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Abbreviations and glossary

AMHS	Area Mental Health Service
APQ	Activity and Participation Questionnaire
ASP	Accommodation Support Provider
CALD	Culturally and Linguistically Diverse
CTTT	Consumer, Trader and Tenancy Tribunal
DEC	Departmental Executive Committee
DSRC	Disability Studies and Research Centre
GP	General Practitioner
HASI	Housing and Accommodation Support Initiative
HONOS	Health of the Nation Outcome Scale
IHS	Integrated Housing System
ISC	Inpatient Statistics Collection
K10	Kessler Psychological Distress Scale
LSP	Life Skills Profile
MDS	Minimum Data Set
MRN	Medical Record Number
MH-AMB	Mental Health Ambulatory data collection
MHDAO	Mental Health and Drug and Alcohol Office
MH-OAT	Mental Health Outcomes and Assessment Tools
NOCC	National Outcomes and Casemix Collection
NSW	New South Wales
SPRC	Social Policy Research Centre
State HIE	State Health Information Exchange
SUPI	State Unique Personal Identifier
UNSW	University of New South Wales

Comparison time periods – any quantitative analysis in this report compares the two years before HASI with the first two years during HASI

Social and community participation – Formation and engagement in meaningful social relationships and networks and social, community, education and paid and unpaid work

Unstable housing – short-term or broken tenancies, no secure tenancy, homeless or at risk of homelessness:

- Primary homelessness (people who do not have access to shelter including people living on the street),
- Secondary homelessness (people who are living in temporary accommodation such as with family or friends), and
- an.3fa odation

Executive summary

This is the second of three reports in the longitudinal evaluation of the NSW Mental Health, Housing and Accommodation Support Initiative (HASI). The evaluation aims

Consumers also experienced improvements in their mental health since joining the program according to the results from Kessler-10 (K10), Life Skills Profile (LSP) and Health of the Nation Outcome Scale (HONOS). Although both men and women's mental health improved, the results differ slightly by gender: women had significantly higher levels of psychological distress (K10 scores) than men, but men recorded more living skills deficits (Life Skills Profile) than women. The evaluation found improvements in consumers' mental health across a variety of clinical mental health indicators.

Social and community participation

The majority of HASI consumers have a high degree of independence in their daily living skills, particularly in relation to personal hygiene, cooking, taking medication and transport. The area in which consumers require the most assistance was financial management (budgeting and paying bills).

Consumers were participating in community activities, such as social and recreational activities. More than half of consumers (54 per cent) were independently participating in social and recreational activities, but many consumers receiving high support continued to require the support and assistance of their ASP support workers to be able to participate in the community in a meaningful way.

While most consumers enjoyed regular social contact (daily or weekly) with at least one of the following people – a family member, friend, spouse or partner (86 per cent) – around one in seven (14 per cent) continued to be socially isolated and have no form of regular contact. The findings show that some HASI consumers (19 per cent) were actively involved in education and training, and participation in paid or unpaid work was another way that consumers were spending their time (31 per cent).

Costs of HASI

The total budget for the program over the last four years was $118 million accommodation support costs, $1 million project management costs and previous housing capital investment 2002-07 was $26 million. This is equivalent to an annual unit cost per consumer ranging from $11,000 to $58,000, plus project management costs of between $200 to $500 per person, depending on the level of accommodation support and the method of calculating the annual unit costs.

The final report will assess the cost of HASI against the outcomes experienced by HASI consumers. Where possible, comparisons will be made between the HASI consumers and a comparable group, such as the general population, the consumer outcomes from the Stage 1 evaluation, or another comparison group derived from the secondary data sources.

Conclusion

This report shows that the majority of HASI consumers are successfully maintaining their tenancies, are regularly using appropriate services in the community, and have a

the hospital since joining the program. However, many consumers struggled with their mental and physical health and a minority remain isolated from social networks in the community. The final report will explore these findings in more detail in relation to key findings from interviews with consumers and other stakeholders.

1 Introduction

The Mental Health Housing and Accommodation Support Initiative NSW (HASI) is designed to promote recovery for people with mental illness by providing access to stable housing, accommodation support services, and clinical mental health services. This is the second of three reports on the longitudinal evaluation of the whole of HASI.[1] The evaluation aims to understand how well the HASI program is working by investigating the effectiveness of support for consumers, benefits and limitations of the service model, and the costs and benefits of the program. This report focuses on outcomes achieved by HASI consumers in regards to housing stability, mental and physical health, and social and economic participation.

1.1 HASI aims and service description

HASI is designed to assist people with mental illness to participate in the community, experience improvements in their quality of life, prevent homelessness and support their recovery from mental illness. The specific aims of the program are to:

- provide people with mental illness ongoing clinical mental health services and rehabilitation within a recovery framework;
- assist people with mental illness to participate in community life and to improve their quality of life;
- assist people with mental illness to access and maintain stable and secure housing; and
- establish, maintain and strengthen housing and support partnerships in the community.

