introduction.....	3
Our Aims and Goals	3
Treatment and Programmes.....	3
AMBIT Approach	3
The Darwin Learning Centre School	4
Patient and Parent Involvement	4
Outreach	4
Our Performance.....	4
Period of Review	5
Contact for Further Information	5
Clinical Activity.....	6
Bed Occupancy	6
Referrals.....	6
Source of Referrals	6
Admissions.....	6
Waiting Times.....	7
Discharges	8
Length of Stay	8
Incidents	9
Formal Complaints	9
Clinical Outcomes.....	10
Overview and Aims.....	10
Description of Patient Group	10
Gender	10
Age.....	10
Diagnosis	10
Mental Health Act Section	10
Outcome Measures and Results	12
Analysis.....	12
Results	12
Service User and Parent/Carer Feedback and Experience	18
Inpatient Ipad Survey	18
Exit Satisfaction Questionnaires.....	18
<i>Patients</i>	18
<i>Parents/Carers</i>	19
News and Updates	21
Teaching and Training.....	21
Patient and Parent Involvement Activities	21
Outreach Changes	21
References	22

About Us

Introduction

The Darwin Centre for Young People is an NHS Tier 4 inpatient and day patient acute ward offering assessment and treatment to young people aged 12-17 with severe and acute mental health problems. Young people are referred by their local mental health services if they have been unable to make progress whilst remaining at home with the support of local outpatient treatment. The unit has provision for 16 young people: 14 inpatients and 2 day patients.

Based in Fulbourn, Cambridge, the Darwin Centre provides services to young people from Cambridgeshire, Peterborough, Norfolk, Suffolk and Bedfordshire. However, under the new National Commissioning arrangements, young people from all areas are eligible for referral/admission to the Darwin Centre.

Our Aims and Goals

We aim to provide a high quality, multi-disciplinary mental health service for young people experiencing severe emotional and/or mental health difficulties. We work towards empowering young people to take charge of the ways they cope with their mental health problems. We offer a holistic approach to the needs of the young people and their family, and we work in close partnership with patients, parents and/or carers.

We pride ourselves on our ability to work closely and effectively with external children's agencies and education in order to ensure that the needs of the young person are met both whilst in our care and after discharge.

Treatment and Programmes

We aim to offer young people a variety of activities as part of a therapeutic programme, which we expect all young people to take part in. They are given opportunities to work both individually and as part of a group.

During a young person's stay, they will be offered a comprehensive range of assessment and treatments by our multi-disciplinary team composed of doctors, nursing staff, family therapist, psychologist, occupational therapist, art and music therapist, outreach workers, dietician and teachers.

The length of stay and type of admission depends on the young person's individual needs and circumstances; Most young people stay for around two to three months, but we can offer longer treatment if needed. We aim to work in partnership with young people, their families/carers and local services to help them return home as soon as they are able to. We work towards supported home leave very quickly, often within the first two weeks of admission.

AMBIT Approach

In January 2013 we introduced an innovative team-based framework called AMBIT (Adolescent Mentalization-Based Integrative Therapy). At its core is mentalization, which is the capacity to make sense of one's own and other people's behaviour in terms of

intentional mental states (for example feelings, beliefs, desires, reasons, needs¹). The ability to think about one's own thoughts and feelings is a critical part of emotion regulation. In addition, thinking about other's thoughts and feelings is central to improving interpersonal relationships.

AMBIT provides a framework for promoting a team-wide curious stance on mental states. Through AMBIT, we aim to stimulate and promote mentalization both in the young person and between team members. We aim to foster a secure and trusting relationship between young people and their key workers. An additional aspect of the model is the importance of integrating multiple (often complex) systems around a young person (e.g., family, community workers, school, etc....) in a way that best supports their recovery.

The Darwin Learning Centre School

Young people at the unit attend the Darwin Learning Centre School, which was awarded 'outstanding' by OFSTED in September 2011 for the second time in succession. The school aims to enable students to continue their mainstream school work as much as possible, with staff liaising closely with students' home schools. The school provides teaching in the core curriculum subjects, as well as a flexible learning environment where students are able to carry out their own individual study. As the Darwin Learning Centre School is a registered exam centre, it is possible for students to take their exams here and students are supported to pursue their future and further education options. Students are also involved in a range of extra-curricular activities.

Patient and Parent Involvement

The Darwin Centre has a dedicated involvement post: the Head of Patient and Parent Involvement (HOPPI). The HOPPI's main role is to ensure that patients and parents are given opportunities to be involved in their treatment and participate in the development of the service more generally.

Outreach

The unit has an Outreach Team whose role is to ensure that young people have as smooth a transition as possible between the Darwin Centre and the community. To achieve this, they assist young people in maintaining links with their local community whilst in hospital, mainly working within the home and educational environments. They are involved in the admission process, carrying out home assessments of the family's mental health needs. The team also supports the transition for up to six weeks post-discharge, co-ordinating and nurturing the supportive community links in order for discharge to be successful and the young person to remain out of hospital. Outreach also facilitates activity groups within the Darwin (e.g. drama, sports) particularly during the school holidays.

Our Performance

The performance of the service is judged based upon service users' experience, satisfaction and the use of validated clinical outcome measures which this report will present. We also work in line with QNIC (Quality Network for Inpatient CAMHS) standards and CPFT standards on key areas such as care planning and the environment.

As a result of our performance against the QNIC standards in February 2013, the Darwin Centre has been accredited as 'excellent' until 24th April 2016. Specific strengths highlighted during the accreditation review include the pleasant ward and school environments, the comprehensiveness of the care plans, the variety of treatments provided, the quality of joint working on the unit, and the supportive atmosphere reported by both staff and patients.

Areas of improvement, which we are acting upon, include increased clinical psychology time, and developing ways to signpost parents/carers to important information.

Period of Review

This report describes activity during the financial year from 1st April 2012 to 31st March 2013.

Contact for Further Information

We welcome comments, feedback and questions about this report to:

Elisa Napoleone, Research Assistant: *elisa.napoleone@cpft.nhs.uk*

James Fairbairn, Clinical Psychologist: *james.fairbairn@cpft.nhs.uk*

Visit our website *www.darwincentre.cpft.nhs.uk* for an electronic version of this report, for the QNIC Accreditation Report 2013, and for more information about the Darwin Centre for Young People.

If you would like more information on the AMBIT approach and how it applies to the Darwin Centre, please visit *http://ambit-darwin.tiddlyspace.com/*

Clinical Activity

Bed Occupancy

Figure 1 shows the proportion of occupied beds per month during the financial year 2012-2013, based on 13 beds. As can be seen, on certain months the occupancy exceeded this figure. This is because the Darwin Centre has the flexibility for an extra bed if necessary and the maximum bed numbers can change due to different constraints (e.g., staffing levels, commissioning).

