Statewide Gambling Therapy Service Inpatient Treatment Programme Review

Project Report produced for the Independent Gambling Authority (IGA) of South Australia.

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TABLE OF CONTENTS

Acknowledgements ii
SUMMARY iii
INTRODUCTION 4
THE INPATIENT TREATMENT PROGRAMME 6
CASE FILE REVIEW: 2008 & 2009 INPATIENT ADMISSIONS 8
  Patient Characteristics 8
    Demographic characteristics 8
    Psychiatric history 9
    Previous treatment for the gambling problem 12
    Past engagement with Statewide Gambling Therapy Service 13
    Reasons for requiring inpatient treatment 13
  The Admissions 15
    Time spent on waiting list for inpatient treatment 15
    Duration of hospitalisation 15
    Clinical, allied health and adjunct services 17
    Diagnostic and investigative procedures 18
    Medications received during hospitalisation 18
    Current disorders (diagnoses applied at discharge) 20
    Diagnostic complexity at discharge 22
    Key Findings from Case File Review 23
QUANTITATIVE DATA ANALYSIS: 2008 & 2009 INPATIENT ADMISSIONS 24
    Gambling context 24
    Psychological distress and suicidal thinking at start of treatment 25
  Longitudinal treatment outcomes 29
    Outcome variables 30
    Treatment engagement variables 30
    Statistical methods 30
    Results 30
THEMATIC ANALYSIS OF INTERVIEWS WITH INPATIENTS 33
  Introduction and Methods 33
  Findings 35
    Themes arising from interviews 36
  Discussion 58
DATA SYNTHESIS 61
REFERENCES 67
APPENDICES 69

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We would particularly like to thank the users of the inpatient treatment service who agreed to be interviewed for this project; the openness and candour with which they discussed their problem gambling and its treatment made for a series of narratives that are both informative and poignant.

SUMMARY

Statewide Gambling Therapy Service (SGTS) offers a locally unique inpatient treatment service for problem gamblers; clients receive two weeks of intensive cognitive behavioural therapy while staying in the Psychiatry ward of the Flinders Medical Centre. The Independent Gambling Authority provided funds such that a review of the inpatient programme and its users could be conducted. The case files of all 53 users of the programme during 2008 and 2009 were reviewed, as were SGTS records. These data were compiled into a detailed description of the users demographic, clinical and gambling behaviours, as well as a comprehensive account of the treatment they received whilst hospitalised. In addition to the case file review, interviews were conducted with eight users of the inpatient service during 2010, who were interviewed during their inpatient stay and again approximately 6 weeks after they left hospital.

SGTS clients used the inpatient service for a range of reasons, most commonly their having a co-occurring psychological condition that would likely preclude them from effective participation in outpatient therapy, or due to stressors within their home environment (or the absence of a stable home environment) that would impede success with outpatient therapy. After waiting on average 6 weeks to be admitted, the inpatients received treatment from a range of clinicians and allied health professionals including psychiatrists, social workers, radiologists and dieticians. In addition to their gambling problem, most users of the inpatient service had experienced or were currently experiencing some form of psychological disorder, the most common being mood, substance-related or anxiety disorders. The inpatients were treated for their co-occurring psychological disorders, as well as identified physiological conditions.

Thematic analysis of the interviewed inpatients' narratives found descriptions of early gambling and personal problems likely in part antecedent to the gambling disorder, and some shared features of the gambling problem such as loneliness, secrecy, loss, and the use of gambling as an escape. Themes were also detected that related to patients' initial engagement with Statewide and their perceptions of the treatment they received and the changes in their lives subsequent to receiving the inpatient therapy.

The combination of traditional quantitative review methods and the more flexible qualitative approach has enabled the project team to produce a detailed investigation of what the inpatient treatment service provides and to whom, while providing an unusual insight into its users' lived experience; their problems, perspectives on treatment and the experiences that followed their admission.

INTRODUCTION

Statewide Gambling Therapy Service (Statewide; or SGTS) is a South Australian treatment provider funded through the Gamblers Rehabilitation Fund and run under the auspices of the Adelaide Health Service and Flinders University. Statewide offers Cognitive Behavioural Therapy (CBT) with an emphasis on graded cue exposure for the treatment of problem gambling, focusing on extinguishing the urge to gamble. Approximately 500 problem gamblers are treated each year by SGTS (Annual Reports 2008/09 and 2009/10), the majority of whom are treated as outpatients at its three metropolitan offices, with limited outreach services into regional areas (now curtailed due to funding constraints), supplemented by telecounselling services (Oakes, Battersby et al. 2008). In addition to the outpatient therapy, Statewide offers a locally unique inpatient treatment service, wherein the usual 6 – 12 sessions of treatment are condensed into an intensive two-week programme; the present review investigates aspects of this inpatient treatment service.

Financial support in the form of a research grant for this review ($15 000) was provided by the Independent Gambling Authority. An amendment to the ethics approval granted by the Flinders Human Research Ethics Committee for Statewide's usual research activities was submitted and approved to cover the elements of the present review.

Clients seeking inpatient treatment for problem gambling have been found to often have more severe gambling problems and higher rates of psychiatric and substance-related comorbidity than those receiving outpatient treatment (Ladouceur, Sylvain et al. 2006). The inpatient treatment service at the Flinders Medical Centre, located in Ward 4G (Psychiatry) is particularly suited to assisting problem gamblers with comorbid psychiatric and substance-related conditions, who can receive assessment and treatment as needed for their concurrent disorders. Moreover, active participation in outpatient treatment can be undermined by some life circumstances such as unstable, volatile or otherwise highly pressured home situations; where these situations exist, the inpatient programme may provide the necessary situation whereby a client can better engage with the therapeutic process (Taber, McCormick et al. 1987). Other reasons for using the inpatient service include the distance that clients live from outreach services; the telemedicine services offered by Statewide do not suit all clients from regional areas, some of whom accordingly choose the inpatient treatment.

The present review uses both qualitative and quantitative research methods to investigate Statewide's inpatient treatment service, with a focus on the characteristics and experiences of its users. A retrospective review of admissions to the service during 2008 and 2009 was conducted; a total of 53 individuals were treated by the inpatient service during these years. Content analysis was applied to the psychiatric histories of the service users to illustrate their diagnostic complexity, and their medical records were otherwise examined for details of treatments that they received whilst hospitalised. The reviewed treatments included the rates of patient inputs from the clinicians and allied health professionals who provided care, as well as the diagnostic and investigative procedures and medications administered to these clients. The duration of hospitalisation and time spent on the waiting list for

the service was also investigated, and diagnoses applied at discharge were analysed. Supplementary information regarding these patients' demographic details, clinical presentations and gambling behaviour was derived from Statewide's clinical and research database and is also presented.

In addition to the retrospective case file review, in-depth semi-structured interviews were conducted with 8 users of the inpatient treatment service, who were each re-interviewed approximately 6 weeks after they were discharged from hospital. These interviews covered topics such as the gambling behaviour leading up to presentation for treatment, contributory life events, their experience of the inpatient treatment service, and the events that had followed the conclusion of treatment and their returning home. Thematic analysis was applied to transcripts of these interviews, and the findings are presented in the form of a discussion of the themes communicated by the inpatient treatment users.

Interviews were also conducted with clinicians who provide treatment to the inpatients to supplement the information gathered directly from and about the individual users. The clinicians included Associate Professor Michael Baigent, the consultant psychiatrist who reviews and treats the inpatients, and several of Statewide's therapists who currently and have historically provided treatment for inpatients.

The present review finds a heterogeneous patient sample; a minority was without psychiatric complication, seeking inpatient treatment due to distance from or lack of success with outpatient treatment, while a substantial number had extremely complex psychiatric presentations, sometimes with additional issues of substance dependence requiring address during hospitalisation. A number of patients also required matters of physical health to be addressed during their stay, needing to have X-rays, specimens sent for pathology analysis prior to clinical input, or treatment via medication. Hospitalisations ranged from less than one day (where a patient decided on the day of admission that they did not want to receive the inpatient therapy) to over three weeks in cases where alcohol or benzodiazepine dependence required that the patients be observed and have withdrawal symptoms addressed concurrent with treatment for their gambling problem.

The cross sectional nature of the case file review methodology cannot, however, illuminate aspects of the inpatients' presentations that relate, for example, to sequences of experiences; the in-depth interview component of the research allowed for the lived experience of treatment users to be more fully explored. For example, the interviews revealed that in some cases, psychiatric disorders pre-dated the development of the patient's gambling problem, whereas for others, the psychiatric symptomatology appeared to be in response to the gambling. The thematic analysis provides many of the patients' descriptions of their lived experiences in their own words, and contributes a richness of perspective that cannot be captured by conventional quantitative techniques of data analysis and presentation.

The review commences with a brief overview of the programme, followed by a description of the demographic characteristics of the 2008 and 2009 programme users and an exploration of the psychiatric diagnoses that had been applied to these patients previously.

THE INPATIENT TREATMENT PROGRAMME

Statewide Gambling Therapy Service offers a locally unique inpatient treatment service for problem gamblers. This programme condenses Statewide's usual 6 to 12-session outpatient treatment into (typically) two weeks of intensive, supported therapy conducted in Ward 4 G at the Flinders Medical Centre.

The inpatient programme provides a much needed service for clients for whom the outpatient treatment is not suitable. This may be for reasons of geographical location, co-morbid psychiatric illnesses or addiction-related problems. The treatment can also be beneficial for those with psychosocial circumstances that preclude them from effective engagement with usual (outpatient) treatment as well as people who have tried the outpatient treatment without success:

> *Distance is now a problem, that we're not doing any rural visits and it's more difficult to do therapy on the phone, not impossible, but it certainly makes it harder and for some people, almost impossible. They really need that extra time and one-on-one and the drawings, and you need the body language from people to be able to get an idea of whether they're actually really understanding what you're doing or just saying that they do.... It's certainly helpful for rural clients. Trying to do therapy over the phone or over a video I find incredibly difficult; you don't get the nuance from people's body language, you're unable to develop the same sort of therapeutic relationship that you can one-to-one, so it works really well for those people that you can't see face to face [as outpatients]. Obviously people with drug and alcohol problems need to come off those addictions so we need the hospital to help them dry out initially... We deal with people that are homeless, who have tried the treatment many times and failed, or who have big co-morbidities that need assessing as well; people that are just desperate and depressed... All those people will be considered. Then there's the ones that just have heard about the inpatient and really want to do it and are so distressed and chaotic that they find that they just can't get a grip on...organising themselves well enough in their own environment to be doing the work at home. (SGTS Therapist)*

Patients are oriented to the ward and introduced to staff and other patients by Elsie Cairns, Statewide's Consumer Representative, and former user of the Inpatient Treatment Programme. The inpatient therapy is provided by Sharon Harris (Cognitive Behavioural Psychotherapist) and David Healey (Trainee Cognitive Behavioural Psychotherapist), both of whom are based at the FMC office of SGTS. Between them, staffing the Inpatient Programme requires approximately 2 hours per working day. This comprises the hour-long therapy session with the client, then another 30 minutes reviewing the task work that the client has been doing between sessions. While the tasks are designed to be completed independently by clients (and are practiced independently by outpatients), the individuals treated by the inpatient programme have particular difficulty focusing on the activities, and require additional "coaching" for successful completion.

Nursing staff play a considerable role in the Inpatient Programme. Many of the staff in 4G have completed the Flinders University workshops or diplomas in the treatment of Anxiety and Related Disorders (on which Statewide's therapy for problem gambling is based), and are also familiar with the programme from observing it in action on the

ward. In addition to their usual ward duties, nursing staff encourage the gambling patients to persist with and complete the tasks relating to their therapy. The gambling programme is considered among the positive elements of the ward's activities.

> *They like it because people get well....It's nice to work with people and see the change and see them come in in one state, and go out in another. It makes them feel better about their job... with our treatment it's less chronic, yes, and our treatment works, so I think that's the one client that they see routinely get better; it's a positive impact for them (SGTS Therapist)*

Psychiatry input is provided by the consultant psychiatrists and psychiatry registrars working on the ward, including intake interviews and medication reviews. Other specialists and allied health professionals provide services as required to address patients' physical and psychological co-morbid conditions and other needs.

Clients suitable for the programme wait for variable periods before treatment. Senior 4G ward staff and Statewide's therapists employ various considerations relating to bed allocation for patients requiring treatment for gambling. The ward has one bed available for gambling, located in one of several double rooms within the ward. Decisions regarding to whom on the waiting list the bed can be offered relate to the gender of the other person in the room and to a lesser extent, the diagnosis of the potential room-mate and the general suitability of the patient combination.

The case file review to follow describes the types of input provided and the treatment providers involved, as well as presenting other details including the periods for which the users were hospitalised and how long they waited for a bed to be available.

CASE FILE REVIEW: 2008 & 2009 INPATIENT ADMISSIONS

Patient Characteristics

Fifty-three individuals were admitted to the Inpatient Treatment Service during 2008 (n = 29) and 2009 (n = 24). FMC medical records and SGTS case files were reviewed for information regarding the inpatients' demographic characteristics and clinical presentations, the types of clinical input and medications that were received during the admission and the diagnoses applied to these patients at discharge from hospital. Where relevant, comparisons are drawn between the characteristics of the inpatients and those found among Statewide's broader client group.

Demographic characteristics

Statewide's database was queried for demographic details. The sample comprised 31 males (58.5%) and 22 females (41.5%). Their mean age at admission was 43.5 years (median = 43 years, SD = 11.6, range: 22 to 66). Although the mean age of the inpatients replicates that typically found in clients treated by Statewide more generally, the distribution of ages in the inpatient sample finds a greater proportion in the older age groups. Males were over-represented in the inpatient sample to a slightly higher degree than tends to be found among Statewide's outpatients (Statewide Gambling Therapy Service Annual Reports, 2008/09 and 2009/10).

Four patients self identified as being of Aboriginal or Torres Strait Islander origin, comprising slightly more of the sample than tends to be the case among Statewide's outpatient group. Most patients were Australian-born (75.5%, 40/53); where patients had been born elsewhere, these countries were England (n = 5), New Zealand (n = 2), The Netherlands (n = 2), Fiji (n = 1), Croatia (n = 1), Scotland (n = 1) and Germany (n = 1).

Less than half of the inpatients (37.8%, 20/53) reported being in intact domestic partnerships (married or de facto), whether with or without children. Children comprised some part of the household in just under a quarter of cases (24.5%, 13/53). Slightly fewer than 10% (9.4%, 5/53) lived in unstable accommodation (such as a caravan park, transitional housing or in an addiction stabilisation unit) or were homeless; this is a considerably larger proportion than is found among the broader client group treated by Statewide in 2009/10 (2.2%). The inpatients included greater proportions of individuals self- identifying as single, divorced and separated than is the case in Statewide's outpatient client group (see Annual Report 2008/09 and 2009/10).

Nearly half of the inpatients (45.3%, 24/53) reported that their gross annual income was between $10 400 and $15 599 ($200 - $299 per week); this is consistent with the amounts typically received by a single person receiving Centrelink (government) benefits. Seven individuals (13.2%) reported incomes lower than this amount. Table 1 describes the source of patients' income.

TABLE 1 SOURCE OF INCOME.

Source of income		*Proportion of inpatients* %*	(n)
Government benefits:	Disability Support Pension (DSP)	43.4	(23)
	Unemployment benefits	13.2	(7)
	Parenting benefits	3.8	(2)
	Student (Austudy)	3.8	(2)
	Sickness benefit (not DSP)	1.9	(1)
Other sources:	Employed (full time, part time or casual)	28.3	(15)
	Home duties	3.8	(2)
	Retired	1.9	(1)
		100	(53)

* Due to rounding, percentages do not add exactly to 100

The inpatients included a substantially greater proportion of clients who indicated that they were in various ways outside the paid workforce (71.7%) than was the case generally among Statewide's clients in 2008/09 (42.2%) or 2009/10 (44.4%) (SGTS Annual Reports: 2008/09 & 2009/10). The relatively low prevalence of employment among users of the inpatient service may be in part due to employed people finding it difficult to arrange time off from work for the admission, particularly since it can be difficult to give clients accurate advance notice of when future admissions will commence.

Many of recipients of Disability Support Pensions received these for mental health reasons or alcohol dependence.

Psychiatric history

At the commencement of inpatient treatment, an intake interview is conducted by the Psychiatry Registrars working on the ward. A directed content analysis (Hsieh and Shannon 2005) was applied to the records of these interviews and discharge summaries from earlier hospitalisations; descriptions of past diagnoses were fitted to International Classification of Diseases, 10th Edition (ICD-10) disorders, these prevalence of which among the sample is given in Table 2 below. Where a patient was not reviewed at admission by the Psychiatric Registrar, notes made at intake by ward staff were analysed.

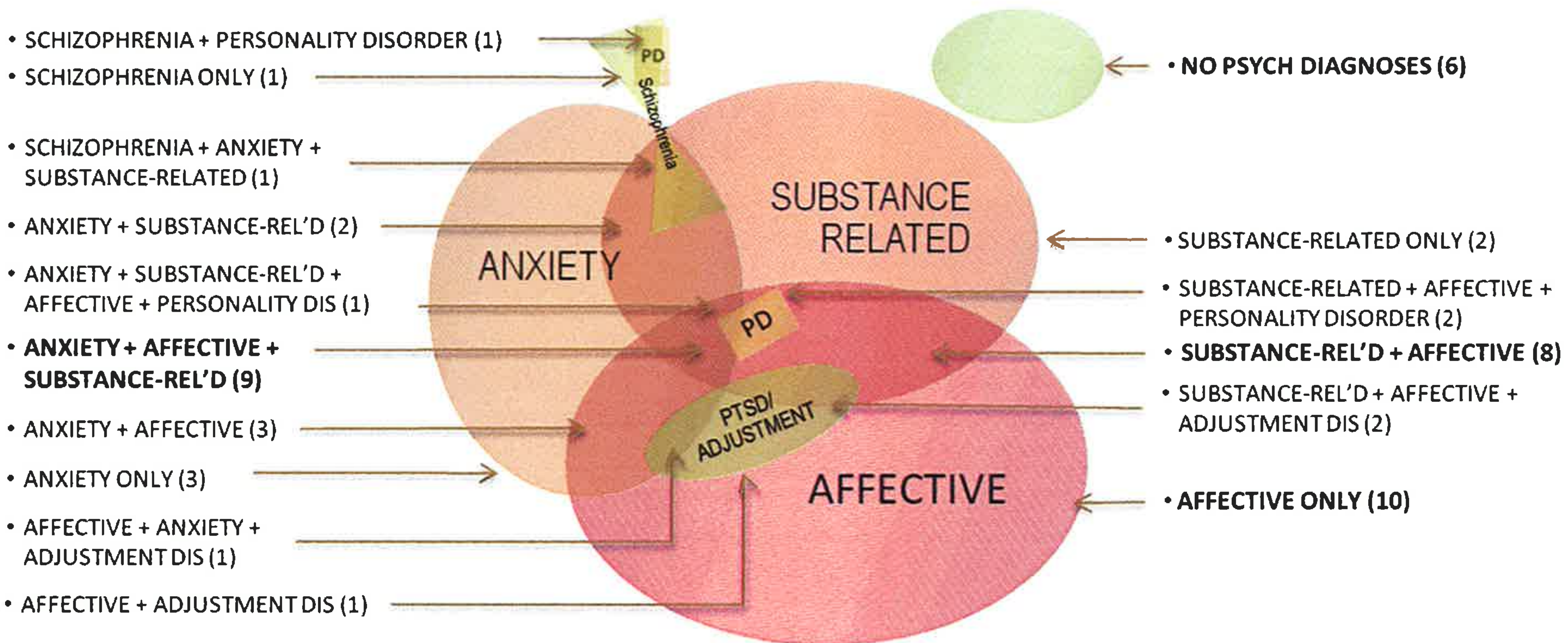
The presence of an identified disorder in a patient's psychiatric history does not indicate that the patient is currently suffering from that disorder, rather that they had at some stage in their life. Also, some diagnoses had been revised in light of new information (such as the revision of a diagnosis of bipolar affective into that of borderline personality disorder); both diagnoses would appear in that patient's psychiatric history and included in the table. Three patients had experienced panic attacks in the absence of a specific anxiety disorder diagnosis. In addition to the four individuals who had been diagnosed with personality disorders, 5 patients had been diagnosed with structures or traits associated with personality disorders: narcissistic personality structure (1); narcissistic, histrionic and grandiose traits (1); antisocial traits (2); and passive aggressive traits (1). In all, nine of the 53 inpatients (17.0%) had received diagnoses associated with the personality disorders.

TABLE 2 MENTAL AND BEHAVIOURAL DISORDERS NOTED IN PSYCHIATRIC HISTORIES.

