Evaluation of the Integrated Services Project for Clients with Challenging Behaviour: Final Report

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Contents

6.4 Summary 48
7 Conclusion and Recommendations 49
7.1 Client outcomes 49
7.2 Service model and governance 49
7.3 Service system 50
Appendix A: Evaluation Methodology 51
Administrative data 51
Secondary data 52
Interviews with stakeholders and clients 53
Financial Records 53
Appendix B: ISP Responsibility Matrix 54
Appendix C: Model of ISP Accommodation and Support Services 55
Appendix D: ISP Units 56
Appendix E: Cost Data 58
Appendix F: Case Study Summaries 60
Appendix G: Additional Data Tables 64
References 68

List of tables

Table 2.1: Cultural Background of ISP Clients (n=38) 7
Table 2.2: Presenting Diagnoses of ISP clients (n=38) 9
Table 2.3: Mental Health Diagnoses of ISP clients (n=38) 10
Table 2.4: Core Activity Restrictions, March 2008 (n=38) 11
Table 3.1: Measures of the Level and Severity of Challenging Behaviours, Baseline, March 2008 and January 2009 16
Table 3.2: Total Inpatient and Emergency Department Services Used, July 2003-June 2008 (n=36) 18
Table 3.3: Median Inpatient and Emergency Department Services Used Per Person per Year, Before and During ISP (n=34) 19
Table 3.4: Median Hospital Use per Person, Per Year Before and During ISP (n=34) 20
Table 3.5: Change in Corrective Service Use 12 months prior to ISP, 12 and 24 Months in ISP (n=21) 21
Table 3.6: Changes in Service Use and Cost for Case Study Clients, annualised 23
Table 3.7: Self Assessed Health during ISP Compared to HASI clients and the Australian Population, January 2009, per cent 25
Table 3.8: Personal Wellbeing Index Mean of ISP Clients (n=26), HASI Clients (n=55) and Australian Population, per cent 27
Table 3.9: Frequency of Social Contact (n=36), per cent 28
Table 3.10: Number of Clients who Participated in Social and Economic Activities since entry to ISP (n=36) 29
Table 4.1: Former ISP Client Housing Situation, January 2009 (n=18) 37
Table 6.1: ISP Expenditure and Revenue per Quarter July 2007 to March 2008 ($) 44
Table 6.2: Annualised Recurrent Cost of ISP per Client 45
Table 6.3: Outcome Data for ISP clients 47
Table G.1: Summary of Client Characteristics – Age, Gender, ISP Status and Months in ISP, January 2009 (n=38) 64
Table G.2: Challenging Behaviour at Baseline, Phase 1 and Phase 2, per cent 65
Table G.3: ISP Current Client Self Care Skills, March 2008 and January 2009, per cent 66
Table G.4: Personal Wellbeing Index, Clients in ISP and Clients Exited from ISP, per cent 67

List of figures

Figure 2.1: Age Distribution of ISP Clients by Gender, January 2009 (n=38) 6

Figure 2.2: Housing Type prior to ISP Entry, March 2008 (n=38) 8

Figure 2.3: Presenting Disabilities on Entry to the ISP (n=38) 9

Figure 3.1: Number of Challenging Behaviour Categories, ISP clients (n=35) and ABI Consultancy Sample (n=190).....15

Abbreviations

ABI	Acquired Brain Injury
ABS	Australian Bureau of Statistics
ADHC	Ageing, Disability and Home Care NSW (formerly DADHC)
ARBIAS	Alcohol Related Brain Injury Accommodation Support Service
CALD	Culturally and Linguistically Diverse
CJP	Community Justice Program
DCS	Department of Corrective Services NSW
DSQ	Disability Services Queensland
DJJ	Department of Juvenile Justice NSW
DSRC	Disability Studies and Research Centre
ED	Emergency Department
HASI	Housing and Accommodation Support Initiative
MACNI	Multiple and Complex Needs Initiative

Executive Summary

The Integrated Services Project for Clients with Challenging Behaviour (ISP) was established in 2005 and is administered by Ageing, Disability and Home Care (ADHC), Department of Human Services NSW. The Project aims to: foster improved life outcomes for people with complex needs and challenging behaviours; reduce the cost of this group to the service system and the wider community; and contribute to the evidence base in this area. The Social Policy Research Centre (SPRC) was commissioned to conduct an independent evaluation of the Project in 2007. This final evaluation report assesses the outcomes of the Project for clients, the effectiveness of the Project's support processes and governance structures, and examines how the ISP might inform improvements to the broader service system.

Key findings

Nominations to the Project are made quarterly by seven human services agencies in NSW, and the referrals are assessed by the ISP's Project Management Committee. Due to the intensive level of support required by each client, a maximum of eight people were accepted into the Project in each quarterly round, and the total number of clients served over this period was 38. These clients had a median age of 35 years, 89 per cent were under guardianship orders, and all clients lived in insecure housing upon entry. Clients had a complex mix of disabilities and diagnoses, of which the most common was mental illness, followed by intellectual disability and alcohol and drug disorders. Almost all clients had a mix of two or more diagnoses.

The majority of ISP clients experienced improvements in a number of key outcome areas over the course of their involvement with the Project. Clients experienced a decrease in the frequency and impact of their challenging behaviours which contributed to a considerable decrease in the amount of hospital and criminal justice services used by clients. In particular, there was a 90 per cent decrease in the number of days spent as an inpatient in hospital, an 82 per cent decrease in the number of hours spent in emergency, and a 94 per cent decrease in the number of days spent in custody. In addition, clients became more independent in some activities of daily living, particularly budgeting, cleaning, bathing and dressing. They reported improved health and well-being, as well as increased involvement in social and community activities, work, and education.

Staff and stakeholders reported that the ISP successfully supported its target group. Some of the major strengths of the Project's services were: the flexibility, consistency of support, stability of staff, and ability of the Project to learn from experience. They reported that the support could be improved by ensuring that ISP staff have high-level skills required to deal with this challenging client group.

Half of all ISP clients had exited ISP by January 2009. Clients were primarily moved on to group homes, ADHC's Community Justice Program, and NSW Health's Housing and Accommodation Support Initiative, with the median cost of a post-ISP package being $140,000. Although the Project was set up to support each client for 18 months, the average time current clients had spent in the ISP was 21 months, with the 18 former clients spending an average of 25 months in the Project. Due to limited resources and capacity in the broader service system regarding the management of

1 Introduction

The Integrated Services Project for Clients with Challenging Behaviour (ISP) was established in 2005 as a pilot project and is administered by Ageing, Disability and Home Care (ADHC), Department of Human Services NSW.

There are two examples of the second model involving case management and brokerage: the Intensive Behaviour Support Teams in Queensland, and the Multiple and Complex Needs Initiative (MACNI) in Victoria.

