

# Evaluation of the Integrated Services Project for Clients with Challenging Behaviour: Mid-Term Report

**Author:**

McDermott, S; Fisher, K.R; Gleeson, R

**Publication details:**

Report No. SPRC Report Series 14/09  
9780733428043 (ISBN)

**Publication Date:**

2009

**DOI:**

<https://doi.org/10.26190/unsworks/891>

**License:**

<https://creativecommons.org/licenses/by-nc-nd/3.0/au/>

Link to license to see what you are allowed to do with this resource.

Downloaded from <http://hdl.handle.net/1959.4/45203> in <https://unsworks.unsw.edu.au> on 2024-04-27

# Evaluation of the Integrated Services Project for Clients with Challenging Behaviour: Mid-Term Report

Shannon McDermott, Karen R Fisher and Ryan Gleeson

SPRC Report 14/09

---

Social Policy Research Centre  
University of New South Wales  
August 2009

For a full list of SPRC Publications see, [www.sprc.unsw.edu.au](http://www.sprc.unsw.edu.au) or contact: Publications,  
SPRC, University of New South Wales, Sydney, NSW, 2052, Australia.  
Telephone: +61 (2) 9385 7802 Fax: +61 (2) 9385 7838 Email: [sprc@unsw.edu.au](mailto:sprc@unsw.edu.au)

ISSN 1446 4179

ISBN 978-0-7334-2804-3

Submitted: October 2008

Published: August 2009

## **Social Policy Research Centre, UNSW**

Karen Fisher, Peter Abelson, Shannon McDermott and Ryan Gleeson

## **Disability Studies and Research Centre**

Edwina Pickering

## **Authors**

Shannon McDermott, Karen Fisher and Ryan Gleeson

## **Contacts for follow up**

Karen Fisher and Shannon McDermott, Social Policy Research Centre, University of New South Wales, Sydney NSW 2052, ph 02 9385 7800, email karen.fisher@unsw.edu.au or s.mcdermott@unsw.edu.au

## **Acknowledgements**

Thank you to the ISP clients, managers, staff and Evaluation Reference Group members who contributed to the research.

## **Suggested Citation**

McDermott, S., Fisher K.R. and Gleeson, R. (2009), Evaluation of the Integrated Services Project for Clients with Challenging Behaviour: Mid-Term Report, SPRC Report 14/09, report prepared for the New South Wales Department of Ageing Disability and Home Care, Social Policy Research Centre, University of New South Wales.

## Contents

<b>List of Tables</b> .....	<b>iv</b>
<b>List of Figures</b> .....	<b>v</b>
<b>Abbreviations</b> .....	<b>v</b>
<b>Executive Summary</b> .....	<b>vi</b>
<b>1 Introduction</b> .....	<b>1</b>
<b>2 Description of the Integrated Services Project</b> .....	<b>2</b>
2.1 Objectives of the ISP .....	2
2.2 Framework for Service Delivery .....	2
2.3 Roles and Responsibilities of ISP Partners .....	3
<b>3 Cost Effectiveness</b> .....	<b>4</b>
3.1 Costs .....	4
3.2 Effectiveness .....	7
<b>4 Client Profile</b> .....	<b>9</b>
4.1 Client Characteristics .....	9
Number of clients and length of time in ISP .....	9
Age and gender .....	10
Cultural background.....	11
4.2 Presenting problems and disorders on entry to the ISP .....	11
Mental health.....	12
Core activity restrictions .....	13
Legal capacity .....	14
4.3 Housing .....	15
<b>5 Client Outcomes</b> .....	<b>16</b>
5.1 Challenging Behaviours .....	16
5.2 Personal Wellbeing.....	17
5.3 Health .....	19
5.4 Living Skills .....	20
5.5 Social and Economic Participation.....	22
<b>6 Service Use</b> .....	<b>24</b>
6.1 Services Used in the Community .....	24
6.2 Hospital Services.....	25
6.3 Criminal Justice Services .....	26
<b>7 Conclusion</b> .....	<b>27</b>
7.1 Implications of the Preliminary Findings .....	27
7.2 Evaluation Progress.....	27
<b>Appendix A : Evaluation Methodology</b> .....	<b>28</b>
ISP Client Information Sheet .....	28
Client File Data .....	29
Case Studies .....	29
Financial Records.....	29
Discussions with ISP Management and Evaluation Reference Group.....	30
<b>Appendix B : ISP Responsibility Matrix</b> .....	<b>31</b>
<b>Appendix C : Model of ISP Accommodation and Support Services</b> .....	<b>32</b>
<b>Appendix D : Cost Data</b> .....	<b>33</b>
<b>Appendix E Case Study Summaries</b> .....	<b>35</b>
<b>Appendix F Client Characteristics</b> .....	<b>39</b>
<b>References</b> .....	<b>40</b>

## List of Tables

Table 3.1:	ISP Expenditure and Revenue per Quarter July 2007 to March 2008 .....	5
Table 3.2:	Equivalent Annualised Net Recurrent Cost of ISP per Client .....	6
Table 3.3:	Expected Outcome Data for Final Cost Effectiveness Analysis .....	7
Table 4.1:	Cultural Background of ISP Clients, March 2008 .....	11
Table 4.2:	ISP Clients' Mental Health Diagnoses, March 2008 .....	13
Table 4.3:	Core Activity Restriction by Presenting Problem, March 2008.....	14
Table 5.1:	Measure of Challenging Behaviours Level and Severity (Overt Behaviour Scale – OBS) during ISP, March 2008 .....	17
Table 5.2:	Personal Wellbeing Index during ISP, March 2008.....	18
Table 5.3:	Self Assessed Change in Health Status during ISP, March 2008 .....	20
Table 5.4:	Self Care Skills during ISP, March 2008 .....	21
Table 5.5:	Domestic Skills during ISP, March 2008.....	21
Table 5.6:	Community Skills during ISP, March 2008 .....	22
Table 5.7:	Education and Work Participation during ISP, March 2008.....	23
Table 6.1:	Health Services Used in the Community 12 Months before entry and 12 Months after entry into ISP (annualised), March 2008.....	25
Table 6.2:	Hospital Services Used 12 months before entry and 12 months after entry into ISP (annualised), March 2008 .....	25
Table 6.3:	Criminal Justice 12 months before entry and 12 months after entry into ISP (annualised), March 2008.....	26
Table D. 1:	ISP Expenditure and Revenue per Quarter April 2005 to March 2008 to Calculate Recurrent Net Cost Requirement .....	33
Table D. 2:	Number of Clients in ISP per Quarter, April 2005 to March 2008 .....	34
Table F.1:	Summary of Client Characteristics – Age, Gender, ISP Status and Months in ISP, March 2008.....	39

## List of Figures

Figure 4.1:	Age Distribution of ISP Clients, March 2008 .....	10
Figure 4.2:	Age Distribution of ISP Clients by Gender, March 2008 .....	10
Figure 4.3:	Presenting Problems on Entry to the ISP, March 2008.....	12
Figure 4.4:	Distribution of ISP Clients' Mental Health Diagnoses, March 2008.....	12
Figure 4.5:	Core Activity Restriction by Presenting Problem, March 2008.....	14
Figure 4.6:	Housing Type prior to ISP Entry, March 2008 .....	15
Figure 5.1:	Personal Wellbeing Index Compared to HASI and the Australian Population, March 2008 .....	18
Figure 5.2:	Self Assessed Health during ISP Compared to Australian Population, March 2008.....	19
Figure 5.3:	Self Assessed Change in Health Status during ISP Compared to Australian Population, March 2008 .....	20
Figure 5.4:	Social Networks during ISP, March 2008.....	23

## Abbreviations

ABI	Acquired Brain Injury
ABS	Australian Bureau of Statistics
CALD	Culturally and Linguistically Diverse
DADHC	Department of Ageing, Disability and Home Care NSW
DCS	Department of Corrective Services NSW
DJJ	Department of Juvenile Justice NSW
DoH	Department of Housing NSW
DSARC	Disability Studies and Research Centre (formerly Disability Studies and Research Institute – DSaRI)
ED	Emergency Department
ISP	Integrated Service Project for Clients with Challenging Behaviours
NSW	New South Wales
NSW Health	New South Wales Department of Health
NSW Housing	New South Wales Department of Housing
OBS	Overt Behaviour Scale
PWI	Personal Wellbeing Index
SD	Standard Deviation
SPRC	Social Policy Research Centre
UNSW	University of New South Wales

## Executive Summary

The Integrated Services Project for Clients with Challenging Behaviour (ISP) aims to decrease the adverse impact of challenging behaviour on clients, the community, and the service system. The Project does this by developing intervention and support plans that better respond to the individual needs of clients with challenging behaviour, as well as improving their service access, housing, health and social conditions. The ISP is delivered through the NSW Department of Ageing, Disability and Home Care in cooperation with the NSW Department of Health and Housing NSW.

The average recurrent net cost per quarter of the ongoing Project (expenditure less revenue and set-up costs) is approximately \$1,663,808. The cost of direct services to clients (average per quarter \$1,332,438) is 80 per cent of the total Project expenditure. As of March 2008, the ISP had provided services to 38 clients; the equivalent annualised net recurrent unit cost per client is \$194,000 during the ISP. The average cost per client prior to entry to the ISP was \$376,000, as reported by the nominating agencies.

Analysis of client characteristics shows that ISP clients are a diverse and complex group of people. The gender distribution of ISP clients is 55 per cent men and 45 per cent women. This is almost representative of the community and over-representative of women in client groups of the main nominating agencies, particularly Corrective Services and mental health services. Nearly eight per cent of clients identify as being indigenous Australians and 32 per cent as being from a culturally and linguistically diverse background. Most (86.8 per cent) ISP clients have a mental health diagnosis. The most common mental health diagnoses are schizophrenia and personality disorder, which are present in 37.8 and 40.5 per cent of ISP clients, respectively. Most (95 per cent) ISP clients have a legal guardian and 50 per cent of clients spent some time in prison in the 12 months before ISP.

Initial outcomes during the ISP are positive. Preliminary analysis shows a decrease in both the level and severity of challenging behaviours. The strongest indicator of change during ISP is the decrease in unplanned use of hospital and criminal justice services. Analysis indicates that:

- the number of hospital emergency presentations decreased on average by 20 presentations per year;
- the number of days in hospital decreased on average by 45 days per year; and
- the number of days spent in prison decreased on average by 87 days per year.

ISP clients believe their health to have improved over the past year, with three quarters (76.7 per cent) of clients rating their health as excellent, good or very good. Most (60.5 per cent) clients have increased their social connections by reconnecting with family and friends or making new friends since being involved in the ISP. Over half have become involved in social activities such as church, sporting activities and art classes.

Future reports will provide further analysis on client outcomes and cost effectiveness.

## **1 Introduction**

The Integrated Services Project for Clients with Challenging Behaviour (ISP) has commissioned the Social Policy Research Centre to conduct an evaluation of this project. The evaluation, which will take place from February 2008 until November 2009, will answer key questions about ISP governance, service system implications, and outcomes for ISP clients.

The present document provides a preliminary cost effectiveness analysis based on initial client outcomes. The report begins with a brief overview of the ISP before describing the approach taken to the cost effectiveness analysis and the broad characteristics of the 38 ISP clients who were in ISP 2-32 months, from October 2005 to March 2008.

The report analyses client outcomes in the following key areas: changes in challenging behaviour; client perceptions of personal wellbeing and health; living skills; social and economic participation; and changes in the use of community health, hospital, and criminal justice services. The methods used to collect this data are described in Appendix A: Evaluation Methodology. The outcomes presented are compared to the cost of ISP services per client. The preliminary cost effectiveness analysis will be refined as the evaluation progresses. The final section of this report discusses the findings, their limitations and the progress of the evaluation.

## **2 Description of the Integrated Services Project**

The ISP arose out of the work of an interdepartmental committee called the Challenging Behaviours Taskforce. Led by NSW Health, the taskforce conducted a review of the literature and developed an integrated services model to address the problem of clients with extreme challenging behaviour. NSW Treasury approved a joint funding submission, again led by NSW Health, and allocated funding to the Integrated Services Project in early 2005. The Project was set up to be administered out of Department of Ageing, Disability and Home Care (DADHC) and accepted its first clients in September 2005.

### **2.1 Objectives of the ISP**

The ISP supports people who have multiple needs that are not being met under existing service arrangements, are in insecure accommodation and pose a threat to themselves or others. The Project aims to:

- Develop better intervention and support plans that reflect the individual needs of clients with challenging behaviours;
- Improve service access, coordination and durability of engagement with services for clients with challenging behaviours by specifying roles and responsibilities of service providers;
- Decrease the adverse impact of challenging behaviours on clients, other people and the service system; and
- Improve housing, health, social connections and safety for clients through increased coordination of case management, multi-disciplinary assessment and clinical interventions.

