St Patrick's University Hospital 2011

Outcomes Report Summary

INTRODUCTION

St Patrick's University Hospital is continually committed to improving the mental health services it provides. In 2011, the organisation began a process of formally assessing and monitoring the efficacy of its services by evaluating its outcomes, with a view to publishing an Outcome Measures Report. The 2011 Outcomes Report is the first of its kind produced by SPUH and represents an attempt to collate, analyse and synthesise information relating to the organisational outcomes with respect to care pathways, clinical governance processes and clinical outcomes. The full version of this Report is available on our hospital website at **www.stpatrickshosp.ie** This summary publication provides key highlights of the full report and is intended to inform our referrers, service users, service partners and members of the public about what we do well and what we need to improve as a mental health service provider. The intensive process of routinely measuring and publishing our outcomes represents the organisation's commitment to promoting a culture of excellence and service quality through engagement in continual service evaluation.

INTEGRATED SERVICES ACROSS THE CONTINUUM OF CARE

SPUH provides a continuum of care through its Inpatient, day-patient and Community Mental Health services, The Dean Clinics; ensuring service users receive continuity of care through their recovery pathway and the most appropriate care and treatment for their needs.

COMMUNITY MENTAL HEALTH SERVICE (DEAN CLINICS)

In 2011, SPUH received a total of **1,376 Dean Clinic referrals,** with the number of monthly GP referrals ranging from 42 in December to 118 in April. Dean Clinic referrals were lowest in December, January and August, with peaks in April, June and September. The majority of those referred were from within Leinster (76.5%), followed by Munster 16.3%, Connaught 4.9% and Ulster 1.5%. The geographical distribution of referrals is illustrated in **Figure 1** below in blue. The pattern of geographical distribution is in part influenced by the location of Dean Clinics (shown in red on the map).

Figure 1 - Number of Dean Clinic Referrals by County

The Dean Clinics provide multi-disciplinary treatment, clinical reviews and individual and group psychotherapies helping to deliver timely interventions and better outcomes. The outcomes of Dean Clinic Assessments are shown in **Figure 2**. The three most common outcomes were ongoing consultant review (27%), immediate admission for inpatient care (19%) and referral to CBT (13%).

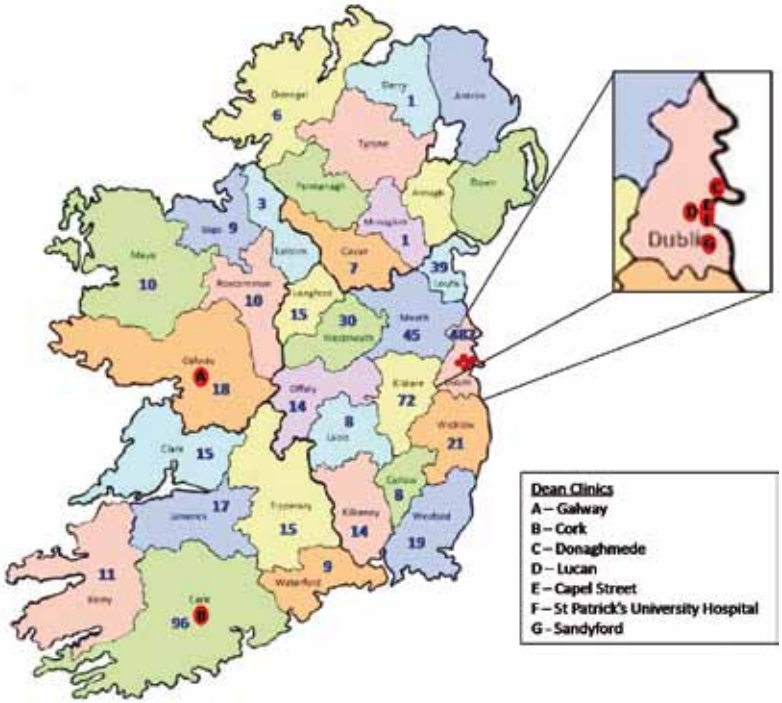
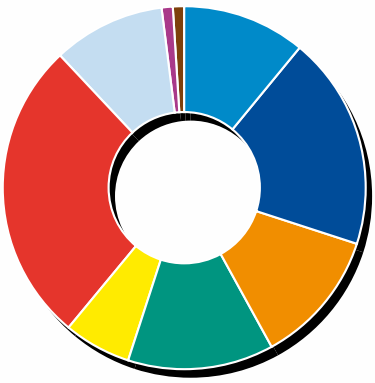