Intensive Behaviour Support Teams work with people with complex needs and challenging behaviours, their families and other current formal and informal support networks. The teams aim to develop tailored care plans and coordinate services in order to improve the long-term life outcomes for people with challenging behaviours (Disability Services Queensland, 2009a). To be eligible for support, clients must: be over the age of 18; have a disability attributable to an intellectual, psychiatric, neurological, sensory or cognitive impairment (or multiples of these); have reduced capacity to participate meaningfully in community life as a result of the impairment; have a history of complex and challenging behaviour support needs; and have access to informal and formal support networks able to assist in the implementation of behavioural intervention plans (Disability Services Queensland, 2009a).

MACNI in Victoria employs a care plan coordination model to develop individualised case plans, and deliver case management and behavioural support services to people with challenging behaviour (Victorian Department of Human Services, 2003). The program has a strong emphasis on coordinating government and NGO services; this has been identified as an important aspect of best practice responses to challenging behaviour (McVilly, 2004; Vincents, 2002). Referrals to the program are made by local service providers via relevant regional gateways to a state-wide panel that considers each case based on selection criteria determined by the Human Service (Complex Needs) Act 2009. Those referred to the program must have more than one of the following: alcohol and drug related dependency; mental illness; intellectual disability; ABI; physical disability; social isolation; behavioural difficulties; and family dysfunction (KPMG, 2007). Both MACNI and the Intensive Behaviour Support Teams provide services that are accessible to people across the state.

1.2 Defining challenging behaviour

Challenging behaviour is a contested term, and there is disagreement about the environmental, social and neurological factors behind it (Hillery, 1998). The term is mostly used in relation to people who have been diagnosed with intellectual disability (Joyce et al., 2001; Knapp et al., 2005; Lowe et al., 2007) and, to a lesser extent, ABI (Feeney et al., 2001; Kelly and Parry, 2008). One common description is: "culturally abnormal behaviour(s) of such intensity, frequency or duration that the physical safety of the person is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit or delay access to and frequent use of ordinary community facilities" (Henry et al., 1999: 129). This is a useful description, but it ignores the social and environmental factors that may contribute to the behaviour, such as mental illness, and social, criminal, and substance-abuse problems (Mansell, 2007). Challenging behaviour is informed by the co-existence of multiples of these problems and the interrelationship between them (Centre for Developmental Disability Health, 2005).

Within the ISP, the term "challenging behaviour" is used broadly to refer to an array of behaviours that place the person and/or others at significant risk of harm and preclude people from accessing the current service system (Martin and Associates P/L, 2001).

1.3 Framework for service delivery

Like HASI and CJP, the ISP has adopted a partnership approach to service provision. The Project is led by ADHC in conjunction with NSW Health and Housing NSW, and each of these agencies is represented on the ISP's Project Management Committee. In addition to these key agencies, the Departments of Corrective Services, Juvenile Justice, Community Services, the Office of the Public Guardian, NSW Police, and the Council for Intellectual Disability are represented on the Interagency Reference Group, which provides a consultative body that informs ISP activities. The governance structure of ISP is described more fully in Section 4.

Potential clients are nominated quarterly by one of the seven NSW Government human service departments. Following acceptance of a nomination by the interdepartmental Project Management Committee, the ISP's multidisciplinary support team conducts an assessment. To be eligible a client must be 18 years or older, exhibit behaviour that places themselves and/or others at risk of harm, and either have one or more disability or diagnosis, or the client's diagnosis must be in dispute. In addition, the client must require a high level of coordinated multiple agency response, live in insecure accommodation and have significantly impaired access to essential services due to their behaviour. The final requirement is that all other options for support have been exhausted.

The ISP does not intend to replicate existing services in the community, but rather to address people's complex needs and challenging behaviour over an 18 month period

These aims were met through a mixed-methods approach involving: an analysis of program data collected by ISP staff; administrative data from NSW Health and Corrective Services; interviews with 17 ISP staff and other stakeholders; interviews with four clients conducted three times over the evaluation period; and analysis of expenditure data. More detail about the methodology can be found in Appendix A and in the evaluation plan (Fisher and McDermott, 2008).

This report is structured around the ISP's logic model. It first examines the profile of those accepted and analyses the outcomes experienced by clients. The processes of supporting clients, governance and the Project's impact on the service system are discussed, as is the economic impact of the Project on the service system. The final section includes recommendations and key learning outcomes of the Project.

2 Client Profile

Nominations to the ISP are made quarterly by seven human services agencies in NSW, and are assessed by the ISP's Project Management Committee. Due to the intensive level of support required, a maximum of eight people are accepted into the Project in each quarterly round; from 2005-2008, 38 clients were accepted for services.[2,3] This section reviews the profile of clients who were accepted and analyses the extent to which the nomination process was successful in identifying the target group.

2.1 Demographic profile

Of the 38 clients accepted into the Project, 55 per cent were male (n=21) and 45 per cent female (n=17). This is representative of the wider community, but women were over-represented in comparison with the usual client groups of the main nominating agencies, such as mental health services (Muir et al., 2007). The median age of clients was 35 years, although women in the ISP were slightly younger than the men (33 years versus 36 years; Table 2.1).[4] This is consistent with the aim of the ISP to orient interventions to younger people in order to change the lifetime trajectory for people with challenging behaviour and complex needs. Most of the clients (95%; n=36) were single and had never been married.

Figure 2.1: Age Distribution of ISP Clients by Gender, January 2009 (n=38)

[2] An additional person was accepted to receive services, but refused to participate in the Project and is therefore excluded from the analysis.

[3] Due to Project capacity and funding issues intake rounds could not be held every quarter.

[4] Clients are one year older than they were when the profile was first reported in the mid-term evaluation report (see McDermott, S., Fisher, K. R. and Gleeson, R. (2008), Evaluation of the Integrated Services Project for Clients with Challenging Behaviour: Mid-Term Report, NSW Ageing, Disability and Home Care, Sydney.)

Regarding the cultural background of ISP clients, eight per cent (three clients) were Indigenous Australians, compared with three per cent in the general population (ABS, 2008), and 29 per cent (11)

Figure 2.3: Presenting Disabilities on Entry to the ISP (n=38)

The most common presenting diagnosis was mental illness: 86 per cent (n=33) were diagnosed with at least one mental illness. Over half also had intellectual disability (68%; n=26) and alcohol and drug disorders (58%; n=22). ABI and physical disability were less common, with about one-third experiencing either of these disabilities.