In the long term, the ISP aims to:

- Foster improved life outcomes for clients with challenging behaviours;
- Reduce the cost to the service system and the wider community from challenging behaviours; and
- Contribute to the evidence base for supporting people with challenging behaviours.

### **2.2 Framework for Service Delivery**

To be eligible for the Integrated Services Project, a client must be 18 years or older, exhibit self-harming behaviour or behaviour that precludes their involvement with other services, 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 been denied access to essential services due to their behaviour. The final requirement is that all other options for support have been exhausted.

Potential clients are nominated quarterly by one of the seven NSW Government human service departments (Appendix B). Following the approval of a nomination by the interdepartmental Project Management Committee, the ISP's multidisciplinary support team assesses the individual nominees. In the initial stages of the model emphasis is placed on allocating appropriate housing with the required level of support (Appendix C). Depending on the client's need, the housing provided may be a 24-hour group home, a self-contained unit with staff on site, or other community housing with on-call assistance from staff. Person-

centred case plans are developed for each client and support plans and guidelines are supplied to residential staff.

Apart from accommodation, the Project provides clinical support to service providers that are involved with the clients nominated for ISP. To build the capacity of the system to better manage such people, the ISP aims to keep agencies that nominated the client involved while the client is in the ISP. The support team also addresses the challenge of involving new service providers if none were previously involved with the client, if the nominator is not the appropriate agency to do this (for example, a criminal justice agency), or if a client moves to an area outside of the jurisdiction of the existing service provider.

### **2.3 Roles and Responsibilities of ISP Partners**

The ISP is led by DADHC in conjunction with NSW Health and Housing NSW (Appendix B). They are each 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 ISP is also informed by a Clinical Reference Group, which consists of independent consultants, and senior clinical staff from NSW Health and DADHC. It provides expertise to ISP staff about both the management of current clients and the capacity of the wider service system to support people with specific illnesses and disorders that contribute to the challenging behaviours encountered in the community. An Evaluation Reference Group has also been formed to guide the current evaluation process and includes representatives from a number of the above-named organisations and NSW Treasury.

The majority of ISP staff provide on-site accommodation support to clients in 24-hour supported accommodation. The ISP also employs clinical staff who are responsible for providing clinical support to clients, accommodation staff and services in the wider community.

### 3 Cost Effectiveness

- The average recurrent net cost per quarter of the ongoing project is \$1,663,808.
- The cost of direct services to clients (average per quarter \$1,332,438) is 80 per cent of total expenditure.
- The equivalent annualised net recurrent unit cost per client ranges from \$175-218,000 depending on the definition of the number of clients.
- The annual cost of \$194,000 represents the cost of supporting clients currently in ISP and people nominated to the ISP. The average cost per client prior to entry to the ISP was \$376,000, as reported by the nominating agencies.

This section presents a preliminary cost effectiveness analysis to identify and quantify the expenditure and benefits associated with the ISP to provide the basis for assessing its budgetary impact. This analysis begins to answer the following questions:

- What is the ISP expenditure in terms of establishment, trial, wind-down and recurrent costs?
- What is the average cost per person in the ISP compared to cost prior to the ISP?
- What are the benefits to the person, government and community during the ISP?
- What is the likely average cost person after the ISP?
- What are the likely benefits to the person, government and community after the ISP?

The hypothesis is that while clients are in the ISP, and after they exit, government costs are less than the costs before they entered the ISP; and outcomes and sustainable service support for the person improve. The preliminary analysis is based on retrospective data to March 2008. Only the first three questions are partially answered at this preliminary stage of the analysis. The full cost effectiveness will be completed at the end of the evaluation.

#### 3.1 Costs

We have calculated a recurrent unit cost per client in the ISP from the recurrent financial expenditure of the ongoing ISP divided by the number of clients in the ISP (Table 3.2). This section describes the process for deriving the unit cost. The analysis isolates the expenditure that relates to the ongoing management and service costs of ISP services, including:

- Project management costs – expenditure not specific to one client e.g. management team, support services for staff from the clinical team, specialists and supported living management; and
- Direct services to clients – supported living expenditure specific to one client e.g. staff and operating costs of care planning, arranging services, direct services, housing and accommodation support costs.

The full expenditure is summarised in Table D.1. It also includes a small revenue offset of 55 per cent of clients' Disability Support Pension charged as a housing and accommodation fee. Financial data excluded from the recurrent unit cost are one-off costs of establishment, wind-

down and evaluation because these are not comparable to the operational systems in other health, community and criminal justice service systems. The analysis does not include:

- Costs incurred by other agencies, not allocated to the ISP budget;
- Indirect costs to clients or other stakeholders; and
- Non-financial costs, such as time, stress, and impact on other service providers.

Expenditure is presented as the dollar value at the time of measurement because the analysis is a relative comparison of simultaneous service provision over a short evaluation period. In the final analysis we will assume all other costs for ISP clients do not rise relative to other clients, except the financial cost of ISP (e.g. housing, criminal justice, drug and alcohol management and mental health services).

The average recurrent net cost per quarter of the ongoing project (expenditure less revenue and set-up costs) is approximately \$1,663,808 (Table 3.1). The cost of direct services to clients (average per quarter \$1,332,438) is 80 per cent of total expenditure.

**Table 3.1: ISP Expenditure and Revenue per Quarter July 2007 to March 2008 (\$)**

	July-September 2007	October-December 2007	January-March 2008	Average per quarter July 07-March 08
<i>General services</i>				
Project management <sup>a</sup>				
Management team	66,193	127,429	72,630	88,751
Operating	24,069	18,158	14,329	18,852
Support services				
Clinical team	177,327	129,998	179,312	162,212
Specialists	23,421	29,654	24,902	25,992
Operating	3,002	24,895	7,797	11,898
Supported living	30,600	31,833	39,559	33,997
<i>Direct services to clients</i>				
Southwest network				
Staff	616,526	671,037	582,183	623,249
Operating	80,138	70,121	66,710	72,323
Set up	-	-	-	-
Northwest network				
Staff	358,944	537,751	746,202	547,632
Operating	50,346	40,744	56,414	49,198
Set up <sup>b</sup>	-	120,107	-	40,036
<i>Total expenditure (1)</i>	1,430,656	1,801,727	1,790,038	1,674,140
<i>Less</i>				
Revenue offset client fees <sup>c</sup>	-29,625	-35,950	-23,535	-29,703
Set up costs (2)	-	120,107	-	40,036
<i>Recurrent net cost requirement (1) - (2)<sup>d</sup></i>	1,460,281	1,717,570	1,813,573	1,663,808

Notes: a. Excludes evaluation costs. Does not include other costs covered by DADHC e.g. rent

b. Establishment of three new interim housing properties

c. Supported living fees at 55 per cent Disability Support Pension

d. Some one-off expenses not identified e.g. Temporary project costs eg. evaluation, wind down costs

The expenditure is from the first quarter of the ISP (when funding was allocated) April 2005-June 2005 up until the first quarter of 2008 (January 2008-March). The expenditure is analysed by quarter from the beginning of the Project because of the changes in expenditure (Table D.1) and number of clients in the Project (Table D.2). The preliminary analysis has

analysed the last three quarters of the Project (Table 3.1) to calculate a recurrent unit cost.<sup>1</sup> In this period the Project has matured and costs have stabilised, more closely reflecting recurrent costs.

The equivalent annualised net recurrent unit cost per client ranges from \$175-\$218,000 depending on the definition of the number of clients (Table 3.2). The annual cost of \$194,000 represents the cost of supporting clients currently in the Project and people nominated for the Project, whom ISP staff are supporting to prepare to enter the Project. This definition of clients and nominees is a reasonable estimate of cost per person because it is the average number of people supported by ISP staff at any time. This cost of \$194,000 is lower than the average cost per client prior to entry to the ISP of \$376,000, as reported by the nominating agencies.<sup>2</sup>

**Table 3.2: Equivalent Annualised Net Recurrent Cost of ISP per Client**

	Assessment unit closed				Ongoing project				Ongoing project average		
	Oct-Dec 05	Jan-Mar 06	Apr-Jun 06	Jul-Sep 06	Oct-Dec 06	Jan-Mar 07	Apr-Jun 07	Jul-Sep 07	Oct-Dec 07	Jan-Mar 08	July 07-March 08
											Clients per quarter
1. Clients in ISP	8	16	21	24	24	24	27	32	30	30	<b>31</b>
2. Clients nominated	8	8	3	3	3	3	7	2	5	4	<b>4</b>
3. Clients exited	-	-	-	-	-	-	-	2	4	5	<b>4</b>
Total clients	16	24	24	27	27	27	34	36	39	39	<b>39</b>
											(\$'000 p.a.)
Cost per client in ISP (1)	155	133	169	141	170	239	233	183	229	242	<b>\$218</b>
Cost per client ISP contact (1-2)	77	89	148	125	151	213	185	171	196	213	<b>\$194</b>
Cost per client all clients (1-3)	77	89	148	125	151	213	185	162	176	186	<b>\$175</b>

Further analysis will concentrate on the return on this investment of approximately \$200,000 net per annum per person. What is the return to the community in terms of lower ongoing costs and improved quality of life? The first step will be to quantify the cost of other support to the people entering the ISP in three periods: before they were in ISP, during ISP and after leaving ISP. This will reveal a net annual cost of ISP – total project cost less cost of public support that would otherwise be given to the person. The net cost will be adjusted for periods other than a year.

<sup>1</sup> In the other sub-periods are: the start of project to first client entry April – Sept 05; first clients to end of assessment unit period October 05 to December 06; readjustment of project after closure of assessment unit – January to June 07; and ongoing project – July 07 to March 08 (See Appendix D: Cost Data). Use of these sub-periods not only provides an indication of change in project costs during project development, but also helps to isolate the extent and nature of one-off set-up, trial and wind down costs.

<sup>2</sup> Based on the cost data from nominating agencies for 18 clients.

### 3.2 Effectiveness

In the final cost effectiveness analysis, ongoing cost per client will be analysed against outcome data derived from the data collection used in the management of the project. This will also be supplemented with qualitative data from interviews. Comparative data on population norms and people with challenging behaviour population norms will be analysed by the evaluators. Table 3.3 summarises the expected outcomes and preliminary findings.

**Table 3.3: Expected Outcome Data for Final Cost Effectiveness Analysis**

Outcome	Comparison groups	Explanation	Preliminary data
Challenging behaviour	Before and after, ISP clients who leave	Percentage change in Overt Behaviour Scale and incident rate compared to before ISP	Reduced challenging behaviour. Supported by evidence of decrease in contact with the justice system
Stable housing	Before and after, ISP clients who leave	Change in length of tenancy (months) compared to before ISP	Increased stability in ISP and successful exits into stable housing
Reduced hospitalisation	Before and after, ISP clients who leave	Financial savings from relative change in hospitalisation (occasions and days) compared to before ISP	Reduced emergency and inpatient admissions
Imprisonment	Before and after, ISP clients who leave	Change in imprisonment (occasions and months) compared to before ISP	Decreased imprisonment (Corrective Services) for most clients
Personal Well-being Index (PWI)	Before and after, ISP clients who leave, Population norm, HASI evaluation results <sup>1</sup>	Change in PWI percentage score towards population norm and HASI clients	Similar to HASI baseline and similar to population norm in future security and part of the community
ABS Health questions	Before and after, ISP clients who leave, population norm	Change in health rating towards population norm	Similar distribution on self assessed health compared to the population norm
Living skills	Before and after, ISP clients who leave	Change in level of independence in domestic and community skills	Increased independence in domestic and community skills
Employment, education, community participation	Before and after, ISP clients who leave	Change in participation (activity and hours) compared to before ISP	Increased participation in education and labour market
Social and family relationships	Before and after, ISP clients who leave	Change in relationships with family and friends (frequency of contact) compared to before ISP	Increased social contact with family and friends

Notes: 1. NSW Mental Health Housing and Accommodation Support Initiative

In summary, the evidence shows an ongoing cost per client of approximately \$200,000 per year. The average cost per client prior to entry to the ISP was \$376,000, as reported by the nominating agencies. For most clients the preliminary evidence shows returns in terms of:

- Reduced levels and severity of challenging behaviour; supported by evidence of a decrease in contact with criminal justice services, particularly Corrective Services;
- Increased housing stability whilst they are in the ISP and some successful exits into stable housing;
- Reduced use of emergency services and reduced length of stay in inpatient hospital services;
- Decreased imprisonment in Corrective Services;
- Personal wellbeing approaching population norms in satisfaction with future security and feeling part of the community and better than the HASI baseline on this latter measure;
- Similar distribution on self-assessed health to population norm;
- Increased independence in domestic and community skills;
- Increased participation in education and labour market; and
- Increased social contact with family and friends.