Figure 2 - Dean Clinic Assessment Decisions



- Immediate admission **(19%)**
- Referral back to GP or referrer **(12%)**
- Referral to CBT **(13%)**
- Day Services/Wellness and Recovery Centre **(6%)**
- Ongoing consultant review **(27%)**
- Psychotherapy in Deans **(10%)**
- Occupational Therapy **(1%)**
  (Alternative private practice community pathways
- Eating Disorder Service **(1%)**
- Other **(11%)**

Note: CBT = Cognitive Behaviour Therapy.
'Other' refers to alternative community supports.

INPATIENT CARE PATHWAY

The organisation's three Approved Centres; St. Patrick's (SPUH), St. Edmundsbury (SEH) Hospitals and Willow Grove Adolescent Service (WGAU) provide mental health care and treatment through a range of services, delivered by highly trained and experienced mental health professionals. In 2011 there were **2,981** inpatient admissions across the three approved centres. Inpatient admissions (by gender) across centres are shown in **Table 1** below.

Table 1 - Inpatient admissions in 2011 for SEH hospital, SPUH and WGAU by gender

	SEH	%	SPUH	%	WGAU	%	Total	%
Female	333	11.2	1417	47.5	50	1.7	1800	60.4
Male	165	5.5	993	33.3	23	0.8	1181	39.6
Total	**498**	**16.7**	**2410**	**80.9**	**73**	**2.4**	**2981**	**100**

The average age on admission, across the three Approved Centres, was 47.9 years and the average length of stay was 31.96 days. The combined number of admissions across the three centres ranged from approximately 210 to 270 per month in 2011. Patterns in monthly admission rates indicated a peak in December, January and July. SPUH consultants were the primary source of referrals for admission (51%), followed by GP referrals (25%). Details of referral sources are shown in **Figure 3.** Other common referral sources included external consultants (8%), other hospitals (7.4%) and self (7.1%).

Note: Data is obtained from an audit of completion rates of Admission and Diagnosis ICD codes between the 1st of November 2010 and the 1st November 2011.

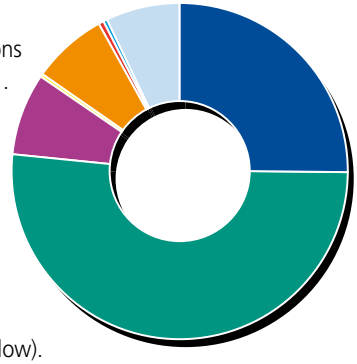


Figure 3 - Source of Admission Referral

- GP **(25.1%)**
- St. Patrick's Consultant **(51.5%)**
- External Consultant **(8%)**
- Gardai **(0.1%)**
- Other Hospital **(7.4%)**
- St. Patrick's Registrar **(0.4%)**
- Relative **(0.3%)**
- Self **(7.1%)**

The five most common diagnoses at point of admission are detailed in **Table 2** (below). The most common diagnosis at admission was Recurrent Depressive Disorder, current episode moderate.

Table 2 - Five most common ICD codes (diagnoses) at admission across centres

ICD Code	Total	% of total reviewed (N = 3091)	Description
F33.1	374	12.1	Recurrent Depressive Disorder, current episode moderate
F10.2	223	7.2	Alcohol Dependence Syndrome
F32.1	222	7.2	Depressive Episode, moderate
F31.3	216	7.0	Bipolar Affective Disorder, current episode, mild or moderate
F41.2	135	4.4	Other Anxiety Disorders, mixed anxiety depressive disorder

Note: ICD - International Statistical Classification of Diseases and Related Health Problems 10th Revision, WHO, 2010