The program is available to adults with a diagnosed mental illness who require support services to live independently in the community. Since the implementation of HASI Stage One in 2002, which funded high level support services, HASI has expanded to provide low to very high levels of support to people with mental illness across NSW. Although the core objectives of HASI have remained the same since the program's inception, the service delivery system has evolved and different groups of mental health consumers have been targeted in each stage. All stages of HASI provide some level of accommodation support services, and most (with the exception of 4B HASI in the Home) provide services to people who are eligible for, or who are currently living in, social housing.

HASI commenced in 2002/03 with the roll out of 100 high support packages (up to 5 hours of support per day, 7 days per week) across NSW. This stage targeted people with high support needs and at risk of homelessness or inappropriately housed, as well as those in inpatient facilities who are unable to exit due to difficulty in accessing

[1] The first report included findings from Round 1 of fieldwork – 112 interviews with consumers and other stakeholders in three sites across NSW – as well as service use data from the HASI Minimum Data Set to examine the operational effectiveness of the service delivery model (see McDermott et al 2010). A final report which will include the full evaluation results will be completed in March 2011.

the levels of accommodation support they require. Between 2003 and 2010, the HASI program significantly expanded. Each stage of HASI has been targeted to meet the needs of mental health consumers, providing a range of support, from low support (5 hours a week) to very high support (8 hours a day), and rolled out in areas of need across NSW:

- HASI Stage 2 commenced in 2005 with the provision of 460 packages of care (up to 5 hours of support per week) for people in social housing requiring lower level outreach accommodation support who are at risk of being unable to sustain their tenancies/accommodation.
- HASI Stage 3 commenced in 2005/06, is an expansion of HASI 1 and provides 126 high support packages (up to 5 hours of support per day, 7 days per week) and accommodation in existing social housing stock.
- HASI Stage 3B commenced in 2006/07, with the provision of 50 very high support packages (up to 8 hours of support per day, 7 days per week) and accommodation in existing social housing stock. This stage targets people who have a mental illness and associated very high levels of disability.
- HASI Stage 4A commenced in 2006/07, expanding on HASI 1 and 3 and providing 100 high support packages and accommodation in existing social housing stock.
- HASI Stage 4B (HASI in the Home) commenced in 2007 with the provision of 240 low support packages and 80 medium support packages (2-3 hours of support every day, 7 days per week). HASI 4B is a model of HASI whereby accommodation support is provided to people regardless of where they live, so for the first time people do not have to live in social housing.

The final report will analyse the management between these HASI stages and supplementation from other programs such as Personal Helpers and Mentors (PHaMS).

1.2 Service delivery framework

HASI is a partnership program between NSW Health, Housing NSW, and non-government Accommodation Support Providers (ASPs). NSW Health is responsible for providing ongoing clinical care to consumers through Area Mental Health

work is required for the program (such as reviewing changes to the way in which data collected on HASI consumers) a smaller working group is formed from the membership of this meeting.

At the local level, HASI is managed by Local Coordination Groups, which aim to foster partnerships between the AMHS, housing provider(s) and the ASPs in each area.

1.3 HASI logic model

The premise of HASI is that some people who have a diagnosed mental illness require support services to live independently in the community. The logic of the program is that:

- If people with a mental illness are supported with appropriate services such as housing, clinical mental health services, rehabilitation services, and assistance to participate in community networks and activities;
- And those services are consumer centred, flexible, responsive and are provided in a collaborative way;
- Then it is likely that the service model will achieve beneficial outcomes for consumers, such as improvements in mental health, access and maintenance of secure housing, improved quality of life and increased community participation.

Figure 1.1: HASI logic model

This report presents preliminary analysis of the effectiveness of the program in meeting its aims and objectives for consumers and an analysis of the costs of HASI. In particular, it provides analysis about whether consumers are:

- maintaining their tenancies;
- accessing appropriate services in the community;
- experiencing improved physical and mental health outcomes;
- building personal relationships;
- involved in community activities; and
- engaging in productive activities such as employment, voluntary work and training.

2 Methodology

This report analyses quantitative data collected from a variety of data sources. Analysis is based on a sample of 895 (77 per cent) HASI consumers who were participating in the program in June 2009 and for whom a start date and demographic data were available.

2.1 HASI Minimum Data Set (MDS)

Data from the HASI MDS are collected by ASPs who complete an application form, which includes questions about gender, age, mental health status and tenancy history, when a referral is received (Appendix D). Once a person is accepted into the program, ASP staff complete a report detailing the services consumers received in areas such as housing and health at the commencement of service delivery and each quarter thereafter (Appendix D).[3,4] HASI program data were first collected in July 2006, but there are large gaps in the data for the first two monitoring periods (July-September and October-December 2006) so reliable data are only available from 1 January 2007.

Because ASPs collect some data about housing outcomes, the MDS was analysed in this report to develop an understanding of these outcomes for HASI consumers. In particular, the MDS includes information about how many consumers moved house and why, the number of Consumer, Trader and Tenancy Tribunal (CTTT) actions, as well as the proportion of consumers with complaints made about them to housing providers. The analysis draws on the snapshot of current consumers (n=895) in the April to June 2009 reporting period for whom demographic and service use data were available and for whom these data could be linked.[5]

Limitations to analysing the HASI MDS

MDS is intended to collect data for monitoring services provided by ASPs. Its primary purpose is not to monitor housing use, but it does include some data on housing outcomes that can be used to supplement data collected from Housing NSW. Given this context, one of the expected limitations of the MDS is that the housing data is not complete. A substantial amount of missing data for some of the variables, especially in relation to housing indicators, means that it should only be interpreted as supplementary data as it was intended. For example, while the total sample is 895, information about CTTT actions was available for 289 people. This limits the robustness of the analysis to only adding to the interpretation of the other Housing NSW outcomes data and restricts the extent to which analysis of change over time can be conducted.