It is not yet clear if these improvements will be sustained. Evidence from the longitudinal evaluation will be applied to this question. The remainder of the report describes the analysis to arrive at this preliminary evidence.

## 4 Client Profile

The aim of this section is to provide a picture of the client group as a whole and also to describe the diversity within this group. It provides an overview of demographic information and housing. Most data are to March 2008 unless otherwise stated. Some key data about the 38 clients who have been in the ISP are summarised below.

- 55 per cent of ISP clients are men and 45 per cent are women.
- Average age is 36 years.
- About 40 per cent of ISP clients identify as being Indigenous Australians or being from a Culturally and Linguistically Diverse (CALD) background.
- Clients have an average of three or four presenting problems or disorders.
- 86.8 per cent have a mental health diagnosis.
- 95 per cent have a legal guardian.
- 68 per cent were living in prison, hospital, or large residential care prior to the ISP.
- 50 per cent were in prison at sometime in the 12 months before ISP.

### 4.1 Client Characteristics

Information about the client characteristics include the number of clients in ISP and their age, gender, reasons for entering ISP and core activity restrictions. We anticipate that some of the variation in outcomes might be explained by the diversity in these characteristics. Further analysis later in the evaluation will explore this relationship.

#### Number of clients and length of time in ISP

The data in this report relates to 38 clients accepted into the ISP (Table F.1). One additional person was accepted but she chose not to participate and her information is not included in the analysis. Two other people died before they entered ISP housing but their information is included because ISP staff had already spent time working with them. One person died in the period January-March 2008 and the other in the period April-June 2008.

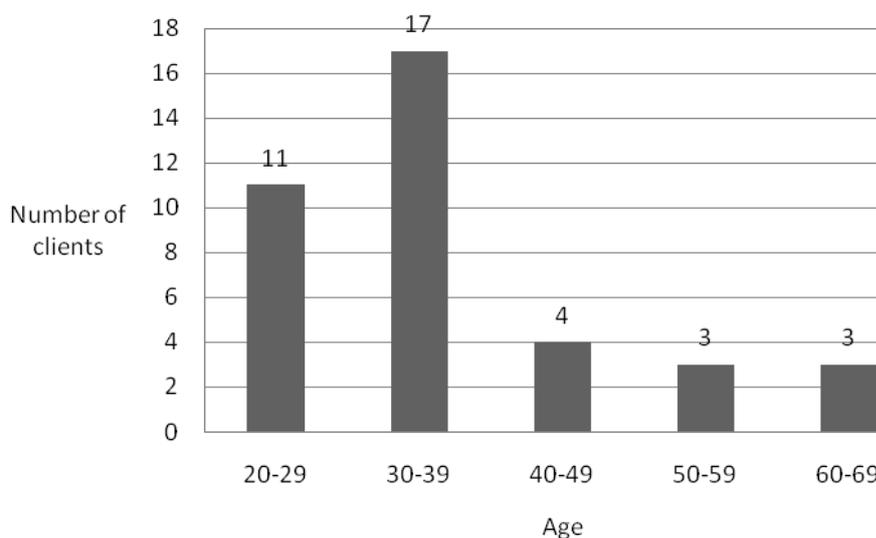
As of March 2008, the average time 38 clients spent in the ISP was 17 months (Table F.1). At that time 10 people had exited (26 per cent), nine had been placed in ongoing support and one person had died. The nine clients who exited to ongoing support spent an average of 22.5 months in the Project (Table F.1). Although the Project is set up to provide shorter term intensive support to clients, some clients from the first and second intakes are still using ISP services. The delay in exiting ISP may be because few options exist in the wider service system for ISP clients to be rehoused. These clients have had to wait while appropriate support and housing is sought in the community.

### Age and gender

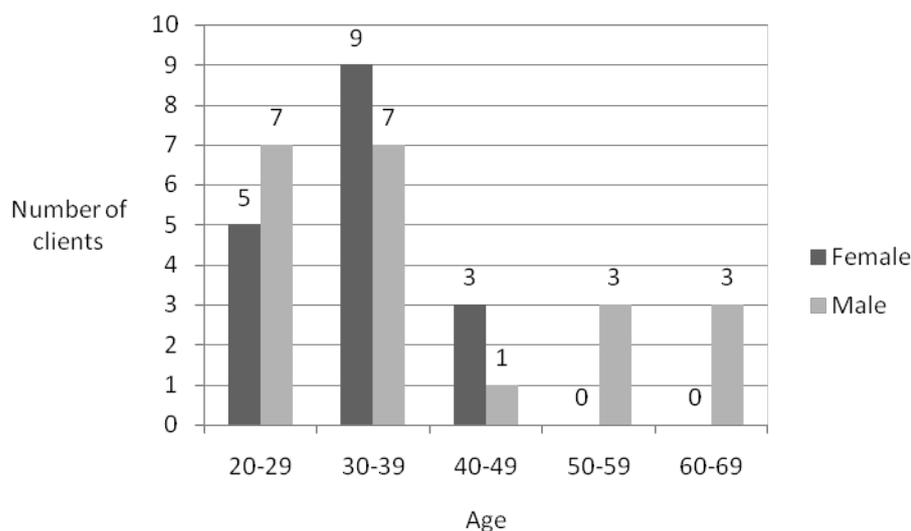
The gender representation in ISP is 55 per cent men (21) and 45 per cent women (17). This is almost representative of the community and over-representative of women in client groups of the main nominating agencies, particularly Corrective Services and mental health services.

The average age of clients is 36 years (median 34 years) (Figure 4.1). The predominance of younger clients is consistent with the aim of ISP to orient interventions so that it changes the lifetime trajectory for people with complex needs. Women in ISP are all aged less than 49 years (Figure 4.2) and are on average (33 years) six years younger than the men (39 years).

**Figure 4.1: Age Distribution of ISP Clients, March 2008 (n=38)**



**Figure 4.2: Age Distribution of ISP Clients by Gender, March 2008 (n=38)**



## Cultural background

The cultural background of ISP clients is diverse compared to the general population (Table 4.1). Nearly eight per cent of clients identify as being indigenous Australians and 32 per cent as being from a culturally and linguistically diverse background. Clients with an Indigenous background might be over-represented in ISP compared to the general population, although the number of people is too small to draw conclusions. These characteristics may have implications for recruitment and service planning within ISP. These implications will be explored in future analysis.

**Table 4.1: Cultural Background of ISP Clients, March 2008 (n=38)**

Ethnicity	Number of clients	Per cent
Indigenous Australian	3	7.9
CALD	12	31.6
Other	23	60.5
Total	38	100.0

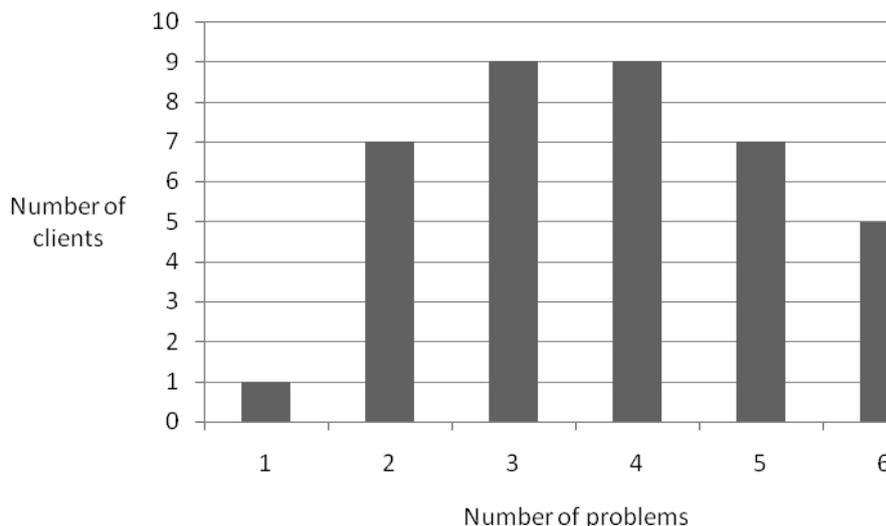
## 4.2 Presenting problems and disorders on entry to the ISP

Clients differ in the presenting problems that resulted in their nomination to the Project and the impact of these problems on core activity restrictions. The presenting problems are categorised into the following groups:

- Mental illness or disorder (including personality disorder);
- Intellectual disability;
- Drug and alcohol disorder;
- Acquired brain injury; and
- Physical disability.

Clients in the ISP have a complex mix of presenting problems on entering the Project. Most ISP clients have a mix of mental health, intellectual disability and other disabilities and disorders. Of the 38 ISP clients, people had an average of three to four presenting problems each (Figure 4.2); only eight people had less than three presenting problems.

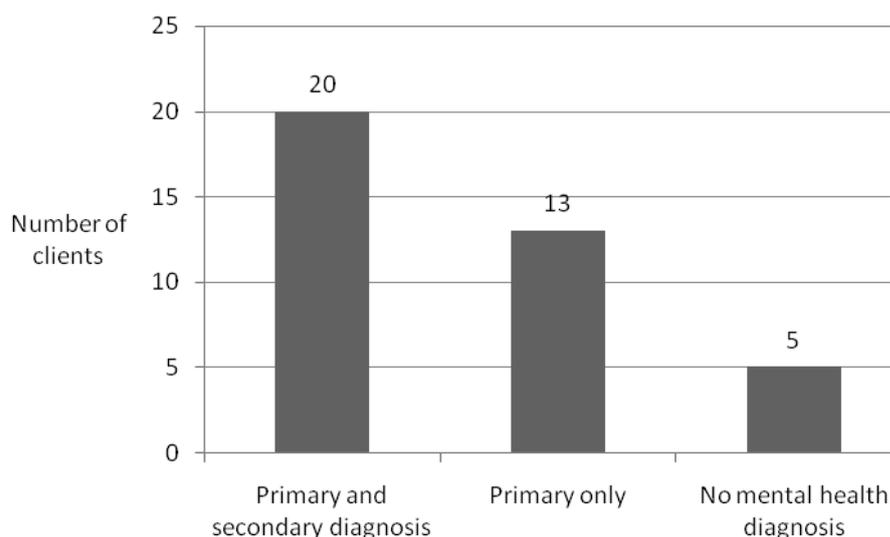
**Figure 4.3: Presenting Problems on Entry to the ISP, March 2008 (n=38)**



**Mental health**

Most ISP clients (86.8 per cent) have a mental health diagnosis (33/38; Figure 4.3). Twenty clients (52.6 per cent) also have a secondary mental health diagnosis in addition to their primary mental health diagnoses. Only five people (13.5 per cent) do not have any mental health problem. The most common mental health diagnoses are schizophrenia (37.8 per cent) and personality disorder (40.5 per cent).

**Figure 4.4: Distribution of ISP Clients’ Mental Health Diagnoses, March 2008 (n=38)**



**Table 4.2: ISP Clients' Mental Health Diagnoses, March 2008 (n=38)**

	Primary mental health diagnosis	Secondary mental health diagnosis	Total clients with diagnosis <sup>1</sup>	Per cent of all clients (38) <sup>2</sup>
Schizophrenia	12	2	14	37.8
Personality disorder	10	5	15	40.5
Schizo-affective disorder	5	2	7	18.4
Anxiety	2	3	5	13.5
Mood disorder	0	3	3	8.1
Conduct disorder	0	2	3	8.1
Psychotic disorder	1	0	1	2.7
Persecutory delusional disorder	1	0	1	2.7
Post traumatic stress disorder	1	0	1	2.7
Autism	1	0	1	2.7
Intermittent explosive disorder	0	1	1	2.7
Oppositional defiant	0	1	1	2.7
Factitious disorder	0	1	1	2.7
No mental health diagnosis	-	-	5	13.5
Total clients	33	20	-	-

Note: 1. Clients can have more than one diagnosis so total is greater than 38.

2. Per cent of all ISP clients demonstrates the frequency of each mental health diagnosis in the ISP population. Total is greater than 100 per cent because 12 people have more than one diagnosis.