Type of disorder (approx. ICD-10 block)	*Diagnosis*		*Proportion of inpatients* %*	(n)
DUE TO PSYCHOACTIVE SUBSTANCE	Alcohol	*Abuse*	18.9	(10)
		Dependence	11.3	(6)
	Cannabis	*Abuse*	20.8	(11)
		Dependence	3.8	(2)
		Psychosis	3.8	(2)
	Benzodiazepines	*Dependence*	5.7	(3)
	Amphetamine	*Abuse*	1.9	(1)
		Dependence	3.8	(2)
	Polysubstance	*Abuse*	3.8	(2)
	Any substance-related disorder		50.9	(27)
SCHIZOPHRENIA, SCHIZOAFFECTIVE	Schizophrenia		3.8	(2)
	Schizoaffective		1.9	(1)
	Any schizophrenia / schizoaffective		5.7	(3)
AFFECTIVE DISORDERS	Mania		1.9	(1)
	Bipolar affective disorder		15.1	(8)
	Depressive episode		5.7	(3)
	Depression (unspecified)		54.7	(29)
	Cyclothymia		1.9	(1)
	Dysthymia		1.9	(1)
	Any affective disorder		69.8	(37)
ANXIETY DISORDERS	Agoraphobia with panic disorder		9.4	(5)
	Social phobia / social anxiety		13.2	(7)
	Anxiety disorder		28.3	(15)
	Any anxiety disorder		37.7	(20)
STRESS & ADJUSTMENT DISORDERS	Post traumatic stress disorder (PTSD)		1.9	(1)
	Adjustment disorder		5.7	(3)
	Any adjustment disorder / PTSD		7.5	(4)
SPECIFIC PERSONALITY DISORDERS	Borderline personality disorder		5.7	(3)
	Histrionic personality disorder		1.9	(1)
	Any specific personality disorder		7.5	(4)
DISSOCIATIVE / SOMATOFORM / EATING / OTHER DISORDERS				
	Dissociative disorder		1.9	(1)
	Somatoform disorder		1.9	(1)
	Eating disorder		3.8	(2)
	Attention deficit hyperactivity dis. (ADHD)		1.9	(1)
ANY MENTAL OR BEHAVIOURAL DISORDER DIAGNOSIS			88.7	(47)

* Percentages do not add to 100 as some patients had multiple diagnoses recorded in their psychiatric histories.

Most patients had been diagnosed with a combination of types of disorders. Figure 1 provides the frequencies with which the various combinations of psychiatric disorder types had been applied to the patients in the present sample. All of the patients diagnosed with personality disorders, eating disorders, somatoform, dissociative disorder or ADHD had also received diagnoses from other blocks of the ICD-10 relating to mental and behavioural disturbances.



ANY ANXIETY DISORDER: 37.7% (20); ANY SUBSTANCE-RELATED DISORDER: 50.9% (27); ANY AFFECTIVE DISORDER: 69.8% (37);

ANY PTSD/ADJUSTMENT DISORDER: 7.5% (4); ANY PERSONALITY DISORDER: 7.5% (4); ANY SCHIZOPHRENIA-TYPE DISORDER: 5.7% (3).

FIGURE 1 COMBINATION OF DIAGNOSES IN PSYCHIATRIC HISTORY.

Nineteen of the 53 inpatients (35.8%) had had at least one previous admission to a psychiatric ward, and two had received Electroconvulsive Therapy (ECT). Four patients reported having received input from Alcoholics Anonymous. Other treatments for alcohol problems reported were: The Woolshed, Drug and Alcohol Services South Australia programmes, Callun House and Salvation Army services. Treatment for amphetamine dependence had been received by one patient. In many cases, psychiatric (or substance-related) problems were the primary reason for which inpatient treatment was most appropriate.

Suicidal thinking and past attempts

Notes were also examined for mention of past and present suicidal thinking, and past suicide attempts. Nearly three quarters of the inpatients (39/53, 73.6%) had reported past suicidal thinking. Twelve (22.6%) reported that this suicidal thinking was to some extent current, whether that was chronic or regular (5), fluctuating, fleeting or intermittent (4), or without specific description beyond "current" (3). Suicide attempts were noted in the psychiatric history of 20 patients (37.7%). One of the users of the service came to do so as a result of being hospitalised for a near fatal overdose taken in the context of despair over the gambling problem. Another was prioritised for inpatient admission (having earlier been put on the waiting list) as a result of the SGTS therapist identifying current suicidal thinking and dangerous impulsivity. Patients' responses to the Goldney scale of suicidal thinking administered at the commencement of their inpatient treatment are provided later in the report.

Previous treatment for the gambling problem

A range of strategies had previously been attempted to try to control or stop gambling, given in Table 3 below.

TABLE 3 TYPES OF TREATMENT PREVIOUSLY ACCESSED OR OTHER ATTEMPTS TO CONTROL GAMBLING.

Type of treatment / attempt to control gambling	*Proportion of inpatients*	
	%*	(n)
Self-barring from venues	20.8	(11)
Relationships Australia	17.0	(9)
Gamblers Anonymous	7.5	(4)
Families SA	5.7	(3)
Uniting Care Wesley	5.7	(3)
BreakEven / Lifeline South East	5.7	(3)
Hypnotherapy	5.7	(3)
Pokies Anonymous	1.9	(1)
Gambling Addiction Treatment Services (GATS)	1.9	(1)
Nonspecific BreakEven service	1.9	(1)
Anglicare	1.9	(1)
Mission Australia	1.9	(1)
Moved to WA (because EGM not available there)	1.9	(1)
No previous treatment / control attempts for gambling	39.6	(21)

* Percentages do not add to 100 as patients may have accessed multiple services.

Most (60.4%, 32/53) had used one or more of these strategies in attempting to stop or control their gambling.

Past engagement with Statewide Gambling Therapy Service

Broad variation was found in the degree of contact the patients had had with Statewide prior to the reviewed admission to the Inpatient Programme; in quartiles, these can be described as: minimal: 0 – 4 sessions (n= 13); moderate: 5 – 10 sessions (n = 13); considerable: 11 – 19 sessions (n = 14); and very extensive: 20 + sessions (n = 14). The maximum number of earlier therapeutic contacts recorded among the inpatients was 46. Included in the therapeutic contacts that the patients had had prior to admission are any that formed part of a previous inpatient admission. Five of the 53 reviewed inpatients had had previous admissions to the Inpatient Treatment Service. One individual had had no contact with SGTS prior to their inpatient admission, having been admitted following admission to the FMC after a near fatal deliberate overdose. After several days of acute recovery in the ICU and a period of detained admission in the psychiatric ward (a total of 10 days), admission to the inpatient treatment service for problem gambling was arranged.

Reasons for requiring inpatient treatment

SGTS therapists' indications as to why inpatient admission was most appropriate are presented in Table 4.

TABLE 4 REASON FOR WHICH PATIENTS REQUIRED INPATIENT TREATMENT.

Reason for admission to inpatient treatment		*Proportion of inpatients* %*	(n)
Severe mental illness	Anxiety	13.2	(7)
	Depression	7.5	(4)
	Depression + anxiety	3.8	(2)
	Bipolar affective	7.5	(4)
	Schizophrenia / schizoaffective	5.7	(3)
	Any severe mental illness reason	37.7	(20)
Severe other illness	Parkinson's disease	1.9	(1)
Substance dependence	Alcohol	5.7	(3)
	Benzodiazepines	3.8	(2)
	Alcohol + benzodiazepines	1.9	(1)
	Any substance dependence requiring attention	11.3	(6)
Personality characteristic	Responsible for lack of success as outpatient	7.5	(4)
	Such that outpatient therapy unsuitable	3.8	(2)
	Any personality characteristic reason	11.3	(6)
Stressors / distractions	In home environment	17.0	(9)
	As result of unstable accommodation	9.4	(5)
	Any stressor / distraction related reason	26.4	(14)
Other reason	Regional location	15.1	(8)
	Lack of success with outpatient therapy	11.3	(6)

* Percentages do not add to 100 as some patients had multiple reasons for admission to inpatient treatment.

Most commonly, patients were admitted to inpatient treatment due to a significant mental illness, the severity of which would likely preclude their effective participation in outpatient treatment, or which had previously rendered

attempts at outpatient therapy unsuccessful. Inpatient treatment for these individuals allowed their condition to be assessed in a supportive environment and, where necessary, psychiatric medication adjusted under clinical supervision. In a similar sense, the patient admitted for inpatient treatment due to having Parkinson's disease (the medication for which was associated with the development of the gambling disorder) required monitoring of illness symptoms such that their medication could be reviewed and adjusted during hospitalisation.

Six patients with current dependence to alcohol or benzodiazepines (in one case, both) were admitted to the inpatient programme so that withdrawal from these substances could be observed, and where clinically indicated, treatment provided to ameliorate withdrawal symptoms. One individual required treatment for cannabis withdrawal; since withdrawal from cannabis is not medically hazardous, it was not included among the reasons for which admission to the inpatient treatment was required.

Each person noted in Table 4 as having been unsuccessful in outpatient therapy had circumstances or issues that would have complicated their engagement with treatment, such as substance abuse or symptoms of depression or anxiety of a lesser severity than those patients for whom the mental illness was the reason for admission.

Three individuals with substance dependence problems warranting inpatient treatment also had personality characteristics likely to preclude them from successful engagement in outpatient therapy: borderline personality disorder (one concurrently alcohol-dependent, the other with a dual dependence to alcohol and benzodiazepines) or a narcissistic personality structure (concurrent with a partially treated alcohol dependence requiring further treatment). Narcissistic and histrionic personality traits had been identified in a patient with schizoaffective disorder, each factor such that outpatient treatment was unsuccessful. Antisocial and narcissistic personality traits alone precluded another two individuals from engagement in outpatient treatment.

Over a quarter of the admitted inpatients reported that they were experiencing too many (or too severe) environmental stressors to engage effectively with the exposure therapy without coming into hospital. Stressors included demands associated with caring for children and conflicts with others in the household. Stressors and distractions are inherent where individuals did not have stable accommodation, including one staying with friends after a marriage breakdown and another sleeping rough in his car. Two of the individuals from regional areas also had severe anxiety disorders that would also have impaired their ability to engage in therapy had it been available near where they lived.

The combinations of reasons for which these patients required inpatient treatment, as well as the combinations of diagnoses previously been applied to these patients (and those that would be applied to them at discharge) are indicative of the diagnostic complexity among this group of treatment-seeking problem gamblers.

The Admissions

Time spent on waiting list for inpatient treatment

The mean duration for which patients waited to be admitted was 6.4 weeks (median = 5.0, SD = 5.2, range: 0 – 26). Variation in time spent on the waiting list was determined by demand for the service and other factors. Clients who spent longer periods of time on the list may have declined one or more offers of admission before the reviewed treatment, or had requirements such as a minimum amount of notice to give an employer for time off, or child care responsibilities precluding attendance during school holidays. Efforts are made to maintain occupancy of the bed allocated to the gambling programme; gaps caused by early self-discharge or by patients declining admission are filled as soon as practicable given bed allocation protocols regarding the gender and clinical characteristics of the patient occupying the other bay in the (shared) room. Clinically indicated extensions of preceding patients' admissions also influenced waiting periods.

Duration of hospitalisation

The recommended duration of stay for the Inpatient Programme is two weeks; the patients in the present review stayed for a mean period of 12.6 days (SD = 5.3, range: 0 – 25); the distribution of durations is presented in Figure 2. Analyses do not include the 10 day period that one patient spent receiving treatment subsequent to a near-fatal overdose that preceded their admission to the gambling programme. Where a weekend occurred at the end of a planned admission, patients tend to be discharged at the end of the working week.

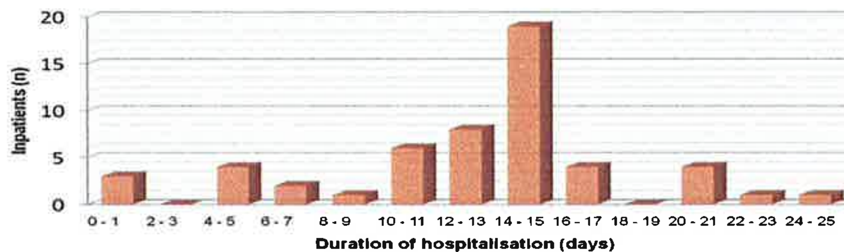


FIGURE 2 DURATION OF HOSPITALISATION.

During 2008 and 2009, users of the inpatient treatment service utilised **668 days of care.** This figure includes one day each for the two individuals who left on the same day as admission since those beds could not be re-allocated to other patients. This represents a near constant occupancy of the bed allocated to the gambling programme over the two years (**total 730 days available**).

Nine patients discharged themselves within one week, for the reasons described in Table 5.

TABLE 5 REASONS GIVEN BY PATIENTS FOR EARLY SELF DISCHARGE.

Reason for early discharge	*Length of stay*
1. Patient felt that rights were being violated when ward was secured at night and did not want to "sign out" when off the ward.	Left same day
2. Stressors relating to relationship breakdown and custody issues; patient did not feel that this was the right time to participate in the programme.	Left same day
3. Found the ward environment too unsettling to concentrate on the programme.	Overnight
4. Felt "bored".	4 days
5. Patient had trouble sleeping on the ward due to hospital noise and was unhappy about the "inflexibility" of not letting him sleep in his car.	4 days
6. Felt that they needed to return home to work on relationship issues.	4 days
7. Felt that they were "going stir crazy" in the hospital environment and had already derived some benefit from the programme.	5 days
8. Work commitments allowed only one week admission; patient wished they had arranged further leave to complete the full 2 weeks.	6 days
9. Issues relating to relationship breakdown and child custody; unable to focus on programme tasks.	7 days

While some patients chose to leave the ward early, several patients' admissions were extended, the reasons for which are presented in Table 6 below.

TABLE 6 REASONS FOR EXTENDED ADMISSIONS (LONGER THAN 15 DAYS).

Reason for extended admission	*Length of stay*
1. Patient had considerable health issues requiring address: hypertensive episode, abscess requiring dental x-rays and treatment, stroke requiring a CT scan, Stroke Team, Occupational Therapy and Speech Pathology input.	16 days
2. Patient made slow progress with the programme due to difficulty tolerating anxiety-related emotions. Needed input to cease behaviours related to this and tolerate increased periods of concentration on tasks.	16 days
3. Admission preceded by an intentional high lethality suicide attempt (overdose); residual effects complicated early part of admission. No previous contact with SGTS; required extra time for exposure therapy.	16 days
4. Patient did not spend much of the first 2 days of the admission on the ward and was absent for another day.	17 days
5. Patient experienced problems sleeping on ward, had trouble concentrating on therapy.	20 days
6. Patient made slow progress due to cannabis withdrawal and odd beliefs developing as due date for depot antipsychotic approached.	21 days
7. Patient had problems with concentration, memory, planning and organisation, struggled to understand therapy rationale; deficits in frontal lobe function (due to drug and alcohol abuse) revealed in neurological testing.	21 days
8. Patient required treatment for a rash on neck (actually a spider bite); bite had caused patient to feel unwell during early admission and slowed progress of therapy.	21 days
9. Patient admitted with skin condition requiring several treatments; slow progress due to poor sleep and pain.	23 days
10. Patient progressed slowly due to overwhelming anxiety with each task and likely cognitive deficits from benzodiazepine use; dependence on these addressed via (poorly tolerated) tapered reductions. A progressive anxiety-focussed intervention was provided, rationale for which the patient struggled to retain.	25 days

Therapeutic contacts delivered by Statewide's therapists during the inpatient admissions were quantified during the review of SGTS data. Table 7 shows the number of treatment sessions from SGTS therapists that the 53 inpatients received whilst hospitalised. Inpatients received on average 9.9 therapy sessions during their hospitalisation (median = 10, SD = 4.0, range: 0 – 17). Two individuals left the ward prior to receiving input from SGTS therapists.

TABLE 7 NUMBER OF TREATMENT SESSIONS FROM SGTS DURING ADMISSION.

Grouped duration of stay		*Number of therapy sessions received*				
	(n)	*mean*	*median*	*SD*	*min*	*max*
0 – 7 days	(9)	3.2	4.0	2.2	0	6
8 – 14 days	(33)	10.6	10.0	2.3	6	16
15 – 21 days	(8)	12.6	13.0	2.8	7	16
22 – 25 days	(3)	15.7	16.0	1.5	14	17
Overall (0 – 25 days)	(53)	9.9	10.0	4.0	0	17

Patients practice the progressive therapy tasks independently and with the assistance and encouragement of ward staff. Toward the end of the admission, patients attend local venues for *in vivo* exposure practice. In addition to the therapy for gambling, one patient received a progressive anxiety- and social phobia-focused intervention from a medical student (GEMP IV), and another received an extension of the gambling exposure programme (provided by the SGTS therapist) to incorporate elements of alcohol exposure (to help with strong cravings).

Clinical, allied health and adjunct services

All but one of the inpatients was seen by a Psychiatry Registrar during their hospitalisation. General medical officers provided input to two patients, although most matters of physical health were attended to by the Psychiatry Registrars. Registrars from Dermatology (providing input to 2 patients) as well as Endocrinology and Gastroenterology provided ,were involved with the inpatients' care (one patient each), as was a Consultant Neurologist (one patient). The "Stroke Team", the "Diabetes Team" and the "Endocrinology Team" also provided input to one patient each, and other allied health and adjunct services were also provided (see Figure 3).

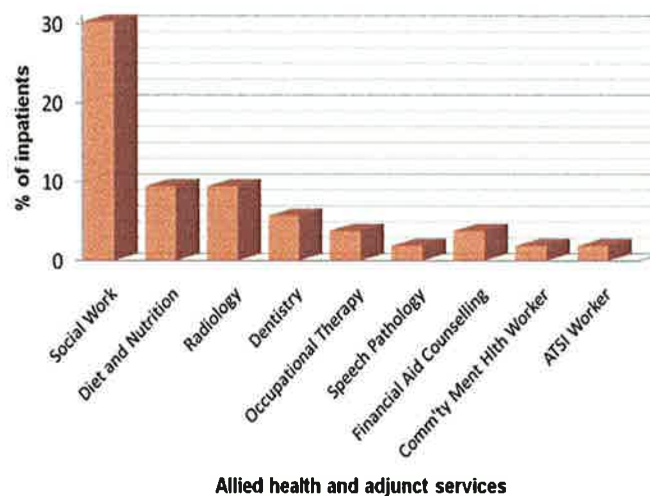


FIGURE 3 ALLIED HEALTH AND ADJUNCT SERVICES.

Diagnostic and investigative procedures

Clinical decisions were in many cases guided by the results of investigative or diagnostic procedures. Nearly two thirds of the patients (66%, 35) had blood sent for routine biochemistry and a full blood examination. Several also had endocrine studies performed (32.1%, 17), or tests for b12 folate (20.8%, 11) or lipid studies (18.9%, 10). Coagulation studies, tumour markers and iron studies were also conducted. Blood tests for specific diseases were also performed: hepatitis B and C (3.8%, 2) and HIV (1.9%, 1). Quantification of lithium and valproate, clozapine and lead were each performed in one patient each. Other tests included fecal chemistries (5.7%, 3), urine microscopy (5.7%, 3), cutaneous fungal cultures and STI screening (1.9%, 1 each).

Other diagnostic and investigative procedures are also implemented where required. Five inpatients received (one or more) radiology or imaging input, including 3 who received CT scans of the head/brain. Ultrasound and X-ray investigations were also conducted. Two patients received frontal lobe testing as a result of exhibiting functional deficits (e.g., inability to retain the therapy rationale), and one patient underwent an endoscopy.

Medications received during hospitalisation

Medication charts within case files were examined for details of the medications that patients received whilst they were hospitalised. Five of the 53 inpatients were not administered any medication during their hospitalisation; this includes 3 individuals who remained on the ward for one day or less. For the most part, ward doctors prescribed the medications after confirmation from the patient's GP, or prescribed in order to treat an identified condition.

Psychotropic medications

Most (66%, 35) of the inpatients were administered some form of psychotropic medication during their hospitalisation. Mood stabilisers were provided to 11%, and psychostimulant medication formed part of the medication regime of one inpatient.

While classed as an anxiolytic, temazepam is more so used to aid sleep, and it was this purpose for which it was used for the present inpatients; 17.0% (9) of patients took a benzodiazepine other than temazepam. Of these, six received these drugs during the treatment for drug or alcohol dependence.

Over half of the inpatients received treatment with antidepressant medication during their stay, and three individuals were commenced on the medication while they were hospitalised. Just over one quarter were administered an anxiolytic (26%), and just under one quarter were administered antipsychotic medication. Mood stabilizers were provided to 11%, and psychostimulant medication formed part of the medication regime of one inpatient.

The inpatient stay provided an opportunity for medication regimes to be amended under the medical supervision. Comorbid mental health conditions that would impact patients' psychological wellbeing are treated, as are drug and alcohol dependencies. Exposure therapy is considerably reliant on effective learning; alcohol, benzodiazepine and cannabis dependence each impair this ability and need to be addressed for successful engagement with therapy.