Other expected limitations about the level of detail available on consumers' housing profile from MDS include that there is no record of whether consumers are living in public housing, community housing, private rental accommodation or their own homes, which limits the analysis of housing outcomes in relation to different types of accommodation. A final expected limitation is that information recorded about

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[3] This information is completed by ASPs and is compiled by InforMH, which is a unit within NSW Health responsible for data management. The HASI MDS was previously managed by ARTD Consultants.

[4] The MDS forms included in the Appendices were used to collect the data for this report. The forms were extensively revised in 2010.

[5] Due to the way that data are collected, it was not always possible for ARTD or InforMH to link the demographic data collected upon entry to the service use data that are reported quarterly. In the April to June 2009 quarter, service use data were submitted for 1,167 consumers, but could only be linked with the demographic data of 895 consumers (77 per cent).

they receive services provided by community mental health teams. NOCC data contains four different mental health measures including the:

- Kessler Psychological Distress Scale (K-10);
- Health of the Nation Outcome Scale (HONOS);
- Life Skills Profile (LSP-16); and
- Activity and Participation Questionnaire (APQ-6).

The K10 is a ten-item consumer self-report questionnaire designed to measure psychological distress. It includes questions about levels of nervousness, agitation, fatigue and depression and whether consumers have experienced aspects of distress over the last four weeks. Each item in the K10 is scored from one (none of the time) to five (all of the time). This evaluation includes the data for a sample of 242 people who had scores calculated both before and during their participation in HASI.

Table 2.2: Kessler 10 scores

Scores	Risk of psychological distress
1-15	Low or no distress
16-29	Medium distress
30-50	High distress

Source: (Kessler et al., 1994)

Unlike the K10, which measures levels of distress among the general population, the clinician-rated LSP-16 is designed to measure the life skills of people with schizophrenia and other major psychiatric disorders. A shorter version of the original LSP-39, the LSP-16, is collected by clinicians as part of MH-OAT. This measure is deficit based rather than strengths based: it focuses on self care, anti-social behaviour, withdrawal and compliance (Alan Rosen et al., 2006).[9] A higher score on the LSP-16 indicates poorer functioning (A. Rosen et al., 2001). Potential scores on this measure range from 0 to 48. LSP-16 data were available for 291 consumers before and during their involvement with HASI.

The Health of the National Outcome Scale (HoNOS) is a clinician rated mental health measure used to measure changes in problem areas that are commonly associated with mental illness.[10,11] The severity of each problem over the past two weeks is rated by clinicians on a five point scale from zero (no problem within the period rated) to four (severe or very severe), and so the higher the score, the more problems experienced by consumers. Scores before and during consumer involvement with HASI were available for a sample of 341 consumers.

[9] The domains in LSP-39 are labelled: self-care, non-turbulence, social contact, communication and responsibility.

[10] HoNOS65+ is used for people over the age of 65 years.

[11] These include: aggressive behaviour, self injury, problem drinking or drug taking, cognitive problems, physical illness or disability, problems with hallucinations or delusions, problems with depressed mood, other mental and behavioural problems, problems with relationships, problems with activities of daily living, problems with living conditions, and problems with occupation and activities.

A non-clinical, self-report measure of social and community participation, the Activity and Participation Questionnaire (APQ-6), was introduced by NSW Health in June 2009. It asks consumers to indicate whether they have work or are looking for work, enrolled in any courses, and whether they are participating in any social activities. The questionnaire also includes a section asking whether consumers would like to become involved in any activities in the future. While this measure has the potential to provide valuable information on the level of social activities and community engagement, it is not analysed for this report due to the small number of consumers for whom information was available. At the time data were collected, scores were only available for 49 HASI consumers, and only one person had more than one APQ-6 score. If the APQ-6 becomes a widely used tool, it has the potential to be useful for both clinicians and evaluators to understand social outcomes that may be experienced by mental health consumers.

Mental Health Ambulatory (MH-AMB) Data Collection

The Mental Health Ambulatory (MH-AMB) data collection includes information about the type of community mental health services that HASI consumers have used. This includes services such as general community mental health services, allied health and rehabilitation appointments. These data were analysed to understand whether there was a change in the use of community mental health services after consumers entered HASI. Approximately 400 consumers were identified in the MH-AMB data collection, representing 376,802 visits to community mental health services (July 2001- June 2009). The statistical software package used to analyse data for this report could not process such a large amount of data, so the data will be analysed for the

Table 3.1: Consumers by type of accommodation at entry to HASI

	Number of consumers[1] (n)	Per cent (%)
Public housing	348	41
Hospital	137	16
Living with family or friends	91	11
Community housing	75	9
Private rental	58	7
Homeless	20	2
Boarding house	18	2
Other	92	11
Total	839	100

Source: HASI MDS
Note: 1. Data missing for 56 consumers

ASPs noted the existence of a tenancy risk factor in one in four consumers entering

Housing outcomes of all HASI consumers

The findings indicate that HASI consumers are successfully maintaining their tenancies. According to the MDS data, 90 per cent (n=806) of consumers have not ended a tenancy since joining the program. Of the 80 tenancies that ended, 86 per cent (n=69) were for planned reasons such as moving to more appropriate or other long term housing (Table 3.4).