### Core activity restrictions

ISP staff also rated clients' core activity restriction as a result of each of their presenting problems on entering ISP. The four levels of core-activity restriction are based on whether someone needs help, has difficulty performing, or uses aids or equipment with one or more core activities, which are communication, mobility and self care (defined by Australian Bureau of Statistics, 2003). The four levels of limitation are:

- Profound: the person is unable to do, or always needs help with, a core-activity task;
- Severe: the person sometimes needs help with a core-activity task and has difficulty understanding or being understood by family or friends;
- Moderate: the person needs no help but has difficulty with a core-activity task; and
- Mild: the person needs no help and has no difficulty with any of the core-activity tasks, but [has minimal restriction(s) and may use] aids and equipment [or other support].

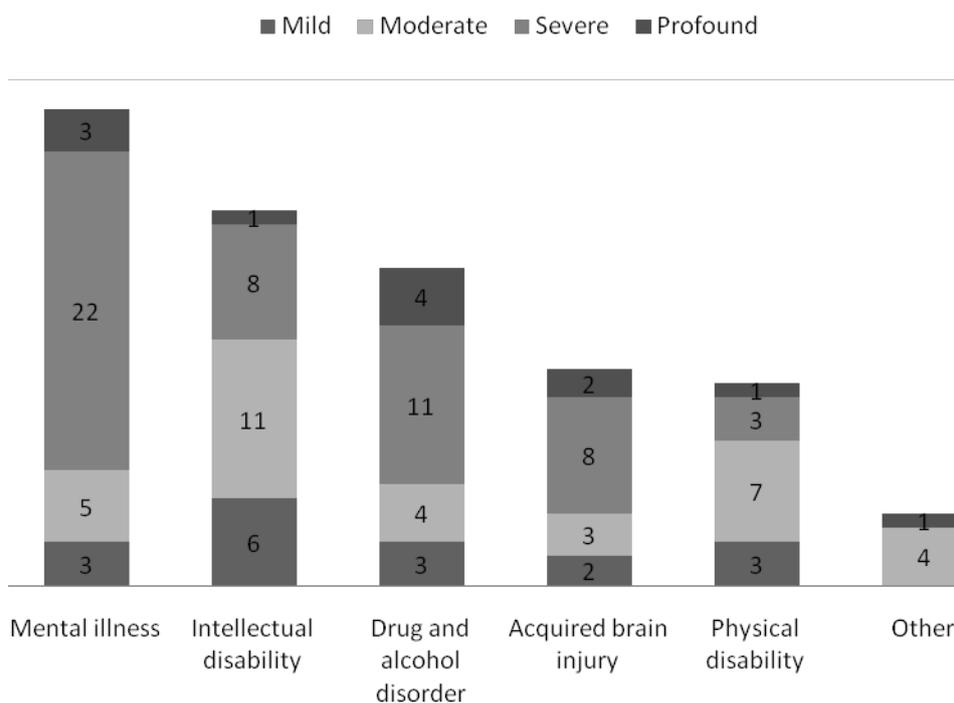
The greatest core activity restrictions were experienced by clients who had a mental health problem, acquired brain injury, or drug and alcohol disorder (Table 4.3; Figure 4.4). Most clients with these disorders experienced severe or profound levels of activity restriction. In addition, since most people have several presenting problems on entering the ISP (Figure 4.4), the combined restriction for each person is likely to be greater than Table 4.3 presents.

**Table 4.3: Core Activity Restriction by Presenting Problem, March 2008 (n=38)**

Restriction	Mental disorder	Physical disability	Intellectual disability	Drug and alcohol disorder	Acquired brain injury	Other
Mild	3	3	6	3	2	0
Moderate	5	7	11	4	3	4
Severe	22	3	8	11	8	0
Profound	3	1	1	4	2	1
Total	33	14	26	22	15	5
Average degree of restriction <sup>1</sup>	2.8	2.1	2.2	2.7	2.7	2.4

Note: 1. The average degree of restriction is a weighted average per person with that reason. Mild=1, Moderate=2, Severe=3, Profound=4.

**Figure 4.5: Core Activity Restriction by Presenting Problem, March 2008 (n=38)**



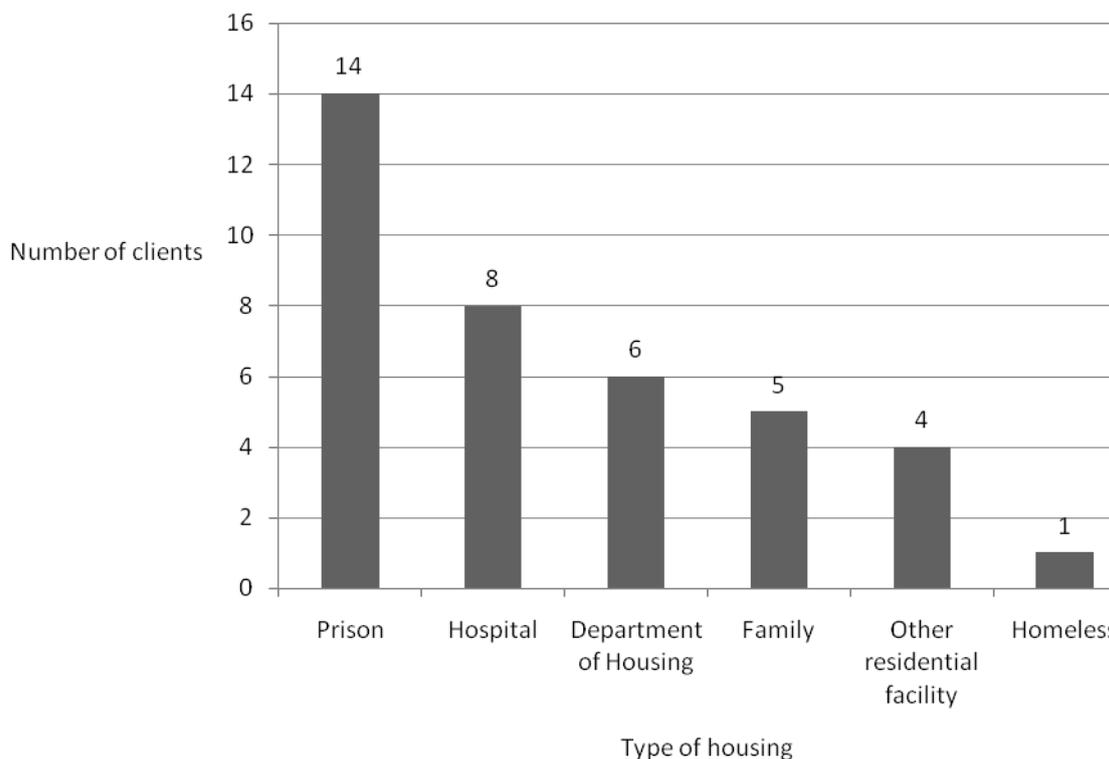
### Legal capacity

The extent to which ISP services can minimise the impact of a person’s challenging behaviour may depend on the client’s legal status. Only 11 of the 38 (29 per cent) ISP clients did not have an appointed guardian before they entered ISP; eight of these people gained a guardian whilst in ISP. As of March 2008, only two clients (5 per cent) did not have a guardian. It will be worthwhile in future reports to explore the extent to which legal guardianship encouraged people to engage with ISP services.

### 4.3 Housing

One of the criteria for entry to the ISP is insecure accommodation. Most people (68 per cent) were living in prison, hospital, or other large residential facility without stable housing to return to after discharge (Figure 4.6).

**Figure 4.6: Housing Type prior to ISP Entry, March 2008 (n=38)**



When clients enter the Project, they typically live in housing provided by the ISP (Section 2.2 and Appendix C). Whilst the Project has operated nine different units over its tenure, due to the winding down of the Project it currently operates or funds seven. These properties provide the physical infrastructure to support a variety of needs; the chosen model of support provided within the accommodation is that which best addresses the particular needs of each client. ISP clients have been supported in the following models: cluster model; villas/apartments; co-located models; group homes; drop in support; and large residential centres.

People exit the ISP when they move into housing in the community with sustainable support. Of the nine clients who have successfully exited the ISP, four were moved into group home accommodation and another four clients were supported in the community through flexible packages offering a combination of supports. Later stages of the evaluation will analyse the type and stability of housing after ISP.

## 5 Client Outcomes

This section reports on initial outcomes which have been experienced by clients since participating in the ISP. Although client outcomes will be systematically investigated in future reports, current analysis has uncovered promising early trends. It is important to note that ISP clients are a small, diverse group of people, making generalisations difficult; refer to Appendix A for a full discussion of the methodology and its limitations.

- Clients have experienced a decrease in the level and severity of challenging behaviours during their involvement with ISP.
- The number of presentations to emergency departments has decreased.
- The number of days admitted to hospital has decreased.
- The number of days of imprisonment has decreased.
- Ratings of self-assessed personal well being are below the Australian norm but are comparable to baseline scores from a similar program.
- 76.7 per cent of ISP clients rate their health as excellent, good or very good.
- 83 per cent believe their health is much better or somewhat better than one year ago.
- The majority of ISP clients do not require support more than half the time with self care skills; most, however, need help more than half the time with completing domestic and community skills.
- 60.5 per cent of ISP clients have reconnected with family and friends or made new friends since being involved in ISP.
- 52.6 per cent of ISP clients have become involved in social activities such as church, sporting activities, art classes since being an ISP client.

### 5.1 Challenging Behaviours

A primary aim of ISP is to reduce clients' challenging behaviours. Overt Behaviour Scale (OBS) was used to measure changes in challenging behaviour (Kelly et al, 2006). This validated instrument quantifies the frequency and severity of a range of challenging behaviours, including: verbal aggression; physical aggression against objects; physical aggression against self; physical aggression against other people; inappropriate sexual behaviour; perseveration or repetitive behaviour; absconding, inappropriate social behaviour; and lack of initiation (Appendix A describes the scoring method).

OBS data were available for 24 clients still in ISP and five people who have left the Project, allowing for comparisons of challenging behaviours before, during and after ISP. Analysis showed a decrease in both the level and severity of challenging behaviours (Table 5.1). The level of challenging behaviour for people in ISP decreased by 4.8 per cent and, for people who have left ISP, by 36.3 per cent. The severity of challenging behaviours decreased by 6.44 per cent for people still in ISP and by 42.36 per cent for people who successfully exited ISP.

**Table 5.1: Measure of Challenging Behaviours Level and Severity (Overt Behaviour Scale – OBS) during ISP, March 2008 (n=24)**

	OBS level			OBS severity		
	Pre ISP	During ISP	Per cent change	Pre ISP	During ISP	Per cent change
Average	12.5	11.9	-4.8	29	27.1	-6.4
Minimum	3	3	0	9	6	-33.3
Maximum	23	21	-8.7	55	50	-9.1
Standard deviation	5.31	4.97	-6.4	12.89	12.76	-1.0

Despite the small sample size, these numbers indicate that clients have experienced a decrease in challenging behaviours whilst they have been in the ISP. Changes in challenging behaviour will be measured and analysed more fully in future reports, including further comparisons of OBS scores, types of challenging behaviours and analysis of incident reports.

## 5.2 Personal Wellbeing

One of the client outcome measures for the evaluation is self-assessed personal wellbeing. This was measured using the Personal Wellbeing Index (PWI), an internationally validated instrument which measures subjective wellbeing (IWG, 2006).<sup>3</sup> The results are standardised to a scale of 1-100 and compared to the Australian population (Cummins, 2005) and a similar population group, the Mental Health Housing and Accommodation Support Initiative (HASI) clients (Muir et al, 2007: 20).<sup>4</sup>

ISP clients are most satisfied with their safety and feeling part of the community (Table 5.2; Figure 5.1). Although ISP clients are less satisfied with all aspects of their wellbeing than the general population, the scores are similar to the baseline scores for the HASI clients. Compared to HASI clients, they are more satisfied with their health and with feeling a part of the community. These are positive results that are consistent with the goals of ISP. We would expect the scores to increase in some dimensions during the evaluation

<sup>3</sup> These data were collected in March 2008 and therefore do not represent a baseline measurement.