Data from an audit of completion rates of admission and diagnosis ICD codes (Nov 2010 to Nov 2011) indicate that 3,091 discharges occurred during this period. In 97.7% of cases ICD codes were recorded at admission, while both admission and discharge ICD codes were recorded for 62.1% of episodes. Of these, 45.3% showed a change of diagnosis from admission to discharge. Audit recommendations included improving procedures to record ICD codes on discharge. The majority of inpatients were discharged into the Dean Clinic pathway or back to GP care. Details of where inpatients were discharged to are shown in **Figure 4.**

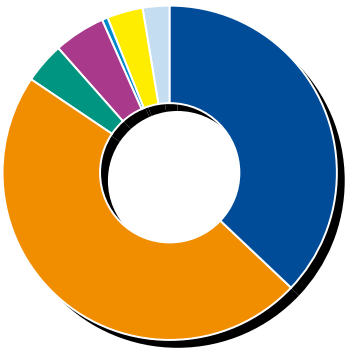


Figure 4 - Inpatients Discharged to:

- GP **(37.06%)**
- Dean Clinic **(47.41%)**
- Hospital Transfer **(3.92%)**
- Day care **(4.98%)**
- Nursing Home **(0.55%)**
- Self **(3.47%)**
- Other **(2.57%)**
- Died/RIP **(0.03%)**

DAY PATIENT CARE PATHWAY

Day services are accessed through the Wellness and Recovery Centre (WRC) which offers an alternative to admission for many service users. These day services also help to foreshorten in-patient stays through the delivery of recovery focused day programmes, allowing people to continue with their personal lives, work, leisure and social activities. Programmes are delivered by specialist teams focusing on disorder-specific interventions, psycho-education and psychological skill development. In 2011, there were **1,399** referrals to day services. Referrals peaked in September, with the lowest number occurring in November. The total number of referrals by programme (in blue) and the subset of referrals made through the Dean Clinics (in red) are shown in **Figure 5.**

In 2011, service users received a range of clinical programmes and services accessed through structured and defined inpatient, day patient and outpatient care pathways based on need, urgency and service user preference. Whilst measures of access do not define the quality or outcomes of programmes and services, they do provide information about how the organisation structures and resources its services within the Hospital campus and through its community clinics network.

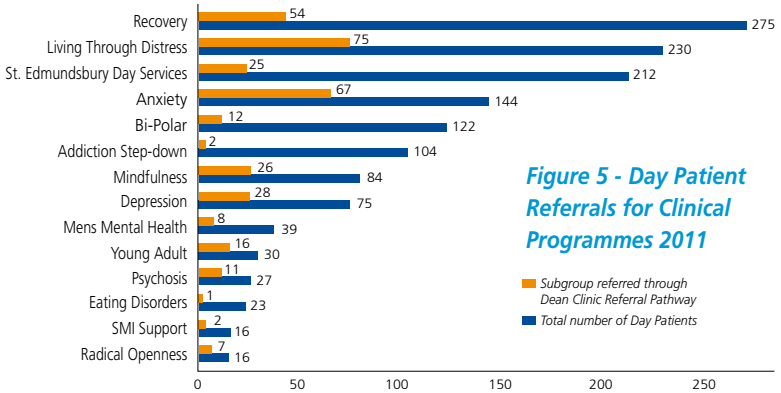


Figure 5 - Day Patient Referrals for Clinical Programmes 2011

CLINICAL GOVERNANCE MEASURES AND OUTCOMES

The achievement of excellence in the delivery of Mental Health Services is a central component of the mission of the hospital. Routine clinical governance and quality management measures and outcomes are collated and reported in the interest of transparency and continuing service development. Details for 2011 are shown in **Table 3.**