Table 8 describes the medication regimes that were initiated or altered during the inpatients' hospitalisation to address such comorbid psychological or substance-related conditions.

TABLE 8 PSYCHOTROPIC MEDICATION REGIMES INITIATED OR ALTERED DURING ADMISSION.

Medication regimes initiated or altered during hospitalisation	*Proportion of inpatients*	
	*%**	*(n)*
Treatment for substance withdrawal (alcohol and cannabis)		
Alcohol: *diazepam, ceased prior to discharge*	3.8	(2)
Cannabis: *diazepam, ceased prior to discharge*	1.9	(1)
Treatment for alcohol cravings: *Acamprosate administered, ongoing*	1.9	(1)
Benzodiazepine dependence		
Alprazolam *replaced by dose equiv in diazepam, tapered to nil*	1.9	(1)
Alprazolam *replaced by dose equiv in diazepam, reduced*	1.9	(1)
Diazepam *dose tapered to nil*	1.9	(1)
Antidepressant		
Commenced	5.7	(3)
Increased	3.8	(2)
Reduced (not ceased)	3.8	(2)
Reduced to nil	5.7	(3)
Antipsychotic medication		
Intramuscular depot *administered*	3.8	(2)
Antipsychotic *reduced*	1.9	(1)
Antipsychotic *given while on ward*, not continued	1.9	(1)

* These do not add to 100, patients may have more than one medication alteration during admission

Other (non-psychotropic) medications

A variety of non-psychotropic medications were administered during hospitalisation. Over half (52.8%, 28) of the inpatients received analgesia, eight of whom were administered moderate to strong pain relief (e.g., panadeine forte) in response to issues such as dental problems, migraine, arthritis or back pain.

Over one quarter (26.4%, 14) received vitamin and/or mineral supplementation, which is reflective of the sub-optimal physical health of some users of the service. A considerable minority of inpatients had been noncompliant with the medication regimes prescribed by their usual GPs due to the poverty routinely resulting from using all available monies for gambling. Nutrition was also poor in some inpatients for the same reason; purchasing nutritious (or any) food had been regularly ignored in favour of using money to gamble. Approaching charities and churches for food parcels was routine for some clients (including those with families) who had been unable to stop themselves gambling the household budget.

Other commonly administered medications included anti-inflammatory agents, gastro-oesophageal reflux treatments, anti-hypertensives, anti-hyperlipidemics, anti-constipation agents and hormonal medications, each administered to more than 10% of the sample. More detail on the types of medications received is presented in the Appendix of the present report.

Current disorders (diagnoses applied at discharge)

Casemix refers to the different kinds of disorders and diseases treated during a patient's hospitalisation that are noted as patients leave hospital; Casemix reports were analysed for details of the disorders that had been identified as currently affecting the reviewed inpatients. Pathological gambling was the principal diagnosis (that chiefly responsible for the episode of care) in the present sample. Other diagnoses relate to co-existing conditions that affect patient care, required therapeutic treatment, diagnostic procedures, extended hospitalisation or increased nursing care or monitoring. Mental and behavioural disorders were prevalent; Table 9 indicates the types of mental and behavioural disorders noted for the present sample, and Table 17 (in the Appendix) details the specific conditions identified.

TABLE 9 MENTAL AND BEHAVIOURAL DISORDERS APPLIED AT DISCHARGE.

Type of mental and behavioural disorder		*Proportion of inpatients*	
		*%**	*n*
Substance-related	Tobacco-related	47.2	(25)
	Alcohol-related	26.4	(14)
	Cannabis-related	11.3	(6)
	Amphetamine-related	5.7	(3)
	Sedative-hypnotic / other	5.7	(3)
	Any (excluding tobacco)	35.8	(19)
	Any substance related disorder	64.2	(34)
Affective disorders	Bipolar affective disorder	7.5	(4)
	Manic episode	1.9	(1)
	Recurrent depressive disorder	5.7	(3)
	Depressive episode	13.2	(7)
	Suicidal ideation**	5.7	(3)
	Any affective disorder	28.3	(15)
Anxiety disorders	Phobic	9.4	(5)
	Other	11.3	(6)
	Any anxiety disorder	18.9	(10)
Other mental and behavioural disorder		20.8	(11)
No mental and behavioural disorders other than pathological gambling		17.0	(9)

* Does not add to 100 since patients could have more than one mental and behavioural disorder.

** included for its relationship to the affective disorders.

The physiological disorders identified tended to be disorders associated with lifestyle, such as high cholesterol, or diabetes. 39.6% (21/53) were diagnosed with one or more physiological disorders (and 13.2%, 7/53 had 2 or more); these disorders are listed in Table 16 in the Appendix. While it was most common for the inpatients *not* to receive a

physiological diagnosis in addition to the pathological gambling diagnosis, a substantial minority (39.6%, 21/53) were noted to have at least one (and up to 11) physiological disorders relevant to the current admission.

Substance-related diagnoses

In all, fifty-two substance-related diagnoses were applied; nearly half related to tobacco. These diagnoses were applied to 34 individuals; the drugs associated with their diagnoses are shown in Figure 4. Of the 22 clients that had only one such diagnosis, tobacco or alcohol accounted for the disorder in all but one case (that being amphetamine). Seven inpatients were diagnosed with 2 substance-related disorders, and 4 were diagnosed with 3. Twelve inpatients had 2 or more substance-related diagnoses.

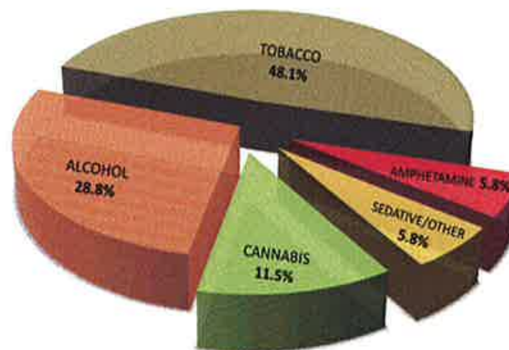


FIGURE 4 TYPE OF DRUG INVOLVED IN CURRENT SUBSTANCE-RELATED DISORDERS.

Affective and anxiety related diagnoses

Affective diagnoses were applied at discharge to 28.3% (15/53) of the inpatients. Figure 5 illustrates the types of affective disorder diagnoses applied to the inpatients and the percentages of inpatients that they were applied to.

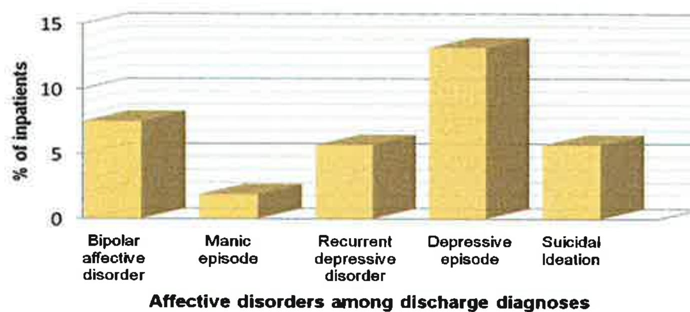


FIGURE 5 TYPES OF CURRENT AFFECTIVE DISORDERS (AND SUICIDAL IDEATION) IMPACTING INPATIENTS.

In addition to the Physiological Conditions and Mental and Behavioural Disorders, the Casemix report also included descriptions of factors that would influence health status and contact with health services; Table 18 in the Appendix details these and the proportion of inpatients to whom these factors applied.

Diagnostic complexity at discharge

To provide an indication of the diagnostic complexity among this group of patients, the number of diagnoses of the different kinds was considered for each patient; this technique, known as a 'comorbidity count' is among the less complicated but often employed means by which to express levels of comorbidity among particular populations (Walker 2007) . Three inpatients received one diagnosis only, having no physiological or psychological disorders other than pathological gambling identified as currently affecting the patient and their care; 94.3% had had some form of condition comorbid to the gambling disorder noted.

As described, nearly 40% of the sample had one or more physiological disorders currently impacting them; 13.2% (7/53) had 2 or more, and up to 11 physiological disorders were mentioned as relevant to the admission under review. Mental and behavioural disorders comprised the more prevalent form of comorbid conditions; 83.0% of the sample was noted to have been impacted at the time of admission by one or more psychological conditions in addition to problem gambling. Figure 6 provides detail with regards the number of physiological and mental/behavioural disorders that the inpatients had been identified as being impacted by at the time of their hospitalisation.

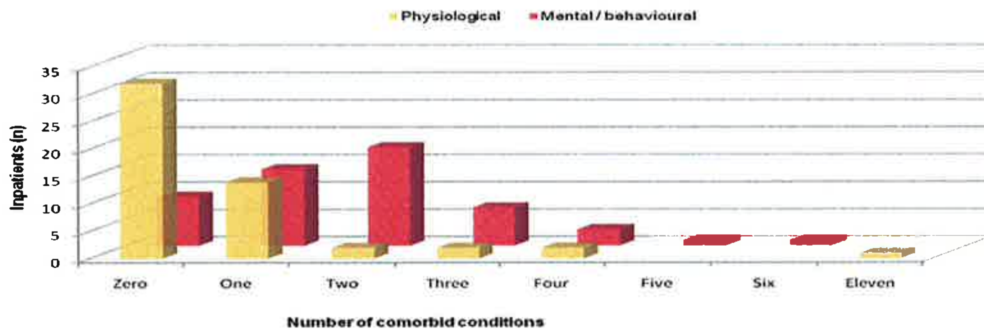


FIGURE 6 NUMBER OF COMORBID PHYSIOLOGICAL AND MENTAL/BEHAVIOURAL DISORDERS.

Key Findings from Case File Review

The review of 2008 and 2009 admissions to the inpatient treatment programme found that the 53 users of the service were aged on average 44 years and over half (31/53) were males. Nearly 10% were without stable accommodation and nearly 60% reported an annual gross income of less than $16,000. Nearly three quarters of the inpatients reported they had at some point thought about suicide and 38% had attempted suicide in the past. Most had been diagnosed previously with at least one psychological condition in the past, and many required treatment for such disorders while hospitalised.

Patients received considerable input from other clinicians during their hospitalisation. The average duration of hospitalisation for the Inpatient Treatment Programme was approximately 13 days, for which patients had waited on average approximately 6 weeks. The bed allocated to the inpatient treatment was utilized at near constant occupancy during 2008 and 2009.

The complexity of many of these clients' conditions is evident from the combinations of disorders with which they had historically been diagnosed and those included among the discharge diagnoses relevant to the reviewed admission. Multiple psychological disorders were more prevalent than were multiple physiological conditions.

QUANTITATIVE DATA ANALYSIS: 2008 & 2009 INPATIENT ADMISSIONS

Descriptions of gambling behaviour and indications of treatment outcomes were sourced from Statewide's client database to supplement the information gathered from case files.

Gambling context

This section provides a brief overview of the inpatients' gambling behaviour. Table 10 shows the length of time that the patients stated that their gambling had been problematic.

TABLE 10 DURATION FOR WHICH GAMBLING HAD BEEN PROBLEMATIC.

Duration of problematic gambling	*Proportion of inpatients*	
	%	*(n)*
Up to 3 months	3.8	(2)
3 – 6 months	1.9	(1)
6 – 12 months	5.7	(3)
1 – 2 years	7.5	(4)
2 – 5 years	17.0	(9)
5 – 10 years	26.4	(14)
10 years or more	37.7	(20)
	100.0	(53)

For the most part, these patients had been gambling at problematic levels for a number of years. Fewer than one in five (18.9%, 10/53) reported gambling at problematic levels for two years or less, and over one third (37.7%, 20/53) had had a gambling problem for over 10 years. The inpatients in the present review tended to report gambling problems of longer duration than are reported by Statewide's broader client group; data from the 2008/09 and 2009/10 SGTS Annual Reports reveals that 55% of those (largely) outpatient samples had been gambling problematically for 5 or more years, whereas 64% of the present sample reported gambling problems of this duration.

TABLE 11 FORMS OF GAMBLING THAT WERE ASSOCIATED WITH PROBLEMS.

Forms of problematic gambling	*Proportion of inpatients*	
	*%**	*(n)*
Electronic Gaming Machines (EGM)	90.6	(48)
TAB / Racing codes	18.9	(10)
Scratchies / XLotto / Powerball	15.1	(8)
Keno	13.2	(7)
Casino games	11.3	(6)
Sports betting (context not specified)	3.8	(2)
Raffles / bingo / bingo tickets	1.9	(1)
Private gambling	1.9	(1)

* Percentages do not add to 100 as clients could nominate multiple forms of gambling.

Over two thirds of this group (69.8%, 37/53) reported that their problematic gambling related exclusively to one form of gambling (typically EGM), although up to six forms of problematic gambling were reported; the types of problematic gambling are shown in Table 11. The considerable majority of inpatients (81.1%, 43/53) reported that their most recent gambling had taken place in a hotel or club (which is where most Electronic Gaming Machines in South Australia are located). Six individuals reported last gambling at the TAB (11.3%), 3 indicated that the Casino was where they had most recently gambled (5.7%), and one individual reported gambling most recently at a shopping centre (on Keno).

Psychological distress and suicidal thinking at start of treatment

The set of measures gathered on the date most closely preceding that of clients' admission to the inpatient programme was used in the first instance to indicate the levels of psychological distress and suicidal ideation among the users of the inpatient service when they commenced treatment.

These measurements varied in temporal proximity to the date on which patients were admitted to hospital. The median time between this measure and admission to hospital was 4 weeks (mean = 7.6 weeks, SD = 9.0, range: 0 – 45 weeks). While nearly one third (32%, 17/53) were assessed in the fortnight preceding their admission, and over one half (56.6%, 30/53) within 4 weeks, for a substantial minority of patients this measure had been taken some time prior to commencing the inpatient treatment; 15.1% (8/53) had not been assessed within the 13 weeks prior to admission. For the purposes of the present descriptive treatment of client data, however, these measures will be collectively described as "start of treatment", within the context of the stated acknowledgement regarding variable timing relative to the commencement of inpatient treatment.

The Kessler 10 is a well validated 10-item scale used to measure nonspecific psychological distress, based on questions about the level of nervousness, agitation, psychological fatigue and depression (Kessler, Andrews et al. 2002). Figure 7 illustrates the proportions of inpatients whose categorised responses indicated not-significant, mild, moderate and severe distress; interpretation of scores was according to the instructions in the Kessler 10 Manual.

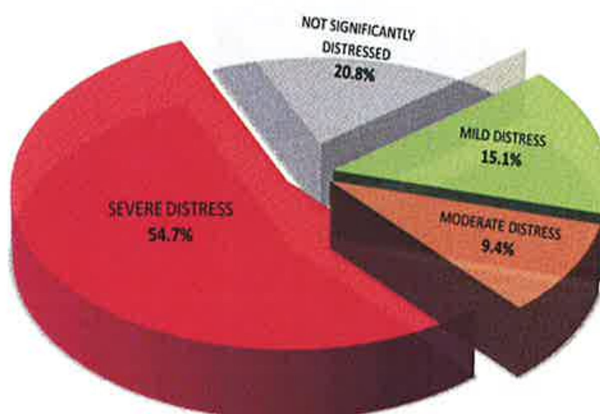


FIGURE 7 LEVEL OF DISTRESS AT START OF TREATMENT (K10)

Nearly 80% (42/53) were classifiable as experiencing some degree of distress at the commencement of inpatient treatment; over half (54.7%, 29/53) presented for treatment in a state of severe distress.

The Goldney Scale of suicidal ideation (Watson, Goldney et al. 2001) combines patients' responses to four items investigating suicidal thinking into a score from 0 to 4; higher scores indicating higher levels of suicidal thinking. At the start of treatment, approximately half of the inpatient sample reported some degree of suicidal thinking (50.9%, 27/53), and over one quarter endorsed all four items on the scale (26.4%, 14/53).

Measures taken before and after inpatient treatment

With the aim of exploring some of the impacts of the inpatient treatment, Statewide's data were examined for assessments of outcomes that occurred in proximity to the end of inpatient treatment, or, where proximal assessments were unavailable, the outcomes that were gathered next after discharge. The number of patients for whom post-treatment measures could be found differed somewhat between the elements of data gathered ; the following description of (re)assessment timing relates to data explored from the set of 40 individuals who had responded to the item regarding strength of gambling urge both before and after treatment.

The timing of the assessment closest to the date of discharge varied in its proximity to that date. The *median* period that had elapsed between discharge from hospital and this assessment was 1 week (mean = 2.7 weeks, SD = 5.2, range: -1 to 19); in 5 cases, this measure was taken around in the week before the patient left hospital (with any suitable subsequent assessments). Nevertheless, in over half (52.5%) of the 40 cases where the second assessment was available, the "end of treatment" assessment occurred within one week of discharge. 82.5% of the "end of treatment" measures were conducted within 3 weeks, although for 5 clients (10%), the next measure against which the "start of treatment" measure could be compared had occurred 10 or more weeks following the conclusion of that client's departure from inpatient treatment.

Changes evidenced in the data that might reflect treatment effects need to be considered with this variation in mind; the "end of treatment" assessments vary with regard to their relationship to the date of discharge but as previously described, the "start of treatment" assessments were in some cases obtained some time before the date of admission; it therefore cannot be assumed that any observed changes occurred as a result of the time spent in inpatient therapy. While observational (as opposed to experimental) research necessarily precludes attributing causality to a studied intervention, the described irregularity of the dataset requires a reader to exercise further caution when interpreting the findings.

A Mann-Whitney U test revealed no significant difference with regard to the period separating patients' start of treatment assessment and the date of their admission to inpatient therapy, for the group of patients from whom further measures were obtained (Md = 4.0 weeks, n = 40) and the group who became lost to re-assessment (Md = 2.0 weeks, n = 13), U = 194.0, z = -1.374, p = 0.169. However, the patients for whom the end of treatment assessment was missing were found (as a group) to have engaged with the inpatient treatment for significantly fewer days (Md = 6.0, n = 13) than those from whom an end of treatment assessment was available (Md = 14.0, n =

40), $U = 87$, $z = -3.665$, $p < 0.001$, $r = 0.50$), with a large effect size. In circumstances where the inpatient treatment proves so unsuitable for particular patients that they choose to self discharge before completing the programme it is unlikely that they would be inclined to remain on the ward in order to participate in data collection. In addition to early self-discharge, it is possible that some of the same personal and/or clinical characteristics that render participation in outpatient treatment difficult would reduce the likelihood of completion of outcome measures questionnaires; mention was made in a number of case files to clients being unwilling to complete the questionnaires. Nevertheless, both start and end treatment measures are available for 75.5% of respondents to the gambling urge item; rates of re-assessment for other items like the K10, WSAS and Goldney Scale reached 81.1% (43/53 patients). Nearly 70% of patients (37/53) had both start and end assessments for the VGS, this slightly lower rate resulting from missed items precluding calculation of the scale total in some cases.

To further investigate whether the individuals who were not re-assessed differed at the start of treatment measure from those from whom an end-treatment measure was obtained, A Chi-square test for independence indicated no significant association between whether or not a post-treatment measure was available and the severity of their self rated gambling problem at pre-treatment when response categories to this question were collapsed into 3 rather than 9 categories X^2 (2, $n = 51$) = 3.61, $p = .56$.

Among patients for whom both start of treatment and end of treatment measures were present, data were explored for trends. Variables unlikely to undergo change in relatively short periods of time (such as those relating to financial problems) were excluded.

At the start treatment measure, 89.2% of the inpatients responded to the VGS such that they would be receive a diagnosis of problem gambling, using the cutoff of 15+ (Wenzel, McMillen et al. 2004). At the end of treatment measure, this had reduced to 59.5%. Since the VGS is explicit in instructing respondents to consider *the past month*, it is more suited to administration over longer periods than for its present application is the case in the present descriptive treatment of start and end measures. For this reason among others the VGS was also selected for inclusion in the linear mixed modelling analysis in the following section of this report, an approach that utilises the inpatients' follow-up data as well as measures taken early in treatment.

The Goldney Scale asks clients to endorse or otherwise each of four questions regarding suicidal thinking; the minimum score is 0, the maximum score is 4. The proportion of clients endorsing two or more items was halved when pre-treatment responses were compared to those gathered post-treatment (44.2%; 19/43 vs 20.9%, 9/43). This and other continuous outcome measures investigated each required nonparametric statistical analysis due to non-normal distributions of data. Wilcoxon signed rank tests were applied to five continuous variables, to investigate whether the responses provided at the start of treatment differed from those provided after treatment had ended. Each variable examined showed significant reductions; Table 12 provides details.

TABLE 12 DESCRIPTIVE STATISTICS AND OUTPUT FROM WILCOXON SIGNED RANK TESTS OF GAMBLING AND PSYCHOSOCIAL VARIABLES MEASURED AT (APPROXIMATED) TREATMENT START AND END.