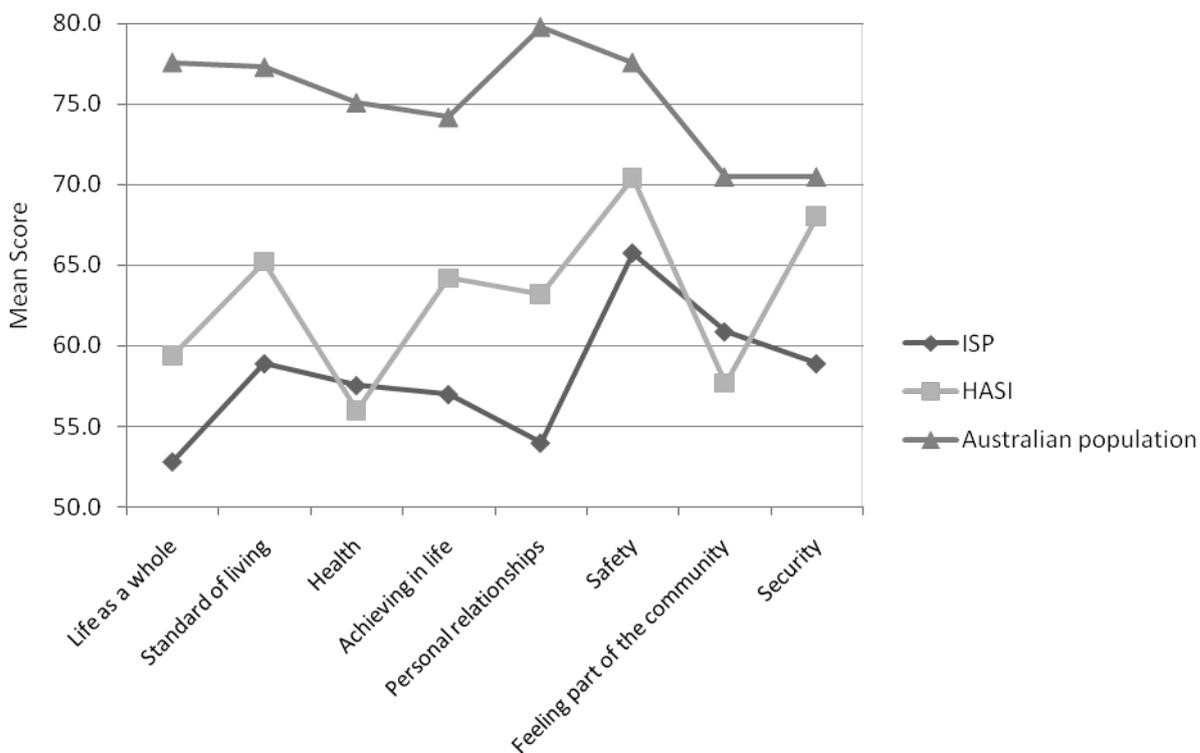
<sup>4</sup> Researcher interview scores for three clients were slightly different to the scores collected by ISP staff, illustrating the difficulty of taking self-assessment measurements with this client group.

**Table 5.2: Personal Wellbeing Index during ISP, March 2008**

	ISP clients (36)			Comparison means		ISP difference from Australian norm
	n	Range	Mean	HASI baseline (55) <sup>1</sup>	Australian norm <sup>2</sup>	
Standard of living	35	0-100	58.9	65.2	77.3	-18.1
Health	36	10-100	57.5	56.0	75.1	-17.6
Achievements in life	36	10-100	56.9	64.2	74.2	-17.3
Personal relationships	33	10-100	53.9	63.2	79.8	-25.8
Safety	35	10-100	65.7	70.4	77.6	-11.9
Feeling part of the community	36	10-100	60.8	57.7	70.5	-9.7
Future security	35	10-100	58.9	68.0	70.5	-11.6
Life as a whole	36	0-100	52.8	59.4	77.6	-24.8

Notes: Personal Wellbeing Index (PWI). Scale 0-100 where 0=completely unsatisfied, 100=completely satisfied (IWG 2006).  
 Missing results (3) – one person died and two people refused to participate.  
 1. Muir et al, 2007: 20.  
 2. Cummins, 2005: 39.

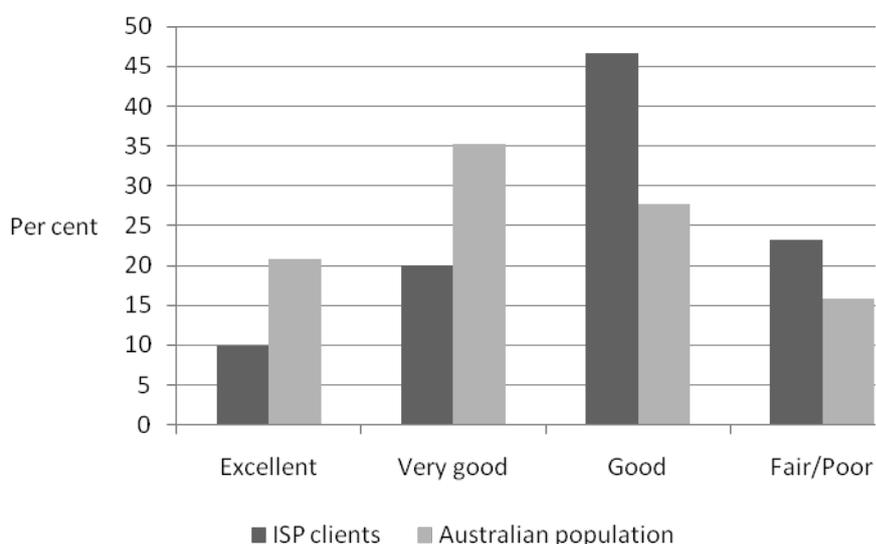
**Figure 5.1: Personal Wellbeing Index Compared to HASI and the Australian Population, March 2008 (n=36)**



### 5.3 Health

ISP staff asked clients how they rate their health, using the standard ABS self-assessed health question (ABS, 2006). Most ISP clients (76.7 per cent) rate their health as excellent, very good or good (Figure 5.2). Although slightly less positive than the mean scores for the Australian population, the distribution of scores is similar. Possible explanations for the differences include: ISP clients are on average younger than the general population and younger people are more likely to rate their health as better than older people; also, mental health diagnoses are more prominent among ISP clients than physical health problems (Figure 4.4), but clients may rate their mental health differently from their physical health.

**Figure 5.2: Self Assessed Health during ISP Compared to Australian Population, March 2008 (n=30)**



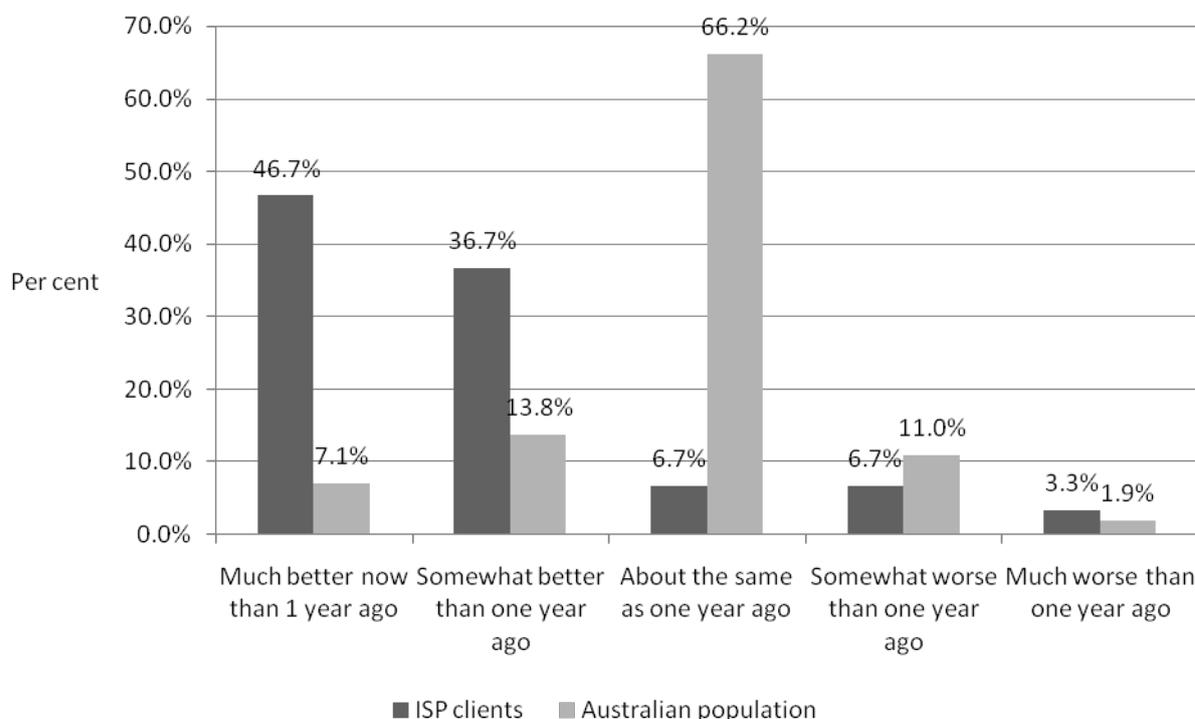
Notes: Comparison data source, ABS (2006).  
Missing (8) (one person died; seven people did not answer this question).

ISP clients also rated their health compared to one year ago (Table 5.3 and Figure 5.2). Most people (83 per cent) assessed their health as much better or somewhat better than one year ago. ISP clients report much greater positive change than the Australian population. This could be due to ISP or other factors in their lives.

**Table 5.3: Self Assessed Change in Health Status during ISP, March 2008**

Change in health status	ISP clients		Australian norm
	n=30	Per cent	per cent
Much better now than one year ago	14	46.7	7.1
Somewhat better than one year ago	11	36.7	13.8
About the same as one year ago	2	6.7	66.2
Somewhat worse than one year ago	2	6.7	11.0
Much worse than one year ago	1	3.3	1.9
Total	30	100.0	100.0

Note: Missing results (8) – one person died; seven clients did not answer this question.

**Figure 5.3: Self Assessed Change in Health Status during ISP Compared to Australian Population, March 2008 (n=30)**


#### 5.4 Living Skills

As rated by staff, most clients require some support in self care, domestic skills, and community living skills. The following table (Table 5.4) shows that the majority of ISP clients who do not require support more than half the time with most self care skills, with the exception of taking medication (over 75 per cent need assistance more than half the time). This independence reflects the fact that the ISP client group is young (average age 36 years) and that these clients are not as restricted physically as they are by mental illness and intellectual disability.

**Table 5.4: Self Care Skills during ISP, March 2008 (n=37)**

	Bathing	Dressing	Diet	Exercise	Taking medication
Independent	21	23	7	7	1
Supported less than half the time	7	9	13	12	8
Supported more than half the time	6	4	10	11	8
Fully dependent	2	1	7	4	18
Don't know	1	0	0	3	2
Per cent who do not require support more than half the time	75.6	86.5	54.1	51.3	24.3

Note: Missing results (1) – no information for the client who died.

Staff report that although clients have the capacity to carry out self care tasks, many clients had limited motivation to comply with these tasks when entering the Project. ISP staff reported that clients have become more self-sufficient and independent in completing the tasks to the point that most clients are now able to complete self care tasks after verbal prompting by staff.

Similarly to self care tasks, most ISP clients require some support with domestic skills and activities of community living (Table 5.5; Table 5.6). Slightly more than half of ISP clients do not require support less than half the time with getting around and shopping. However, most clients need help more than half the time with other domestic skills such as cooking and cleaning. Budgeting is the area in which clients need the most support: 86.5 per cent of clients need assistance more than half the time with this task.

**Table 5.5: Domestic Skills during ISP, March 2008 (n=37)**

	Cooking	Cleaning	Shopping	Laundry
Independent	5	3	6	6
Supported less than half the time	11	8	13	11
Supported more than half the time	8	14	7	8
Fully dependent	9	7	9	10
Don't know	4	5	2	2
Per cent who do not require support more than half the time	43.2	29.7	51.4	45.9

Note: Missing results (1) – no information for the client who died.

**Table 5.6: Community Skills during ISP, March 2008 (n=37)**

	Getting around	Using public transport	Banking	Budget	Use community services	Make appointment
Independent	14	12	8	1	5	4
Supported less than half the time	6	7	5	4	6	7
Supported more than half the time	8	8	9	17	12	8
Fully dependent	9	8	14	13	9	11
Don't know	0	2	1	2	5	7
Per cent who do not require support more than half the time	54.1	51.3	35.1	13.5	29.7	29.7

Note: Missing results (1) – no information for the client who died.