Figure 1. Percentages of Beds Occupied per Month



Referrals

During 2012/2013, the Darwin Centre received 111 referrals; Of these, 76.58% were urgent referrals and 12.61% were planned (with 10.81% unknown or not specified).

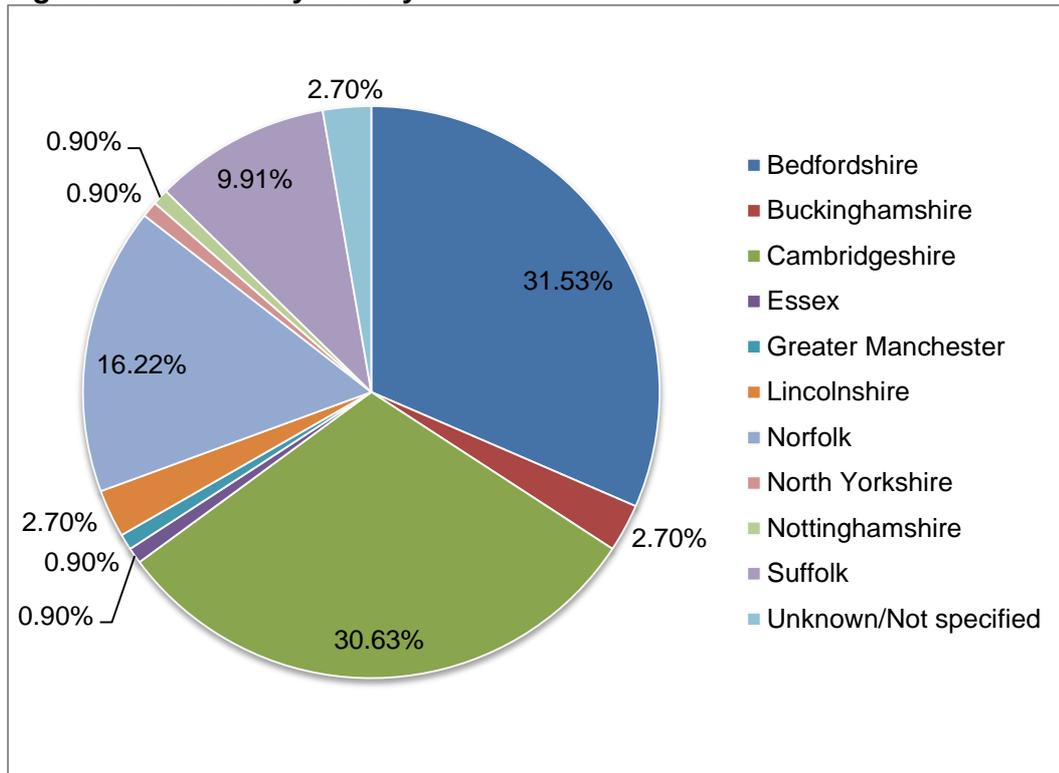
Source of Referrals

Figure 2 shows the proportion of total referrals received according to county. The highest proportion of referrals were received from professionals within Bedfordshire (31.53%), followed by Cambridgeshire (30.63%) and Norfolk (16.22%).

Admissions

Fifty-seven admissions took place during 2012-2013; Of these, five were of patients who had been admitted to the service in previous years and six who have been admitted more than once during this financial year. Figure 3 shows the number of young people admitted to the Centre each month.

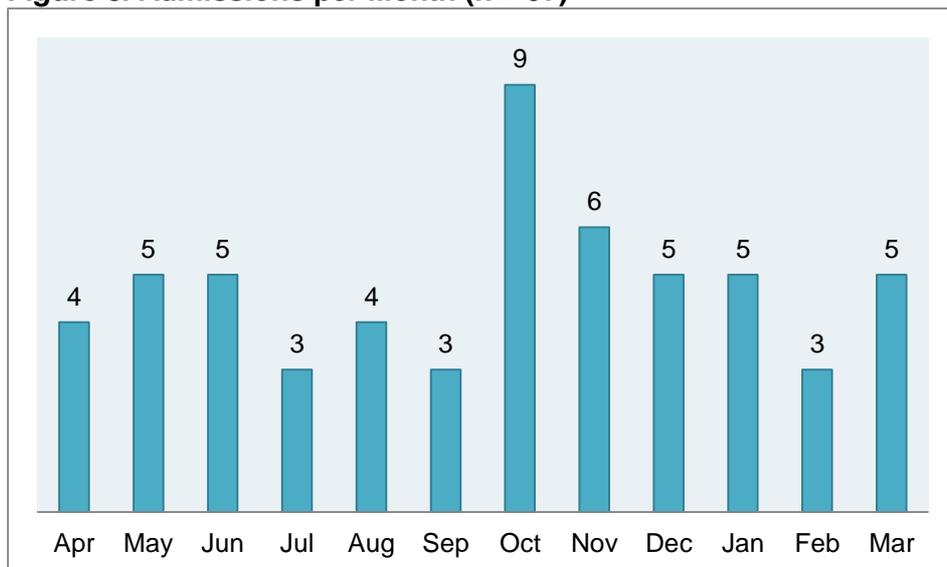
Figure 2. Referrals by County



Waiting Times

The average waiting time between referral and admission was 9.18 days (Standard Deviation, $SD = 17.10$). This varied according to referral type: for urgent referrals the average waiting time was 3.71 days ($SD = 7.68$), while for planned referrals it was 29.67 days ($SD = 26.43$).

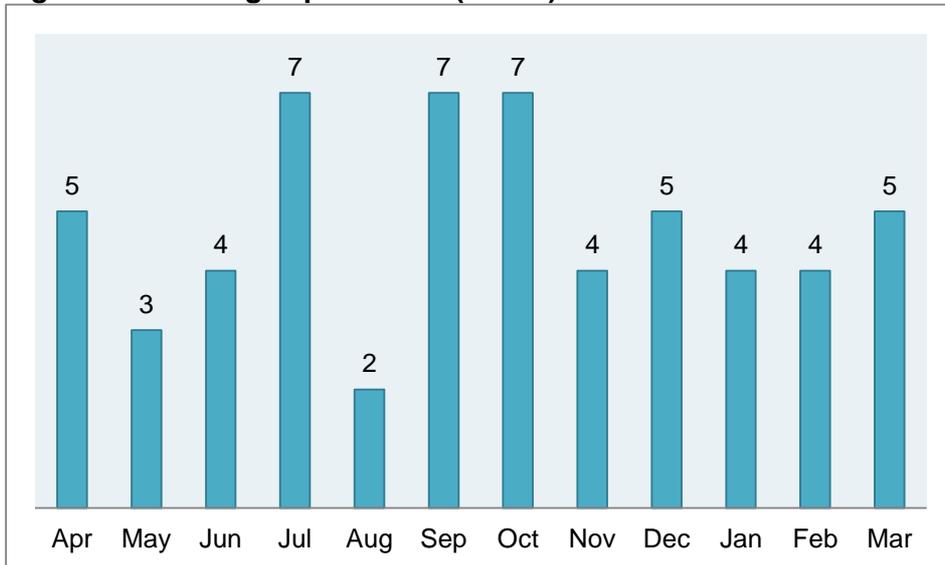
Figure 3. Admissions per Month (n = 57)



Discharges

Fifty-seven young people were discharged during this period. The number of young people discharged every month is displayed in Figure 4.