Outcome measure		*Start treatment*		*End treatment*		Wilcoxon summary		
	N	median	(IQR)	median	(IQR)	*z*	*p*-value	*r**
Victorian Gambling Screen	37	37.0	(20.0)	19.0	(33.0)	-4.754	.001	0.55
Hours spent gambling	40	8.0	(21.87)	0.0	(4.38)	-4.236	.001	0.47
Kessler 10	43	31.0	(18.0)	20.0	(15.0)	-3.728	.001	0.40
Work and Social Adjustment Scale	43	16.0	(20.0)	8.0	(17.0)	-3.132	.002	0.34
Goldney Scale	43	1.0	(4.0)	0.0	(1.0)	-2.716	.007	0.29

**r = effect size*

These and other variables were examined for whether the response given at the end of treatment represented a worsening, maintenance or improvement in the patient's situation. With the exception of the Goldney Scale, for which responses tended to remain unchanged, the large majority of patients' assessments after treatment indicated that their situation was improved, whether that be in terms of gambling severity, time that had been spent gambling (unsurprising among a group of people who had spent a significant amount of time in the FMC during the intervening period), as well as indicators of improved wellbeing such as lessened functional impairment (WSAS) and reduced psychological distress, along with reduced urges to gamble.

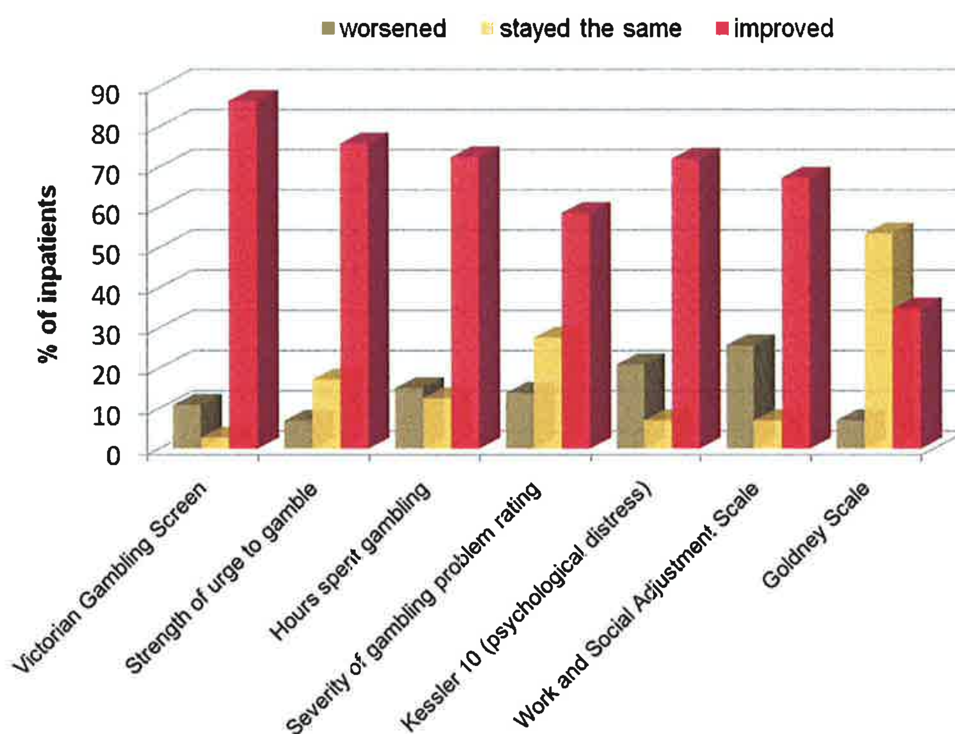


FIGURE 8 PROPORTIONS OF INPATIENTS REPORTING WORSE, SAME OR IMPROVED STATUS ON OUTCOME MEASURES AFTER TREATMENT.

Longitudinal treatment outcomes

Further to the descriptive treatment of quantitative data gathered "before and after therapy" given in the preceding section, inferential quantitative analyses have been performed using the follow-up data gathered from the sample. As described in the previous section, not all individuals that are treated go on to participate in any repeated outcomes assessment; rates of participation in (and the timing of) further follow-up assessments among the present sample was particularly patchy. Figure 9 illustrates the variable timing and prevalence of follow-up measures. As described, around three quarters of the inpatients attended at least one re-assessment after their inpatient stay, but these occurred at very variable times relative to the admission. The inpatients' follow-up dataset is particularly fragile for its preponderance of 'missingness' and non-uniform engagement with the time points upon which Statewide would like to be collecting data (1, 3, 6 and 12 months after people conclude their treatment). It is clear from Figure 9 that this is far from being the case in this sub-set of Statewide's clients.

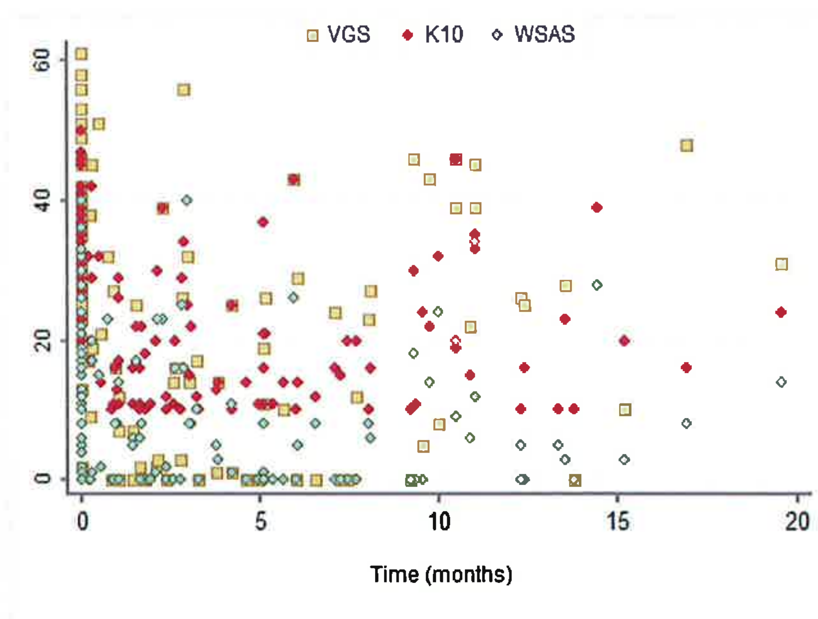


FIGURE 9 SCATTERPLOT ILLUSTRATION OF VARIABLE TIMING OF FOLLOW-UP MEASURES.

In order to make the best use of the follow-up data that *had* been collected, Statewide's statistician David Smith prepared the following analyses for the report. A linear mixed modelling approach was applied to the data, such that time could be included as a continuous variable rather than attempting to impose the intended follow-up schedule onto the data that had been collected, thus causing further data loss through excluding measures unsuited to the schedule. The present approach provides an opportunity to quantify change over time of continuous outcome measures such as the VGS (as a gambling screen) and the K10 and WSAS (to indicate problems caused by gambling). This approach accommodates the tendency for repeated-measures data to be correlated within subjects, uses all the available data on each subject (even where collected at non-uniform intervals) and is robust to randomly missing data, among other advantages over more traditional analyses (Gueorguieva and Krystal 2004). Since the present research uses an observational design (as opposed to an experimental protocol such as a randomised controlled trial) and given the composition of the dataset, findings should be considered as exploratory and viewed in

light of their approximating (modelling) trends rather than providing evidence per se with regards the effects of the therapy.

Outcome variables

The present analyses used The Victorian Gambling Screen (VGS), The Kessler 10 Scale (K10), and The Work and Social Adjustment Scale (WSAS) as outcome variables; the VGS as a gambling screen, and the K10 and WSAS as indicative of problems caused by gambling. The use of the combination of dimensional assessments of impairment such as the WSAS is well complemented by the K10 as a measure of nonspecific distress (Kessler, Andrews et al. 2002).

Treatment engagement variables

The effects of treatment engagement levels on treatment outcomes was assessed using inpatient length of stay (days), and the number of outpatient therapy sessions attended during the 12 month follow up period post-inpatient treatment. Mean length of hospital stay was 12.53 days (SD= $\pm$ 5.30 days). The mean number of outpatient treatment sessions following an inpatient episode was 5.81 (SD= $\pm$ 5.34). A binary variable for this variable was generated using a cut score at median value of 4 to provide a more appropriate covariate form.

Statistical methods

Linear mixed modelling (LMM) was used to quantify change over time of the continuous outcome measures of problem gambling. LMM takes into account the tendency in repeated measures research for individual respondents' data to be correlated between assessments (accommodating inter-individual differences in intra-individual change) and uses all the available data on each subject without requiring that individuals provide the repeated assessments at the same intervals as one another. LMM is also unaffected by randomly missing data and therefore does not require imputation methods (Gueorguieva and Krystal 2004).

Models for each outcome variable included time as a continuous covariate. The variables relating to level of treatment engagement were also tested for any significant effect on outcome variables. A quadratic term for time was tested to allow for possible nonlinear effects where rates of change in outcome measures slowed down over time with a leveling-off effect (i.e., rates of change are non-linear).

Predicted values for significant outcome variables were calculated from final models.

Results

On average, there were 2.6 (range 1-7) outcome assessments conducted for each problem gambler receiving inpatient treatment during the study period varying in number to a small extent between the K10 and WSAS and to a slightly larger extent between these variables and the VGS. As described in the previous section, missed items precluded calculation of the VGS scale total in some cases. Results from linear mixed models are described in the following paragraphs, with interpretation of each significant outcome measure. The covariates 'time' and 'time squared' (quadratic term) were significant in all models described at $p<0.01$.

Victorian Gambling Screen (VGS)

A statistically significant model (Wald χ^2=32.24, df=2, p<0.001) showed for each one month change in time a participant's VGS score, on average, would decrease (improve) by 5.07 units. In terms of confidence intervals this decrease could be as low as 3.31 or as high as 6.83 units. The influence of variables relating to treatment engagement on VGS scores for each individual was insignificant and therefore removed from the final model without compromising overall goodness-of-fit.

Kessler 10 Scale (K10)

A statistically significant model (Wald χ^2=22.67, df=2, p<0.001) showed for each one month change in time a participant's K10 score, on average, would decrease (improve) by 2.25 units. In terms of confidence intervals this decrease could be as low as 1.31 or as high as 3.19 units. The influence of variables relating to treatment engagement on K10 scores for each individual was insignificant and therefore removed from the final model without compromising overall goodness-of-fit.

Work and Social Adjustment Scale (WSAS)

A statistically significant model (Wald χ^2=15.74, df=2, p<0.001) showed for each one month change in time a participant's WSAS score, on average, would decrease (improve) by 1.88 units. In terms of confidence intervals this decrease could be as low as 0.94 or as high as 2.82 units. The influence of variables relating to treatment engagement on WSAS scores for each individual was insignificant and therefore removed from the final model without compromising overall goodness-of-fit.

A plot of margins calculated from predictions of fitted models to estimate VGS, K10 and WSAS values at various values of time over a 12 month period are presented in Figure 10 (VGS), Figure 11 (K10) and Figure 12 (WSAS).

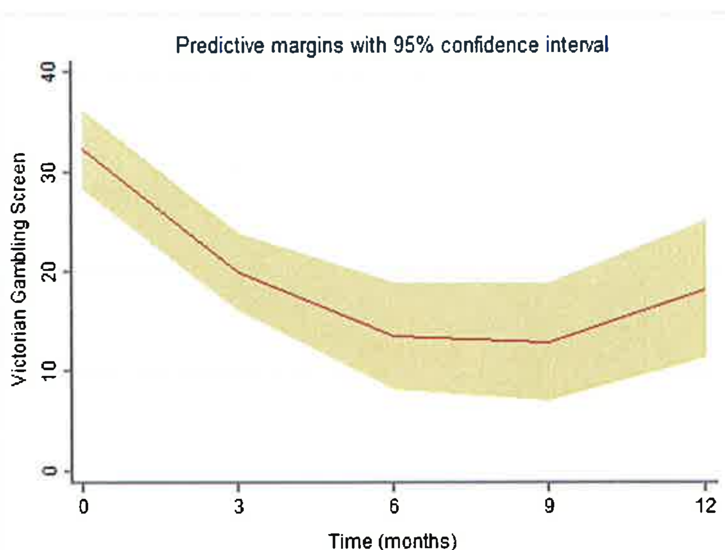


FIGURE 10 VGS PREDICTIVE MARGINS MODEL.

In all plots, predicted values indicate improvement occurs at a faster rate from approximately baseline to 6 months and then slows down with a levelling effect from 6 to 12 months. The confidence intervals indicate predicted values

are more likely to have less error with lower time values (due to the fact that there are very few longer-term data points to consider and inform the model). VGS baseline scores are estimated, on average, to be in the problem gambling range with cut score at 21 or above and mean at 32.29 (SD=±5.16) when controlling for time and time*2 (Figure 10).

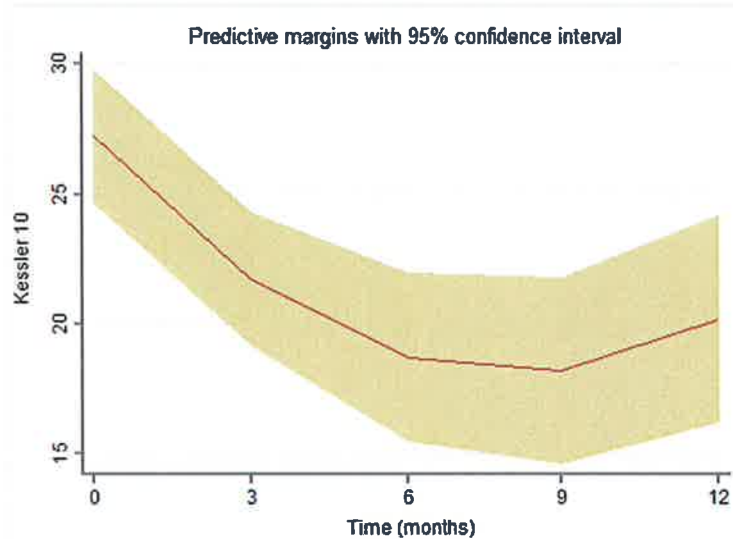


FIGURE 11 K10 PREDICTIVE MARGINS MODEL.

Figure 11 shows that problem gamblers are expected to experience clinical symptoms of depression and/or anxiety in the mild to severe range on treatment commencement with a mean estimated score at 27.23 (SD=±6.22). For WSAS scores, predicted estimates at treatment commencement are, on average, in the 'significant functional impairment but less severe clinical symptomatology' range with mean at 14.09 (SD=±5.93) (Figure 12).

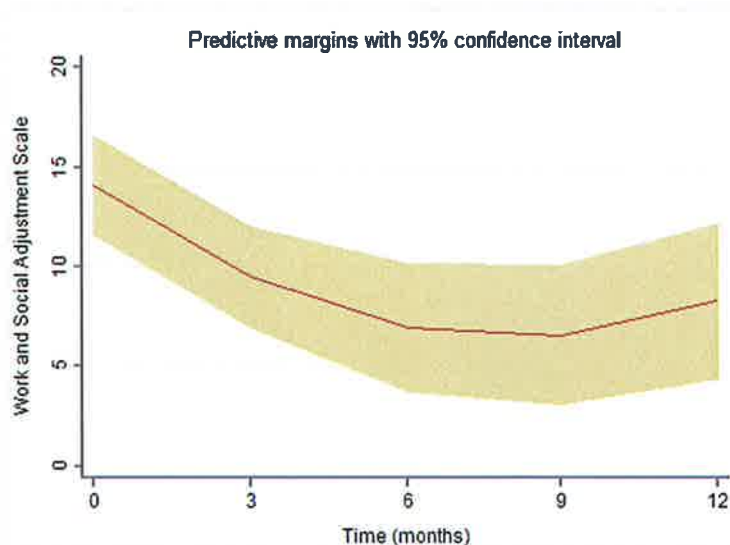


FIGURE 12 WSAS PREDICTIVE MARGINS MODEL.

It should be emphasised that the above figures present predictions based on the available data, of which at the later stages of the intended follow-up period there exists little, as shown in the scatterplot of available data in Figure 9.

THEMATIC ANALYSIS OF INTERVIEWS WITH INPATIENTS

Introduction and Methods

Thematic analysis (Braun and Clarke 2006) is the qualitative method that was used to identify, analyse and report patterns or themes within the interview data. Qualitative research attracts some criticism for its potential to be subjective, in large part because the researcher is both the instrument of data collection and data interpretation (Patton 2002). The present review of the inpatient programme finds some balance in the application of both qualitative (focusing on the interview data) and quantitative approaches (involving the questionnaire data) to sets of data within the broader data corpus concerning the programme and the characteristics and experience of its users. A grounded-theory approach to the analysis was considered, but since the goal of this component of the research was not the development of a model or theory but rather more simply to give voice to the experiences of the users of the inpatient treatment service, it was unnecessary to use this technique in the present instance and would have been questionably appropriate given the size of the data set. The intent was to gather the stories of the participants; to learn of their individual pathways to problem gambling, how they came to be treated by the programme, their experience of the treatment itself, and what it was like for them on their subsequent return to home.

All interviews were conducted by the researcher (Kate Morefield). The therapists (Sharon Harris and David Healey) who provided treatment for the inpatient service described the study to each inpatient once the interviews could commence, and asked them if they would be interested in participating. Provided they were happy for this to occur, the researcher attended the ward to be introduced to the patient by the therapist and a suitable time was negotiated for the first interview to take place, either in a quiet area of the ward, or in the offices at The Flats at the Flinders Medical Centre, one of the sites at which Statewide provides its outpatient therapy. In each instance during the period July – October 2010 where the researcher was available to be introduced to the inpatient at a suitable time during the admission (with the aim that they had settled into the ward environment and experienced at least some of the inpatient therapy by that point), agreement was readily reached that the interview would take place. The interview set does not include every (consecutively admitted) user of the inpatient service during this period; due to restrictions in the researcher's availability and occasional instances of early self-discharge prior to approach regarding the study.

All interviewed patients provided written informed consent, including for the interview to be audio-taped for transcription. At the conclusion of the first interview, participants were reminded that about 6 weeks following their discharge from the inpatient programme, the researcher would contact them again to arrange a time to conduct the follow-up interview. The follow-up interviews took place either in Statewide's offices at the FMC or at Salisbury (depending on which site the client was attending for continued therapy subsequent to discharge) or were conducted via speakerphone. This method of follow-up interviewing proved useful in following up two of the interviewees who lived in and had returned to regional areas, for another two participants who would have struggled to arrange childcare to attend the offices at a time that was mutually viable, and for one participant who had not engaged at all

with outpatient therapy following the admission and with whom it proved particularly difficult to re-establish communication at all. Participants were provided with a $30 Woolworths voucher as an expression of appreciation for the time and inconvenience associated with their engagement with the follow-up interview; these were posted to the interviewees who were not interviewed face to face on the second occasion.

An interview guide was prepared to ensure that the same basic lines of inquiry were pursued with each interviewee; employing some structure facilitates analysis of findings, but consideration must be given to maintaining sensitivity to individual and situational differences (Patton 2002). The guide was employed in a flexible order between individuals, such that avenues of information could be organically and responsively explored as they arose and re-arose during the discussions. There was considerable scope for exploration and probing of answers to illuminate individual perspectives (Patton 2002). Sequences arose from content supplied by the participants; the interviewer decided the order and wording of questions during the course of the interview. The interview guide was also used to an extent to facilitate the flow of information if lulls occurred during a participant's narrative. While techniques such as paraphrasing and reflecting were used to facilitate continued information supply, the interviewer did not supply categorised answer formats within which respondents need frame their answers; the purpose was to capture how the interviewees saw their own world, using their terminology and to capture the complexities of their individual perceptions and experiences.

The present investigation used a 'data-driven' approach rather than a 'theory-driven' approach; no pre determined coding frame had been devised or conceived. The thematic analysis involved searching across the data set of interview transcripts for repeated patterns of meaning among the text and coding these key thoughts or concepts (Hsieh and Shannon 2005). How these themes came to be structured was influenced by an interest throughout the interviews (couched in the form of open-ended questions on broad topics) directed toward each interviewee's personal journey. The interviews were launched with a statement from the researcher that they would like to hear about the "back story" associated with the person's gambling. This led fluidly to most patients volunteering information about another topic of interest; the progression to problem gambling and feelings and behaviours associated with the gambling problem. Few prompts were typically required for patients to describe treatments or strategies relating to their problem gambling that they had tried. Other matters of relevance to and co-occurring with the problem gambling could also be flexibly explored in the context of the person's relationship with gambling. If the conversation had not already turned in that direction, patients were asked open-ended questions relating to how it came to be that they were treated in the inpatient programme and what that had been like. Interviews tended to be concluded after exploring the outcome of "what's next?", as in, what it seemed might be ahead from that point. Not all interviews progressed in precisely that sequence of course, and the progressions were not necessarily linear, with references made to topics already alluded to and re-visiting of topics earlier raised. The follow-up interview commenced with an open-ended inquiry from the researcher into what the experience of being an inpatient in the programme had been like, things they liked about it, and things we could have done better (since among the purposes of the review was to illuminate areas for ongoing service improvement). Often this naturally progressed to the interviewee volunteering information regarding not having recommenced gambling if that was the case. Further

topics explored what it had been like when they went home, whether they had participated in any outpatient treatment or practised tasks, and what they had been up to since leaving hospital.