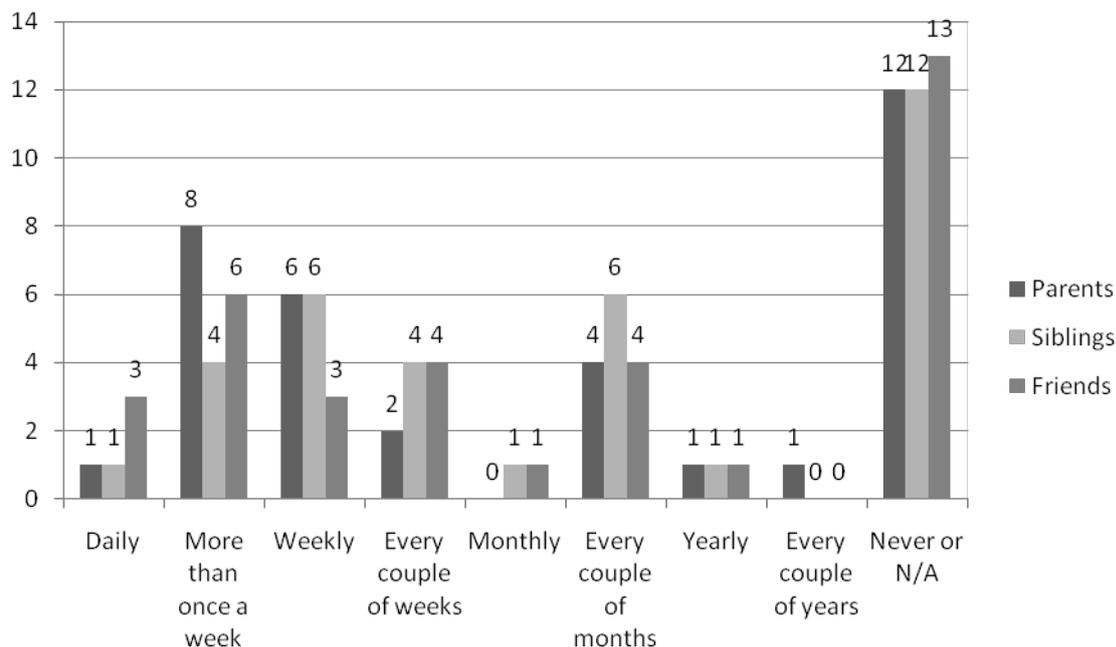
Staff reported seeing positive changes for ISP clients in the areas of self care, domestic and living skills; this is the case even in relation to budgeting, which is one of the areas in which ISP clients have the biggest skill deficits. For example, one client has learned how to,

... budget her money more effectively and recently saved a significant amount of money to holiday in Queensland. She now makes her money last and does not spend the lot the day she receives it.

These levels of dependence have implications for the support and the levels of service required to support these clients in the community. If the independence levels do not improve over time, it will also indicate that support packages after ISP will need to include this type of support.

### 5.5 Social and Economic Participation

ISP aims to increase social networks and economic participation. Reports from ISP staff indicate that clients have experienced improved relationships with family, friends and the community through their contact with the ISP (Figure 5.4). Most clients (60.5 per cent) have reconnected with family and friends or made new friends since being involved in ISP. Some families have become more willing to include clients to family events because of the decrease in the clients' challenging behaviour. For example, a 28 year old Aboriginal client has made links with cultural groups and has increased contact with his family. Another client had a reunion with his father and mother, from whom he had been estranged for 15 years and 10 years, respectively.

**Figure 5.4: Social Networks during ISP, March 2008 (n=35)**


While over half of these 35 clients see their parents, siblings, and friends more than once a year, just over one third of clients (34-37 per cent) still have no contact at all with these social networks (no information was available for the one client who died and another two who are still in prison) (Figure 5.4). In addition to increased contact with family, 20 of 38 (52.6 per cent) people have become involved in social activities such as church, sporting activities, art classes since being an ISP client. Some clients are also engaging in economic and educational activities since being in ISP. Six clients (three of whom have exited ISP) are now working at an average of 12.7 hours per week (Table 5.7). All jobs are casual or temporary positions. Three clients are doing some type of volunteer work and another five clients are participating in some sort of educational activity for an average of five hours per week.

**Table 5.7: Education and Work Participation during ISP, March 2008 (n=38)**

	Number of clients	Per cent <sup>1</sup>	Average hours per week
Working	6	15.8	12.7
Volunteering	3	7.9	4.3
Education	5	13.2	5
No participation	25	65.8	-
N/A or unknown	3	7.9	-

Note: 1. Per cent of all clients (38). Clients might participate in more than one activity so total per cent is greater than 100.

## 6 Service Use

ISP intends to increase appropriate service use, such as the use of GPs, and to reduce inappropriate or unplanned service use, such as the overuse of hospital, emergency and criminal justice services. Analysis is drawn from the service use information of 18 clients, who had quantifiable information about service use during the 12 months before ISP and during ISP. The data for the remaining 20 ISP clients require further analysis to extrapolate numbers that accurately reflect service use. Future reports will include this analysis, as well as a comparison of the service use after clients have exited from ISP.

All service use data provided in this section have been annualised for the periods before and during ISP. Annualisation is useful for comparing two time periods, but may obscure changes that occurred during ISP, which is a short, time-limited project. Later analysis will examine this possibility. The units of service are the number of events or visits (for emergency services and all other service types) and the number of days (for hospital admissions). Changes in service use are calculated by subtracting the mean number of units of service used during the 12 months during ISP from the 12 months prior to ISP. Later evaluation reports will provide detail about the ISP services received by clients. The summary of preliminary results is below.

- The number of emergency department presentations decreased on average by 20 presentations per year.
- The number of days in hospital decreased on average by 45 days per year.
- The number of days spent in prison decreased on average by 87 days per year.

### 6.1 Services Used in the Community

ISP is intended to support the increased use of community health services, such as primary and allied health services. The preliminary analysis shows an increase in the use of psychologists, allied health and other health services. Other community health services, such as drug and alcohol as well as community mental health services were used less frequently (Table 6.1). An explanation for the decrease in the use of community health services is that some clients were extraordinarily high users of community health services before ISP. Some clients, for example, used GP services almost daily before ISP, while others had not seen the GP at all in the 12 months prior to ISP. The diverse patterns of service use are reflected in the high standard deviation scores for the mean levels of service use the 12 months before and during ISP.

**Table 6.1: Health Services Used in the Community 12 Months before entry and 12 Months after entry into ISP (annualised), March 2008 (n=18)**

	Mean pre-ISP	SD	Mean ISP	SD	Difference bet. means
Psychologist	12.4	28.3	23.8	50.6	11.4
Psychiatrist	12.1	21.8	6.2	11.6	-5.9
General practitioner	19.6	53.6	9.6	16.8	-10.0
Allied health	6.1	24.5	7.5	23.4	1.4
Community mental health	20.1	83.8	4.6	14.0	-15.5
Drug and alcohol	19.8	83.2	1.2	4.7	-18.6
Other (e.g. dentist)	0.1	0.5	3.0	10.2	2.9
All service types	90.2	--	55.9	--	-34.3

Note: Units are number of visits

Although the numbers show a substantial decline in the use of community health services, many ISP staff reported that the under-use, rather than over-use, of health services before ISP was a problem for clients. One client, for example, had not used medical services for over ten years. This again highlights the complexity and diversity of this client group and makes it difficult to draw generalisations about the whole group.

## 6.2 Hospital Services

Hospital service use decreased during ISP compared to before ISP for both emergency services and days admitted (Table 6.2). While some people have experienced a small increase in the number of days and visits in both hospital service types, presumably for planned or unpreventable reasons, the overall trend was a large decrease in the amount of hospital services used. Part of this decrease can be attributed to two people who had been living in hospital for the entire year prior to beginning ISP. Future analysis will separate these people from other ISP clients and, in addition, will separately examine acute services from residential hospital services.

**Table 6.2: Hospital Services Used 12 months before entry and 12 months after entry into ISP (annualised), March 2008 (n=18)**

	Mean pre-ISP	SD	Mean ISP	SD	Difference bet. means
Emergency <sup>1</sup>	23.6	83.9	3.7	6.5	-19.9
Other hospital <sup>2</sup>	46.8	116.8	2.0	4.0	-44.8
Total	70.4	--	5.7	--	-64.7

Note: 1. Units for emergency = number of visits  
2. Units for other hospital = number of days

The ISP confirmed that the trends from these numbers were reflected in their experiences. They reported substantial decreases in hospital service use by most clients. For example, one client in the 12 months prior to starting ISP used emergency hospital services and police services more than once a week due to mental health crises. This client now uses emergency

services only once a month on average. The change in service use reflects a change in the capacity of the service system to deal with her behaviour through better coordination of alternatives to emergency services.

### 6.3 Criminal Justice Services

ISP aims to decrease client contact with the criminal justice system. Half of ISP clients (19/38) spent some time in prison in the 12 months before entering the Project (average time in prison was 41.1 months, median 10 months). This section provides analysis of the use of criminal justice services for the 18 clients for whom data were available. As in the previous section, the data have been annualised for the periods before and during ISP.

Contact with criminal justice services reduced greatly for most people once they entered ISP (Table 6.3). The biggest reduction was days in prison, which decreased by an average of 87 days. The largest increase was contact with police, but the increase was small compared to the overall decrease in the use of most criminal justice services.

**Table 6.3: Criminal Justice 12 months before entry and 12 months after entry into ISP (annualised), March 2008 (n=18)**

	Mean pre-ISP	SD	Mean ISP	SD	Difference bet. means
Police (contacts)	1.4	3.9	2.7	4.2	1.3
Courts (visits)	0.8	2.0	0.6	0.8	-0.2
Prison (days)	108.0	152.6	21.1	85.8	-86.9
Mandatory drug and alcohol service (visits)	0	0	0.0	0.1	0.0
Probation (days)	20.4	86.0	16.2	59.1	-4.2
Total	130.6	--	40.6	--	-90.0

These results indicate a positive change for clients involved with ISP. In addition, the comments from staff also illustrated the wider benefits to the service system and the community. For one client, the time spent in ISP and away from prison represented, ‘... the longest known period of time the client lived in the community since she was [aged] 15 [for 17 years].’ Staff attributed changes experienced by clients to the stability of the living environment, the strategies used to manage challenging behaviour and the consistency of the use of these strategies by staff.

While for most clients recidivism and the use of criminal justice services decreased, some other clients did reoffend. Staff believed that without appropriate support, a high risk that these few clients would offend again still remained. One staff member said:

Without social support he is likely to return to the criminal justice system. When parole was in place, ISP had some capacity to coerce him to engage but when that was up, he walked out the door. He has been violent to staff and is regularly using drugs and alcohol.

Such experiences reflect the complexity and diversity of the people accepted as ISP clients. It also suggests that compulsory powers through guardianship or court order may be important for some people to secure their engagement with ISP services. This element will be explored further in later reports.

## **7 Conclusion**

### **7.1 Implications of the Preliminary Findings**

The ISP serves some of the most complex clients in the service system in Sydney and, for this reason, generalisations across the whole of the ISP client group run the risk of masking significant differences between individuals. The information provided by staff on ISP clients shows that most clients involved in ISP are experiencing improvements in most measures of intended outcomes. Clients involved in this project for over 12 months seem to be improving in many areas of challenging behaviour, which provides benefits to the community and to the service system. These clients have shown a large decrease in their use of hospital and criminal justice services. They have also increased the appropriate use and decreased the inappropriate use of primary and allied health care. The findings will be further explored in future reports when the OBS is compared with incident reports to build a full picture of changes in challenging behaviour.

The recurrent cost of ISP is approximately \$200,000 per person per year. The average cost per client prior to entry to the ISP was \$376,000, as reported by the nominating agencies. The Project has contact with people nominated, entering and exiting the ISP. These multiple points of contact have a broader impact on assisting the nominating and exit agencies to support these clients and others with challenging behaviours.

### **7.2 Evaluation Progress**

The evaluation of the ISP is so far on schedule. Later reports will include further data about:

- Nominations to the Project to examine what agencies referred to the project and the criteria for acceptance;
- Service use across the client group;
- Challenging behaviour measures using OBS and incident reports;
- Description of ISP services and accommodation;
- Post-ISP packages; and
- Process and satisfaction with the ISP from workers and key stakeholders.

## Appendix A: Evaluation Methodology

This preliminary report provides an analysis of the outcome data for 38 clients in ISP. ISP collected the data from April to June 2008. Five sources of data were analysed for this report: ISP client information sheet; client file data; researcher interviews with three case study clients; financial records; and discussions with the ISP management and Evaluation Reference Group. These methods are explained below. All information was given to the researchers in a de-identified format. The interviews were de-identified after they were matched to the secondary data. The full methodology is described in the ISP Evaluation Plan (Fisher & McDermott, 2008).