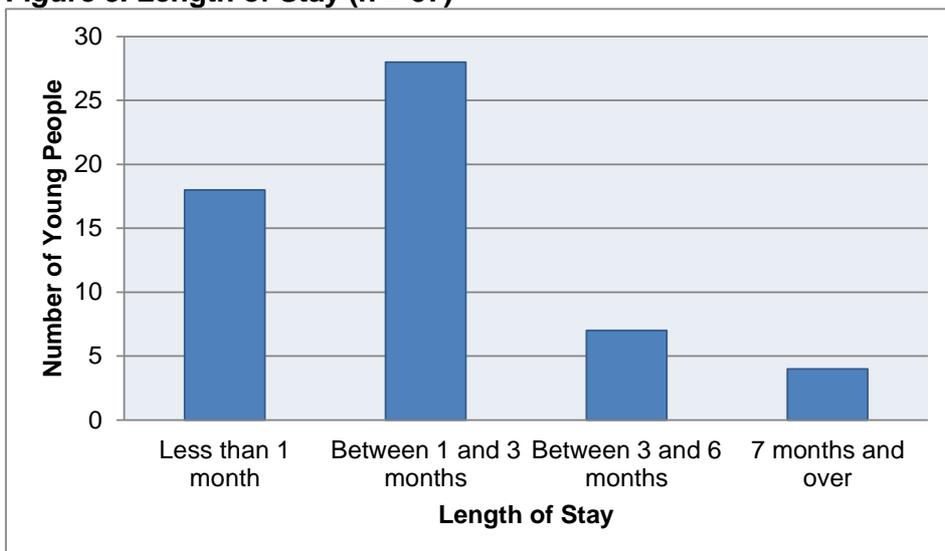
Figure 4. Discharges per Month (n = 57)



Length of Stay

The average length of stay was 85 days (12 weeks); However, there was much variation within this, with a range of stay from one day to over a year ($SD = 90.78$). As shown in Figure 5, the majority of young people spend between one and three months at the Darwin Centre.

Figure 5. Length of Stay (n = 57)



It is worth noting that part of young people’s treatment involves spending time on home leave and integrating back in the community, therefore there will be periods during the admission when young people will not be spending all of their time on the unit.

Incidents

There have been a total of 734 incidents which principally affected service users during the financial year. Figure 6 displays the different types of incidents recorded per month, while Figure 7 presents the same incidents, but classified according to degree of harm.

Figure 6. Incidents per Month According to Type (n = 734)

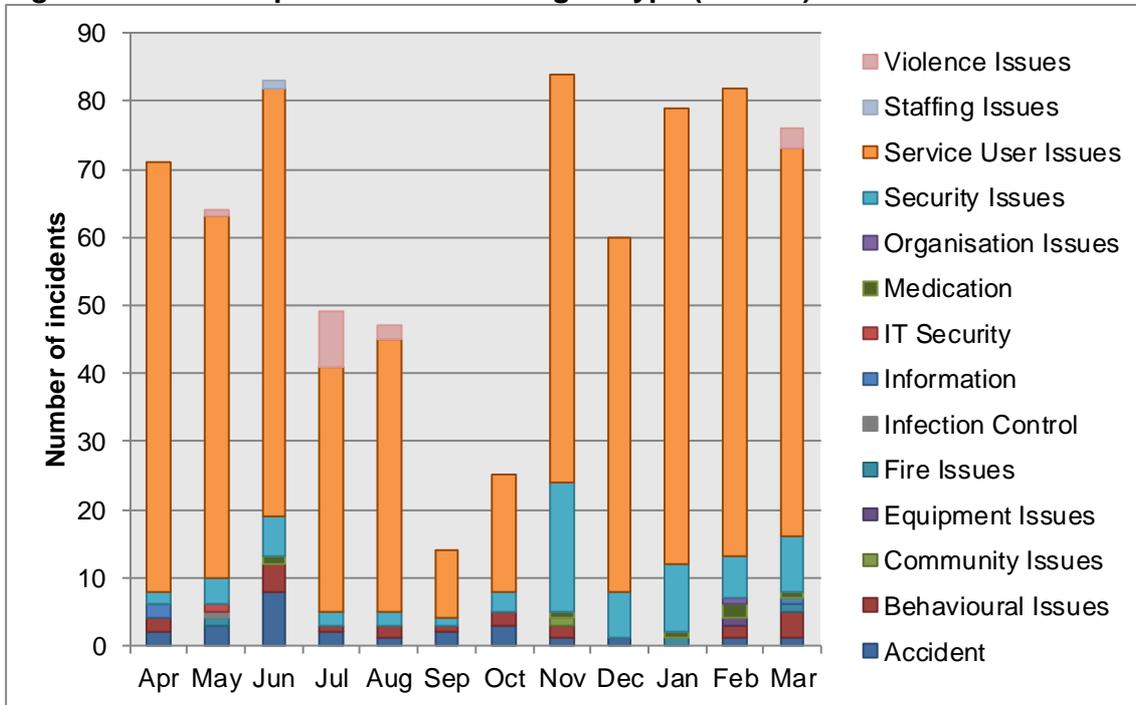
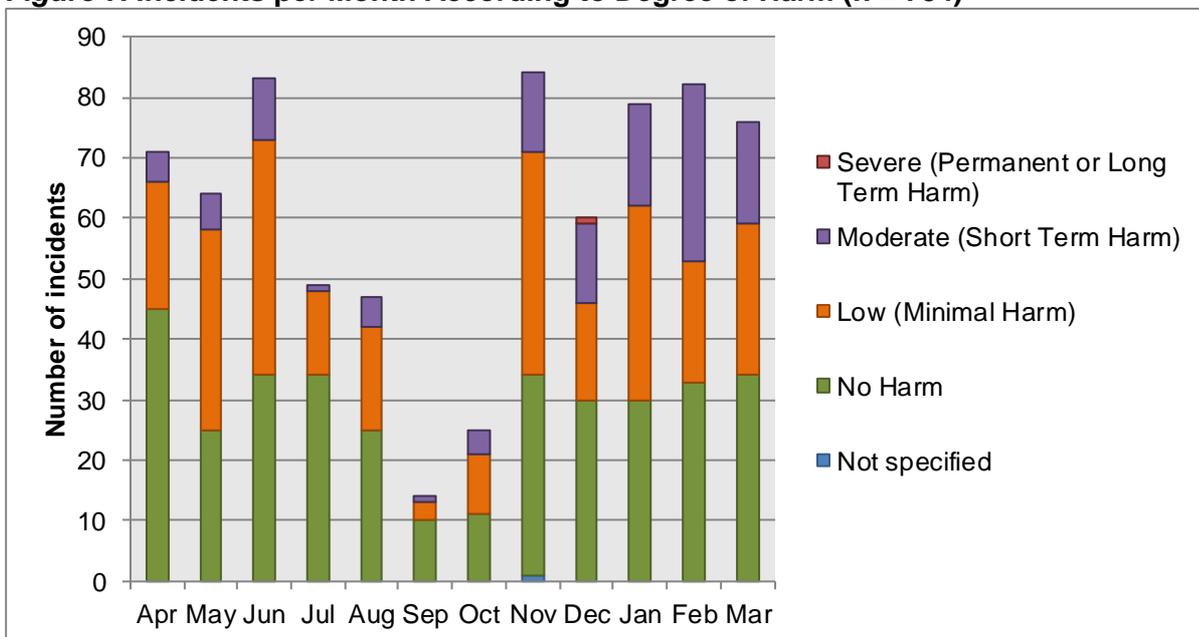