Table 3 - Clinical process measures

2011	No.
Number of Clinical Audits	12
Number of Complaints	606
Number of Incidents An event that could have or did lead to unintended/unexpected harm, loss, damage or deviation from an expected outcome of a situation or event.	1374
Number of Deaths	1
Root Cause Analyses commenced in 2011 A thorough and credible examination of a critical incident in order to determine whether systemic or organisational factors contributed to the occurrence of an incident.	4
Number of Section 23s Where a voluntary service user indicates that he/she wishes to leave but a consultant psychiatrist, registered medical practitioner, or registered nurse on staff is of the opinion that the person is suffering from a mental disorder, he/she may be detained for up to 24 hours for the purpose of examination by two consultant psychiatrists to decide whether discharge or involuntary stay is required.	51
% Section 23s which progress to Involuntary admission	39%
Number or Section 14s Where a recommendation from a registered medical practitioner outside of the approved centre is received, a consultant psychiatrist on staff carries out an examination of the person and—(a) if he or she is satisfied that the person is suffering from a mental disorder, make an involuntary admission order for the reception, detention and treatment of the person or (b) if he or she is not so satisfied, refuse to make such order.	31
% Section 14s which progress to Involuntary admission	74%
Form 6 Admissions Details of the above examination and the outcome are entered onto the Mental Commission form which is faxed to the MHC as notification of an involuntary admission. The MHC will then appoint a legal representative to the patient and set a tribunal to review the detention. A consultant psychiatrist, a medical practitioner or a registered nurse shall be entitled to take charge of the person concerned and detain him or her for a period not exceeding 24 hours for the purpose of carrying out the examination.	23
Form 6 Assisted Admission	13
Form 6 Non-Assisted Admission	10
Form 10 Admissions Where a patient is transferred to an approved centre under Section 20 or 21 of the Mental Health Act 2001, the clinical director of the centre from which he or she has been transferred shall, as soon as possible, give notice in writing of the transfer to the MHC on Statutory Form 10.	8
Form 10 Assisted Admission	4
Form 10 Non-Assisted Admission	4

AUDITS

A number of audits were conducted in 2011 including the following:

- Pick-up and intervention rates of abnormal lab results
- Vitamin supplementation for patients on alcohol withdrawal-re-audit
- Compliance with infection control policies and procedures
- Appropriateness and effectiveness of antibiotic prescribing practices
- Lithium Prescribing and monitoring
- Recording of ICD-10 diagnostic codes
- Implementation of photographic I.D. of service users
- Use of Benzodiazepines and Hypnotic Z-Drugs

While many were scheduled for re-audit in 2012, audits conducted in 2011 shed light on important processes, practices and evidence which are guiding improvements to service quality and standards.

CLINICAL OUTCOMES

SPUH is making a concerted effort to implement pre and post intervention clinical outcome measurement across all programmes. While this initiative is not pure academic research, it provides a solid basis for future research and is already being integrated in some cases into individualized patient care plans. Although not all programmes currently do this, a good proportion already do, with a growing culture of measurement within the hospital. While it cannot be assumed that outcome measures reflect changes resulting from the treatment programme specifically, it is hoped that outcome measures will inform programme refinement and support the evaluation of their effectiveness.

a). Clinical Global Impression

The Clinical Global Impression (CGI) (1976, Guy) is a clinician-rated mental health assessment tool used to establish the severity of illness before treatment and a subsequent rate of global improvement or change following treatment. The CGI is used as a routine outcome measure by all 16 multi-disciplinary teams across the three approved centres on a weekly basis. The CGI is a 2-item observer scale: 1) a 7 point severity of illness scale from 1 (not at all ill) to 7 (extremely ill) and, 2) a 7 point clinical improvement scale from 1 (being very much improved) to 7 (being very much worse).

CGI scores were evaluated for a random subsample of 200 service users admitted between 1st January 2011 and the 30th June 2011. The average age of the sample was 55.4 years, the average length of stay was 40 days and 65% were female. The 5 most common diagnoses at admission in this sample are shown in **Table 4.**

Table 4 - 5 most common admission ICD-10 diagnostic codes recorded in random subsample of admissions in 2011 (N=200)

ICD-10 Admission Diagnosis Category		Primary Diagnosis	Additional Diagnosis
F31	Bipolar affective disorder	74	1
F33	Recurrent depressive disorder	39	2
F10	Mental and behavioural disorders due to the use of alcohol	25	17
F25	Schizoaffective disorders	10	2
F42	Obsessive compulsive disorders	10	0

Table 5 below summarises the percentage changes in CGI scores of the 200 records examined. Nearly 80% showed improvement with 59% much or very much improved at discharge.