Table 3.4: Reasons for tenancy completion

Reasons for tenancy completion[1]	Number of completions[2] (n)	Percent (%)
Planned reasons		
Consumer moving to other long-term housing	33	

Table 3.5: CTTT actions (n=686) and complaints (n=690) by support level, June 2009

	Low or medium		High or very high		Total[1]	
	Consumers (n)	Percent (%)	Consumers (n)	Percent (%)	Consumers (n)	Percent (%)
One or more CTTT actions[2]	2	0.5	4	1	6	1
One or more complaints[3]	13	3.0	14	5	27	4

Source: HASI MDS

Notes: 1. This includes HASI consumers living in public housing, community housing, anbh2TJ24(S)6.sing04 1iving i

3.2 HASI consumers living in public housing

This section focuses on a subsample of HASI consumers who are public housing tenants (n=163). The profile of these consumers is discussed in relation to the profile of public housing tenants in NSW to gain a better understanding of how HASI consumers in public housing properties differ from other public housing tenants.[16]

Profile of people living in public housing

Data collected from Housing NSW shows that HASI consumers are much more likely than other public housing residents to live alone. Almost nine in ten (88 per cent) HASI public housing residents live alone, compared to one in two public housing tenants (51 per cent; Table 3.8). As a re

Table 3.9: Number of bedrooms, public housing subgroups, June 2009

Number of bedrooms	HASI consumers in public housing (n=163) (%)	All public housing residents in NSW (n=121,273) (%)
1[1]	53	25
2	32	28
3	13	39
4	2	8
Total[2]	100	100

Source: Housing NSW, IHS database (n=163)
Notes: 1. Includes studio apartments
2. Includes people living in public housing and housed through the Aboriginal Housing Office but excludes community housing residents.

Outcomes for HASI consumers in public housing

At June 2009 most HASI consumers living in public housing properties were paying their rent on time, and only a small number (3 per cent, n=5) were in rent arrears of two weeks or more. Table 4.10 shows that, although the housing profile of HASI consumers differs from the general population of people in public housing, the proportion of HASI consumers in rent arrears is the sa

psychiatric services ($p<0.01$) more than once a month, but we

Table 4.1: Pre-HASI and in-HASI participant mental health admissions (n=197), compared with Evaluation of HASI Stage One (n=67)

	Before HASI[1]	While in HASI[2]	Per cent change since joining HASI	Evaluation of Stage One (per cent)
Average number of admissions per person per year	1.7	1.3	-24**	-17
Average number of days in hospital per person per year	55.1	23.4	-60***	-81
Average number of days per admission	6.3	2.1	-68***	-78

decrease after consumers entered HASI so that, in Year 3, the number of admissions is the below that in Year 1 and stabilises in Year 4.[24]

Table 4.2: Mean number of mental health admissions for two years prior and first two years of HASI per person per year, by gender (n=197)

	Consumers	13-24m prior	0-12m prior	0-12m during	13-24m during	Sig.[1]	Effect size[2]
Men	116	1.4	1.6	0.9	0.9	.000	.194
Women	81	1.6	2.5	1.9	1.9	.027	.110
Total	197	1.5	2.0	1.3	1.3	.000	.103

Source: NSW Health, Admitted Patient Data Collection in the State HIE. Annualised data.
Notes: 1. Wilks' Lambda, one-way repeated measures ANOVA
2. Partial eta squared

Figure 4.2: Mean number of mental health admissions for two years prior and first two years of HASI per person, per year, by gender (n=197)

The findings also reveal that men and women have different patterns of mental health hospitalisation. The data show that women in HASI are admitted to hospital more

Table 4.3: Mean number of days spent in hospital per person per year, by gender (n=197)

	Consumers	13-24m prior (Year 1)	0-12m prior (Year 2)	0-12m during (Year 3)	13-24m during (Year 4)	Sig.[1]	Effect size[2]
Men	116	50.9	71.1	25.7	10.9	.000	.320
Women	81	29.7	73.7	39.9	21.3	.000	.247
Total	197	42.2	72.1	31.5	15.2	.000	.272

Source: NSW Health, Inpatient Admissions Database
Notes: 1. Wilks' Lambda, one-way repeated measures ANOVA
2. Partial eta squared

This could mean that people enter HASI when they have reached a crisis – either the

men and women. This indicates that people continue to spend fewer days in hospital while in the program.