Table 2.2: Presenting Diagnoses of ISP clients (n=38)

	Number of clients	Per cent[2]
Mental illness[1]	33	86
Physical disability	13	34
Intellectual disability	26	68
Alcohol and drug disorder	22	58
Acquired brain injury	13	34
Other[3]	12	32

Notes: 1. 21 of the 33 clients had two diagnosed mental illnesses
2. Clients can have more than one presenting pr

Table 2.4: Core Activity Restrictions, March 2008 (n=38)

Impairment	# clients	Mild	Moderate	Severe	Profound	Weighted average

well as Huntington's disease, a genetic condition which causes degeneration of brain cells, resulting in emotional disturbance, reduced intellectual capacity, and uncontrolled movement (National Institute of Neurological Disorders and Stroke, 2008). She has a significant history of poly-substance abuse, and has been using heroin sporadically for the last 14 years. She also has a history of aggression, which has resulted in numerous incarcerations and has spent most of her life homeless. Welfare services have attempted to procure housing for Rebecca, but she has been excluded from most private accommodation in city areas due to her behaviour and drug use.

Alan

Alan is a 61-year old man of Yugoslavian descent. He has been diagnosed with chronic paranoid schizophrenia and alcoholism, but the diagnosis of schizophrenia was disputed by a psychologist who instead diagnosed Alan with a personality disorder and ABI due to his alcohol abuse. He also has severe liver damage due to alcohol abuse. Alan has a long history of homelessness with intermittent periods of incarceration. Since 2005, he has been under guardianship and financial management orders, and has spent 43 days in a psychiatric institution and 12 months in prison. He t

3 Client Outcomes

This section reports on the impact of the Project on outcomes experienced by 36 clients in five key areas: challenging behaviour; appropriate service use; ability to live safely in the community; health and well-being; and social connections and community participation.[7] The analysis presented in this section is drawn primarily from data collected by Project staff at two points in time during the evaluation period: March 2008 (Phase 1) and January 2009 (Phase 2).[8] In addition to the data collected at Phase 1 and 2, additional data was available on the Overt Behaviour Scale (OBS), which was used to measure changes in challenging behaviour, as well as

levels, and Clinical Weighted Severity scores, clinicians are also able to rate the frequency and impact of each of the behaviours on a five point likert scale, which provides a deeper understanding of how the behaviours may change over time.

Complete OBS data were available for 35 clients upon entry into the Project and at Phase 1 (March 2008). Twenty nine clients had data available at Phase 2 (January 2009); data were unable to be obtained for six people who had exited from ISP before this time. Upon entry into the Project, the median cluster score was six, indicating that most clients exhibited behaviours in six of the nine broad categories measured by the OBS (Figure 3.1). The most common challenging behaviours exhibited were inappropriate social behaviour (100%), verbal aggression (91%), physical aggression against objects (80%) and physical aggression against others (80%). As compared with a sample of clients with acquired brain injury referred to the ABI Behaviour Consultancy for treatment of challenging behaviours (Kelly et al., 2008), ISP clients exhibited much higher rates of challenging behaviours: an average of four types of behaviours were exhibited by Consultancy clients as compared with six types of behaviours displayed by ISP clients (Figure 4.1).

Figure 3.1: Number of Challenging Behaviour Categories, ISP clients (n=35) and ABI Consultancy Sample (n=190)

Figure 3.2: Proportion Exhibiting each of the Challenging Behaviours, ISP clients (n=35) and ABI Consultancy Sample (n=190), per cent

The ISP aims to reduce client's challenging behaviours over the course of their involvement in the Project. Table 3.1 provides an overview of the three key indices measured by the OBS (the cluster score, number of levels of behaviour, and Clinical Weighted Severity score). From entry into the Project until Phase 1 (at which time most clients were still in the Project), the levels and severity of challenging behaviours decreased. The reduction in severity between entry and Phase 1 was statistically significant ($p<0.05$) according to the Wilcoxon Signed Ranks test. Between Phase 1 and Phase 2, however, the scores in all three categories increased back to baseline levels.

Table 3.1: Measures of the Level and Severity of Challenging Behaviours, Baseline, March 2008 and January 2009

	Entry to ISP (n=35)	Phase 1 (n=35)	Phase 2 (n=29)
Median cluster score	6	6	7

Staff reported that the behavioural and therapeutic approaches implemented by the Project successfully assist clients to achieve reductions in their challenging behaviours. This was also reflected in the comments of three out of the four case study clients. Before ISP, for example, Anne had a great deal of difficulties with self harm and overdosing. Since her involvement with ISP,

> My mental health is so much better, I used to self harm every one to two days. ISP has helped me come up with different strategies that work.

John also reported that the strategies implemented by the ISP had helped him to avoid contact with the criminal justice system. He stated.

> I don't mind [living here]. I get all the support I need. I get more trust on my own in the community than 10 months ago because I've proved I can hold a job down four days a week. I've stayed out of trouble now for more than a year.

In conclusion, while as a group clients did not experience consistent changes in the global levels of challenging behaviour as measured by the OBS, reductions in the frequency and impact of the challenging behaviours did occur across the client group. This finding was supported by interviews with staff and in the responses of three of the four case study clients and is borne out by data presented in the following section on use of hospital and criminal justice services.

3.2 Use of Hospital and Criminal Justice Services

The ISP aims to reduce inappropriate or unplanned service use, including the overuse of hospital services and contact with the criminal justice system. To measure this, the Project was able to access administrative data from NSW Health and Corrective Services, making it possible to compare changes in service use before people entered the ISP and while clients were in the Project.

Hospital services

Data on hospital use was collected via the NSW Health Inpatient and Emergency Database on 36 ISP clients from July 2003 until June 2008. Over this period, clients spent a total of 9,407 days in the hospital and visited the emergency department 1,868 times. The total cost of hospital services provided to clients over the five-year period was $4,854,530 (Table 3.2).

Table 3.2: Total Inpatient and Emergency Department Services Used, July 2003-June 2008 (n=36)

	Unit	Total (03-08)	Median	Median pp/year
Total inpatient stays	Stays	952	190	3
Total inpatient days	Days	9407	1881	25
Total involuntary days	Days	5656	1131	5
Total days in psychiatric units	Days	8014	1602	9
Total inpatient cost	**Cost**	**4,203,632**	**840,726**	**12,836**
Total emergency visits	Visits	1868	373	5

The data on hospital use was annualised in order to provide consistent points of comparison to services used by clients before and during ISP; comparison data was available for 34 of the 36 clients because two people were not linked to their start dates before the data was collected by NSW Health.