The interview data were supplemented by a review of the interviewees' FMC and SGTS case notes for information relating to the clinical services provided during hospitalisation and the extent to which Statewide provided treatment to these clients prior to and after the inpatient admission during which they were interviewed.

Findings

Eight users of the inpatient programme were interviewed. They have been assigned pseudonyms; Table 13 shows their basic demographics, the number of days for which they stayed in hospital for the inpatient programme, the number of days spent on the waiting list to be admitted and the number of treatment or assessment sessions that they received from Statewide and from Psychiatry Registrars and/or Consultant Psychiatrists while hospitalised.

TABLE 13 DEMOGRAPHICS, TIME SPENT ON WAITING LIST, DURATION OF STAY IN HOSPITAL, AND NUMBER OF THERAPY SESSIONS RECEIVED BEFORE DURING AND AFTER ADMISSION.

Pseudonym	*Gender*	*Age group (years)*	*Pre-inpt* SGTS therapy (sessions)*	*Waiting list period (days)*	*Length of stay (days)*	*SGTS therapy as inpatient (sessions)*	*Input from psychiatrist during inpt (sessions)*	*Post-inpt SGTS therapy (sessions)*
Janet	Female	60 - 65	15	38	21	14	10	8
Tim	Male	25 - 30	3	64	19	14	11	2
Bev	Female	50 - 55	1	40	12	7	5	7
Rachel	Female	35 - 40	2	55	11	8	5	0
Melanie	Female	25 - 30	12	48	11	9	6	3
Helena	Female	60 - 65	4	32	7	5	3	0
Mandy	Female	35 - 40	1	15	11	7	4	4
Tina	Female	40 - 45	6	14	14	8	6	2

* inpt = inpatient

The age distribution, length of hospitalisation, time spent on the waiting list and prevalence of input from SGTS therapists and psychiatrists is in keeping with the findings of the case file review of the patients treated by the inpatient programme during 2008 and 2009. The gender distribution, however, differs considerably from that in the larger sample; the 53 reviewed patients comprised 31 males (58.5%) and 22 females (41.5%).

In addition to the input from Statewide's therapists and the Psychiatrists in Ward 4G, various other services were provided to the interviewees; Table 14 presents the number and proportion of the interviewees that received these whilst on the ward.

TABLE 14 CLINICAL AND INVESTIGATIVE SERVICES PROVIDED TO THE INTERVIEWED INPATIENTS IN ADDITION TO GAMBLING THERAPY AND PSYCHIATRY.

Clinical and investigative services	*Interviewed inpatients (N = 8)*	
	%	(n)
Physical exam (RMO / Psych Registrar)	87.5	(7)
Psych Social Worker	37.5	(3)
General Medical Dr	12.5	(1)
Pharmacist	12.5	(1)
Routine bloods	37.5	(3)
Thyroid function testing	25.0	(2)
Urine microscopy	12.5	(1)
Palette swab microbiology	12.5	(1)

Each of the interviewed inpatients reported that Electronic Gaming Machines (EGM) were the gambling type associated with their problem. In 7/8 cases, this was the only kind of gambling noted to have been problematic, but for Tina, the problem had moved from Casino games to EGM.

Themes arising from interviews

The analysis of interview data produced 21themes, broadly grouped by whether the theme primarily relates to before, during or after the inpatient treatment; the themes are presented in Figure 13.

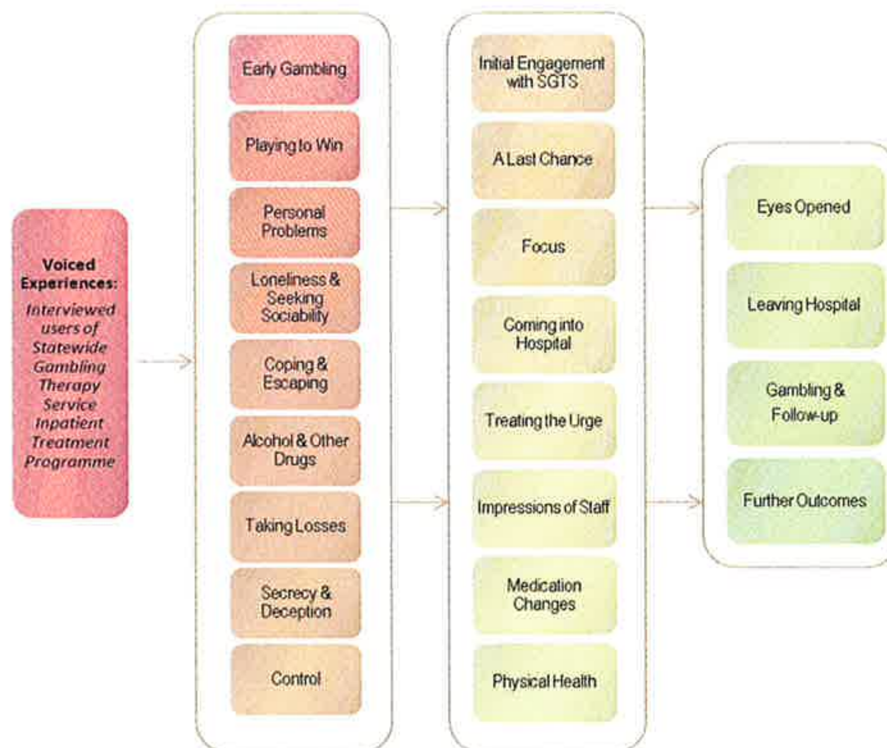


FIGURE 13 VOICED EXPERIENCES OF USERS OF INPATIENT SERVICE: THEMATIC MAP.

The following section of the report presents the experiences of the interviewed inpatients in terms of these themes, where possible illustrated in their own words. Where content from the transcripts contained information that could identify the interviewee, these have been replaced by generic descriptions of the type of information redacted, e.g., specific town or place names have been replaced by [town] or [place] in the quotes presented (Kaiser 2009). Although only one male was interviewed in the present sample, males are not such a clear minority among users of the inpatient service more broadly that including gendered pronouns or using the gendered pseudonym would tend to identify him.

Early Gambling

Users' early experiences of gambling often involved gambling with family, although the family members' gambling behaviour was not typically problematic. Interviewees progressed from gambling with family to doing so with friends, prior to the development of the gambling problem.

> *We all would go and play twice a year. That was before they had pokies in South Australia and it was a real holiday. We would... book the motel out for a whole week and we'd have the children there. Helena*

> *You go in there and you have a chat, and you might have a drink or you might have something to eat and you start playing and then you have these lucky beginner's luck wins and you get interested in a particular game and you tend to feel that you're an expert at that game after a while, and get everyone's perspective and have your own and you have some really, really great times amongst some pain. Anyway, obviously it become a real night out. Tina*

As is the case with Tina's description of gambling at the Casino, interviewees' descriptions of gambling behaviour often focused on the aspects of the experience they found particularly rewarding.

Playing to Win

Attractions held by winning were notable in the narratives of some interviewees. One individual at least in part believed they may be able to address some of her financial problems via a win on the machines, reporting thinking that "my money is not going to cover these bills... and I genuinely do hope to pick some money up" (Tina) when gambling, others such as Helena enjoyed winning money seemingly for other reasons:

The excitement and stimulation associated with winning were also among the attractions:

> *...there's something about the Shogun machine that I liked...mad, loved it... The dollar and the old show gun when it came on and how it paid out and everything. I liked it very much. No I didn't I loved it very much, I loved the excitement and I loved that feeling when I won. Janet*

Personal Problems

The interviewees described a range of life experiences that clustered within the theme of personal problems, whether involving a personal loss or mental health problem or a combination of these. In some cases, neither

gambling nor depressive symptoms had been present prior to the death of a spouse or marriage break-up, and help with regards coping with these traumatic events had not been readily available.

> *... if anybody was there to help me out like when my marriage broke up and that, I don't think I would have turned to pokies. Bev*

In other cases, gambling (and existing depressive symptoms) had worsened in the context of relationship breakdown and bereavement, or gambling had progressed from recreational to problematic at the same time as the onset of severe postnatal depression. Such traumatic experiences may render those who experience them more vulnerable to the urge to avoid and escape; gambling may then be a welcome mechanism for such escape (Taber, McCormick et al. 1987). Themes of escape certainly feature prominently in these three patients' narratives around gambling and are discussed in the sections to follow.

Social anxiety appears to have manifested for one interviewee around the same time they began to gamble on EGM, and the disorders appeared to progress or worsen in tandem, whereas depressive symptoms emerged later, seemingly secondary to increasingly problematic gambling. It was noted, however, that this patient may have a mild bipolar affective disorder, with gambling a feature of the manic phase.

In one case, gambling had commenced at the same time as methamphetamine use; the periods when the most methamphetamine was used were those during which the patient gambled most heavily. This methamphetamine use was partly recreational, and partly self-medicating for a sleep disorder; since receiving treatment for the sleep disorder, the methamphetamine use had ceased and the gambling intensity had lessened (although it remained problematic). Notably, the sleep disorder was reported to have pre-dated both the methamphetamine use and the gambling.

Problematic gambling did not always have clear links to traumatic life events or disorders. While in some cases the aetiology of events and conditions seems reasonably straightforward, for others the relationships between disorders are far more complex and likely interrelated.

Loneliness and Seeking Sociability

This theme relates to the function of gambling in providing avenues for socialising, and the related use of gambling in attempts to address feelings of loneliness. The social aspect had been part of one interviewee's initial attraction to gambling and continues to factor in her attraction for it, with particular reference to her feelings of social isolation:

> *I came to like it because it was somewhere to go where I could be safe, dress up, drink, in good company most of the time... and socialise and go out even if I had no-one to go out with, I could just go straight in there on my own whenever I wanted, which is appealing when you lose contact with friends. Tina*

Feeling lonely was explicitly stated as a reason for gambling in one case: "…can you understand why I would have played the pokies? I was and I still am really lonely" (Janet), and clearly implied by another; Bev recounted that sometimes she would gamble "…instead of coming home to an empty house" after the break-up of her marriage.

While Helena repeatedly denied that she would "play the pokies to socialise", she did note that gambling had played a large role in the out-of-house activities she and her husband had shared prior to their separation. Tim emphasised the solitary nature of his own gambling: "I've never gambled with anyone, I've always gambled by myself", revealing that at least initially they had been associated with a means of socialising that was compatible with his social anxiety.

The attractiveness of EGM gambling for people with concurrent social phobia was also noted by one of Statewide's therapists, who went on to describe the extra utility of the inpatient programme for people with this condition:

> *People that have a gambling addiction often have a social phobia as well. It's a place you can go that you think you're being social and you're actually not; you don't talk to people but there's people around you, and people that have a social phobia and come into a place like 4G where there's people around you, you have to share a room, the whole thing, they have to habituate just because they're in the environment… sometimes they can find it quite difficult but if they can stay the two weeks they habituate to their social phobic as well; so they get a side benefit.*

While feelings of social anxiety had contributed to the development of Tim's gambling problem, he recognised that his gambling and attempts to hide the problem had played a large role in perpetuating and worsening his isolation. While nervous, Tim was confident that these social networks would be available to him on his return home. Similarly, Melanie was aware that she had neglected relationships through prioritising those associated with gambling, but was happy that she still had friends not associated with gambling and was confident that these relationships could be revived.

Intending to re-connect with friends and participate in social activities were among other inpatients' stated plans for when they left hospital. Mandy planned to visit friends for coffee, and Bev looked forward to lunches, coffee and Tupperware parties.

Treatment in 4G had provided Tina with some of the social interaction that she had been craving; she wanted to follow up the friendships she had made and become involved in mental health outpatient groups: "there's meant to be some sort of program that you can join after being in hospital that keeps you centred and sociable". The importance of these social links was emphasised by her fear that these friendships could dissipate: "I get concerned about going home… I just don't want to lose contact with those… really good people and in the real world it's hard to find".

Interviewees noted the loneliness they observed in the EGM players that they saw during venue visits: "They'd still be sitting by themselves and it was pretty sad to see such lonely [people]" (Tim), and "It's sad… because you see all these people that perhaps don't go to bingo anymore" (Bev).

The loneliness apparent in many of these voices reveals a link to another prominent theme among the interviewees' narratives: using gambling as a coping strategy.

Coping and Escaping

The theme of using gambling as a coping strategy to deal with negative life events or emotions was particularly prevalent in the examined narratives. An examination of the language used found gambling described as: "a way of switching off" and "blocking out the world" (Tina); "a substitute", "a cop out", "a coping mechanism" and "an outlet to sort of not to know about things" (Helena); "an outlet" (Melanie); a "break" (Mandy); "my relief" and a means "to run away" (Bev), and "my little escape" (Tim).

Almost all of the inpatients reported that they had gambled as an outlet for negative mood states (often generated by conflict or pressures), including being "cross or upset" (Janet), when "overwhelmed with anger or frustration" (Melanie), or when "miserable… and upset" (Bev), or "anxious and distressed" (Helena).

Mandy reported that gambling provided a means through which she could be alone, and escape from the demands of her children and her husband:

> *I could go there and the kids weren't with me… I didn't have all the other worries of the world on my shoulders at that point and if I was gone an hour well that was an hour's break, if I was gone five hours so be it... I like getting away and finding my own peace… that's why I was doing what I was doing.*

Alternative means of dealing with these mood states and situations were noted among the plans that interviewees had for when they left hospital.

Only one of the eight interviewed inpatients made no reference to gambling being used as a means of responding to negative life events or emotions.

Alcohol and Other Drugs

For two interviewees, intoxicants (in one case alcohol, the other, methamphetamine) were often used in combination with gambling in seeking relief from negative mood states, producing reckless and self destructive thinking and behaviour that they both would later describe as "stupid". Whereas methamphetamine use was strongly linked to the escape function of gambling, Melanie reported that she drank alcohol more so as a secondary response to the negative affect generated by contemplating the effects gambling had had on her life.

Melanie had already given up using methamphetamine (and noted a corresponding reduction in her gambling behaviour), and Helena had recently participated in detoxification from alcohol. In the weeks following her discharge from hospital, Helena returned to drinking and gambling, but was aware that she would probably need to "give up the whole lot" (both drinking and gambling) to have lasting recovery.

Alcohol was described by another interviewee as enhancing the "fun" of gambling and dampening any qualms she may have had in relation to her behaviour, although its role had gradually decreased and gambling had become the dominant activity. Helena also indicated that alcohol increased the likelihood of her spending more than she had wanted to due to lessened self-control; this had provided motivation for detoxing from alcohol prior to receiving inpatient treatment for her gambling problem.

For Melanie, alcohol played little if any role in facilitating the gambling behaviour, whereas her use of amphetamines had powerful associations with her degree of gambling: "my worst time when I lost the most money…and spent the most time there" was during the period in which she was using the drug most heavily: "I know that's because of the use of amphetamines", although she clarified that she did not attribute her gambling problem entirely to amphetamine use. When she received treatment for an underlying sleep disorder and ceased methamphetamine use (the latter likely in part self-medicating for the disorder), she did continue to gamble, but at a lesser intensity than previously.

While intoxicants were not a theme that impacted the majority of interviewees, for the minority (3/8) to whom it applied, substance abuse had played a powerful role in the development and maintenance of their gambling problem.

Taking Losses

In addition to the bereavements and relationship losses that for some interviewees had been associated with the onset of their gambling problem, a strong theme was detected in the inpatients' narratives relating to losses incurred as a result of gambling.

Large sums of money had been lost by all interviewees: "$500 to $1 000 or more some nights" (Janet); "I was changing was big money" (Mandy); "I would go in with all my money and put it in the machine…we're talking $1,000 gone" (Rachel); "'I've lost $1,000; I done all that overtime for that $1,000' and then when I check my internet banking I've lost $2,000 or $3,000" (Tim); "probably $80 or $90,000" (Melanie). Moreover, money that was won on EGM was quickly fed back into machines and lost again.

The losses were felt acutely by two of the interviewees, in relation to what they would have wanted for themselves at this stage in their lives. They also acknowledged that relentlessly focusing on the losses incurred would be counterproductive, given that they were now receiving treatment.

In addition to the financial losses incurred, the gambling problem was also associated with less tangible but still keenly felt losses; lost trust featured prominently among the non-financial damages from gambling and regaining this trust was among the hoped-for (and often achieved) outcomes of treatment. Other interpersonal costs of problem gambling were acknowledged, including consequences that have been incurred by other family members and to relationships. Interviewees' plans for after their inpatient treatment often involved addressing the losses incurred as a result of gambling.

Secrecy and Deception

The theme of secrecy was unanimously expressed; each interviewee reported deceptive behaviour of one form or another in relation to their gambling problem. Some interviewees actively obscured the extent of their gambling via financial deceptions with regards others in the household, whether by downplaying exactly how much had been spent, or redirecting money from the household budget in one way or another. Some avoided gambling at the same venues on sequential days or at places where they were known, passively avoided revealing how bad things had become, or told flat-out lies. One interviewee's family resorted to hiring private investigators to determine that she was in fact gambling.

The secrecy and deception had consequences in the personal lives of the interviewees. Bev's partner had threatened to end the relationship: "he was cross because I lied to him", while secrecy had impacted Tim's ability to establish serious relationships:

> *I suppose I haven't had a serious relationship because it feels like every time a girl gets closer to me, the closer she's getting to my dirty secret. So...I'd push them away and that's what I've done every time, I've pushed them away.*

After the inpatient treatment, Tim found that he was able to be open and honest with a girl he had been seeing for a while, with seemingly good effects in terms of this relationship.

Secrecy regarding the gambling problem translated for some interviewees into the need for secrecy with regards to getting help for it. Tina told her boss she was having an operation during the period she was admitted for the gambling programme, and also felt uncomfortable at the thought of walking to the venue for the exposure task "in case someone saw me and thought 'Oh, I know where she's going'". Melanie had decided not to tell anyone beyond her family that she was getting the inpatient treatment, preferring to leave telling her friends "what I was coming here for until I finished it". Bev struggled to tell her partner about initially seeking help because she'd told so many lies already regarding whether she was or wasn't gambling. Interestingly, Helena's reluctance to disclose to gaming room staff at the venue at which she had typically gambled that she had received treatment (and was for that reason sitting by the machine drinking coffee and not actually gambling the $50 that she had brought with her for the task), was a significant part of the decision to gamble the money, a week after she got home from hospital.

In contrast, Tim found great benefit from being open with his bosses and colleagues about getting the inpatient treatment:

> *I spoke to my big boss and he said... "The only advice I'd give you is to knuckle down for these two weeks and get the most out of it as you can"... (he) rang yesterday... and just asked how I was going... and said they were looking forward to having me back but I take all the time that I need. He's actually gone out and bought a few books on depression and social anxiety just to understand what I'm going through a little bit, so I thought that was pretty special... Because I've hidden this for so long – I've told everyone back at home that I tried to hang myself and it was from the gambling, it was from the depression, it was from hiding everything from everyone. Anyone that's asked they say "What do*

we say while you're in hospital?" and I just say "Just tell them the truth; I'm going to be 100% honest from now on" and my boss told me… "It's really brought heaps out of the woodworks like in the industry that I work in"… he said it's been good to get that side of things out in the open and get people talking about stuff that they're going through.

Control

Losing control

The inpatients were for the most part aware that the way in which they had gambled was to varying degrees out of control. Spending increasing amounts of money was described by Mandy ("it's just gone up, yeah"), Tim ("spending more and more money… how the hell did I lose so much control that I didn't even know how much I was losing?"), Bev ("it got worse as it got down the track"), Rachel ("getting worse and worse"), and Melanie ("everything just snowballed… you don't feel you can get back on top"). Tina referred repeatedly to feeling that her gambling was out of control, as were other aspects of her life.

Several interviewees noted that the uncontrolled gambling was at odds with their self concept as being people who were "in control". Attempts to regain control formed another prominent subtheme of the interviews.

Trying to regain control

Recognising that the gambling was getting beyond their control seemed to be a common element of the interviewees' pathways toward getting treatment. Most of the interviewees had attempted to control their gambling in some way prior to attending Statewide.

Tim's attempt to regain control via barring himself from the hotels in his home town worked for a couple of months but then had the unintended and regrettable consequence of increasing the intensity of his gambling at hotels further away: "instead of losing a couple of hundred here and there I was travelling and I think because I travelled I'd hit them really hard and lose thousands". Moreover, he found that he could still gamble at the local hotels if he found himself there for reasons like a friend's birthday: "I don't think I ever got tapped on the shoulder playing the pokies and asked not to play. I don't know if they just thought they'd never seen me there so it's not a big thing, or if they didn't recognise me or what it was". Similarly, Rachel found other venues to gamble at beyond those from which she had barred herself. Tina's self-barring from the Casino (following a $15 000 "whirlwind" spend on Black Jack) did put an end to her card gambling at that venue, although she soon after shifted her gambling to EGM at local hotels. Bev had not barred herself from venues, but had instituted strategies to limit the amount of money she had access to:

I had everything taken out of my pay, my house payment, insurances, everything taken out and I used to put $50 away in the bank to cover emergencies or the electricity bill. But in the end I took that as well and I often think back and thank God.