Table 5 - Frequency and percentages of baseline CGI scores at point of admission and at point of discharge

Baseline CGI - Severity of illness			
		Total	%
1	Normal, not at all ill	0	0
2	Borderline mentally ill	5	2.5
3	Mildly ill	16	8
4	Moderately ill	48	24
5	Markedly ill	53	26.5
6	Severely ill	30	15
7	Extremely ill	2	1
0	Not recorded	46	23

Final CGI - Global Improvement			
		Total	%
1	Very much improved	29	14.5
2	Much improved	89	44.5
3	Minimally improved	41	20.5
4	No change	13	6.5
5	Minimally worse	1	0.5
6	Much worse	0	0
7	Very much worse	0	0
0	Not recorded	27	13.5

b). The Anxiety Programme

The Anxiety Programme provides group and individual psycho-education, intervention and support based on the cognitive behaviour therapy (CBT) model. All programme facilitators are CBT and Mindfulness trained. Of the 242 (inpatients and day patients) referrals to the anxiety programme between February and December 2011, 51 did not meet referral criteria for the programme, 121 people completed the programme (of these 114 completed pre and post measures) and 70 did not complete the programme. The primary diagnoses within this sample are shown in **Figure 6.**

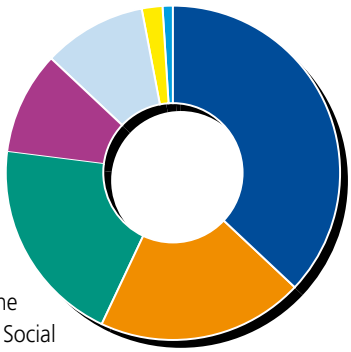
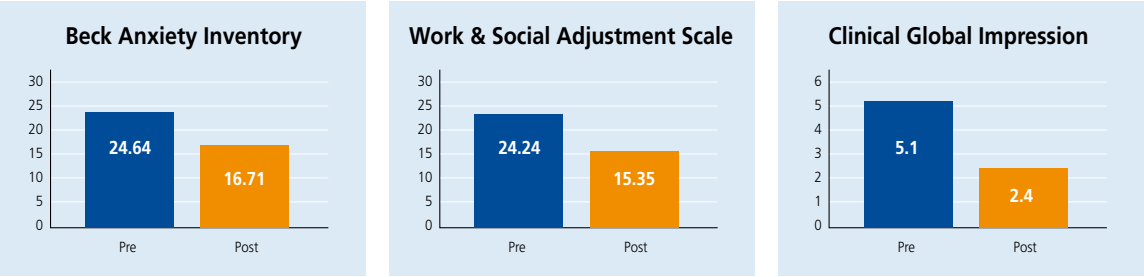


Figure 6 - Anxiety Programme Completers by Diagnosis

- Obsessive Compulsive **(37%)**
- Social Phobia/Anxiety **(20%)**
- Generalised Anxiety Disorder **(20%)**
- Panic Disorder **(10%)**
- Agorophobia (with/without panic) **(10%)**
- Health Anxiety **(2%)**
- Habit and Impulsive Disorders **(1%)**

Pre and Post-measures were self-completed by programme participants and include the Beck Anxiety Inventory (BAI: Beck & Steer, 1990), CGI (Guy, 1976) and The Work and Social Adjustment Scale (WSAS: Munds, Mark, Shear & Greist, 2002) and are shown in **Figure 7** (Lower scores indicate improvement). While BAI scores stayed within the moderate range of anxiety, they did drop from the upper 24.65 (SD=10.25) to lower 16.71 (SD=12.81) end of the range. Scores on the Work and Social Adjustment Scale which can range from 0 to 40 also dropped from 24.24 (SD = 9.28) to 15.35 (SD = 9.25). This represents a drop from moderately severe or worse psychopathology to significant functional impairment but less severe clinical symptomatology. Finally CGI scores went from an average of 5.07 (SD=.71) which placed people in the markedly ill range, to post-scores of 2.48 (SD=0.87) which placed people in the much improved category on the rating scale.