Analysis of the annualised hospital and emergency department data shows a considerable decrease in the amount of hospital services used per year across all categories (Table 3.3). In particular, there was a 90 per cent decrease in the number of inpatient days per year, an

The reduction in service use translates to a corresponding decrease in costs for Corrective Services. One year prior to joining ISP, these 21 clients collectively cost Corrective Services $1,065,024; this decreased to $66,822 in clients' second year in ISP (Figure 3.6).[9]

Figure 3.6: Change in Total Cost to Corrective Services per year (n=21)

To further examine changes in hospital and criminal justice service use, the data received from both services was linked to the case study clients and compared.[10] Table 3.6 shows that all four of the case study clients had a reduced amount of contact with the criminal justice and hospital systems in NSW, resulting in substantial cost reductions to NSW Health and to Corrective Services. Not all clients experienced reductions in service use: two clients used more criminal justice se 41

Table 3.6: Changes in Service Use and Cost for Case Study Clients, annualised

Case study client	Before ISP				During ISP				Change in cost ($)
	Inpatient days	ER visits	Days in custody	Total cost ($)	Inpatient days	ER visits	Days in custody	Total cost ($)	
Alan	81	14	343	162,146	0	0	0	0	-162,146

3.4 Health and well-being

The ISP aims to improve client health and well-being. This section reports on self assessed measures of changes in health and well-being as experienced by clients in ISP and those who have left the Project.

Self assessed health

ISP clients have a diverse range of diagnoses and conditions, so it was not possible to implement a clinical measure that could compare changes in health conditions across the sample. For this reason, changes in client's health status were rated qualitatively through the use of a self-assessed health question that was adapted from the Australia Bureau of Statistics (ABS). This facilitated comparisons between ISP clients, the general Australian population (ABS, 2006) and HASI clients (Muir et al., 2007). As with other client outcomes, information on self-assessed health was gathered from

longitudinally between Phase 1 and Phase 2 to detect change in client well-being during their involvement with the ISP.[13,14] For comparative purposes, clients' personal well-being results were also measured against the Australian population norm (Cummins, 2005) and scores from clients in the HASI program (Muir et al., 2007). The HASI sample was chosen as a comparison group because, like ISP clients, all clients have complex needs and insecure tenancy upon entry into HASI.

Between March 2008 and January 2009, clients experienced an overall increase in personal well-being; statistically significant increases ($p<0.05$) were recorded in the areas of standard of living, achievements in life, future security and life as a whole (Table 3.8). These increases moved ISP clients closer to the Australian population norm and, in some domains such as achievements in life, safety, feeling part of the community and future security, the scores of ISP clients surpassed those of the Australian population.

Table 3.8: Personal Wellbeing Index Mean of ISP Clients (n=26), HASI Clients (n=55) and Australian Population, per cent

	Sample	Phase 1	Phase 2	p[1]
Standard of living	ISP clients	56.8	83.6	.000**
	HASI clients	70.0	65.0	-
	Australian population	-	78.3	-
Health	ISP clients	59.2	71.2	.079*
	HASI clients	56.0	53.7	-
	Australian population	-	75.1	-
Achievements in life	ISP clients	58.0	73.6	.021**
	HASI clients	64.0	56.6	-
	Australian population	-	73.5	-
Personal relationships	ISP clients	54.7	64.4	.241
	HASI clients	63.2	60.4	-
	Australian population	-	79.2	-
Safety	ISP clients	66.6	77.2	.338
	HASI clients	70.4	68.2	-
	Australian population	-	80.2	-
Feeling part of the community	ISP clients	60.0	74.0	.078*
	HASI clients	57.7	64.3	-
	Australian population	-	71.1	-
Future security	ISP clients	57.9	74.4	.010**
	HASI clients	68.0	61.2	-
	Australian population	-	73.0	-
Life as a whole	ISP clients	55.2	70.8	.048**
	HASI clients	59.4	58.0	-
	Australian population	-	78.3	-

Notes: Based on the Wilcoxon Signed Rank Test (*p<0.1, **p<0.05)
10 clients were missing data due to refusal or inability to participate

[13] The data collected in Phase 1 (March 2008) does not represent a baseline measurement, except for the four clients in the last round of intake.

clients (81%, n=29) had become involved in social and community activities since joining the Project. Some clients had also become involved in volunteering (14%, n=5), paid employment (28%, n=10) and education (31%, n=11). One of the case study clients spoke appreciatively about this aspect of the support provided by ISP because it helped him to feel like part of the community,

> Most of the time I like being a part of the Project because it helps me go forward. It makes me feel like I'm part of the community, and shows me and others that I'm doing something worthwhile. I'm pleased with myself [because of this].

Table 3.10: Number of Clients who Participated in Social and Economic Activities since entry to ISP (n=36)

	n	Per cent	Median # hours per week
Volunteering	5	14	4
Work	10	28	12

Results from the comparisons between current and former clients were mixed. On the one hand, there were no significant differences in the independence of clients who were still in ISP compared with those who had exited, nor were significant changes in clients' behaviour reported after leaving ISP. In addition, people who had left ISP had the same rates of participation in volunteering, work and education as those who remained in the Project. This indicates that many of the changes made by clients in ISP were sustained after transitioning out of the Project.

On the other hand, there is some evidence that client well-being decreased after people left ISP. Clients who were less involved in social activities once they had left the Project (68% of current clients, n=13 compared with 47% of exited clients, n=9) and, in addition, the PWI scores of clients who had exited were lower than people who were still in ISP (Figure 3.9).

Figure 3.9: PWI Scores of Clients still in ISP (n=13) and People who had Exited From ISP (n=13) by Phase 2, per cent

Differences between current and exited clients in Phase 2 of the evaluation were also reflected in the subjective ratings clients gave about their lives. Figure 3.10 shows that more people who had exited had either mixed or negative attitudes about their lives compared with those who were still in ISP.

Figure 3.10 Attitude about Life as a Whole, Current Clients (n=11) and Exited Clients (n=13), January 2009

This data, though limited, demonstrates that many of the changes experienced by clients while in ISP were sustained directly after exiting from ISP. However, client well being and involvement in social activities declined after transitioning out of the Project. This suggests that that the transition out of ISP can be problematic for clients and may impact on the sustainability of client outcomes; this is further discussed in Section 5.

3.7 Conclusion

This section has shown that clients have experienced generally positive changes in their lives since entering the ISP. For example, clients experienced a reduction in the frequency and impact of some challenging behaviours, which may have contributed to the considerable reductions in inappropriate hospital use and contact with the criminal justice system experienced across the group. Almost all interviewees agreed that the Project provides an essential service for a client group whose needs are too complex to fit into the existing service system and the flexible and individual nature of the support provided worked particularly well for this client group. Other factors that contributed to positive client outcomes included the commitment of staff and the ability of the Project to adapt as the project matured.

The next section analyses the effectiveness of ISP processes in relation to client outcomes and discusses some of the challenges associated with transitions out of the Project.

3.8 Summary

- Changes in challenging behaviours were measured by using the Overt Behaviour Scale (OBS) which showed that, upon Project entry, the most common challenging behaviours exhibited by clients were inappropriate social behaviour (100%), verbal aggression (91%), physical aggression against objects (80%) and physical aggression against others (80%).