### **ISP Client Information Sheet**

The researchers developed an ISP client information sheet to collect a set of standard qualitative and quantitative questions for all clients. ISP staff who work with the clients collected the information. The client information sheet includes questions on: demographics; reasons for entry to ISP; mental health and disability; and number of health care and criminal justice services used before, during and, if applicable, after ISP. Other questions addressed living skills, social and community participation, relationships and economic participation. The data will be updated for longitudinal analysis in the future evaluation reports.

Some questions on wellbeing and community participation were drawn from validated instruments so that comparison can be made to other research, such as the Cummins (2005), Kelly et al (2006), Stancliffe et al (2007) and the Robertson et al (2004) UK study of support for people with challenging behaviour. In addition, qualitative questions were included in the client information sheet to allow ISP staff to provide descriptive accounts of clients' progression through the Project.

Staff collected information on client's challenging behaviours using the Overt Behaviour Scale (OBS). This measure will be used to measure changes in challenging behaviour over time. The OBS measures behaviours in the following categories:

- Verbal aggression;
- Physical aggression against objects;
- Physical aggression against self;
- Physical aggression against other people;
- Inappropriate sexual behaviour;
- Perseveration or repetitive behaviour;
- Absconding;
- Inappropriate social behaviour; and
- Lack of initiation.

These behaviours form nine categories, which are used to calculate scores on three scales. The first of these scales, the 'Cluster' score (0-9), indicates the number of behavioural categories exhibited by a client. The second scale, the 'Total Levels' score (0-34), is the total sum of each of the levels of behaviour exhibited within the nine categories. These sub-behaviours are ranked in order of severity and are identified by a clinician ticking the appropriate box that matches with client behaviour. For example within the category of 'Verbal Aggression' a client may both make personal insults and threats of violence, constituting two levels of sub-behaviour. Corresponding with each level of challenging behaviour is a score between one and four that assigns a severity value to individual sub-behaviours. The final scale, the 'Clinical Weighted Severity' score (0-77), is the total sum of these values. This scale provides an absolute number that defines the overall severity of behaviour exhibited by a client across all categories. These scales and individual behavioural results inform the primary modes of analysis when using OBS. For the purposes of this evaluation the OBS will be used to track the progress of clients participating in the ISP through a longitudinal analysis of their results.

For future analysis, the ISP staff will collect the standardised Overt Behaviour Scale (OBS) to measure changes in challenging behaviour. This change will be analysed in conjunction with incident reports to develop further understanding of changes in challenging behaviour.

### **Client File Data**

ISP staff sent relevant supporting information with that provided in the client information sheet. The type and amount of data sent varied for each client. The types of data included ISP snapshots, client behaviour and intervention plans, hospital data, criminal record data, guardianship reports, incident reports, and risk assessments. This information was used to develop a more holistic understanding of the client's situation, service use change and cost to the service system and to the wider community.

### **Case Studies**

The evaluation includes interviews with four clients in April - May 2008, September 2008 and September 2009. Repeat contact with these clients allows for analysis of participants' experience of ISP and any changes in their lives over time. Four clients from recent intakes were identified in April 2008. The aim was to include a client from each of the primary referral agencies, including DADHC, Department of Health, Department of Housing, and Corrections. The arrangements for the interviews were delayed because one client chose not to participate in the interview. As a result, one interview will be conducted after the ISP client leaves prison in the second half of 2008.

This report includes the interview data for three people. It includes a description of the client's history, as well as their responses to questions about social isolation, confidence, community participation, wellbeing, service use and quality of care. The responses will be compared with the repeat interviews in 2008 and 2009.

### **Financial Records**

ISP managers transferred financial records for the cost effectiveness analysis. The records include financial costs to the Project from its establishment through to the stable operation of ISP from mid 2007 to March 2008. The financial records will be updated for the remainder of

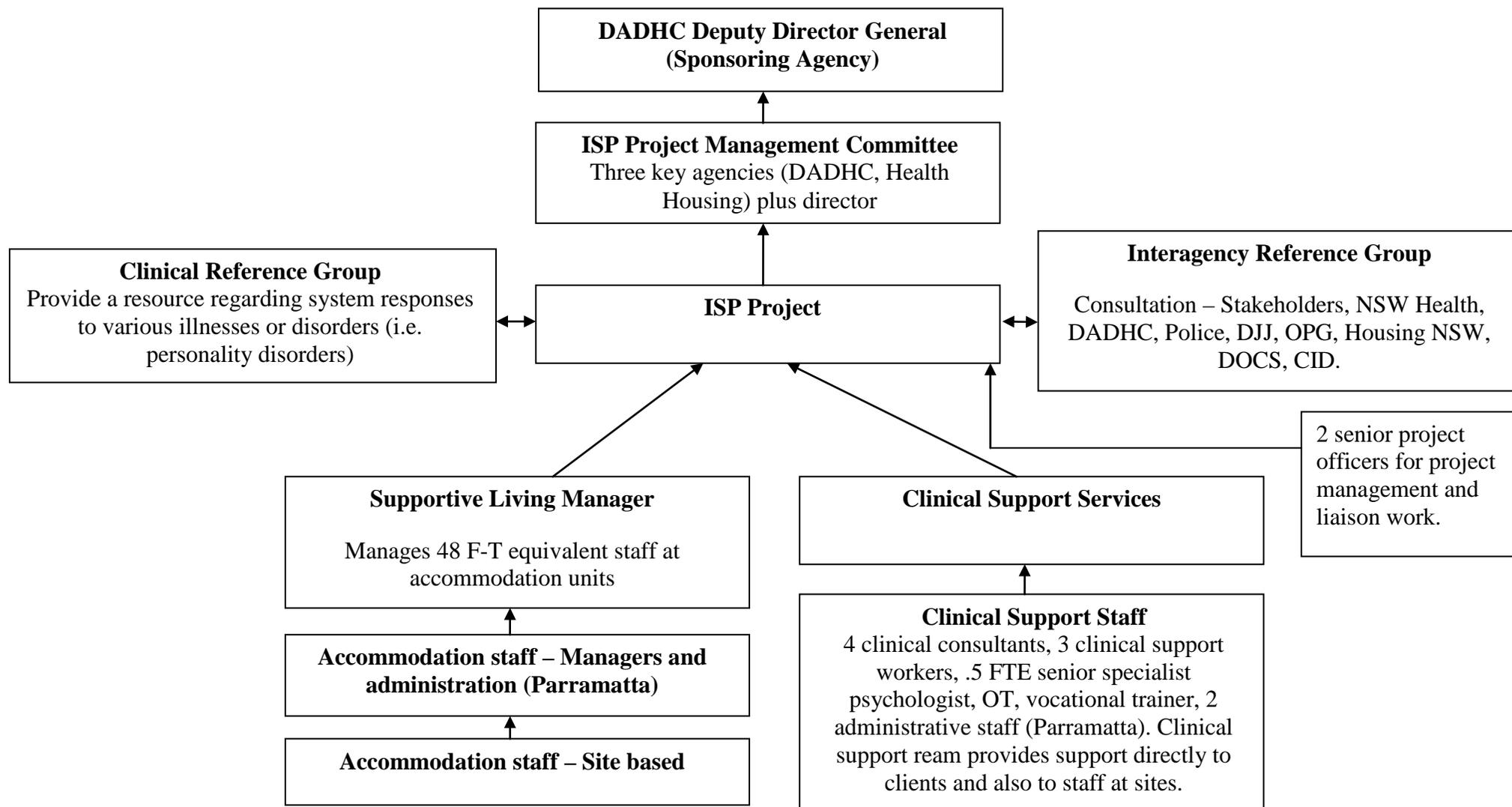
the evaluation. It is possible that later costs will include wind-down costs, which are not typical of an ongoing project.

### **Discussions with ISP Management and Evaluation Reference Group**

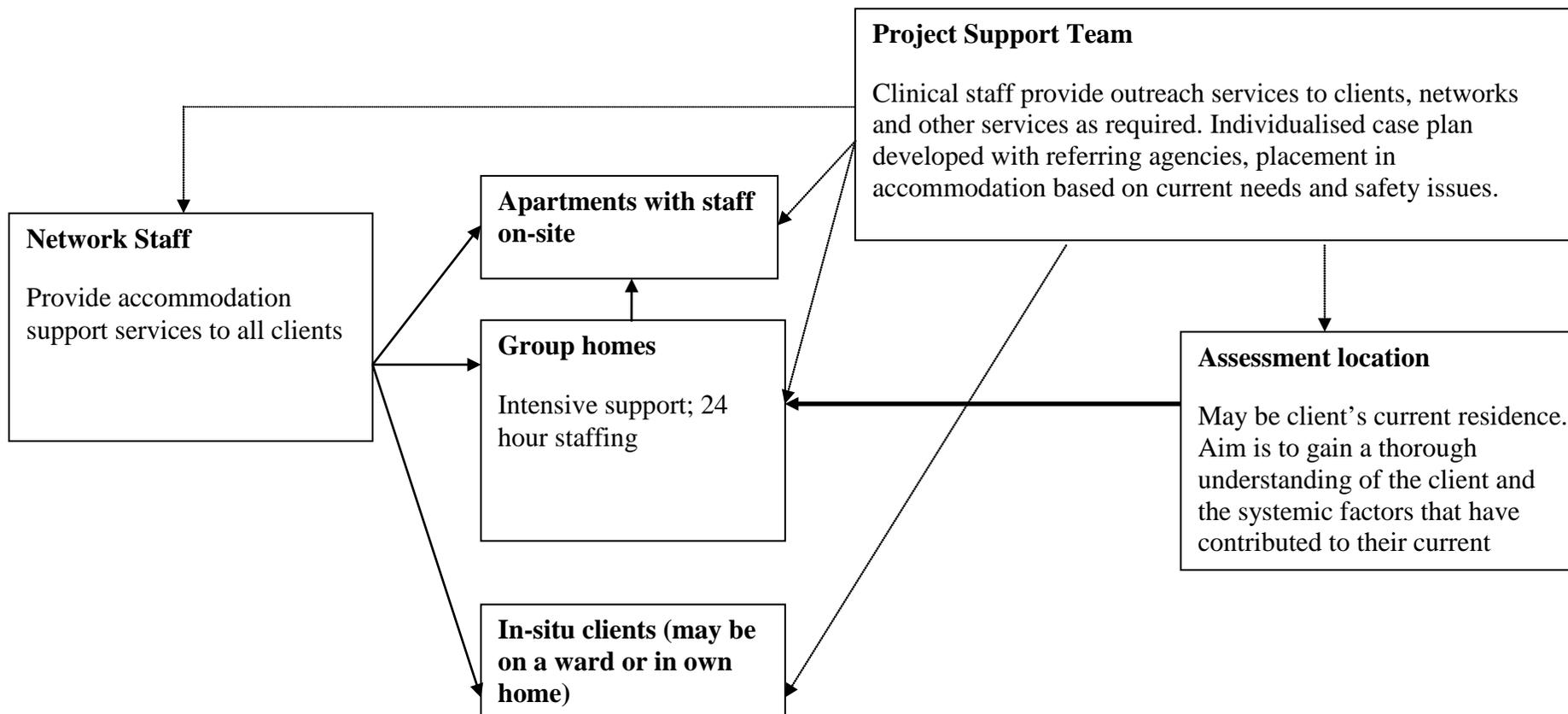
The researchers communicated with ISP management and Evaluation Reference Group members from February to June 2008 about data collection, transfer and quality questions. These meetings also informed the researchers about the establishment, management and operation of ISP. The data were used to inform the preliminary analysis in this report. Comprehensive interviews with ISP management and staff will be conducted in September 2008 for analysis in the next report.