Four interviewees reported receiving input from counseling services affiliated with church groups before receiving treatment from Statewide. While each described the experience was pleasant, they had not found it helpful in terms of the gambling problem:

I went to probably three or four of their sessions and it just didn't work. It was about relaxation and I went straight back (to gambling)... He would get you to talk to your body, "Say goodnight to your toes, goodnight to your feet, and feel all the energy release from your body", that wasn't me. (Mandy)

I found that it was nice and supportive there but it just didn't work for me, almost to the point where it became a conversation about the counselor's holiday. (Tina)

It's not that I didn't like going; I didn't find it effective at all. They tell you what you should and shouldn't be doing but I already know that... At the church one I went to they just said – "Here's what you should and shouldn't be doing; here's a budget sheet, basically work it out yourself" and that wasn't helpful. (Melanie)

Although he "tried to stop by speaking to counselors", Tim's engagement with his local (church-affiliated) service had not helped Tim cease gambling (although he continues to derive benefit from attending this service with regards other matters). Similarly, speaking with counselors at the local health service was helpful to Bev in some ways, but not in terms of her gambling.

Over 10 years of therapy from Pokies Anonymous (PA) had not stopped Rachel's gambling, and losing her licence was preventing her attending these meetings.

Helena had received no previous treatment for gambling, but did participate in a detox from alcohol before coming into the FMC.

Initial Engagement with Statewide

I like the Statewide, this particular therapy - I was much more attracted to purely based on the fact there's like scientific meaning or there's research that's gone into it... evidence based, and it seems a lot more structured and you've got your goals to set. (Melanie)

With this, from the first task I was set, I could feel that something was working. (Mandy)

The 8 interviewees had engaged to varying degrees with Statewide's outpatient services prior to admission to inpatient treatment. Janet and Melanie had each attended many sessions of therapy but had made little progress and were not participating in the homework tasks. Fewer sessions had been attended by Tina, who found it difficult to participate in the treatment as an outpatient, as did Tim, who lived in a regional area and had initially been treated by Statewide's outreach services. When the outreach service was ended due to budgetary constraints, Skype telecounselling was arranged through his local counseling service and one session was conducted.

Mandy and Bev received one face to face therapy session each. Bev was assessed via Skype from her regional home but found the medium unsuitable and was put onto the waiting list for the inpatient treatment. It was clear that Mandy's home situation was such that outpatient treatment would be difficult.

It was apparent from a number of narratives that the tasks set early in therapy held little salience for these individuals during attempts at outpatient therapy:

> *...my ego kicked in and I thought I was better than that; I'm not going to sit at home and look at pictures and stuff. (Tim)*

> *...you try and get the urge up by a piece of paper, it doesn't really entice you. (Melanie)*

> *Ben would tell me what he would like done.... the homework tasks... I didn't do most of those tasks that Ben asked me to do. Janet*

Helena had commenced treatment as an outpatient (she was put on the waiting list on her second visit), and had "started to learn about the picture side of things, looking at pictures". For her, the pictures had a profound initial effect, particularly those given to her for the homework task; Helena demonstrated avoidance behaviour by putting them in the boot of the car rather than looking at them:

> *...when Ben gave me the pictures... the thing I said when I walked out the door 'they're not coming in the car with me, I'm going to put them in the boot'. I didn't even want them in the car. That's how phobic I was to even look at those things without getting the urge to gamble.*

Rachel sought the inpatient treatment when she approached Statewide, having been referred by a person from Pokies Anonymous and Nick Xenophon, an Independent Senator for South Australia with a particular interest in EGM, both of whom spoke highly of the inpatient treatment.

A Last Chance

In the descriptions of why they elected to use the inpatient service, a theme was detected in the narratives of most interviewees that it represented a last chance to beat the gambling problem. The inpatient programme was described as a "last ditch effort to kick the habit" (Janet) and in the face of worsening addiction, a "last place to go for help" (Rachel). Bev declared she felt "so lucky to be able to be given that second chance".

Crises had arisen or were imminent for many interviewees:

> *If I don't do this now we're going to end up losing everything. (Bev);*

> *All the areas of my life had a tick in each box that they were a problem... I was at bottom and I was in trouble... I was scared that things were going to go wrong even worse. (Tina)*

Tim related the context of his personal decision to get the hospital based treatment; either commit suicide or do the inpatient treatment:

> *One time where I'd lost a fair bit I went home and I saw my only option was to end my life and hang myself in the shed; I got pretty close to the shed in taking the last step and doing it properly. I decided that I had two options, I could step off that Esky or I could get some help, and I thought this time I'm going to do it properly and do the absolute most I can to get over it. The counselor she said because you can only do it on Skype and because I'd tried it before and thought it wasn't for me that maybe the hospital would have been the best option.*

Melanie described how her father had eventually conveyed to her the seriousness of where she was headed if she didn't stop gambling:

> *My Dad basically put it to me, if I keep gambling I'll end up dead... basically if I was sent out to live on my own without any support... it's a potential that you could go down the track that you can't pay your rent, so you get kicked out of your rental property, you have to sell everything you've got because you continue to waste your money in the pokies. It's only a matter of time before you start excessively using drugs... you're going to end up on your arse on drugs and probably selling it in the end. It's not until he put it to me like that, he goes, "You're going to end up dead" that I think I really knuckled down and actually made sense of it all.*

In some other cases, the perceived threat of losing important relationships was the crisis motivating their seeking help from the inpatient programme.

Focus

A number of interviewees indicated that the inpatient programme provided the opportunity to focus on the treatment in a way that wasn't possible in their home environment:

> *At home I don't have time to sit down and focus on a certain task or whatever, I just haven't got time because babies are crying or the two year old is wanting to climb all over me and it's just constant. At least by being in here I've had time to focus on what I'm supposed to be doing and able to tackle it without all the other distractions. (Mandy)*

Janet was determined to do the inpatient treatment, saying "I'd made up my mind... I was going to put myself away, do what I had to do". The ability to focus was prominent in other inpatients' accounts of why they chose this treatment:

> *I could never have committed to doing the work... on my own with no support and money, trying to pay bills and everything. It just wasn't going to happen for me anyway. [Here], you can focus on the main issue and not be interrupted and, you know, you either do it or you don't but if you don't, well you're wasting everyone's time. So it's, yeah, it's good, very good... I think the pressures at home, all of that was put aside because you were away from that. So instantly there was 100 per cent focus and, yeah, no interruptions and no other stress. (Tina)*

> *It's a time out and it is a time to reflect and actually focus on your problem and your recovery as well. That's what I found. It was like a sort of a mini retreat for me because it was the only time where I felt, "Right, this is what I'm here to do and I'm going to do it" and you've got nowhere else to go, which is a*

> *good thing. You've got no other things, no-one else to answer to whether it's work or friends or anything like that. (Melanie)*

For Helena, rather than going to see her therapist weekly or fortnightly, the inpatient programme presented an opportunity for "really intense" treatment, including "monitoring myself, how I feel every day". She felt that "it's worked very well as you can see on the scores". The value of the intensity of the treatment was echoed by Melanie, who noted that "when you do that really intense treatment, the main thing I can say is it gives you the time to reflect and think and understand how serious the problem actually is... (as an outpatient) it's easy to brush it off". Similarly, Mandy viewed the inpatient treatment as providing a "huge head start on having to do it weekly as an outpatient", as it "gave me the ability to have time and recognise, you know, what I did and what strategies to use, so yeah, it was fantastic for me". Bev found trying to attend to therapy via Skype very difficult, as she was unable to focus on the therapy while babysitting a grandchild.

Coming Into Hospital

Feelings of trepidation with regards to the admission to the inpatient programme were expressed by a couple of users of the programme. Melanie reported feeling "really anxious" about the inpatient programme because she had "never been to hospital as a patient before". Tim shared her general fear regarding the hospitalisation, but was also specifically concerned by the prospect of being treated in a psychiatric ward. Mandy, said that "I was comfortable coming here, yep", saying that "it didn't scare me as much as being put in the ward because I've been in a ward before". She acknowledged that she thought going into a psych ward would bother "you know, sane people" a little.

The unpredictability of when beds would become available meant that for some, although possibly having been on the waiting list for weeks, there may have been little notice of the actual date on which the admission would commence.

Treating the Urge

Among the core components of Statewide's therapy is the concept of *the urge to gamble*, to which they are repeatedly and progressively exposed during treatment. Descriptions of the urge included the following:

> *...that sickening, gut wrenching, but excited urge... gut feeling and the anxiety and the butterflies and all the tightness in the top half, your muscles... adrenalin and excitement and everything going through your body. (Melanie)*

> *I just got very hot very quickly, I overheated a bit... I did feel quite – a little bit unsure about what might happen. (Tina)*

> *I got the feeling that "yeah I'd love to be doing this" but just sat with it, sat down and thought about it, and thought about it, and it did go away... (in) about 25 minutes. (Mandy)*

> *...oh my goodness, you've got like a bit of a surge and you're thinking oh, my hair and my stomach... My hair felt like it was (standing) up on top of my (head)... I felt really hot sitting there and I thought oh my God and within minutes of just sitting there, it just went and I thought wow and I felt so good. (Bev)*

...it was a little bit of butterflies and that. (Helena)

Tim, Janet and Rachel acknowledged having experienced the urge but did not provide descriptions of what it felt like to them. Melanie acknowledged that prior to the inpatient treatment she had not fully understood what the urge meant.

Helena quickly felt that the EGM no longer provoked an urge to gamble: "I can really laugh at it now that I can actually sit in front of a pokie machine with no urge at all". Although initially finding the treatment tasks that followed the elements she had practiced already as an outpatient confronting, Helena reported an extremely rapid habituation to the cues presented. It is possible that the naltrexone that this patient was taking in relation to an alcohol problem had impacted her urge to gamble (Grant and Hartman 2008), although Helena attributed much of her feeling that she no longer wanted to gamble to her reading of the booklet describing how EGM are programmed, and, feeling confident that she had derived sufficient benefit from the programme in one week; she discharged herself at that point and went home.

Impressions of Staff

Interactions with staff involved with the inpatient treatment were almost without exception described in glowing terms. 4G's ward staff were described as "really supportive" (Melanie); "terrific" (Janet); "very good" (Tina and Helena); "really good" (Mandy and Bev); "fantastic" (Tim and Bev) and "absolutely great" (Tim); "wonderful" (Bev and Mandy). These comments tended to have been in relation to nursing staff, although a doctor on the ward was also described as "fantastic" (Mandy). Rachel reported feeling like she had been "treated brilliantly".

Statements regarding Statewide's therapists were more so tied into impressions of the therapy (discussed later), but Sharon (who treated the majority of the interviewees) was noted to have "been excellent" and "really appreciated" (Janet). David Healey provided some therapy to the interviewees and was described as "great" (Tim).

> *Sharon she was really good; she is really, really a top lady, she actually helped me so much and brought me out, it was just good. It really, really was. She's going to keep ringing me and I said I don't want to lose her; she's my – what do you call it – my comfort zone... she's been ringing me once a month".* (Bev)

An appropriate level of support appears to have been provided for the individual patients, who appreciated the nurses' encouragement and assistance in relation to tasks.

The efforts of the various staff involved in their care came to contribute to the interviewees' motivation to complete the treatment:

> *...you either do it or you don't but if you don't, well you're wasting everyone's time. (Tina).*

> *I'd be devastated if I went (gambling). It's not just my time I've wasted, it's yours, everyone's and that's another positive thing that comes out of it is you think all the work... that everyone has put in to*

> *help get me better for me to go and just throw it all away because of some stinking urge, stupid urge. So that's another thing I suppose that stops you from going.* (Melanie).

A small number of less positive comments were made about the occasional nurse who was perceived as "pushy" or "came on too strong", believed by the patients to have been relieving rather than regular staff of 4G.

Medication Changes

While the theme of medication changes was detected in only one quarter of the participants' described experience, it was of very considerable import to those individuals. The admissions for these patients were extended (to 19 and 21 days); the symptoms associated with the rapid discontinuation of antidepressant medications were in both cases clearly debilitating and distressing, and affected participation in the tasks:

> *(I felt) heaps wonky; my decision making was pretty average… (I was) light headed and it was hard to make decisions so it definitely affected the last week of visiting the venues and stuff… I can't drive to the venues; I feel like I'm going to faint all the time… it seems to be getting a lot better now but for the second week I was in here it was pretty bad. (Tim)*

> *…within one or two days they started reducing it… probably the way I was thinking I wasn't reacting very well to it apparently, and I wasn't aware of that… I'm not aware of a lot of things apparently… (it) made me feel quite ill, because it happened so quickly… I didn't really like it at all. (Janet)*

Both patients were aware that the symptoms they experienced were at least in part due to the speed of the discontinuation, and both felt that this had impacted their participation in the therapy, but appreciated the extended hospitalisation arranged to accommodate this. Their views were divided as to whether the discontinuation had been the best thing to do.

Physical Health

The theme of physical health was raised in number of contexts throughout the data set. These references are divided into several subthemes:

- Exercise;
- Attention to physical health; and
- Food

Exercise

Often the therapist would walk with the inpatient up to the Flagstaff hotel in the early phase of venue visiting. These walks are of course a means of attending the venue visits, but are also employed by the therapists as a form of *behavioural activation,* that being "a therapeutic process that emphasizes structured attempts at engendering increases in overt behaviours that are likely to bring the patient into contact with reinforcing environmental contingencies and produce corresponding improvements in thoughts, mood, and overall quality of life" (Hopko, Lejuez et al. 2003). One patient lost some weight during the admission due to doing extra exercise in a form she enjoyed, and happily recounted that she would "go back up the hill (to the hotel) and do the exercise, walking and

thinking, all the positive things" (Bev), seemingly linking the in vivo exposure exercise with the physical exercise of walking to the hotel. Both forms of exercise became additionally reinforcing for this patient via the associations with successful task completion: "I walked up there and each time I walked up there… when I come back down I felt really elated. I'd achieved; every assignment I achieved!" Another patient expressed her view that "I think the walking was a great thing", although she did find herself exhausted at the end of the fortnight from "overdoing it" (Tina), and a third stated that this was a time she had enjoyed with Sharon: "we walked around and talked a lot" (Janet).

Attention to Physical Health During Hospitalisation

Two patients emphasised that they would like more attention to have been paid to their physical health while they were hospitalised. Tina had been looking forward to being "checked from head to toe", having been reportedly assured that this would happen by the Statewide therapist, and were disappointed at not receiving the full medical check that they had anticipated: "I thought it was a good chance to have all of that, blood pressure, cholesterol, maybe check my bowels for bowel cancer, just a good chance to have some of those things checked, but it just hasn't happened". In the follow-up interview this patient noted however that "it didn't happen because there [were] doctors sick and they were understaffed while I was in there". Inadequate engagement with health professionals was an ongoing issue for Tina, who also reported having issues with regards securing a regular General Practitioner.

The other patient (Janet) who reported dissatisfaction with the level of physical care complained that they felt that the concerns they reported were not being taken seriously: "I've got heart problems etcetera, and if I had… short(ness) of breath or anything like that, [staff] made me feel as if I was playing on those things, which I wasn't". It is not clear to what extent or how clearly the patient was reporting these symptoms, however, given that she "didn't want to say anything" about her condition due to her perception that the staff believed her to be "putting things on or over reacting, dramatising things". Moreover, the patient went on to state: "you see I was in a hospital and complaining of a few things, yes… But I kept trying to remind myself that I was in a hospital for a totally different cause. I was there for the gambling, not for my state of health… that's why *I was trying not to complain about being unwell*" (emphasis mine); there seems to have been substantial potential for miscommunication to have occurred in this instance. A number of physical health matters were addressed and/or investigated during admission for this patient. The theme of physical health was raised by another patient, who was happy with the care she had received:

> *Yeah I got antibiotics because I had an abscess in my mouth… and the doctors were great on that as well… I wasn't sure if she was a normal doctor or (just for) mental health - and she was like "no, I'm a ward doctor, I can fix that" and she was fantastic about it. (Mandy)*

This patient also received input from Psychiatry Social Work to discuss appropriate outpatient supports and resources, and the Psychiatry Registrar had arranged and convened a family meeting for the patient during her admission. Mandy was pleased with the holistic approach to her care that had been apparent while she was in 4G:

You know, it wasn't just "this [gambling] is your problem", it was more dealing with the whole situation and they really were interested in you as a person, not just "we're here to fix you for this [gambling] problem".

Food and nutrition

Food was raised as a sub-theme with several variations: the link between eating out and gambling, gambling presenting threats to nutrition, interviewees' appreciation of the meals provided during the inpatient stay, and the role of food in the personally salient plans and achievements.

The nexus between eating out and gambling was raised several times, in particular with reference to EGM in hotels. Janet explained how she commenced playing EGM in this context. Going to the pub for a meal and *not* playing EGM was noted by a number of patients as something that would indicate their having successfully beating their gambling disorder; it was one of Bev's stated plans for the future, and it's achievement was a source of pride for Janet and Tim:

Going ahead, if [partner] and I were to go out for tea I could walk straight in and sit at a table and not worry about them and that's what I want to do. (Bev)

Every Friday night I go to a venue with my friends and we have a meal, and they play. (Janet)

Tim described with surprise the lack of salience that gambling cues held for him after inpatient treatment, in his account of having been to pubs for meals many times since leaving hospital, saying he "never took any notice of the sounds of the pokies even being there... or looked to see where the pokie room was... or anything like that".

The subtheme of gambling posing a threat to physical health via neglect of proper nutrition during times of extreme gambling was disclosed by three interviewees. Melanie described periods of not eating in the context of using drugs and gambling, while Tina reported "eating the best that I can with my finances". Bev described more severe health outcomes:

I got sick... by letting myself down. I wasn't eating. Going out and sitting on a poker machine on weekends, not going home. The poor animals were suffering and the house was suffering and I just didn't care anymore. (Bev)

Several interviewees affirmed their intent to eat more healthily after leaving hospital.

Melanie's account of the gambling behaviour of her then-boyfriend's use of her money to gamble reveals this link as well; Melanie responded eventually by gambling the money (the money required for food) herself:

I thought "Bugger you, you're not gambling with my money, I'll do it, I'll go gamble with my money" and that's sort of where it all started". I remember literally thinking – this is a weird thought but with the dollars, I'm there, "There goes one loaf of bread; there goes our shopping".

Bev's partner eventually restricted her access to credit cards, saying that if she gambled the money set aside for household shopping they would go without. This came to form one of her motivations to "come clean".

Appreciation of the meals and their being provided (described as being "nicer than at [another hospital]", "rewarding" and "demolished") was a theme noted in the narratives of over half of the inpatients (5 individuals), one of whom (Tina) noted that the "really good" food provided on the ward was of much higher quality than that which she had been eating before hospitalisation, to the extent that she reported that her "system went into shock over so much good food and fibre".

Being provided with meals was particularly meaningful for those who would typically be responsible for providing food to others under normal circumstances. Providing food for others formed a significant part of the plans that the interviewees had for themselves for after they were discharged and featured among the behaviours that were proudly described as having replaced the gambling, as well as among the activities that had fallen by the wayside during the gambling problem. Tim described how "I'd have family and friends around and cook a big meal for them but all that had stopped in the last few years" (during the gambling problem), and that he hoped to recommence doing this once the "initial awkwardness" had passed, and Bev reported with pride that she had been baking for family celebrations in the period following her treatment at the FMC, describing cooking and baking as among "passions" in life.

The theme of food was raised several times with regards the eating disorder patients also being treated in 4G: two interviewees highlighted the difference in attitude to food between themselves and the eating disorder patients:

> *I suppose they think as irrationally about food as I thought irrationally about the pokies at one stage. (Melanie).*

The observations regarding the other patients' fear of food and habits of "dissecting their meals…pea by pea" form part of another theme derived from the dataset; the awareness of other patients on the ward.

Eyes Opened

One of the more prevalent themes determined from the inpatients' narratives was that the treatment had "opened their eyes" to things to which they had previously paid little attention. Many interviewees felt that the inpatient stay had provided some insight into the experience of other patients with whom they had shared the Psychiatry Ward, as well as revealing hitherto ignored characteristics of the problem gamblers that they observed at gambling venues (during in vivo exposure tasks and after their treatment concluded).