Figure 7. Incidents per Month According to Degree of Harm (n = 734)



Formal Complaints

No formal complaints were received during this period.

Clinical Outcomes

Overview and Aims

The Darwin routine outcome measurement project was introduced in January 2012, with the aim of monitoring the effectiveness of the service and informing service development. Measures are collected at admission and discharge. We plan to introduce a follow-up measurement occasion at 12 months post-discharge in January 2014. A variety of viewpoints are taken into account in evaluating outcome: clinicians, young people and parents/carers.

The following demographic and clinical outcomes data is based on the 57 patients *discharged* between 1st April 2012 and 31st March 2013. It should be noted that patients in this cohort were not necessarily admitted during the same financial year. The presentation of data in this way is to allow admission and discharge data of the same patients to be matched. This enables us to investigate change experienced during an admission to the service.

Description of Patient Group

Gender

Of the young people admitted, 79% were females and 21% males.

Age

The average age at admission was 15.39 ($SD = 1.45$), with a range of 12 to 17 years.

Diagnosis

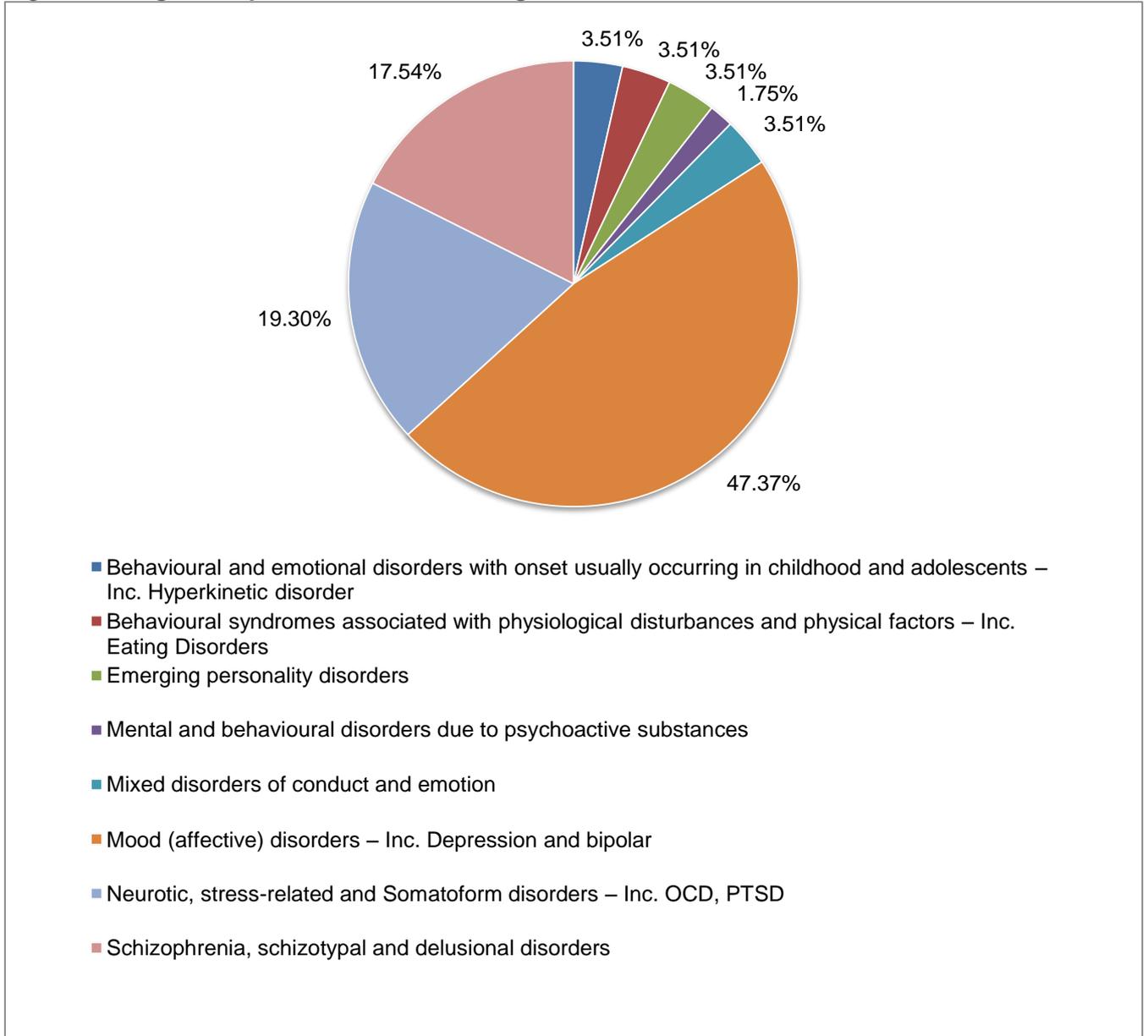
The young people that are referred and admitted to the Darwin Centre usually have a complex psychiatric history. Figure 8 shows the different categories of psychiatric disorders (according to ICD-10 criteria) that the patients presented with at admission to the Darwin Centre. As shown in Figure 8, the majority of young people had a mood disorder. Other prevalent diagnoses were neurotic, stress-related and somatoform disorders such as obsessive-compulsive disorder, and delusional disorders such as schizophrenia.