Table 4.4: Number of days per hospital admission, per year, by gender (n=197)

	N	13-24m prior	0-12m prior	0-12m during	13-24m during	Sig.[1]	Effect size[2]
Male	116	6.0	10.5	3.0	1.5	.000	.205
Female	81	3.0	7.7	3.5	1.2	.000	.231
Total	197	4.8	9.4	3.2	1.4	.000	.197

Source: NSW Health, Inpatient Admissions Database
Notes: 1. Wilks' Lambda, one-way repeated measures ANOVA
2. Partial eta squared

Figure 4.4: Mean number of days per mental health hospital admission, per year, by gender (n=197)

According to the statistical test that was carried out on these yearly averages (one-way repeated measures ANOVA) the change across the four year period in relation to the number of hospital admissions, the number of days spent in hospital per person, and the number of days per admission is statistically significant. However, the change *between* years is not always significant. Without a comparison group, it is not possible to know what the trajectory would have been for these HASI consumers had they not been accepted into the program. Furthermore, a longer term comparison is needed to assess this trend over time and to determine whether the spikes in the amount of tim38 1 a3

4.3 Mental health outcomes

HASI aims to assist people to achieve improvements in their mental health. To measure changes in consumers' mental health status, consumers' level of psychological distress (K10), life skills (LSP-16) and other behavioural issues (HONOS) were examined. A non-clinical m

Table 4.7: K10 before and during HASI by gender (n=242)

	n	Before HASI	During HASI	Sig.[1]
Men	136	21.5	19.7	0.05
Women	106	25.2	23.8	0.19
	-	0.004	0.001	-

Source: NSW Health, MH-OAT Collection in the State HIE
Notes: 1. Paired sample t-test of equality of means
2. Independent sample t-test of equality of means

LSP-16

The life skills of HASI consumers were measured using the LSP-16 and, as stated in the methodology, a lower score on the LSP-16 indicates better life skills.[27] Analysis of LSP-16 scores for 291 people before and during HASI shows a small drop, which indicates that consumers' life skills increased since joining the program. This change is statistically significant but, as argued by others, such a small drop is unlikely to be clinically significant (Eagar et al., 2005). This will be discussed further in the final.15 TDs2.66 refBT

HONOS

Data on the HoNOS was obtained to measur

Table 4.12: ASP perceptions of consumer physical health as compared with the evaluation of HASI Stage 1

	HASI stage 1 evaluation (n=51)	Current consumers (n=636)
Very good or excellent (%)	28	14
Good (%)	37	37
Poor or very poor (%)	35	49
Total (%)	100	100

Source: MDS supplement
Notes: HASI Stage 1 data collected by ASPs
Data missing for three current consumers

There were no significant differences between people receiving lower and higher levels of support or differences based on the length of time people had spent in the program. ASPs rated men as having slightly better physical health than women (54 per cent were reported as being in good, very good or excellent health, as opposed to 48 per cent of women) but this difference was not statistically significant.

Although the evaluation of HASI Stage One found that physical health declined over the course of the evaluation, the poor physical health of current consumers is a surprising finding, particularly given that the majority of consumers are accessing health services on a regular basis. This may suggest that by the time people join the program they may have already developed a range of complex health problems, which may not been properly treated before they joined HASI or it could reflect an increase in the identification and treatment of physical health problems once consumers join the program. These possibilities will be further analysed for the final report. The physical health of consumers will be followed up in the next round of interviews.

4.5 Conclusion

This section has shown that according to the MDS data reported by ASP staff, the majority of HASI consumers are using health and mental health services on a regular basis. There was a clear difference between the service use profile of different groups of consumers: women use GP and allied health services more frequently and people receiving higher support use community mental health and psychiatric services more often than those receiving lower support.

The support consumers receive through the program appears to have had an impact on their use of mental health hospital services. Data from NSW Health show a statistically significant decrease in the average number of hospital admissions each year (24 per cent decrease), the mean number of days spent in hospital per person per year (60 per cent decrease), and the average number of days hospitalised per admission (68 per cent decrease). Longitudinal analysis revealed that men and women have different patterns of hospital service use. Women are admitted to hospital more regularly and spend more days in hospital per admission than men, but men spend more days in hospital per person before HASI. The rate and length of stay improved for both men and women when they entered HASI and continued to improve after their first year in the program.

According to the MH-OAT data, small positive improvements in consumers' mental health since joining the program were also identified. Some of these results differ by

gender, as women experience more distress

5 Social and community participation

HASI aims to assist people with a mental illness to participate in the community. The HASI model suggests that the provision of stable accommodation and appropriate clinical and non-clinical

Figure 5.1: Proportion of people independent in activities of daily living, current HASI consumers receiving high support (n=228) and lower support (n=376) compared with results from the evaluation of HASI Stage One (n=69) (per cent)

5.2 Community participation

The findings show that most HASI consumers (83 per cent; n=530) are participating in at least one type of community activity (Table 5.2). Similarly high participation

participants (54 per cent) regularly attend activities without their support worker and these activities are more likely to be undertaken by people receiving lower levels of support.

Table 5.3: Participation in social or recreational activities by type, September 2009

	Consumers (n)	Currently participating (%)	Not participating (%)	Total (%)
Supported group activity	611	55	45	100
Unsupported group activity	594	54	46	100
Supported individual activity	611	62	38	100
Day program	597			

5.5 Conclusion

Most HASI consumers have a high level of independence in their daily living skills, particularly in relation to personal hygiene, cooking, taking medication and transport. Achieving high levels of independence in these skills has enabled consumers to participate in social networks and community activities such as recreational activities, education and employment.