- There were mixed results in relation to the global measures of challenging behaviour: the levels and severity of challenging behaviours decreased between baseline and Phase 1 of the evaluation but, between Phases 1 and 2, the levels and severity of challenging behaviour increased. However, the data shows that the frequency and impact of some behaviour decreased significantly over the course of the Project.

- There was a remarkable decrease in the number of hospital services used per year; in particular, there was a 90 per cent decrease in the number of days spent as an inpatient, an 83 per cent decrease in the number of days spent in psychiatric units, and an 82 per cent decrease in the number of hours spent in emergency.

- This translated into a 60 per cent decrease in cost burden for NSW Health; the provision of hospital services for clients one year prior to ISP cost about $1,261,392 per year compared with $517,673 per year during ISP.

- Clients also demonstrated a considerable decrease in contact with Corrective Services: there was a 94 per cent decrease in the number of days spent in custody one year prior to ISP and clients' second year in the Project.

- Clients became more independent in some activities of daily living, particularly budgeting, cleaning, bathing and dressing. In most other areas, minimal change was registered. This shows that ISP clients will likely require continuing support with daily living skills even after they have exited from the Project.

- At January 2009, three quarters of ISP clients rated their health as excellent, very good or good. These scores did not change between Phase 1 and 2 of the research, which indicates that clients experienced stable health conditions between the two phases of the research.

- ISP clients experienced an improved quality of life since becoming involved with the Project. Clients were particularly positive about their achievements in life, future security, standard of living and life as a whole.

- At January 2009, 58 per cent had regular contact with parents, 70 per cent had regular contact with siblings, and 72 per cent had regular contact with friends. This was reported by stakeholders to be an increase on baseline measures.

- ISP encouraged clients to become involved in social and other community participation activities as appropriate. The majority of clients (81%) had become involved in social and community activities since becoming a client of ISP. Some clients had also become involved in volunteering (14%), work (28%) and education (31%).

- Although the Project is set up to provide support for 18 months, as of January 2009, the average time current clients had spent in the ISP was 21 months, while the 18 former clients had spent an average of 25 months before exiting the Project.

- Exited clients did not differ from clients in ISP in regards to OBS results, independence in living skills, and economic participation, indicating that many of the changes made by clients in ISP were sustained after transitioning out of the Project.

- However, personal well-being and involvement in community activities decreased for clients who had exited, which suggests that the transition out of ISP may be problematic for clients.

- More data is needed to determine conclusively whether the changes experienced by clients in ISP are sustainable after exiting from the Project.

4 Processes for Supporting Clients

are provided with holistic servicesthat address their needs at multiple levels, including health and mental health, vocational, social and life skills. The skills of staff were praised by one of the case study clients, Rebecca, who stated:

> If it wasn't for them, I wouldn't be anywhere. They are so well trained in helping people who have been on the streets, violent, have mental problems, on drugs.

Rebecca later commented that she feels the support provided by ISP is holistic, "How could I ask for more? We get looked after so well". John also felt as though he was getting the support he needs, "They're making changes for the best and they ask how I feel about it. I know I'm benefiting from it." Anne stated: I reckon I'm getting heaps, I can't think of more support, but if I think of something they'd help me find it."

Participants reported that the successful implementation of the clinical plans required consistencyfrom all staff, including the accommodation support workers and case managers, which were achieved through strong communicationchannels. Some of the mechanisms by which communication was facilitated included a fortnightly meeting involving all staff associated with each client and through the accessibility of staff at all levels of the project.

Other factors that interviewees thought contributed to the successful provision of services were the low turnover of staffwhich reflected a strong commitment to working with people with challenging behaviour and support for the ISP service model. The stability of the workforce contributed to the consistency of support provided to clients. In addition, the ISP has demonstrated the capacity to learn from experienceand alter support mechanisms that are not working as well as could be. For example, an assessment unit at metro residences was established in the project's early stages, but a number of problems with this unit emerged over time. In particular, this environment proved not to be the most appropriate setting in which community living skills could be assessed. Consequently, the assessment unit was closed and the Project focused on assessing and managing clients in community based settings, where they could potentially reside for the 15-18 months stay with the project.

Effectiveness of ISP support for certain groups

Analysis of the outcome data for the 36 clients showed that the project had varying levels of success in achieving outcomes and roughly three groups were identified. The first group, which accounted for about 70 per cent (n=25) of clients, engaged with ISP services to varying degrees and showed gradual but consistent improvements in their behaviour, well being and living skills, as well as notable reductions in use of hospital and criminal justice services. Stakeholders reported that the process of 18.16i[(f staf[(4.8(v)-28(l)in

Figure 4.1: Clients' Post-ISP Accommodation Support, January 2009 (n=18)

Preliminary data collected on people who exited from ISP indicates that their housing outcomes since exiting from the Project have been wholly positive: 89 per cent were reported to still be living in stable housing. The majority were also successfully managing to maintain their physical environments (81%) and to pay their rent on time (72%). Only 53 per cent of former clients, however, were reported to have maintained good relationships with their neighbours.

Table 4.1: Former ISP Client H cr7TDu5512ro-Client H cr7Tient H vun=18)

- Support could be improved by ensuring that staff have training and support to ensure they have high-level skills required to deal with this challenging client group

- There was some concern that clients may be receiving a higher level of services than required or sustainable under the current model.

- Half of all ISP clients (n=18) had exited ISP by January 2009. Clients were moved on to: group homes (n=7), CJP (n=5), HASI (n=4), men's hostel (n=1) and Leaving Care (n=1). The median cost of a post-ISP package was $140,000.

- Exit data indicates that former clients have experienced stable housing after exiting from ISP. They have also been successful in maintaining the physical environment and paying rent consistently.

- Transitioning clients out of the ISP is the Project's key challenge, because of limitations in the broader service system's support models, limited knowledge of how to manage clients with challenging behaviour, and limited resources to support this group of clients effectively.

5 Governance and Service System Impact

Like HASI and CJP, the ISP has adopted a partnership approach to service provision. The Project is led by ADHC in conjunction

position assisted the ISP to understand the unique contexts and cultures of both agencies.

A key barrier to engaging stakeholders early in the Project was staff turnover in the service system, which resulted in lack of continuity and affected the commitment of agencies over time. Some of the interviewees involved in the governance of the Project said that they would like communication channels to be more open and to receive regular correspondence about actions taken by the Project. One way of addressing this issue would be to clarify with members on the Interagency Reference

6 Economic Analysis

This economic evaluation of the ISP compares the costs of the Project with client outcomes. The analysis uses expenditure data collected by staff from the beginning of

6.2 Outcomes

The cost of ISP was approximately $6,417,604 per year for approximately 31 places; this covers the management and clinical teams, case management, housing, accommodation support and client advocacy. The cost of approximately $207,000 per client contributed to the following outcomes:

- reductions in the frequency and impact of some challenging behaviours;
- increased independence in some activities of daily living;
- increased access to stable housing;
- increased well-being;
- increased involvement in social and community activities, and
- decreased hospital use and reduced contact with corrective services.