The other patients on the ward

The stay in Ward 4G was somewhat confronting for a number of the gambling inpatients; three interviewees vocalised this with reference to their eyes being opened:

> *… it's been an eye opener what some people have to go through (Tim);*

> *... it's] been eye opening in terms of other people's problems... sometimes you feel like you're the only one that's got an issue but you're actually not and you realise that when you go to hospital" (Melanie) and;*

> *[it] was an eye opener to me... that in the hospital we're all different with different problems but we're all somehow linked... everyone pulls together, whether it's OCD or eating or gambling or whatever, and that support was just unbelievable" (Tina).*

One patient noted that the inpatient experience had been possibly less confronting for her than it may be for some since she had had previous mental health admissions.

For the most part, the interviewees expressed compassion for the other people staying in ward 4G, the majority of whom are hospitalised for the treatment of eating disorders. The other inpatients of 4G were variously described as "some of the most beautiful people that I've ever met in my life" (Tim), and "people that just don't judge you at all; we all talk together and get along like a house on fire" (Tina). The notion that the other patients in 4G were non-judgmental of the gambling inpatients was echoed by Bev.

Occasionally there occurred some overlap between the inpatient stay of two gambling inpatients. One of these patients described the other as "a bit of a pain", but expressed compassion for the other patients on the ward. Another inpatient stated that they would have preferred there be more gamblers being treated simultaneously:

> *Being the only one that had a gambling issue, because everyone else had mental issues and anorexic issues, so there was no-one to really talk to but otherwise it would be nice if you were all there for the same reason... I think you would have [found it useful if there was another gambler], I think you would have, like having actually group sessions; just to see other people there that are there for the same reason that you are. (Rachel)*

Although almost the exact opposite view was expressed by another inpatient:

> *... it was probably better that you don't have someone to relate to... often I did used to gamble on my own but I often gambled with other people that were gamblers as well and you just tend to feed off each other in a negative way I think... if you (were) in the same room as another gambler I don't think it would be a positive thing... I was glad I was the only one there. (Melanie)*

Having two gambling inpatient simultaneously presented a considerable workload for the treating SGTS therapist, but they tended to be of the view it was overall positive:

> *they discuss the tasks and they can learn from each other, especially if one is further ahead and they help the newer person, and the cases that I've had it's worked quite well.... I've got to allocate a lot more time to talk to two different people, and they both need extra time, because they wouldn't be in hospital if they could manage. (SGTS Therapist)*

Problem gambling viewed from the outside

Phrases including the term "eye opening" were also very often used in connection with the theme of being aware of the other gamblers in the venues that were attended as part of the in vivo exposure. Each of the four interviewees who raised this theme noted that prior to receiving treatment they would have been oblivious to the other venue attendees.

> *... going to a pub and looking and just seeing how I used to be and that really hit inside. I was looking at it from another person's view... I was looking at it from – I don't know how to describe it – I was looking at it from another point of view, like I was seeing these people playing pokies and that used to be me, and by doing the program I could sit back and watch... (through) different sorts of eyes... seeing these little things, how I used to be in the pub. I couldn't see that before. (Rachel)*

> *I see the same people there every day – I tried to get there first thing in the morning so there wouldn't be many people there and I'd be waiting for the doors to open, the same people each day. I've never really taken any notice of that so I think my eyes were open to that and a lot of older people were doing it. I'd do it three times a day I'd go to the venue; I'd see them waiting for the door to open and then you'd go back in the afternoon and they'd still be there; you go there that night and they'd still be there; they'd still be sitting on the same machine or they'd still be sitting by themselves and it was pretty sad to see such lonely (people). (Tim)*

> *...your eyes do open up and it's sad in one way because you see all these people that perhaps don't go to bingo anymore... all these people that are sitting up there, like when I went back up in the afternoon the same people were there and the next time I went up... just to see people that were there that morning, they were still there in the afternoon... I'm just thinking God, at one stage that was me... I wouldn't go back there the next day but I'd make sure that I was back every other, third or whatever. (Bev)*

> *...I did feel quite – a little bit unsure about what might happen and just aware of everything around me and watching anxiety in the players – that freaked me out a bit – one in particular... I would have always been tied up in doing what I was doing and not seeing that at all, as a player... Just the constant stress that his body was under and the fidgeting and his feet jumping around and his head and his hands and very anxious, yep, and losing as well... then the very same hour another guy came in and started playing my favourite ShoGun game and hitting maximum, maximum bet you can... it was just a really good way of seeing how quick $900 can be lost... he had his time where he went up $500 but then it just started going down, and down, and down... he was very, just very concentrating, zoned in on what he was doing or zoned on something or switched off, one or the other. (Tina)*

While therapists instruct the patients not to distract themselves from their urge via looking at the other patients, their narratives nevertheless reveal the strong impressions left by their observations of gamblers in the venue. Tim went on to admit that when he was going to the pokies and the urge was there, "I just don't think I cared enough to take any notice".

Leaving Hospital

A strong theme detected in the interviews was the fear that the interviewees felt regarding the prospect of returning home after being treated. Five individuals explicitly expressed this sentiment, stating variously that going home was:

> *"really scary... I didn't believe that I would be able to continue through with what I had learnt in hospital and, you know, what if I do stuff up? Then the world is going to fall apart again" (Mandy);*
>
> *"scary… I was quite scared to go home because I (thought I) was going to fail" (Rachel);*
>
> *"I get concerned... I don't want to lose contact with those people" (Tina);*
>
> *"I'm frightened of going home and something happening and me turning around (to gambling)" (Janet); and*
>
> *"I've gone from shitting myself coming in here to shitting myself going home" (Tim).*

In two of these cases, the interviewee's fears were to an extent justified; they had gambled (albeit minimally) on returning home. Notably, the interviewee who reported the most significant return to gambling expressed no concerns regarding returning home, having more so declared disinterest in gambling.

As a matter of course, Statewide arranges outpatient follow-up with patients as they are concluding their inpatient treatment:

> *They all have to have an appointment within seven days after (leaving hospital) and their treating therapist in the community will decide how much further they need to go. The ones that I've treated because they've all gone out, been taking money, reached the end of the exposure program, usually …one or two weeks… so long as they're doing their goal (practicing the venue visits in the community with money, in the venue at which they'd typically gamble and others) and they do their goal for a week and they're well and everything is fine, then I would put them into follow up… I don't' ask them to go in every day but at least three or four times a week, because it's the repetition of it that helps the habituation, so they have to habituate. (SGTS Therapist).*

The therapist acknowledged that it can be difficult to know whether patients are doing the tasks when they leave hospital; some become largely uncontactable, and it is obviously not possible to independently verify whether they are or aren't doing the tasks as reported. The powerful nature of the inpatient programme can itself pose an issue in terms of convincing patients to continue with the tasks once they leave hospital:

> *By the time they've finished the Inpatient, (they often feel that) because they've habituated already – (they) feel like it's over and find it more difficult to do the homework then. And also because of spontaneous recovery, I talk to them about the first times when they go – when they're out of the hospital to do it with no money and see if there's any difference in the intensity of their reactions and their responses when they go. So they wouldn't go out straight from hospital and do the same task, they would go back a couple of steps, just to see if there's going to be any difference. (SGTS Therapist).*

Gambling and Follow-up with SGTS

Five of the eight interviewees had not gambled when they were re-interviewed approximately 6 weeks after discharge, and 6/8 had engaged with outpatient follow-up with Statewide.

Tim had had two sessions of SGTS outpatient therapy via conference calls, and continued to see the counselor from the local church-affiliated service provider. He had not gambled since his treatment. Bev continues to participate in outpatient treatment via telephone sessions with her therapist, and has not gambled. Janet returned for several sessions of outpatient treatment, attended a support group run by Statewide and had been practicing venue visiting and implemented the cash restriction as suggested by her therapist; she had not gambled at all since leaving hospital. Similarly, Melanie had engaged with outpatient treatment as she had intended, had been practicing venue visits and implemented the recommended cash restriction:

> *I like coming back and telling (my therapist) I haven't played; I get excited… and that's rewarding for me as well because finally I feel like she can be… proud of me as well.*

Rachel had had no direct contact with Statewide in the four months subsequent to her leaving hospital, attributed to a combination of her therapist being pregnant and off sick, and her own children being sick. She noted that although Statewide's therapists had tried to get her to return to see them, "I can always speak to them over the phone". She reported not gambling at all since leaving hospital, and had done some venue visiting, although not at her local venue as she had barred herself previously from there.

One patient had gambled on one occasion following discharge, but had not told their therapist during the subsequent outpatient session (although they planned to do so at the one following):

> *I looked at all my bills and, from the money I had, which was not much, to what I had to pay overwhelmed me and I just grabbed a big – you know, I grabbed a few hundred dollars and just lost it outright and felt horrible… I actually didn't (tell my therapist) – for some reason I wanted to shut it out at the time. Probably I felt like I didn't want to disappoint him and I was trying to forget it myself. I was just trying to like… forget what I'd done. (Tina)*

This client immediately implemented the instruction given by Statewide's therapists to restrict her access to cash in the weeks subsequent to the return home by handing over her key card to a friend.

Mandy had gambled twice in the weeks subsequent to leaving hospital "not a huge amount, but I did slip up". She attributed this to the "stresses of the house and not being able to have my quiet time to try and deal with things". She had told her therapist about the lapses immediately (having readily engaged in outpatient followup); together they worked out a plan for her to get back on track:

> *I went back a few steps and started watching the DVDs and dealing with the urges again and, yeah just going back a few steps and moving slowly, to building slowly up to a point where I was able to deal with things again… I'm back doing the venue visits now and just going in and sitting and listening to sounds. I'm going with no money so that helps and I'm doing quite well at that… (my therapist) was*

> *very supportive, you know like getting me to look at the positives of how far I have come, not the negative of "oh you did this", if you know what I mean, so that was really good.*

Also, she negotiated with her husband to co-operate with some aspects of household management such that she did not have access to money. Mandy found it difficult to attend outpatient follow-up, but had attended 4 sessions in the following few months.

While Helena had intended to maintain outpatient contact with her therapist: "I'd like to keep in touch with him once a month for a couple of months… I know that I can ring him if I get into strife or anything like that", this did not ultimately transpire beyond one phone call in the weeks following discharge, during which she told her therapist she had resumed regular gambling. She appreciated his validation of her feelings with regards the particular power of gambling cues associated with the venue at which she usually gambled (relative to those that the venue visits could elicit):

> *… you go (to the Flagstaff) and hear the machines and be in a venue, it's not the venue that you usually go to. So that's the only drawback and people are not – they are in unfamiliar territory, so… it's not a trigger.*

The intensity of the gambling was reported to have reduced relative to before the treatment and she felt differently about gambling now:

> *I'm not sort of into thinking that I'm actually going to win, whereas before it was the sort of going there and expecting to win and all that sort of thing. So it's been really, really helpful.*

Urges were still being experienced by Rachel and Melanie but at lower intensity, and they were readily managed. Tina said she "hadn't really had the urge because I haven't really had an opportunity yet either".

Further Outcomes

In addition to the impacts on gambling behaviour, the interviewees reported that the treatment had had other outcomes for their lives, including enhanced self confidence (Rachel and Melanie), and improved mood:

> *… so much more upbeat and just positive about things (Melanie);*
>
> *I'm so much happier with myself… and I'm not stressing, I'm not depressed as much (Rachel);*
>
> *It's… made me feel totally different about myself and I'm happier, healthier (Mandy);*
>
> *…better thanks, better… just better about working, feeling better at work (Tina); and*
>
> *I feel 10 times lighter than I did before (Bev)*

Many interviewees noted that with money that had previously been spent on gambling was now being used for personal purchases that provided much personal pleasure: "I've been buying some roses for my garden, that's a

present for me" (Bev); "buying clothes" (Melanie); "I'm buying clothes for my kids; I'm buying myself shoes"; (Rachel).

Tina had been working a great deal since leaving hospital, and had not had time to do much else. Janet described doing: "Not a lot, nothing much. I just sort of spend more time home". Nevertheless, she had ceased drinking alcohol subsequent to the inpatient treatment:

> *I don't even drink alcohol (when I go out for a meal). Champagne, I've stopped all of that. Something's happened to me... A real change. The champagne, I've tried that, I can't even touch it now. It tastes terrible. So something has happened.*

Melanie said that there was now "so much more like a positive energy around the house", and even more profound domestic changes had occurred for Mandy: "me doing this has sort of changed the whole attitude of the house"; "everything is pretty calm compared with what it was". The children had been better behaved, possibly because they didn't need to struggle for "mum's attention", and are "proud of me that I went and did it and that I continue to do it". Her husband had also been "realising that he has to help more around the house and what triggers me off... he's been working with me through it and I feel really supported by him... He got to realise how hard it all was (looking after the household while she was in hospital). Maybe that was it". Janet did not experience this: "None of them have said 'good on you mum' or anything... they've said nothing".

The overall impacts of the treatment could be described as life changing:

> *It's a huge impact on my life... It's turned my whole life around. (Rachel)*
>
> *It's definitely given me a new direction in life. (Mandy)*
>
> *Everything about it, it was a massive turning point in my life. (Tim)*

Discussion

The identified themes relating to early gambling experiences and life events associated with deepening involvement with gambling, such as feelings of loss, conflict in interpersonal relationships and attempts to "fill the void" have previously been reported in qualitative investigations of problem gambling (Doiron and Mazer 2001). Similarly, gambling as a means of escape or as a coping strategy is often detected among problem gamblers; a recent qualitative investigation found this to be a prime characteristic of the gambling experience that facilitated the continuation of problem gambling among the interviewed sample (Wood and Griffiths 2007). Understanding these risk factors, and others such as comorbid psychological disorders have been highlighted in the literature as important in terms of tailoring treatment approaches to best suit the needs of those seeking help (Johansson, Grant et al. 2009).

Gambling related harms such as financial losses, relationship issues and negative emotions arising from problematic gambling are among the most reliably reported motivators for seeking help among problem gamblers (Suurvali, Hodgins et al. 2010); this is also consistent with the findings of the present thematic analysis of the interviewed inpatients' narratives. Suurvali and colleagues' recent review of the empirical literature concerning help-seeking also notes the importance of individuals having made a "conscious decision" to stop gambling (in terms of the success or otherwise of the attempt). Voluntarily admitting oneself to an inpatient treatment programme would itself tend to imply such a conscious decision, and the personal meanings revealed during the interviews described within the themes of *Focus* and *A last chance* certainly support the notion that a number of these individuals viewed the inpatient treatment as tied to a conscious and deliberate dedication to sorting out their problem. While the group is too small to make definitive statements with regards to factors that may be predictive of good outcomes, the present findings tend to suggest that the individuals most focused on fully participating in the therapy and who saw it as most critical for their lives were those who benefited most from it, including where "slip-ups" had occurred and had been followed by renewed adherence to the recommendations.

The goal of the interview component, being to represent the lived experiences of a subset of inpatients in terms of their gambling problem, participation in the inpatient programme and the subsequent happenings, has been achieved and supplies the platform for further qualitative investigation in this area. The number of interviews conducted is at present insufficient for the application of a more demanding qualitative approach such as grounded theory and associated model generation, but a viable extension of the research would include conducting further interviews and building on the codes and themes generated in the present study to ultimately devise a theoretical and data-driven model that goes some way to describing or even predicting the experience of subtypes of inpatients, potentially having identified groups of individuals who approach and experience the programme differently. The nature of these experiential pathways to and through the inpatient programme could potentially be depicted within an integrated model such as the Pathways Model (Blaszczynski and Nower 2002), wherein a model was devised to describe the aetiological pathways relevant to the development of problem gambler subtypes. Moreover, an extension of the current set of interviews and analyses would enable the exploration of factors relevant to aspects of the treatment itself that may influence treatment outcomes for some patients. For example, recent research into physical exercise as an adjuvant therapy for patients undergoing CBT for problem gambling and comorbidities has found preliminary evidence that the inclusion of exercise may improve treatment efficacy (Angelo, Tavares et al. 2009); the present finding that the behavioural activation component of the inpatient treatment comprised a valued element of a number of inpatients' experience lends support to further exploration of this aspect of the care provided.

In conclusion, the interview component of the present research programme allowed for the capture of a number of elements of the inpatients' experience that escape more structured data collection techniques. The following excerpts from the during-admission and post-admission interviews with one patient highlight a particularly personal cost of gambling problem that had been incurred to this patient, and the outcome of Statewide's inpatient treatment service:

Another thing, I love to cook and there's a good little country – you know [Town named]? Yeah, there's a good little butcher shop there. Every single time I've been to Adelaide it's been by myself and I'll say "I'm going to go to [Town] and get some meat to take home". I'd go into [this town], play the pokies and lose $300 or $400 and leave and had never been in the [Town] butcher shop. I'd be so disappointed and so sad and just more disappointed that I didn't have the control over myself. So that's one thing I'm going to do when I leave here, stop and – this doesn't sound like much... But to me yeah it will be a nice feeling to drive out with the meat and to have a little bit of control in my life. It's definitely a brighter future now than what it was when I was in the shed that night. (Tim, during treatment)

K: I meant to ask you, you said when we last spoke that you wanted to make sure that you went to the butcher in [Town] on the way back up to [home].
Yep.
K: Did you go?
I certainly did.
K: Awesome. That's excellent.
Yeah it was funny. When I left there, it brought a tear in my eye. I knew I would because how stupid a thing it was and how much it meant to me but I was laughing my head off, thinking how stupid I am. (Tim, after treatment).

DATA SYNTHESIS

Statewide Gambling Therapy Service's inpatient treatment programme provides a means of delivering intensive treatment for problem gambling to a range of users who would struggle to obtain comparable benefits from treatment in the community. Psychological disorders that co-exist with problem gambling can complicate effective engagement with outpatient therapy; the inpatient service provides an environment in which people with these conditions can be supported by specialists in mental illness, during their stay in the Psychiatry ward of the Flinders Medical Centre, while they participate in Statewide's cognitive behaviour therapy for problem gambling. For other users, the need arises as a result of geographical location; Statewide is unable to provide in-person gambling therapy in many regional areas and has been obliged in recent years to further scale back its rural outreach services for budgetary reasons; the inpatient service enables clients from regional areas to access treatment from which they would otherwise be excluded. Other aspects of some problem gamblers' home environments (such as interpersonal conflicts and responsibilities associated with child rearing) can interfere with effective outpatient treatment participation, as can the more manifestly problematic circumstances where problem gamblers do not actually have stable accommodation; it is hard to imagine practicing the homework exposure tasks involved in outpatient treatment in the absence of appropriate (or any) accommodation in which to practice. In these circumstances among others, the inpatient treatment represents a unique opportunity to engage with therapy for problem gambling.

Both the case file review and interview datasets reveal that the users of the inpatient service (for the most part) suffer considerable rates of co-occurring psychological disorders, and in many cases, concurrent physiological ailments. The combinations of disorders diagnosed both historically and with relevance to the reviewed admission highlight the complexity of these clinical presentations and the clear need for treatment options that can appropriately address these needs. Whilst hospitalised, the users of the inpatient therapy for the most part received comprehensive assessment, investigation and treatment for co-existing psychological and physical health conditions, in addition to an intensive treatment regime focused on their gambling. In many cases the sheer complexity of their clinical presentation was itself a clear demonstration of their need for inpatient treatment.

The findings of the present review with regards to clinical presentations and reasons for admission are extremely consistent with the overviews of patient characteristics warranting inpatient treatment as described by Associate Professor Michael Baigent, consulting psychiatrist for the gambling programme:

> *There are people who are either not responding to outpatient treatment or who can't access outpatient treatment because they live in the country and there's no therapist there regularly enough for them to see them. So those people, the latter group, would be predominantly people from rural areas, country isolated regions. Their problems are often a little bit more straightforward than the people who haven't succeeded with outpatient treatment. The people who don't succeed with outpatient treatment and therefore require inpatient management are the people that are usually complicated and complex and have a number of co-morbidities and a standard one is a drug and alcohol co-morbidity. Typically alcohol, often benzodiazepines as well but also cannabis and on occasions amphetamines. The other co-morbidity is another psychiatric disorder and there's a large number of people who have a social*

anxiety disorder, depression and we do see a number of people who have got a diagnosis of a psychotic illness such as schizophrenia or bipolar disorder also attending. When that happens we focus on the gambling disorder but we also have to pay attention to those other conditions and make sure they're stable because for the treatment to be effective, the person needs to be relatively stable from the other conditions so we're often involved with detoxifying them or reviewing the medication, making sure they are stable... There's another group of people that we see who have medical complications and medical problems and cardiac liver complications and problems sometimes, neurological disorders and we need to obviously make sure that they're attended to and looked after. (A/Prof Baigent, Consultant Psychiatrist).

Many among the users of the inpatient service were found to experience life situations involving considerable economic and social pressures. Nearly 10% lacked stable accommodation and over 70% were outside the paid workforce. The finding that the inpatient sample was less likely to be employed than the outpatient group was unsurprising given the range and severity of co-morbid conditions among the inpatient sample, and the practicalities associated with employed persons having to take time off work (sometimes at short notice when a bed became available) to attend the programme. Lower rates of employment among inpatients (relative to recipients of outpatient treatment for problem gambling) have been noted in previous research (Ladouceur, Sylvain et al. 2006). That the inpatients appear to have been gambling for slightly longer than those receiving outpatient treatment from Statewide is also consistent with previous research in this area, as was the finding that many sought inpatient treatment in the context of outpatient treatment not having worked for them. Moreover, the stated need among many of the interviewees to concentrate solely on their gambling problem, as well as their seeking to engage in a process they had identified as their "last chance" echoed the findings of recent research in this field (Ladouceur, Sylvain et al. 2006).