More than half of participants (54 per cent) independently participate in social and recreational activities, but many consumers receiving high support continued to require the support and assistance of their ASP support workers to be able to access and participate in the community in a meaningful way. While most consumers enjoyed regular social contact, one in seven continued to be socially isolated as they did not have any form of regular social contact with family, friends or a partner. Some consumers were actively involved in some kind of education or training; participation in paid or unpaid work was another way in which consumers spent their time.

The final report will analyse the participation results by level of HASI support (eg. daily living skills for high support packages, work and education for low and medium support?); the quality of social relationships; the impact on family, carers and siblings; reconnection with family and friends; and referrals to education and employment support.

5.6 Summary of social and community participation

- At least 60 per cent of consumers were reported to be independent or supported less than half the time in all areas of daily living including personal care, cooking, taking medication and transport, cleaning and exercise.
- Approximately one in three consumers required support more than half of the time with shopping, managing their finances, cleaning and exercising.
- Consumers receiving lower levels of support were significantly more independent than consumers receiving high support in the areas of shopping, cleaning, paying bills, budgeting, exercise, and taking medication ($p<0.05$). Both groups, however, had higher levels of independence in daily living skills compared to the results from the first evaluation which focused on consumers receiving high support.
- Most HASI consumers (83 per cent; n=530) were participating in at least one kind of community activity (including supported and unsupported group activities, supported individual activities and day programs); the previous evaluation of HASI found similarly high participation in social and community activities (73 per cent; n=50).
- Most current HASI consumers (86 per cent; n=548) had some form of regular social contact (daily or weekly) with at least one of the following people – a family member, friend, spouse or partner.
- One in seven consumers (14 per cent; n=91) do not have any regular contact (daily or weekly) with other such as a family member, friend or partner. Males and people in high support are less likely to have regular social contact with a family member, friend or partner.
- HASI consumers were continuing to participate in education and work, with 31 per cent currently involved in some type of activity (paid or voluntary work,

education and training). This is lower to the evaluation of HASI Stage One which found that 43 per cent of consumers were involved in either work or study after participating in the program for at least 2 years.

- A similar proportion of current consumers were participating in education (19 per cent) as HASI consumers who participated in the evaluation of HASI Stage One.

6 Costs of HASI

The evaluation also includes an economic analysis of HASI. The analysis conducted in the final report will compare the costs of HASI with the benefits consumers experience a result of their involvement in the program, such as changes in service access, physical and mental health, independence in activities of daily living, and social, community and economic participation. This section provides preliminary analysis of the budgeted costs of HASI services between 1 July 2006 and 30 June

incurring new capital costs. Because HASI consumers are entitled to apply for social housing like any other member of the public and most would have been eligible for social housing regardless of whether they were receiving HASI support, the cost of housing is not included in the cost of the program per consumer.

Table 6.2: NSW Housing HASI capital acquisitions, 2002-07

	Cost ($)
2002/03	4,779,409
2004/05	3,150,511
2005/06	10,781,041
2006/07	7,065,818
Total	25,776,779

Source: NSW Housing
Note: Purchase of 88 properties

Regional office cost data from NSW Health and Housing NSW were not included because these costs of services provided at this level would have been incurred regardless of the existence of HASI.

6.2 Accommodation support provider and housing provider costs

The cost of funding ASP support was analysed from the contracted budget data. The budget per package varies according to the level of support and is adjusted each year from cost increases (Table 6.3). The total contracted accommodation support cost 2006-10 for 1076 packages was $118,278,000, an average of approximately $31 million per year and nearly $30,000 per consumer per year.

Table 6.3: Accommodation Support Provider budget ($), 2006-10

		2006-07		2007-08		2008-09		2009-10		
HASI stage	Consumers	Per consumer ('000)	Total ('000)	Per consumer ('000)	Total ('000)	Per consumer ('000)	Total ('000)	Per consumer ('000)	Total ('000)	Total ('000)
1	100	54	5,379	55	5,524	57	5,663	58	5,781	22,347
2	460	10	4,729	11	4,857	11	5,060	11	5,060	19,706
3a	126	51	6,476	53	6,651	54	6,818	55	6,961	26,906
3b	50	70	3,500	72	3,595	74	3,684	75	3,762	14,541
4a	100	50	5,000	51	5,135	53	5,263	54	5,374	20,772
4b[1]	160	-	-	11	1,760	11	1,804	12	1,842	5,406
4b[2]	80	-	-	35	2,800	34	2,870	37	2,930	8,600
Total 1076			- 25,084		- 30,322		- 31,162		- 31,710	118,278
Average		30	-	28	-	29	-	30	-	-

Source: NSW Health
Notes: 1. Stage 4b included both low and medium support packages. This row refers to the low support packages allocated
2. This row indicates the medium packages allocated in Stage 4b

6.3 Preliminary outcomes

The preliminary summary of the outcomes of HASI is derived from the first report and the earlier sections in this report.