Table 6.3 summarises the primary outcomes experienced by clients during their involvement in ISP.

Table 6.3: Outcome Data for ISP clients

Outcome	Description	Comparison	Entry[1] or Phase 1 data[2]	Phase 2 data	Implication
Challenging behaviour	Severity of challenging behaviour (CWS-OBS)	-	32[1]	30	A 2-point decrease in the severity of challenging behaviour was observed
Living skills[3]	Budgeting	-	11%[2]	34%	23% increase in independence
	Bathing	-	75%[2]	94%	19% increase in independence
	Dressing	-	83%[2]	100%	17% increase in independence
	Cleaning	-	28%[2]	45%	17% increase in independence
Physical health	% responding excellent, very good, good on general health question	65%[4]	-	75%	ISP clients were more likely to report good health than HASI clients
Personal well-being	Life as a whole	78%[5]	55%	71%	Statistically significant increases were recorded in all areas of personal well being
Participation	Social activities	-	-	81%	Most clients had become involved in social activities
	Education	20%[4]	-	31%	Higher rates of participation in education than HASI clients
	Work	26%[4]	-	28%	Similar rates of participation in work as HASI clients
Hospital use (annualised)	Median # hospital days/yr	-	35[6]	3	90% reduction
	Median # days psych units/yr	-	9[6]	1	83% reduction
	Median # hours in emergency/yr	-	60[6]	11	82% reduction
	Cost of hospital svcs ($,000)/yr	sk			

6.3 Conclusion

In summary, the recurrent cost per client of approximately $207,000 has resulted in a number of positive client outcomes, as well as a substantial reduction in inappropriate service use across the group, leading to cost savings for NSW Health and Corrective Services. While the costs of ISP may be higher than other initiatives that support people with complex needs in the community, such as HASI, the ISP provides services to one of the most difficult groups in the community. Moreover, the cost of providing services to clients who had exited was further reduced, but follow-up is needed in future to determine whether the outcomes achieved by clients were sustained after exit.

6.4 Summary

Based on expenditure data, the cost of providing ISP services over a one year period was approximately $6,417,604.

Direct service provision accounted for 80 per cent of total expenditure.

The average annual cost per client was $207,000, and it cost approximately $140,000 to support clients after they have exited from the ISP. The average cost per client prior to entry to the ISP was $376,000 as reported by nominating agencies but this figure should be viewed with caution as it was based on 18 clients and the method for determining costs across the group was unclear.

Outcomes for clients included:

- some reduction in the frequency and impact of challenging behaviours;
- decreased hospital use and reduced contact with corrective services;
- increased independence in activities of daily living;
- access to stable housing;
- increased well-being; and
- increased involvement in social and community activities.

7 Conclusion and Recommendations

The ISP accepted a group of 38 clients with multiple and complex needs and high-level challenging behaviour. All were living in insecure housing and had great difficulty accessing and utilising required services. This report analysed program and administrative data, and qualitative interviews with ISP stakeholders and clients in order to understand outcomes for these clients, the effectiveness of the Project's support and governance structures, and the implications of the ISP for the broader service system. This section provides some concluding comments and recommendations in the areas of client outcomes, the ISP service model and governance, and the service system.

7.1 Client outcomes

The ISP has been successful in helping clients achieve a reduction in the frequency and impact of challenging behaviours, improved health and well-being, and decreased levels of hospital and criminal justice service use. The data suggests that some clients benefited more than others from ISP support; a small number did not engage effectively with ISP services and will continue to be problematic for the service system. These findings are similar to those from the evaluation of the MACNI program in Victoria (KPMG, 2007). Some comments and recommendations on the clients served by ISP are:

1. Further analysis is required to help determine the characteristics of those groups of clients who did well with the ISP compared to those who did not do as well. Developing a capacity to determine potentially predictive factors as to who would benefit most and least from ISP interventions would assist in working with the target population.

2. The longitudinal measurement and follow-up of ISP client outcomes is clearly indicated. The ISP should consider developing a monitoring system with the capability to track all people nominated to the Project including those who are accepted and those who are not and systematically collect and compile comparative data at baseline, exit, and follow-up intervals.

7.2 Service model and governance

Staff and stakeholders expressed a clear commitment to the ISP service model, and spoke particularly favourably about the flexibility and consistency of supports provided to clients. In addition, the Project has garnered high levels of government support and has successfully promoted partnerships between ADHC, Housing NSW and NSW Health. Appropriate governance arrangements have been established to support the aims of the pilot stage of the program. Some recommendations for the future of the Project are:

1. Participants requested that the Project provide feedback when applicants are not accepted; such feedback processes would also assist ISP to maintain and strengthen its relationships with referral agencies.

2. The terms of reference and membership of the Project's peak committees including the Interagency Reference Group must be continually monitored to ensure that they optimally support the work of the ISP.