Twenty-nine per cent of young people also met diagnostic criteria for a secondary, comorbid psychiatric disorder at the time of admission. Most frequently, this was for an eating disorder, and mood and anxiety disorders.

Mental Health Act Section

A total of 14 patients (24.56%) were admitted formally to the service under the Mental Health Act (seven under Section 2 – admission for assessment - and seven under Section 3 – admission for treatment).

Figure 8. Diagnoses per Broad ICD-10 Categories



Outcome Measures and Results

In the following section we report the outcome measures' results for the 57 patients discharged during 2012-2013. We do not have complete data (admission and discharge) available for all patients. This is partly due to the fact that, for a large part of the year, the post of the research assistant was vacant, and partly due to the nature of our service, which can involve unplanned discharges and low compliance. Despite these challenges, we work hard to ensure that measures are collected and entered in our research database routinely.

Analysis

Descriptive statistics (e.g., means and standard deviations) are based on all available data. Because of the importance of matching admission and discharge data to the same patients, inferential statistics (paired t-test) have to be based on the "completers" sample, i.e. patients with data available at both time points. For most measures, power calculations indicated that the complete sample size was too small to detect a true effect (power below 80%). Thus, inferential statistics are reported only for CGAS scores. The magnitude of the change between admission and discharge (effect size) is reported as Cohen's *d*, which is to be interpreted as small (0.2), medium (0.5) or large (above 0.8; Cohen, 1988²).

Results

a) Children's Global Assessment Scale (CGAS³)

The CGAS is a clinician-rated measure of global functioning, including psychological, social and school functioning, on a continuum from 1 ("needs constant supervision") to 100 ("superior functioning"). In addition to being completed at admission and discharge, CGAS ratings are also carried out on a weekly basis as part of ward round, and are discussed by the MDT together with the patient.

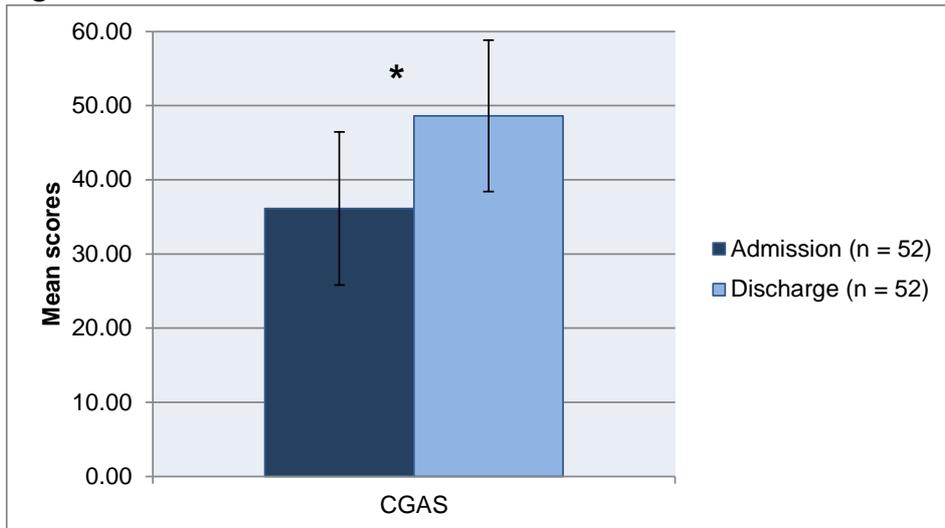
CGAS scores were available for 52 patients discharged between 2012 and 2013. As shown in Figure 9, the mean CGAS score at admission was 36.13 (SD = 10.33). At discharge, the mean CGAS score was 48.62 (SD = 10.19). This difference was significant ($t(51) = 6.85, p < .001$), and the size of this effect was large (Cohen's $d = 1.2$), indicating that patients' global functioning substantially improved during their stay.

Explanations of CGAS Scores

A score of **31 – 40** indicates a major impairment in functioning in several areas and inability to function in one of these areas, i.e., disturbed at home, at school, with peers, or in the society at large, e.g., persistent aggression without clear instigation; markedly withdrawn and isolated behaviour due to either mood or thought disturbance, suicidal attempts with clear lethal intent.

A score of **41 – 50** indicates a moderate degree of impairment in functioning in most social areas or severe impairment functioning in one area, such as might result from for example, suicidal preoccupations and ruminations, school refusal and other forms of anxiety, obsessive rituals, major conversion symptoms, frequent anxiety attacks, frequent episodes of aggressive or other antisocial behaviour with some preservation of meaningful social relationships.

Figure 9. Means and Standard Deviation Bars of CGAS Scores at Admission and Discharge



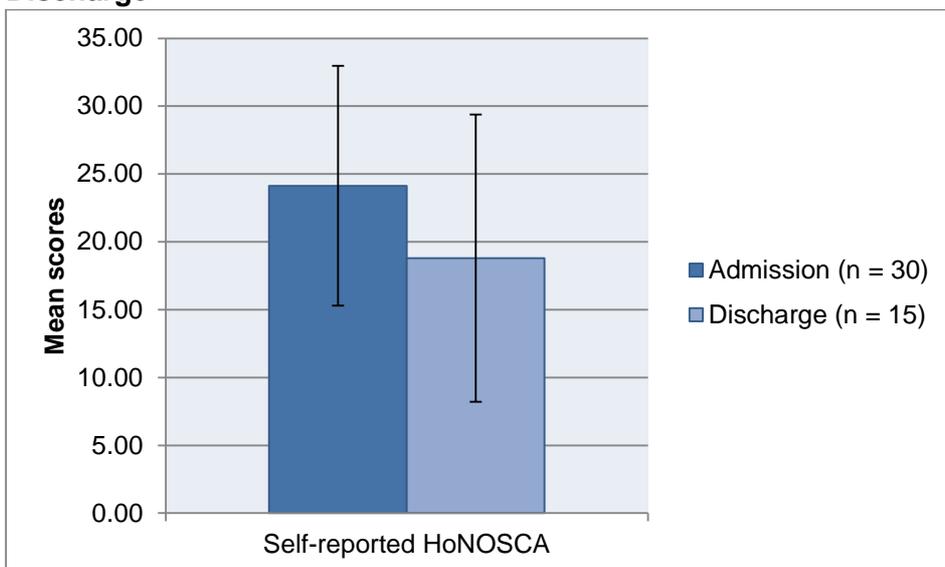
* Difference is significant at $p < .001$

b) Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA⁴)

The HoNOSCA is a 13-item widely-used measurement tool that assesses young people’s current mental health status, including behaviours, impairments, symptoms, and social functioning. There are three versions of the HoNOSCA: self-rated, parent-rated and clinician-rated. Each item is scored on a five-point scale from 0 (no problem) to 4 (severe problem). Therefore, a higher score indicates more impaired functioning.