Table 6.4: Preliminary HASI outcomes analysis

Outcome	Description
Stable tenancy	Most people maintained a secure tenancy and uphold the conditions of their tenancy agreements. Most moves are for positive reasons. HASI public housing tenants have similar outcomes to other public housing tenants for rental payments and property maintenance
Mental health hospital admissions	Days in hospital per year and per admission and the number of mental health admissions all decreased
Mental health	MH-OAT measures of mental health improved (K10, LSP-16, HoNOS)
Physical health	Staff reported good physical health for half the HASI consumers
Independence in daily living	Most consumers have some independence in daily living skills and many need support for more complex tasks
Social participation	Most consumers have regular social contact with family and friends
Community activities	Most consumers participate in social and community activities
Productive activities	A minority of people participate in education, voluntary and paid work

6.4 Conclusion

The total budget for the program over the last four years was $118 million accommodation support costs, $1 million project management costs and previous housing capital investment 2002-07 of $26 million. This is equivalent to an annual unit cost per consumer ranging from $11,000 to $58,000, plus project management costs of between $200 to $500, depending on the level of accommodation support and the method of calculating the annual unit costs. The final report will assess the cost of HASI against the outcomes experienced by HASI consumers. Where possible, comparisons will be made between the HASI consumers and a comparable group, such as the general population, the consumer outcomes from the Stage 1 evaluation, or another comparison group derived from the secondary data sources. If the cost of the outcome can be clearly quantified (such as hospitalisations) the cost will be calculated. Costs will be analysed for the period before consumers entered the program and during the program and after consumers and will be compared against the unit cost of HASI. Other outcomes that cannot be easily quantified, such as well-being, social contact and functioning will not be costed but will rather be discussed in relation to the other benefits associated with the program for consumers.

Preliminary outcomes analysis is showing positive results in stable tenancies, mental health hospital admissions, mental health, physical health, independence in daily living, social participation and community activities. Only a minority of people are involved in education and voluntary or paid work.

6.5

7 Conclusion

The results show that HASI is achieving its aims for most consumers. It is assisting people to successfully maintain their tenancies across public housing, community housing and private rental properties. Consumers rarely move house and when they do, it is usually for positive reasons. The majority of consumers living in public housing are paying their rent on time and do not cause damage to their properties, which compares favourably to public housing residents as a whole. Most are regularly using health and mental health services and, as a result, consumers have experienced improved mental health since joining the program. Participation in the HASI program appears to have also had a positive impact on hospital admissions. Results show a statistically significant decrease in:

- the average number of hospital admissions each year (24 per cent decrease),
- the mean number of days spent in hospital per person per year (60 per cent decrease),
- and the average number of days hospitalised per admission (68 per cent decrease).

Longitudinal analysis shows that people tended to join the program at a time when their rates of hospitalisation were high, with the amount of time they spent in hospital decreasing while they are involved in the program.

The majority of HASI consumers have achieved a high degree of independence in relation to their daily living skills. A higher rate of independence was recorded in these activities compared to the evaluation of Stage One (which is possibly related to an increased focus on the provision of recovery based services and this will be further analysed in the final report). Consumers continue to develop their social networks and participate in community activities. While most have regular social contact with other

Appendix A: MDS sample characteristics

This report focuses on a sample of 895 current HASI consumers.

Table A.4: Language spoken at home

	n	Per cent
Language other than English at home	57	8
English spoken at home	672	92
Total	729	100

Note: Data missing for 166 consumers

Table A.5: Consumers by primary mental health diagnosis

Primary mental illness	n	Per cent
Schizophrenia	548	65
Schizo-affective disorder	91	11
Depression/ anxiety	83	10
Bipolar disorder	75	9
Personality disorder	19	2
Other	29	3
Total	845	100

Note: Data missing for 50 consumers

Table A.6: Secondary mental health diagnosis

Secondary mental illness	n	Per cent
Depression/ anxiety	98	12
Other	61	7
Personality disorder	30	4
Schizo-affective disorder	17	2
Bipolar disorder	11	1
Schizophrenia	4	0.5
No secondary mental illness	624	74
Total	845	100

Note: Data missing for 50 consumers

Table A.7: Co-existing conditions

Type of co-existing factor	n	Per cent*
Substance abuse	238	28
Physical health	104	12
Intellectual disabilities	85	10
Other	53	6
Physical disability	45	5
Acquired brain injury	24	3
Total conditions	**549****	**-**
Total consumers with at least one co-existing factor	460	54
Total consumers with no co-existing factors	385	46
Total consumers	**845**	**100**

Note: Data missing for 50 consumers
*Based on a total of 845 consumers
**Some consumers reported more than one condition

Table A.8: Support level by gender

	Low (n=477)	Medium (n=54)	High (262)	Very High (n=59)	Total (n=852)
Male	47	48	60	71	53
Female	53	52	40	29	47
Total	100	100	100	100	100

Table A.9: Proportion of consumers who exited HASI by level of support (per cent)

	Low (n=1313)	Medium (n=99)	High (n=693)	Very High (n=117)	Total (n=2222)
n	1313	99	693	117	2222
Not exited	73	89	79	83	76
Exited	27	11	21	17	24
Total	100	100	100	100	100

Note: Data missing for 40 consumers

Table A.10: Reasons for exiting HASI

Reason for exiting HASI

					start date APQ6: 49 with some data; 1 had scores available both before and after their HASI start date. This measure was not used due to the small sample size
Mental Health Ambulatory Data Collection (MH-AMB) NSW State HIE	Sample is drawn from consumers who were participating in HASI during the Sept 2009 reporting period	Continuous Data (2000 – 2009)	n=1107	SUPIs could be identified for 810 people 604 could be linked with their demographic data and start date	Of these 604 consumers: 400 had ambulatory data. These data will be analysed in the final report.
NSW Housing – Integration Housing System dataset	Sample drawn from public housing tenants who have been in HASI from about 2002.	Different types depending on variable. Data collected between 1999 – 2009	Unknown	409 current and former HASI consumers identified in IHS by the HASI flag	164 consumers could be linked to their demographic data and start date.