## Appendix B: ISP Responsibility Matrix

(See section: Roles and Responsibilities of ISP Partners)



Appendix C: Model of ISP Accommodation and Support Services



## Appendix D: Cost Data

**Table D. 1: ISP Expenditure and Revenue per Quarter April 2005 to March 2008 to Calculate Recurrent Net Cost Requirement**

Significant changes	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
<i>General services</i>													
<i>Project management<sup>a</sup></i>													
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
<i>Support services</i>													
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
<i>Direct services to clients</i>													
<i>Assessment unit<sup>b</sup></i>													
Staff	-	63955	531638	502959	714162	415381	444914	-	-	-	-	-	-
Operating	-	9813	31083	39563	665	70504	28761	-	-	-	-	-	-
Set up	-	9132	1809	1720	50148	58654	-	-	-	-	-	-	-
<i>Southwest network</i>													
Staff	-	-	17351	98286	221897	185142	256315	613224	731953	616526	671037	582183	623249
Operating	-	-	12145	18501	34057	72435	84372	68014	102045	80138	70121	66710	72323
Set up	-	-	-	30992	164346	225435	-	-	-	-	-	-	-
<i>Northwest network</i>													
Staff	-	-	22118	155815	385508	340970	344790	410131	402221	358944	537751	746202	547632
Operating	-	-	-	15806	28981	25519	30845	30074	51138	50346	40744	56414	49198
Set up	-	9132	1809	32712	266144	284089	-	-	-	-	120107	-	40036
<i>Total expenditure (1)</i>	132522	211261	874062	1107609	1916581	1655039	1469196	1403765	1542792	1430656	1801727	1790038	1674140
<i>Less</i>													
Revenue offset client fees <sup>c</sup>	-	-	-	-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
<i>Recurrent net cost requirement (1) - (2)<sup>d</sup></i>	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 DADHC eg. 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 eg. Temporary project costs eg. evaluation, wind down costs													

**Table D. 2: Number of Clients in ISP per Quarter, April 2005 to March 2008**

Significant changes	Funding allocated		Assessment unit closed					Ongoing project			Ongoing project average		
	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	Jul 07-Mar08
Clients in ISP	-	8 <sup>2</sup>	8	16	21	24	24	24	27	32	30	30	31
Clients pre-ISP (nominated)	8	-	8	8	3	3	3	3	7	2	5	4	4
Total current clients	8	8	16	24	24	27	27	27	34	34	35	34	35
Exited clients <sup>1</sup>	-	-	-	-	-	-	-	-	-	2	4	5	4
All clients - current+exit	8	8	16	24	24	27	27	27	34	36	39	39	39

Notes 1. Including 9 successful exits, 1 person who died and 1 who exited prior to entering ISP services. No data available on clients who were temporarily absent from the ISP.

2. Includes 3 completed, waiting for housing support

## Appendix E Case Study Summaries

This section of the report focuses on three of the four clients who will participate in the longitudinal element of the ISP evaluation. The section provides a short summary of the history of these three clients from their files and provides brief analysis of the baseline interviews conducted in April and May 2008. The interviews will be compared with the longitudinal aspects of the evaluation to take place in September 2008 and again in September 2009. The names used in this report are pseudonyms.

### **Anne**

Anne is a 29 year old Anglo-Australian woman. She was born in NSW and moved with her family to Adelaide shortly thereafter. She is the third of nine children who were brought up in an emotionally dysfunctional home – she describes being physically, sexually and emotionally abused by her father. Anne was taken into foster care at the age of nine in Adelaide and maintains regular contact with this family via phone

When she was 18, Anne was admitted to psychiatric hospital in South Australia for treatment of hypomania and severe depression, which led to debilitating anorexia nervosa, self-harm and suicidal ideation. She lived at the hospital for six years. In 2003, Anne was released from the hospital and lived independently in the community for two years with community mental health support. In October 2004 at age 25, Anne returned to NSW and was admitted to Nepean Hospital for treatment of an ectopic pregnancy. Following that incident, she was admitted to five psychiatric hospitals in NSW interspersed by short stays in the community.

More recently, Anne was accommodated at Mulawa Prison where she was serving a four-year prison sentence, with a non-parole period of 15 months, for Assault with Intent to Rob. She was located to ISP group home accommodation in July 2007. She reports that living in ISP “has its ups and downs”. She finds it difficult to deal with her roommate who sometimes yells and does not respect her. She feels that she gets enough staff support and services, but she does have some difficulty dealing with the staff turnover.

Anne meets with her case manager once a week to discuss how she is going. She likes that her case manager is encouraging because “most of my life I had no one to praise me”. She also reports being on a behaviour management plan with a psychologist, whom she likes, and a psychiatrist, who she does not like as much. Aside from this, however, she feels that if she needs more help she can talk to the staff and they will provide it to her. She feels she is doing better now than she was before ISP and because of this, she is no longer self-harming every day. In the future, she would like more freedom to go out into the community unsupervised. She would eventually like to have her own unit, a pet, and to live by her own rules.

Anne does not have any friends and finds it hard to make friends because she has a difficult time trusting people. She also feels that the lack of independent access makes it hard for her to make new friends. She does keep in contact with her foster family in South Australia, whom she speaks to via email every two to three weeks. She is currently completing a Certificate 3 in accounting at TAFE. So far, her studying is going well: she achieved 84 per cent on a recent assignment. Anne does not work at the moment but has worked in casual jobs in the past. She likes to go for coffee, to the movies, and out for doughnuts.

## **John**

John is a 34 year-old male with schizophrenia, mild intellectual disability and an acquired brain injury (ABI). He is described by ISP staff as a likable and easy going character that has had it rough. John has an extensive forensic history as indicated by his 113 convictions, mainly for theft, property damage and drug possession, as of July 2005. He has a history of polysubstance abuse and has been a regular user of heroin, marijuana, and amphetamines. When not in prison, John experienced periods of homelessness, and has had little coordinated support from services. John's extreme drug seeking and self-harming behaviours are the primary reasons for previous breakdowns in his accommodation and support.

It is reported that John's biological parents both had psychiatric disorders; it is believed that John was neglected and became a ward of the state at 14 months of age. At the age of 13, John was forced to leave his foster home due to allegations that he had made inappropriate sexual advances to a younger child in the home. He has since had limited involvement with his foster family except to contact them from time to time to request money. John's brother, who was a significant source of social support, died of a drug overdose in 2006.

John transitioned into the ISP in December 2007 from gaol. Since John entered ISP he has been working toward independent community access as well as various skill building activities. He continues to attend a TAFE course although at times he lacks the motivation to complete tasks. He did secure employment briefly however his employer was not able to provide the support he needs and as a result the placement broke down. He is presently seeking another job.

John likes that ISP has given him new skills and is helping him to become more independent. He said that he does not know where he would be without ISP support, "I do like the ISP...they are there to help me...I'm slowly getting together with my life. I am a bit better than I was". He reports getting on well with most of the staff except that he sometimes gets angry with the rules in ISP but realises that they are in place to help him to improve his behaviour.

John reports making a few friends through the fitness classes that he attends twice a week. At the classes, he is involved in soccer, jogging, baseball and other sports. He also likes to go for walks, to watch videos, read books, to play the guitar and to sing. He is going to TAFE to do reading, writing, and math and he would eventually like to study ancient history. He speaks to his mum once a week on the phone and also stays in contact with his sister in law. He would like to eventually have a partner to live with and to keep him company. In the future, he would like to have his own "housing commission flat" and to look after himself using the skills he has learnt in the ISP.

**Rebecca**

Rebecca is a 33 year-old woman who was born in Adelaide, but grew up in Sydney. 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 is reported to have taken to the streets from the age of 11 years. Rebecca has had eight children, although two died at birth. She is also a grandmother to 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, which is a genetic disease which causes a degeneration of brain cells, resulting in emotional disturbance, reduced intellectual capacity, and uncontrolled movement (National Institute of Neurological Disorders and Stroke, 2008). Rebecca has a significant history of poly-substance abuse, and has been using heroin on and off for the last 14 years. She reported spending approximately \$50 per day on heroin and often engaging in prostitution to fund her habit.

Rebecca has spent the majority of her youth and adult life living as a homeless person on the streets in the Kings Cross area, and periodically in Queensland. This was not a happy time for her; she reported that,

My insides were full of pain, pain from the cold [and] really bad food. I went to the Wayside Chapel to get food vouchers and had to wait hours to have a shower. It was embarrassing looking like crap, especially being a woman.

Welfare and community services have attempted to procure housing for her, however she has been blacklisted from most private accommodation in city areas due to her behaviour and drug use. Public housing placements have also broken down as she has voluntarily left these placements to return to the streets of Kings Cross. Drug and Alcohol services and in-house hospital services are unable to accommodate her due to the lack of insight she has into the nature of her deficits, and the fact that there are no orders in place stipulating that she must comply with treatment programs.

Rebecca has a history of aggression and has been incarcerated on numerous occasions, mostly for assault related charges. She was first incarcerated in 2001. On 10<sup>th</sup> July 2007 Rebecca was incarcerated for assault and malicious damage. She served a 6 month sentence, after which she was transferred to Cumberland Psychiatric Hospital in preparation for the birth of her child. DoCS removed the child from care after the birth. She came to ISP because of a court order and very much enjoys her accommodation and living with her roommate. Although she sometimes misses doing what she wants to do, she knows that the project is helping her to be stable and to support her children. She would eventually like to have her own "Housing Commission flat".

Rebecca feels like she is doing much better now that she is off the street. Her key worker drives her to her volunteer job and she feels that her case manager "really cares about me". She appreciates the support that staff provide to her and stated that "I love it here...I want the staff to know I really appreciate it".

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 talk on the phone frequently. Rebecca now 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 is currently volunteering at the Salvation Army but she would eventually like to work for them. 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.

She sometimes feels like she and the other ISP clients are spoilt with all of the services they receive from the project and feels that other residents can sometimes take advantage of the generosity of the staff. At the end of the interview, she talked about how she was ill and cold when she was homeless and, “that’s why I really appreciate being warm and in a place like this”.

## Appendix F Client Characteristics

**Table F.1: Summary of Client Characteristics – Age, Gender, ISP Status and Months in ISP, March 2008 (n=39)**

ISP status	Age (years)	Sex	Time in ISP (months) <sup>a</sup>	Reason for exit
Current clients	26	F	32	
	55	M	32	
	56	M	27	
	31	M	32	
	39	M	20	
	30	F	21	
	21	M	27	
	53	M	26	
	30	F	24	
	43	F	22	
	38	M	23	
	21	F	18	
	29	F	9	
	35	F	19	
	39	F	9	
	62	M	9	
	29	M	8	
	34	M	10	
	26	M	9	
	47	F	11	
	29	F	11	
	40	F	8	
	31	F	7	
	35	F	3	
	61	M	3	
	36	M	3	
	24	M	3	
	23	M	3	
Total (28)		13 15		
Exited clients	21	M	24	Completed ISP
	32	F	26	Completed ISP
	32	M	19	Completed ISP
	36	F	17	Completed ISP
	23	F	26	Completed ISP
	38	F	24	
	45	M	21	Completed ISP
	33	M	16	Completed ISP
	62	M	2	Died, prior to commencement of direct services
	47 <sup>b</sup>	F	0	Exited prior to commencement <sup>b</sup>
34	M	30	Completed ISP	
Total (11)		5 6		

Notes: a. Time is from point of nomination acceptance till end March 2008

b. Nomination accepted and processed but client refused services. Client excluded from all analyses

## References

- (ABS) Australian Bureau of Statistics (2003), *Disability, Ageing and Carers Summary of Findings*, 4430.0, ABS, Canberra, ACT.
- ABS (2006), *National Health Survey, Summary of Results 2004-2005*, No. 4364.0, ABS, Canberra ACT,
- Cummins, R. (2005), *Australian Unity Wellbeing Index, Survey 14*, Report 14.0, Part B: Appended Tables 'The Wellbeing of Australians – Personal Relationships', Australian Centre on Quality of Life, Deakin University, Melbourne, [http://acqol.deakin.edu.au/index\\_wellbeing/index.htm](http://acqol.deakin.edu.au/index_wellbeing/index.htm), accessed 10 June 2008.
- Fisher, K.R. & McDermott, S. (2008), *Integrated Services Project Evaluation Plan*, report for Department of Ageing, Disability and Home Care NSW, SPRC Report Series, forthcoming.
- (IWG) International Wellbeing Group (2006), *Personal Wellbeing Index: 4<sup>th</sup> Edition*, Australian Centre on Quality of Life, Deakin University, Melbourne.
- Kelly, G., Todd, J., Simpson, G. K., Kremer, P. J., and Martin, C. M. (2006), The Overt Behaviour Scale (OBS): A tool for measuring challenging behaviours following ABI in community settings. *Brain Injury*, 20, 307-19.
- National Institute of Neurological Disorders and Stroke (NINDS, 2008), NINDS Huntington's Disease Information Page, National Institute of Health, Bethesda, <http://www.ninds.nih.gov/disorders/huntington/huntington.htm>,
- Robertson, J., E. Emerson, L. Pinkney, E. Caesar, D. Felce, A. Meek, et al. (2004), 'Quality and costs of community-based residential supports for people with mental retardation and challenging behavior', *American Journal on Mental Retardation*, 109 (3), 332-344
- Stancliffe, R. J., A. D. Harman, S. Toogood and K. R. McVilly (2007), 'Australian implementation and evaluation of active support', *Journal of Applied Research in Intellectual Disabilities*, 20, 211-27.