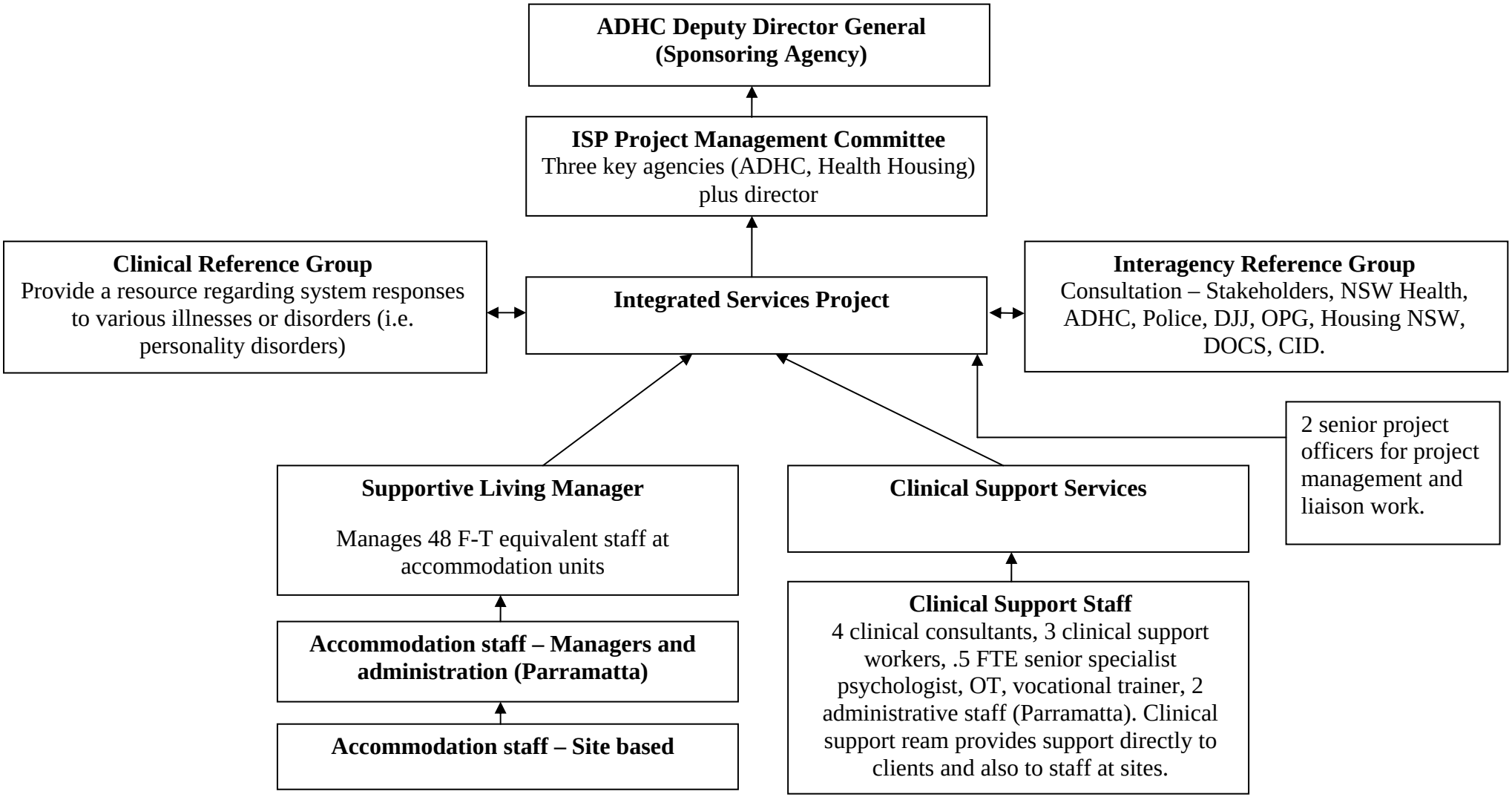
3. Unlike MACNI in Victoria and the Intensive Behaviour Support Teams in Queensland, the ISP is only available to people in the Sydney metropolitan area. The ISP should consider implementing more flexible funding arrangements that can support people outside of the Sydney area to provide more equitable supports across the state.
4. The ISP has accepted some of the most complex clients in the service system and operates in the context of a transitional model. In other sectors, such as the homelessness sector, questions are being raised about the effectiveness and appropriateness of transitional housing models and, in the current NSW Homelessness Action Plan, emphasis has been placed on long-term accommodation and support (NSW Government, 2009). The primary question for the ISP is whether a transitional model is appropriate for all clients, or whether more emphasis should be placed on housing first models that support people in permanent accommodation from the outset (e.g. HASI). This determination will need to be made in future, when more data on exited clients is available.

7.3 Service system

All participants reported that it is important to have a Project such as the ISP in the service system to support people whose needs cannot be met by mainstream services. A key challenge for the ISP is to facilitate successful transitions out of the Project and this is dependent on building broader service system capacity. This includes the development of greater knowledge, skills, resources and a range of organisational supports in the mainstream service system to assist people with complex needs. Some recommendations around this aspect of the Project are:

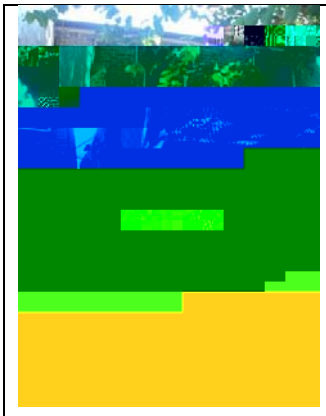
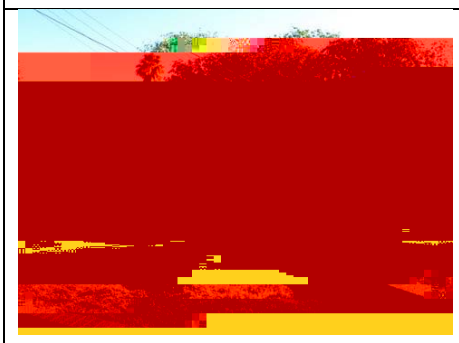
1. While the ISP assists clients to achieve positive individual outcomes, the Project should consider the role it could play in advocating for more sustainable and systemic change for people with complex needs and challenging behaviour within the broader service system. To this end, the ISP could inform imprT2 ystem. m

Appendix B: ISP Responsibility Matrix



Appendix C: Model of ISP Accommodation and Support Services

Appendix D: ISP Units

	Terrace 2 storey 3 bedroom + 1 office (Housing)	3
	2 bedroom + office in main house with annexed to 2 bedroom self contained unit (rental)	4
	3 bedroom + office Semi rural setting	3
	3 bedroom + office in main with self contained unit in rear of house	4

Appendix E: Cost Data

Figure E.1: ISP Expenditure and Revenue per Quarter April 2005 to March 2008 to Calculate Recurrent Net Cost Requirement

Significant Events	Funding allocated						Assessment unit closed	Readjustment post-assessment unit		Ongoing project			Ongoing ISP average per quarter (Jul 07-Mar 08
	Apr-Jun 05	Jul-Sept 05	Oct-Dec 05	Jan-Mar 06	Apr-Jun 06	Jul-Sept 06	Oct-Dec 06	Jan-Mar 07	Apr-Jun 07	Jul-Sept 07	Oct-Dec 07	Jan-Mar 08	
General services													
Project management[a]													
Management team	126002	92065	85611	86715	82134	90193	112781	86451	82849	66193	127429	72630	88,751
Operating	720	12771	21111	18899	24707	18543	16556	28385	18731	24069	18158	14329	18,852
Support services													
Clinical team	-	14112	109797	103445	114577	107835	96650	111938	84504	177327	129998	179312	162,212
Specialists	5800	-	7750	50	11943	14103	17129	23046	25879	23421	29654	24902	25,992
Operating	-	-	6581	7807	4791	2347	9903	1168	16334	3002	24895	7797	11,898
Supported living	-	9413	27068	27051	27015	27978	26180	31334	27138	30600	31833	39559	33,997
Direct services to clients													
Assessment unit[a]													
Staff	-	63955	531638	502959	714162	415381	444914	-	-	-	-	-	-
Operating	-	9813	31083	39563	665	70504	28761	-	-	-	-	-	-
Set up	-	9132	1809	1720	50148	58654	-	-	-	-	-	-	-
Southwest network													Readjustment post-