Figure 7 - Anxiety programme Pre & Post measures of anxiety (BAI), Clinical Global Improvement (CGI) and work and social adjustment (WSAS).



c). Recovery Programme

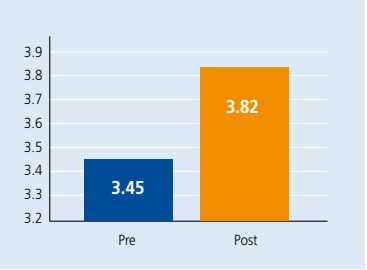
The recovery programme is a structured 12-day programme based on the Wellness and Recovery Action Plan (WRAP) approach designed by Mary Ellen Copeland of the Copeland Centre (1992). This approach focuses on regaining hope for recovery and personal responsibility in mobilising one's own resources of recovery. The programme uses education, self-advocacy, and support.

The Recovery Assessment Scale (RAS) (Giffort et al., 1995) was used to measure empowerment, coping ability, and quality of life using a 5 point likert scale. The RAS measure was self-completed by programme participants.

From June to December 2011, 122 people were referred to the Recovery Programme. Of these pre and post outcome measure data were available for 41 completers. Total RAS scores increased slightly from 3.45 (SD=0.62) before the programme to 3.82 (SD=.67) immediately afterwards (See **Figure 8**).

Similar increases in scores, indicating improvements, were seen across all 5 subscales; Personal Confidence and Hope, Willingness to ask for Help, Ability to rely on others, Not dominated by symptoms, Goal and Success Orientation.

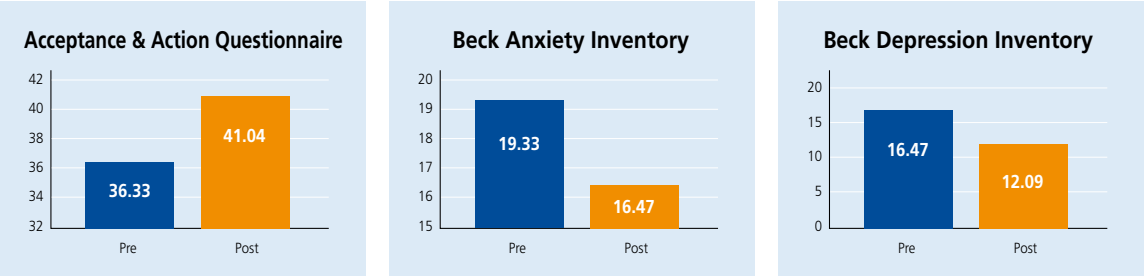
Figure 8 - Recovery Assessment Scale



d). Acceptance and Commitment Therapy

ACT is an evidence-based psychotherapy which teaches people "mindfulness skills", to help them manage their thoughts and emotions more effectively. ACT aims to increase values-based behavioural activation, rather than symptom reduction. The ACT Programme runs over an 8-week period in SEH. Pre and post data were available for 21 people (out of 90 referrals to the programme). Three measures were used including; the Acceptance and Action Questionnaire (AAQ2; Bond et al., 2011), Beck Anxiety Inventory (BAI: Beck & Steer, 1990) and Beck Depression Inventory (BDI; Beck et al., 1996). All measures were self-completed by programme participants. Scores on AAQ2 were measured pre-programme (Mean=36.33, SD=8.16) and post-programme (Mean=41.047, SD=10.86) showing an improvement in psychological flexibility. Scores on the BAI had decreased from a mean of 19.33 (SD=13.26) to 16.47 (SD=10.684) while scores on the BDI also decreased slightly from 16.47 (SD=10.16) to 12.09 (SD = 8.78). (See **Figure 9** below).