Self-reported HoNOSCA

Figure 10. Means and Standard Deviation Bars of Self-reported HoNOSCA at Admission and Discharge



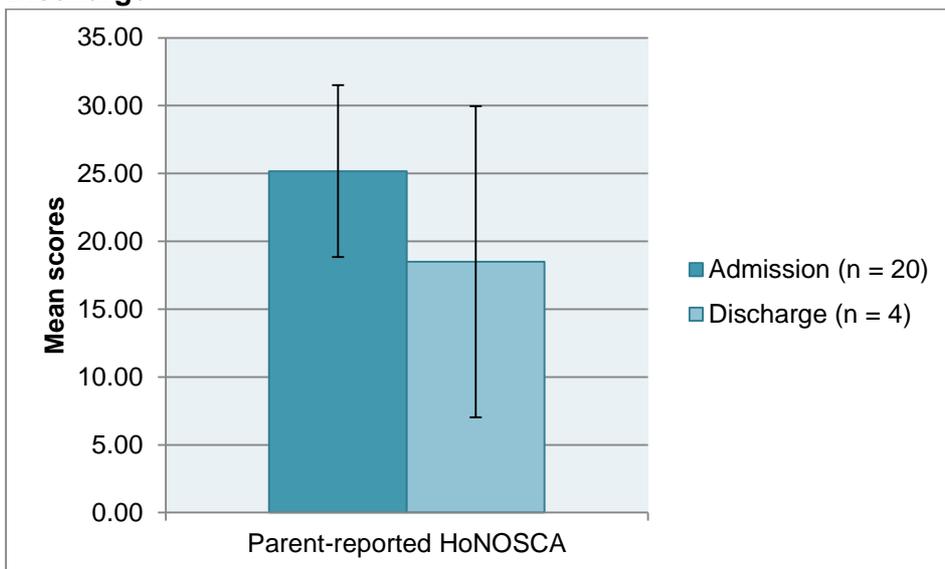
As shown in Figure 10, the mean self-reported HoNOSCA score at admission was 24.13 ($SD = 8.84$). At discharge, the mean was 18.80 ($SD = 10.59$). These means are in the expected direction, in that there was a decrease in overall self-reported symptom severity between admission and discharge.

Parent-reported HoNOSCA

Figure 11 displays the means and standard deviation bars of parent-reported HoNOSCA at admission and discharge. As can be seen, the mean HoNOSCA score at admission was 25.18 ($SD = 6.34$). At discharge, the HoNOSCA score was 18.50 ($SD = 11.47$). Therefore, parent-reported symptom severity decreased during the admission.

However, it is important to note that only four parents completed the questionnaire at discharge; thus results should be treated with caution because they cannot be generalized to the whole group of young people.

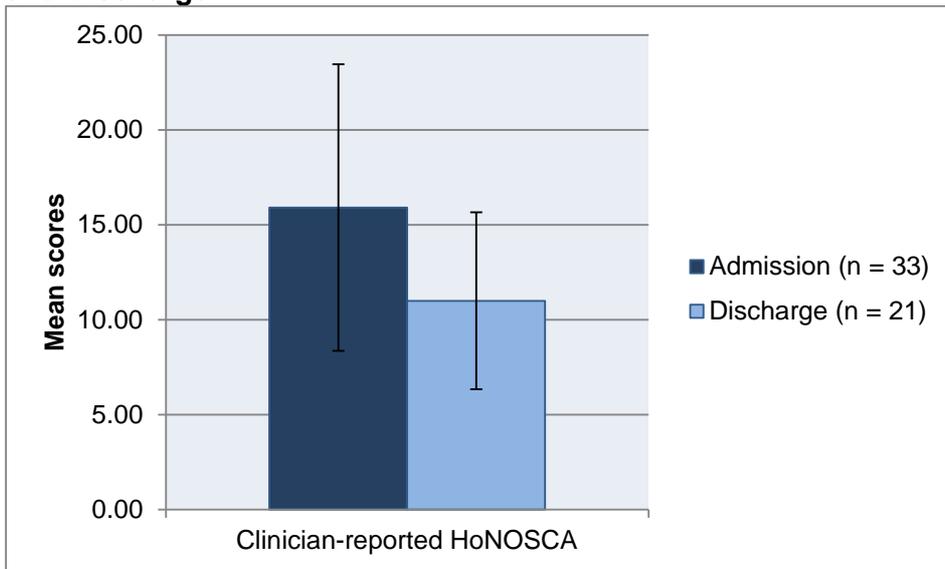
Figure 11. Means and Standard Deviation Bars of Parent-reported HoNOSCA at Admission and Discharge



Clinician-reported HoNOSCA

As displayed in Figure 12, the mean clinician-reported HoNOSCA score at admission was 15.91 ($SD = 7.54$). At discharge, the clinician-reported HoNOSCA score was 11.00 ($SD = 4.66$). Therefore, symptoms reported by clinicians also decreased in severity between admission and discharge.

Figure 12. Means and Standard Deviation Bars for Clinician-reported HoNOSCA at Admission and Discharge



c) Strengths and Difficulties Questionnaire (SDQ⁵)

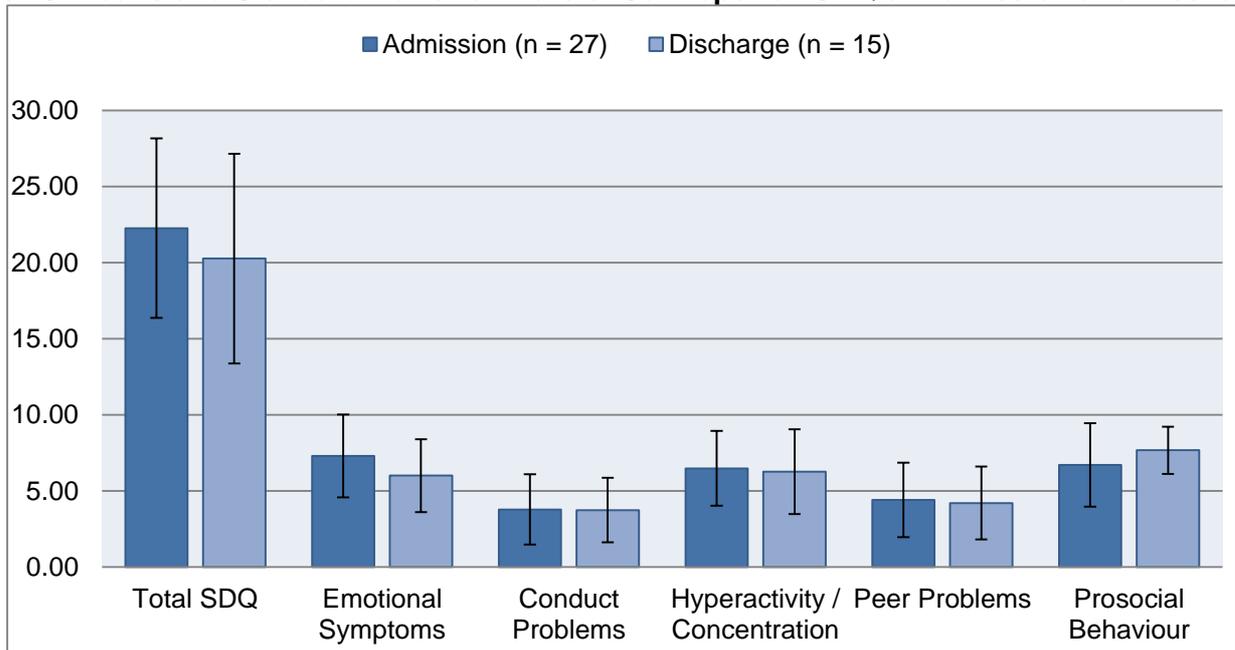
The SDQ is a measure of behaviour and symptom severity and their impact on functioning. Both a self-reported and a parent-reported version exist. It consists of 25 statements that relate to different aspects of functioning. These can be added up to obtain a total score, as well as five subscale scores: emotional symptoms, conduct problems, attention and concentration, peer problems and pro-social behaviour. Items are scored on a three-point scale from 0 (*Not true*) to 2 (*Certainly true*). A higher score indicates more severity, apart from the pro-social behaviour scale, in which a higher score indicates better functioning. Published thresholds for clinical and borderline ranges of symptom severity are provided for ease of interpretation⁶.