Less													
Revenue offset client fees[c]	-	-	-	-1130	-3332	-20441	-25595	-31637	-30717	-29625	-35950	-23535	-29,703
Assessment unit (2)	-	82900	564530	544242	764975	544539	473675	-	-	-	-	-	-
Set up costs (2)	-	9132	1809	32712	266144	284089	-	-	-	-	120107	-	40036
Recurrent net cost requirement (1) - (2)[d]	**132522**	**119229**	**307723**	**531785**	**888794**	**846852**	**1021116**	**1435402**	**1573509**	**1460281**	**1717570**	**1813573**	**1663808**

Notes: a. Excludes evaluation costs. Does not include other costs covered by ADHC e.g. rent
b. After December 2006, absorbed into Southwest and Northwest networks
c. Supported living fees at 55 per cent Disability Support Pension
d. Some one-off expenses not identified e.g. Temporary project costs e.g. evaluation, wind down costs

Rebecca

Rebecca is a 33 year-old woman. Her home environment was reported to be chaotic, with marked domestic violence and sexual trauma. Rebecca spent much of her youth in foster care and was living on the streets from 11 years of age. Rebecca has had eight children, although two died at birth. She is also the grandmother of a two and a half month old child, who is the same age as her youngest baby. All of her children are with DOCS and living with the same foster family.

Rebecca has a history of psychotic illness, however there is a lack of clarity surrounding her mental health diagnosis. Diagnoses include borderline personality disorder, paranoid schizophrenia and bipolar disorder. Rebecca is often aggressive, has poor coping skills, and has reported hearing voices. Rebecca also has a diagnosis of Huntington's disease, a genetic disease which causes a degeneration of brain cells, resulting in emotional disturbance, reduced intellectua

Rebecca has made contact with her brother and sister since being involved in ISP. She had not talked to them since she was ten years old but now they speak on the phone frequently. Rebecca also sees her children every week. She participates in the community through gardening, window shopping, and shopping at second hand shops. She tries to save her money for her children. She would like to study but she is scared people would think her to be dumb because she does not know how to read and write.

Alan

Alan is a 61-year old man of Yugoslavian descent. He is a divorcee who has four children of whom two are still alive. He is an alcoholic and has been admitted to various psychiatric hospitals. He is Yugoslavian and his father fought in the Second World War against the Germans.

Alan has been diagnosed as suffering from chronic paranoid schizophrenia and alcoholism, but this diagnosis was disputed by a psychologist who analysed the client for the court system. He was instead diagnosed with a personality disorder and an acquired brain injury associated with alcohol abuse and repeated head injuries while intoxicated. He sustained significant liver damage due to alcohol abuse. Alan has a long history of homelessness with intermittent periods of incarceration. Since 2005, he was placed under financial and coercive guardianship, spent 43 days in a psychiatric institution and spent over 12 months in prison over that period. He also had a history of physically aggressive behaviour.

Upon entry into the Project Alan was not in touch with any family, nor did he have any close friends, however over the course of his interviews he did not report developing any new friendships or learning new skills.

Appendix G: Additional Data Tables

Table G.1: Summary of Client Characteristics – Age, Gender, ISP Status and Months in ISP, January 2009 (n=38)

ISP status	Age (years)	Sex	Time in ISP (months)[a]	Reason for exit
Current clients	31	M	34	
	22	M	33	
	31	F	30	
	39	M	30	
	36	M	28	
	40	M	24	
	29	F	20	
	30	F	19	
	30	M	18	
	62	M	18	
	35	M	17	
	40	F	17	
	40	F	16	
	32	F	16	
	37	M	16	
	47	F	16	
	35	F	11	
	62	M	10	
	24	M	7	
Total = 19		**8 11**		
Exited clients	55	M	36	Completed ISP
	27	F	35	Completed ISP
	31	F	31	Completed ISP
	34	M	30	Completed ISP
	57	M	30	Completed ISP
	38	F	29	Completed ISP
	36	F	28	Completed ISP
	43	F	28	Completed ISP
	33	M	26	Completed ISP
	33	F	25	Completed ISP
	54	M	25	Completed ISP
	46	M	25	Completed ISP
	22	F	25	Completed ISP
	22	M	21	Completed ISP
	37	F	17	Completed ISP
	23	F	13	
	37	M	3	
	62	M	1	Died
	25	M	1	Died
Total = 19		**9 10**		

Notes: a. Time is fr6.4(1)-g 2.7(i9.86( )ofT)6.T

Table G.2: Challenging Behaviour at Baseline, Phase 1 and Phase 2, per cent

Behaviour	Baseline (n=35)	Phase 1 (n=35)	Phase 2 (n=29)
Verbal aggression	**91**	**91**	**92**
Loud noises	66	66	70
Mild insults	74	71	65

Table G.4: Personal Wellbeing Index, Clients in ISP and Clients Exited from ISP, per cent

Satisfaction with *		March 2008	January 2009	% Change
Standard of living	Clients in ISP	57.1	77.9	+20.8
	Clients Exited from ISP	48.0	84.2	+36.2
	Australian Norm[1]	-	78.3	-
Health	Clients in ISP	54.3	75.0	+20.7
	Clients Exited from ISP	88.0	62.9	-25.1
	Australian Norm	-	75.1	-
Achievements in life	Clients in ISP	54.8	76.7	+21.9
	Clients Exited from ISP	68.0	67.1	-0.9
	Australian Norm	-	73.5	-
Personal relationships	Clients in ISP	49.9	68.3	+18.4
	Clients Exited from ISP	74.8	62.1	-12.7
	Australian Norm	-	79.2	-
Safety	Clients in ISP	62.7	82.5	+19.8
	Clients Exited from ISP	90.0	68.6	-21.4
	Australian Norm	-	80.2	-
Feeling part of the community	Clients in ISP	55.2	78.3	+23.1
	Clients Exited from ISP	74.0	66.4	-7.6
	Australian Norm	-	71.1	-
Future security	Clients in ISP	52.8	75.8	+23.0
	Clients Exited from ISP	78.0	66.4	-11.6
	Australian Norm	-	73.0	-
Life as a whole	Clients in ISP	53.8	75.0	+21.2
	Clients Exited from ISP	52.0	62.9	+10.9
	Australian Norm	-	78.3	-

Source: ISP Project Data.

Notes: March 2008: Still in ISP: n=21 Exited: n=5

January 2009: Still in ISP: n=13, Exited: n=13

10 clients were missing data in January 2009 due to refusals or could not be contacted

Personal Wellbeing Index (PWI). Scale 0-100 where 0=completely unsatisfied, 100=completely satisfied (Cummins 2007).

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