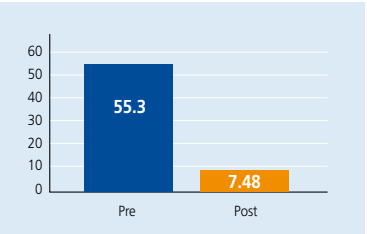
Figure 9 - ACT Programme Pre & Post measures of psychological flexibility (AAQ-II), depression (BDI) & anxiety (BAI)



e). Living Through Distress (LTD) Group

The LTD Group teaches core skills from Dialectical Behaviour Therapy (DBT) to help individuals who use maladaptive behaviours, such as self-harm, to cope with distress. The focus of the group is teaching skills which can be used to manage distress in a more functional way. The group aims to create an atmosphere of validation, empathy and pragmatism. Of the 71 people who completed pre and post-measures for 2011, the Deliberate Self-Harm Inventory (DSHI; Gratz, 2001) scores showed a decrease from 55.3 (SD=101.9) to 7.48 (SD=17.4) (See **Figure 10**).

Figure 10 - Deliberate Self-Harm Inventory



Note: Full referencing included in full report.

CLINICAL OUTCOMES SUMMARY

The section has summarised 2011 clinical outcomes associated with inpatient treatment and four clinical programmes. While there are weaknesses in the level of outcome data completeness, analyses carried out shows outcome improvements across all evaluated programmes. The range of improvement is variable.

What is important is that the establishment of an outcome measurement process is not an end in itself but integral to establishing and improving the effectiveness of our services and will become a routine and standardised practice for programmes in the future.

SERVICE USER SATISFACTION WITH SPUH MENTAL HEALTH SERVICES

In 2011, a number of service user feedback initiatives were undertaken, providing invaluable information on the experiences of service users and guiding service improvements.

In 2011, the Mental Health Commission commissioned the first national Mental Health inpatient survey. SPUH participated in this survey and the information summarised below refers to SPUH's data only. Service users discharged between 1st November 2010 and 1st February 2011 completed a postal survey on their views of care. 379 SPUH service users participated in this Survey, 77 of which had been inpatients in SEH. The response rate for SPUH was 40% and 38% for SEH. Overall, SPUH and SEH results were higher than the national average. Key findings are shown in **Tables 6 - 8.**

Table 6 - Health Status

Following my hospital stay on this occasion my health status is.....	**National (n=710)**	**SPUH (n=120)**	**SEH (n=24)**
Greatly disimproved	6.7%	5.1%	4.2%
Disimproved	4.2%	2.5%	4.2%
Slightly disimproved	4.8%	5.9%	4.2%
Neither improved or disimproved	11.0%	7.6%	8.3%
Slightly improved	16.1%	15.3%	8.3%
Improved	32.3%	34.7%	41.7%
Greatly improved	25.0%	28.8%	29.2%

Table 7 - Service user involvement

I was involved in decisions made about my care and treatment as much as I would have liked			
Strongly agree	38.4%	44.4%	58.3%
Agree	37.2%	34.2%	25.0%
Disagree	16.4%	14.5%	16.7%
Strongly disagree	7.9%	6.8%	0%

Table 8 - Overall evaluation of stay in hospital

Overall, were you satisfied with the treatment you received			
Yes	84.4%	87.5%	95.8%
No	15.6%	12.5%	4.2%
I would recommend this hospital to a friend or family member if they needed similar medical attention			
Strongly agree	51.0%	51.7	73.9%
Agree	33.5%	32.2%	8.7%
Disagree	9.1%	4.3%	13.0%
Strongly disagree	6.3%	1.7%	4.3%
I was confident about the treatments I received			
Strongly agree	45.3%	37.8%	52.2%
Agree	38.7%	45.4%	39.1%
Disagree	10.7%	12.6%	4.3%
Strongly disagree	5.3%	4.2%	4.3%

CONCLUSION

This report represents an important first step in the organisation's efforts to report on the effectiveness of its services. While it contains a range of information regarding clinical activity, outcomes and service user evaluation, there is potential to improve the depth, quality and completeness of this information in future. Some recommendations arising from this report include:

- Integration and systematisation of clinical information systems.
- Identification and integration of a routine service user satisfaction indicator which monitors the service user experience of SPUH services.
- Expansion of outcomes measurement across all programmes, including measurement with good quality, appropriate measures at initial assessment and at point of discharge.
- In-house training in relation to outcome measurement to improve the use, recording and analysis of routine outcomes measures within clinical programmes and services.
- Integration of Registrar audit and research output into the 2012 Outcomes Report.