Increases in gambling associated with significant life issues (such as loss of partner-type relationship or the death of someone close) and related negative emotions have previously been described, as has gambling as a means of escaping conflict (in the home and elsewhere) and life hassles (Thomas, Sullivan et al. 2009). Gambling as a coping mechanism or means of escaping negative situations or emotions was among the most prominent themes among the interviewees' narratives. Evidence that the themes identified during the analysis of interview transcripts were also relevant to the group reviewed via case files was found in illustrations such as a quote recorded in nursing notes regarding a patient's reflections on the losses he had incurred subsequent to gambling. He had sold his house and belongings to gamble and was now homeless, and spoke about the people he saw at the TAB:

I see them when I'm gambling, they go home to their houses and I go back to my tent with no money and I'm tired of it.

Problem gambling is associated with a broad range of poor health outcomes (Desai, Desai et al. 2007). Considerable rates of physical ill health were detected among this sample; in many (but not all) cases, these disorders were lifestyle-related. Temporal relationships are hard to establish in cross sectional research such as the present review, and it is possible to suggest several explanations for the rates of ill health in this sample. Individuals

with poor health may be attracted to gambling as a recreational activity due to its typically sedentary nature and gambling may contribute in various ways to the development of ill health, including the extended periods of sitting involved and the co-existence of opportunities to gamble and opportunities to drink alcohol and (prior to the introduction of smoking bans in licensed premises) to smoke (Desai, Desai et al. 2007). High rates of both drinking and smoking are found in this and published descriptions of problem gamblers, and the use of alcohol and other drugs and the role of this in the facilitation of gambling emerged as a theme during the interview component of the research.

Examples of the subtheme concerning gambling's role in compromising physical health via nutrition were also evident among the individuals reviewed in the case file audit. These included people who disclosed that their severe problems with digestion and constipation were the result of having used all of the money they could access for gambling, subsequently existing on tinned food sourced from charities, and several who had gone hungry on account of having no money left for food. Around one quarter of the reviewed sample were treated with vitamin and mineral supplements to address nutritional deficits, and in some cases physical health had been compromised by non-compliance with prescribed medication due to prioritising gambling over spending money on prescriptions.

Whether some of the described behaviours contributing to ill health are linked to gambling via behavioural traits such as impulsivity or through genetic predisposition (see (Blaszczynski and Nower 2002) for a review), and regardless of the underlying mechanism(s) by which these individuals became unwell, a considerable minority (over one third) of the sample had physical health problems warranting a diagnosis at discharge stating that one or more such disorders had affected their care during an admission intended for the treatment of their gambling disorder (i.e., not an occasion of care with a physical health-care focus). This is consistent with previous research findings that problem gamblers experience poorer health than recreational gamblers, who are themselves less healthy than non-gambling counterparts (Desai, Desai et al. 2007). The inpatient programme is locally unique in its capacity to address some of these problems. Large scale national research has demonstrated that making improvements to individuals' physical health, particularly where several co-morbid physical health problems exist, is likely to have a considerable positive impact on self-perceived quality of life (Walker 2007). If problem gambling is exacerbated to some extent by levels of distress as is suggested by the literature (e.g. (Steel and Blaszczynski 1996) this feature of the programme potentially presents additional value for its users via indirectly impacting users' gambling related problems.

Among well established risk factors for problem gambling are comorbid psychological disorders, including substance-related disorders (Johansson, Grant et al. 2009). As has been described, rates of comorbid psychological disorders were high among the present sample, particularly affective and substance-related conditions. Although some clues as to the sequence of disorders can be found among the psychiatric histories recorded in case files, using cross-sectional research methods like the case file review it is difficult to elucidate whether affective disorders in particular were primary or secondary to gambling, nor whether suicidality was independent of or in response to consequences of the gambling disorder. For example, some problem gamblers

may gamble to escape from depression while others may suffer depression as a result of financial and psychological distress resulting from gambling (McCormick, Russo et al. 1984). Moreover, while it is in theory possible that gambling behaviour and urges that incite excitement may kindle mania (especially for those vulnerable to the development of manic disorder), it is by far more common that gambling symptoms are secondary to the underlying manic episode (Kim, Grant et al. 2006). Most published studies in this area are similarly cross-sectional and do not reveal the relationships between the disorders, although determining whether conditions are primary, secondary or co-occurring has significant research and clinical implications (Kim, Grant et al. 2006). The interviews, with their scope for exploration, are a far better means of eliciting the kinds of information needed to guide understanding of the likely aetiological relationships between disorders. Irrespective of aetiology, however, monitoring and treating such comorbid disorders are clearly among the benefits of the Inpatient Programme, particularly since among the potential sequelae of both problem gambling and these psychological disorders is suicidality.

The intuitive nexus between suicidality and problem gambling can be found among the crises, losses and shame associated with the financial, relationship and legal consequences of pathological gambling (Battersby, Tolchard et al. 2006), and rates of past and present suicidal thinking were high among the reviewed inpatients. Tragic illustrations of the suicidal despair brought about by gambling problems are evident in examples such as the inpatient whose admission was preceded by his acute recovery from a near fatal overdose, stated by himself (and recorded in the notes) as being an anguished response to what he then saw as the hopelessness of his gambling problem and the attendant financial and relationship crises. The young man interviewed during his admission also described his crisis driven decision to seek help from the inpatient service, selected over his other option of taking his own life:

> *One time where I'd lost a fair bit I went home and I saw my only option was to end my life and hang myself in the shed; I got pretty close to the shed in taking the last step and doing it properly. I decided that I had two options, I could step off that Esky or I could get some help, and I thought this time I'm going to do it properly and do the absolute most I can to get over it. The counselor she said because you can only do it on Skype and because I'd tried it before and thought it wasn't for me that maybe the hospital would have been the best option.*

The very high prevalence of psychiatric and substance-related comorbidities among the reviewed inpatients is consistent with indications from published research revealing that users of inpatient treatment tend to have more severe mental health problems than those receiving outpatient services (Ladouceur, Sylvain et al. 2006). Since the outpatient group was not sampled, it is beyond the scope of the present review to present a sophisticated comparison; further research is presently being planned to undertake this and other extensions to the present findings. While not subject to the same degree of psychiatric history investigation as is performed during the ward psychiatrists' intake reviews, Statewide's therapists explore all clients' psychosocial history using techniques based on the Maudsley interview model at the commencement of therapy. This information can be gathered from case files of the broader group of Statewide's clients in order to compare the inpatients' and outpatients' characteristics, likely using a matched control research design.

Follow-up data collection from individuals who have left treatment is often difficult; missing data is an almost ever-present problem in longitudinal research. Relatively simple methods of data depiction can be employed to illustrate quantitative outcomes associated with therapy in a basic pre- and post- treatment fashion, provided that the apparent relationships are not overstated given the research design, data quality and analyses performed, and that claims of causality are not made. However, when examining the effects of treatment over longer periods (where issues of missing data and unbalanced time points render such approaches inappropriate), more sophisticated statistical analyses such as the linear mixed modelling approach provide an opportunity to quantify change over time of continuous outcome measures such as the VGS (as a gambling screen) and the K10 and WSAS (to indicate problems caused by gambling). This approach accommodates the tendency for repeated-measures data to be correlated within subjects, uses all the available data on each subject (even where collected at non-uniform intervals), and is unaffected by randomly missing data, among other advantages over more traditional analyses (Gueorguieva and Krystal 2004). Since the present research uses an observational design (as opposed to an experimental protocol such as a randomised controlled trial), the findings should be considered as exploratory, since they are approximating (modelling) trends rather than providing "proof" of the effects of the intervention, even though "p-values" are generated by the analyses, which could give an unintended impression of depicting reliably demonstrated (as opposed to predicted) findings.

During the period relevant to the present review and until very recently, scale total data was calculated by Statewide's therapists and administrative staff from the paper and pencil-based questionnaires filled in by clients; those totals were entered into the electronic database which is the source of data for research applications such as the quantitative component of the present review. Where the instance of individual item non-response within any survey exceeded tolerable limits stipulated by the survey creators for the calculation of scale totals, instances of missing scale total data were caused. Statewide's new database system is constructed such that individual item responses are the level of inputted data; the database generates viewable scale totals according to scoring protocols which can be used for clinical feedback and case file summaries. With respect to research applications of this data however, the inputting of individual items will allow the research team to construct data files using appropriate imputation methods to compensate for missing item-level data such that the data file need not be impacted to such extents by missingness (Brick and Kalton 1996); while techniques robust to missing data exist as earlier described, the quality and reliability of research findings can only be enhanced by more rigorously complete datasets.

From the present sample of 8 individuals, it can be seen that although Statewide's usual channels of contact failed to elicit response or data return from two clients, the outcomes for these individuals were quite different; one reported not gambling at all since leaving the inpatient treatment, whereas the other had returned to gambling, albeit at an intensity substantially lower than that with which they had gambled prior to treatment; blanket assumptions clearly cannot be made as to the fate of individuals "lost to follow-up". Moreover, while sample size of 8 was chosen to accommodate there being a small number of clients becoming potentially lost to follow-up, all 8 interviewed during their inpatient stay were also re-interviewed after discharge; this suggests perhaps that clients may be more willing

to engage in the kind of follow-up offered in the present research, that being a semi-structured interview with a person who they had met during their treatment (coupled with reasonably assertive efforts to re-contact), rather than the more typical forms of follow-up such as requesting questionnaire completion.

The convergence of findings within the review is reassuring in terms of the likely overall veracity of the information presented (providing a kind of internal reliability and validity check for the various components of the research), as is the overall concurrence of findings with those in the published literature. These findings are an illustration of the very challenging circumstances faced by many people with gambling problems, and the need for treatment services that are capable of helping people with these kinds of needs. While most of Statewide's clients are able to derive considerable benefit from their treatment in the community, this is not the case for all. The cognitive behavioural therapy is effective in both settings in terms of reducing problem gambling and lowering levels of psychological distress, but there is a clear need for this specific service with its unusual capacity to assist people with the most complex clinical presentations as well as those who more simply require the space and focus it affords, such that these people can dedicate themselves to participating in and deriving benefit from Statewide's therapy for problem gamblers.

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APPENDICES

TABLE 15 NON-PSYCHOTROPIC MEDICATIONS / AGENTS ADMINISTERED DURING HOSPITALISATION.

Other Medication Type	*Proportion of inpatients* %*	*(n)*
Analgesic (any)	52.8	(28)
Analgesic (moderate to strong)	15.1	(8)
Anti-alcohol abuse	3.8	(2)
Anti-anginal	1.9	(1)
Antibiotic	1.9	(1)
Anti-coagulant	11.3	(6)
Anti-constipation agent	13.2	(7)
Antiemetic	5.7	(3)
Antihistamine	7.5	(4)
Anti-hyperglycemic	5.7	(3)
Anti-hyperlipidemic	15.1	(8)
Anti-hypertensive	17.0	(9)
Anti-inflammatory	18.9	(10)
Anti-parasitic	1.9	(1)
Anti-parkinsonian	3.8	(2)
Anti-smoking (nicotine patch)	9.4	(5)
Asthma treatments	9.4	(5)
Gastro-oesophageal reflux treatment	18.9	(10)
Hormonal medications	11.3	(6)
Immunosuppressant	3.8	(2)
Vitamin, mineral supplement	26.4	(14)
Other: Anti allergy nasal spray	3.8	(2)
Fish oil, glucosamine supplement	9.4	(5)
Xantrax (weight loss)	1.9	(1)

* Does not add to 100 as patients may receive more than one of these types of medication

TABLE 16 PHYSIOLOGICAL CONDITIONS: ICD-10 DIAGNOSES APPLIED AT DISCHARGE FROM HOSPITAL.

ICD-10 Ch and code	*Diagnoses of Physiological Conditions*	%*	(n)
I	INFECTIOUS AND PARASITIC DISEASES		
B18.2	Viral hepatitis C	1.9	(1)
B86	Scabies	1.9	(1)
IV	ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES		
E11	Non-insulin dependent diabetes mellitus (Type 2)	1.9	(1)
E66.9	Obesity, unspecified	1.9	(1)
E78.0	Pure hypercholesterolaemia	3.8	(2)
E78.5	Hyperlipidaemia, unspecified	5.7	(3)
E86	Volume depletion	1.9	(1)
E87.5	Hyperkalaemia	1.9	(1)
VI	DISEASES OF THE NERVOUS SYSTEM		
G20	PARKINSON'S DISEASE	1.9	(1)
G43.9	Migraine (unspecified)	1.9	(1)
G47.0	Disorders of initiating and maintaining sleep (insomnias)	1.9	(1)
G47.9	Sleep disorder, unspecified	1.9	(1)
G51.0	Bell's palsy	1.9	(1)
IX	DISEASES OF THE CIRCULATORY SYSTEM		
I10	Essential (primary) hypertension	5.7	(3)
I20.9	Angina pectoris, unspecified	1.9	(1)
I64	Stroke, not specified as haemorrhage or infarction	1.9	(1)
I84.1	Internal haemorrhoids with other complications	3.8	(2)
I95.9	Hypotension, unspecified	1.9	(1)
X	DISEASES OF THE RESPIRATORY SYSTEM		
J06.9	Acute upper respiratory tract infection, unspecified	1.9	(1)
XI	DISEASES OF THE DIGESTIVE SYSTEM		
K04.7	Periapical abscess without sinus	1.9	(1)
K08.8	Specific disorder of teeth and supporting structure	1.9	(1)
K21.0	Gastro-oesophageal reflux disease with oesophagitis	1.9	(1)
K21.9	Gastro-oesophageal reflux disease without oesophagitis	1.9	(1)
K55.2	Angiodysplasia of colon	1.9	(1)
K59.0	Constipation	3.8	(2)
K92.0	Haematemesis	1.9	(1)
K92.2	Gastrointestinal haemorrhage, unspecified	1.9	(1)
XIII	DISEASES OF THE MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE		
M54.5	Low back pain	1.9	(1)
M75.8	Pain in a shoulder joint region	1.9	(1)
XIV	DISEASES OF THE GENITOURINARY SYSTEM		
N28.9	Disorder or kidney and ureter, unspecified	1.9	(1)
N95.8	Other specified menopausal and perimenopausal disorders	1.9	(1)
XV11	CONGENITAL MALFORMATIONS & CHROMOSOMAL ABNORMALITIES		
Q64.4	Other specified malformation of urachus	1.9	(1)
XVIII	SYMPTOMS, SIGNS AND ABNORMAL LABORATORY FINDINGS		
R21	Rash and other nonspecific skin eruption	1.9	(1)
R40.0	Somnolence	1.9	(1)
XIX	INJURY, POISONING & OTHER CONSEQUENCES OF EXTERNAL CAUSES		
T39.1	Poisoning by 4-aminophenol derivatives	1.9	(1)
XX	EXTERNAL CAUSES OF MORBIDITY AND MORTALITY		
Y49.2	Other and unspecified antidepressants causing adverse effects	1.9	(1)

* Does not add to 100 as patients may have more than one diagnosis applied at discharge.

TABLE 17 MENTAL AND BEHAVIOURAL DISORDERS: ICD-10 DIAGNOSES APPLIED AT DISCHARGE FROM HOSPITAL.

ICD-10 code	*Diagnosis of Mental and Behavioural Disorders*	%*	(n)
	MENTAL & BEHAVIOURAL DISORDERS DUE TO PSYCHOACTIVE SUBSTANCE USE		
F10.1	Harmful use (*alcohol*)	9.4	(5)
F10.2	Dependence syndrome (*alcohol*)	17.0	(9)
F12.1	Harmful use (*cannabinoids*)	5.7	(3)
F12.2	Dependence syndrome (*cannabinoids*)	5.7	(3)
F13.2	Dependence syndrome (*sedatives/hypnotics*)	3.8	(2)
F15.1	Harmful use (*amphetamines*)	1.9	(1)
F15.2	Dependence syndrome (*amphetamines*)	3.8	(2)
F19.1	Harmful use of drugs (*unspecified*)	1.9	(1)
Y91.1	*Alcohol* intoxication**	1.9	(1)
Z72.0	*Tobacco* use current**	47.0	(25)
	SCHIZOPHRENIA, SCHIZOTYPAL AND DELUSIONAL DISORDERS		
F22.0	Delusional disorder	1.9	(1)
F25.9	Schizoaffective disorder, unspecified	3.8	(2)
	MOOD [AFFECTIVE] DISORDERS		
	MANIC EPISODE		
F30.0	Hypomania	1.9	(1)
F31	BIPOLAR AFFECTIVE DISORDER		
F31.9	Bipolar affective disorder, unspecified	7.5	(4)
F32	DEPRESSIVE EPISODE		
F32.2	Severe depressive episode without psychotic symptoms	3.8	(2)
F32.9	Depressive episode, unspecified	9.4	(5)
R45.8	Other symptoms and signs involving emotional state (suicidal ideation)***	5.7	(3)
F33	RECURRENT DEPRESSIVE DISORDER		
F33.9	Recurrent depressive disorder, unspecified	1.9	(1)
F34.0	Cyclothymia	1.9	(1)
F34.1	Dysthymia	1.9	(1)
F40	PHOBIC ANXIETY DISORDERS		
F40.0	Agoraphobia with panic disorder	3.8	(2)
F40.1	Social phobias	5.7	(3)
F41	OTHER ANXIETY DISORDERS		
F41.1	Generalised anxiety disorder	3.8	(2)
F41.2	Mixed anxiety and depressive disorder	1.9	(1)
F41.9	Anxiety disorder, unspecified	5.7	(3)
F43	REACTION TO SEVERE STRESS, AND ADJUSTMENT DISORDERS		
F43.1	Post-traumatic stress disorder`	1.9	(1)
F43.2	Adjustment disorders	5.7	(3)
F44	DISSOCIATIVE (CONVERSION) DISORDERS		
F44.8	Other dissociative (conversion) disorders	1.9	(1)
F50	EATING DISORDERS		
F50.9	Eating disorder, unspecified	1.9	(1)
F50	SEXUAL DYSFUNCTION, NOT CAUSED BY ORGANIC DISORDER OR DISEASE		
F52.2	Failure of genital response	1.9	(1)
F60	SPECIFIC PERSONALITY DISORDERS		
F60.3	Emotionally unstable personality disorder (borderline)	5.7	(3)
F63	HABIT AND IMPULSE DISORDERS		
F63.0	Pathological gambling	100.0	(53)

* Does not add to 100 as patients may had more than one diagnosis applied at discharge.

** Although these disorders are elsewhere grouped in the ICD-10, they have been included in the present table for their relationship to substance use, abuse and dependence.

*** This disorder is grouped elsewhere in the ICD-10 but is included in the present table for its relationship to the affective disorders.

TABLE 18 ICD-10 FACTORS INFLUENCING HEALTH STATUS AND CONTACT WITH HEALTH SERVICES.

ICD-10 code	Diagnosed factors influencing health status and contact with health services	(n)
Z56	PROBLEMS RELATING TO EMPLOYMENT AND UNEMPLOYMENT	
Z56.4	Discord with boss and workmates	(1)
Z59	PROBLEMS RELATED TO HOUSING AND ECONOMIC CIRCUMSTANCES	
Z59.0	Homelessness	(2)
Z59.8	Other problems related to housing and economic circumstances	(1)
Z60.4	Social exclusion and rejection	(2)
Z61.4	Probs related to alleged sexual abuse of child by person w/in primary support group	(1)
Z63	OTHER PROBLEMS RELATED TO PRIMARY SUPPORT GROUP INCLUDING FAMILY CIRCUMSTANCES	
Z63.0	Problems in relationship with spouse or partner	(4)
Z63.5	Disruption of family by separation and divorce	(1)
Z63.7	Other stressful life events affecting family and household	(1)
Z63.8	Other specified problems related to primary support group	(1)
Z65	PROBLEMS RELATED TO OTHER PSYCHOSOCIAL CIRCUMSTANCES	
Z65.3	Problems related to other legal circumstances	(1)
Z86	PERSONAL HISTORY OF OTHER DISEASES AND CONDITIONS	
Z86.5	Personal history of other mental and behavioural disorders (anorexia)	(1)
Z87.5	Personal history of complications of pregnancy, childbirth and the puerperium	(1)
Z87.891	Personal history of tobacco use disorder	(4)
Z91	PERSONAL HISTORY OF RISK FACTORS NOT ELSEWHERE CLASSIFIED	
Z91.1	Personal history of noncompliance with medication regimen	(2)
Z91.5	Personal history of self harm	(4)