Self-reported SDQ

Figure 13 shows the means and standard deviation bars of self-reported SDQ total scores and subscales at admission and discharge.

The mean total scores were in the lower end of the clinical range (between 20 and 40) both at admission and discharge. In the Emotional Symptoms scale, the problems decreased from the clinical (between 7 and 10) to the borderline range (6). Conduct problems were not of clinical severity at admission (below 4) and they remained stable at discharge. Hyperactivity and concentration problems remained in the borderline range (6), as did peer problems (borderline: between 4 and 5). Pro-social behaviour was in the non-clinical range (between 6 and 10) at admission and improved at discharge.

Figure 13. Means and Standard Deviation Bars of Self-reported SDQ at Admission and Discharge



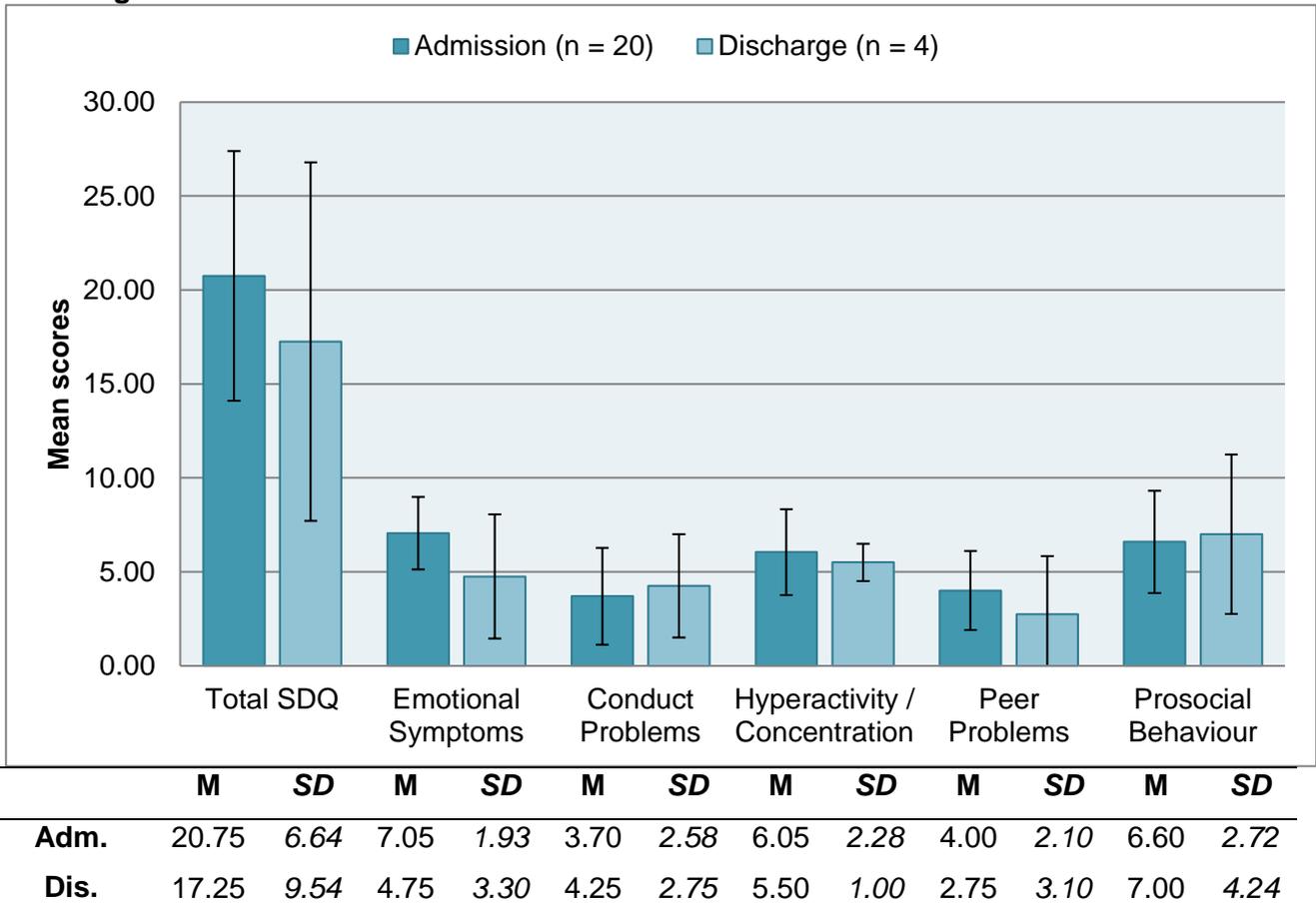
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Adm.	22.26	5.90	7.30	2.73	3.78	2.31	6.48	2.46	4.41	2.45	6.70	2.74
Dis.	20.27	6.89	6.00	2.39	3.73	2.12	6.27	2.40	4.20	2.40	7.67	1.54

Parent-reported SDQ

In Figure 14 the means and standard deviation bars of parent-reported SDQ total scores and subscales at admission and discharge are displayed.

The mean total score, which was in the clinical range at admission (between 20 and 40), entered the borderline range (16 to 19) at discharge. Emotional Symptoms decreased from the clinical (7 to 10) to the non-clinical range (0 to 5). Conduct problems slightly increased from the non-clinical to the borderline range (4) at discharge. On the other hand, hyperactivity and concentration problems decreased from the borderline (6) to the non-clinical range, as did peer problems (borderline: 4 to 5). Pro-social behaviour was in the non-clinical range (between 6 and 10) at admission and improved at discharge.

Figure 14. Means and Standard Deviation Bars for Parent-reported SDQ at Admission and Discharge



Service User and Parent/Carer Feedback and Experience

Inpatient Ipad Survey

Every month we give patients the opportunity to complete an anonymous Ipad survey, in accordance with Trust requirements. The questions cover the following areas of our service: care and welfare, nutritional needs, respect and involvement and additional support. Patients are under no obligation to complete the survey and their care will not be affected in anyway should they choose not to complete the survey. During this year, sixteen young people chose not to participate in the survey.

Table 1 presents the results from the 140 surveys that patients completed during the financial year.

Table 1. Patients' Responses to Inpatient Ipad Survey

Survey Questions	% of Young People who responded YES
Do you know who your care co-ordinator, lead professional or named nurse is?	98.4%
Do you have a care plan?	98.5%
Do you understand what is in your care plan?	95.42%
When you arrived on the ward, did staff make you feel welcome?	96.27%
Do you have trust and confidence in our staff?	87.31%

Exit Satisfaction Questionnaires

Once a young person is discharged from the service, both them and their parents/carers are sent an exit satisfaction questionnaire to complete. We ask questions as recommended by QNIC, in addition to some service specific questions relating to our individual environment and therapeutic program. The rating options are Very Unhappy, Unhappy, Mixed, Happy, Very Happy, or Not Applicable.

Patients

Out of the 15 *patient* satisfaction questionnaires that we received:

- 80% of young people said they felt either Happy or Very Happy with the service they received, in a general sense
- 73.3% of young people said they felt either Happy or Very Happy with the personal manner of staff
- 60% of young people felt either Happy or Very Happy with the effect the service had in helping them to feel better.

Feedback from young people when asked to comment on things they had liked most about their experience included:

- “The care, the friendly feeling and relaxed atmosphere”
- “The help I got and people not giving up on me”
- “Being with other patients experiencing the same kind of trials”
- “The staff were very supportive and understanding. Most were very nice too. They are good at encouraging and distracting.”

Feedback from young people when asked to comment on things they disliked about their experience included:

- “When there was a lack of staff on the ward, the atmosphere became tense and stressful.”
- “Being kept on the ward and not seeing friends and being able to go out with them”
- “Staff assuming things about me that weren’t true.”

Parents/Carers

Out of the 9 *parent/carer* satisfaction questionnaires that we received:

- 44% of parents/carers felt either Happy or Very Happy with the effect the service had in helping their child to deal with their problems
- 66.6% of parents/carers felt either Happy or Very Happy with the appearance and comfort level of the rooms
- 55.5% of parents/carers felt either Happy or Very Happy with the personal manner of the professionals
- 66.6% of parents/carers felt either Happy or Very Happy with how the service maintained confidentiality and respect for their child’s rights
- 75% of parents/carers felt either Happy or Very Happy with how the service referred them and/or their child to other services if needed.

Feedback from parents when asked to comment on things they had liked most about their experience included:

- “The warmth and kindness and reassurance of most staff whenever we attended the unit for a meeting, visit or crisis situation”
- “The welcome staff who accepted us as a family as a whole, supporting us as much as our daughter, being able to support our daughter out of hours”

- “Staff seemed very professional/knowledgeable”
- “The understanding and support from some individual staff, being there at all hours, supporting at difficult times in the night as well as day. The empathy shown”
- “Staff and their support”
- “Watching my son learn new skills, e.g. knitting, guitar, voicing feelings”
- “The interface between my son and myself during family therapy sessions.”

Feedback from parents when asked to comment on things they had disliked most about their experience included:

- “Hard leaving my son and initially he didn’t want to see me and other family members”
- “Not all phone calls were replied to when messages were left. In the early days it seemed like the parent’s assessment of the situation was disregarded”
- “More therapy is needed.”

News and Updates

Teaching and Training

The unit offers on-going placements for junior doctors, student nurses and trainee clinical psychologists. We also sometimes have student social workers and trainee art therapists on placement.

The whole team received AMBIT training in January 2013, and new members of staff are regularly trained as part of the rolling induction programme.

Patient and Parent Involvement Activities

Activities to involve service users and their families are prominent in the culture of the service.

Involvement activities this year include:

- 7 young people were trained in recruitment and selection, so that they would be eligible to help out with the recruitment of new staff
- 5 young people took part in the recruitment process, by holding their own service user interviews with candidates. They helped in the recruitment of both a Health Care Assistant and an Activities Co-ordinator
- Young people are regularly involved in the choosing of equipment and resources to improve the environment at the Darwin Centre
- 2 young people were involved in producing both the images and written content for a service leaflet for the Intensive Support Team
- A parent of a former patient consented to being interviewed and having her experience recorded for an audio presentation to the Trust Board Meeting in June 2013
- Both parents and young people were interviewed (via telephone) as part of our QNIC accreditation review in February 2013

Outreach Changes

The Darwin Outreach Team comprised of an Outreach nurse and an Outreach worker until September 2012. In September 2012, the Intensive Support Team (IST) was introduced to provide outreach support to young people from Cambridgeshire and Peterborough. Since then, the Darwin Team has been reduced to one member of staff who supports young people who come to the Darwin from other counties.

References

- ¹ Bevington, D., Fuggle, P., Fonagy, P., Target, M., & Asen, E. (2012). Innovations in practice: Adolescent Mentalization-Based Integrative Therapy (AMBIT) – A new integrated approach to working with the most hard to reach adolescents with severe complex mental health needs. *Child and Adolescent Mental Health*, 18(1), 46-51.
- ² Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*, 2nd Ed. Hillsdale, New Jersey: Erlbaum.
- ³ Shaffer, D., Gould, M. S., Brasic, J., Ambrosini, P., Fisher, P., Bird, H., & Aluwahlia, S. (1983). A Children's Global Assessment Scale (CGAS). *Archives of General Psychiatry*, 40(11), 1228-1231.
- ⁴ Gowers, S.G., Harrington, R.C., Whitton, A., Beevor, A., Lelliott, P., Jezzard, R., & Wing, J. (1999). Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA). Glossary for HoNOSCA score sheet. *British Journal of Psychiatry*, 174, 428-431.
- ⁵ Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, 38, 581-586.
Goodman, R., Meltzer, H., & Bailey, V. (1998). The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European Child and Adolescent Psychiatry*, 7, 125-130.
- ⁶ <http://www.sdqinfo.org/py/sdqinfo/c0.py>