Appendix C: Sub-sample characteristics

Age

Table C.1: Average age, by subsample

	n	Average age (years)

Figure C. 2: Length of time in the program, by subsample

Gender

Table C.3: Gender distribution, by subsample (per cent)

	Consumers	Gender (per cent)	
		Men	Women
HASI MDS	895	53	47
Housing NSW	163	52	48

Figure C.4: Support level, by subsample

Appendix D: Inpatient admissions

As in the evaluation of Stage One, this evaluation found considerable decreases in hospitalisation of HASI consumers after entering the program.[32] The data show statistically significant decreases ($p<0.05$) in the average number of mental health hospital admissions each year (23 per cent de

Figure D.1: Mean annual hospital admissions, all types, by gender (n=222)

Table D.3: Longitudinal analysis of mean days in hospital per person, per year, all types of admissions (n=222)

	n	13-24m prior (Year 1)	0-12m prior (Year 2)	0-12m during (Year 3)	13-24m during (Year 4)	Sig.[1]	Effect size[2]
Male	127	54.1	68.4	24.3	9.9	.000	.282
Female	95	26.2	67.2	35.8	18.4	.000	.216
Total	222	42.2	67.9	29.2	13.6	.000	.243

Notes: 1. Wilks' Lambda, one-way repeated measures ANOVA
2. Partial eta squared

Figure D.2: Mean number of days spent in hospital per person, per year, by gender, all types of admissions (n=222)

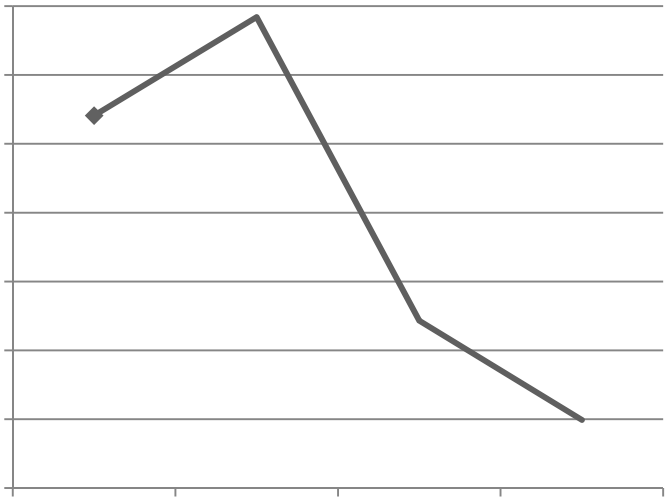
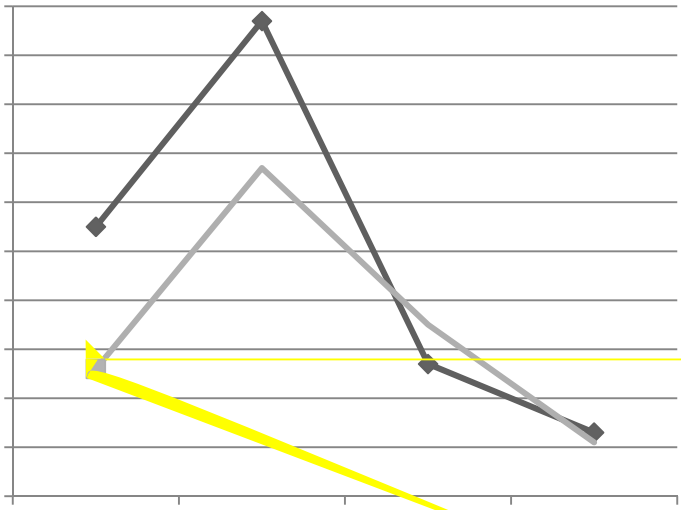


Table D.4: Longitudinal analysis of mean days in hospital per admission per year, all types, by gender (n=222)

	n	13-24m Prior (Year 1)	0-12m Prior (Year 2)	0-12m during (Year 3)	13-24m during (Year 4)	Sig.[1]	Effect size[2]
Male	127	5.5	9.7	2.7	1.3	.000	.188
Female	95	2.6	6.7	3.4	1.1	.000	.207
Total	222	4.2	8.4	3.0	1.2	.000	.177

Notes: 1. Wilks' Lambda, one-way repeated measures ANOVA
2. Partial eta squared

Figure D.3: Mean number of days per admission, pear year, by gender, all types (n=222)



Appendix D: Minimum Data Set (MDS) forms

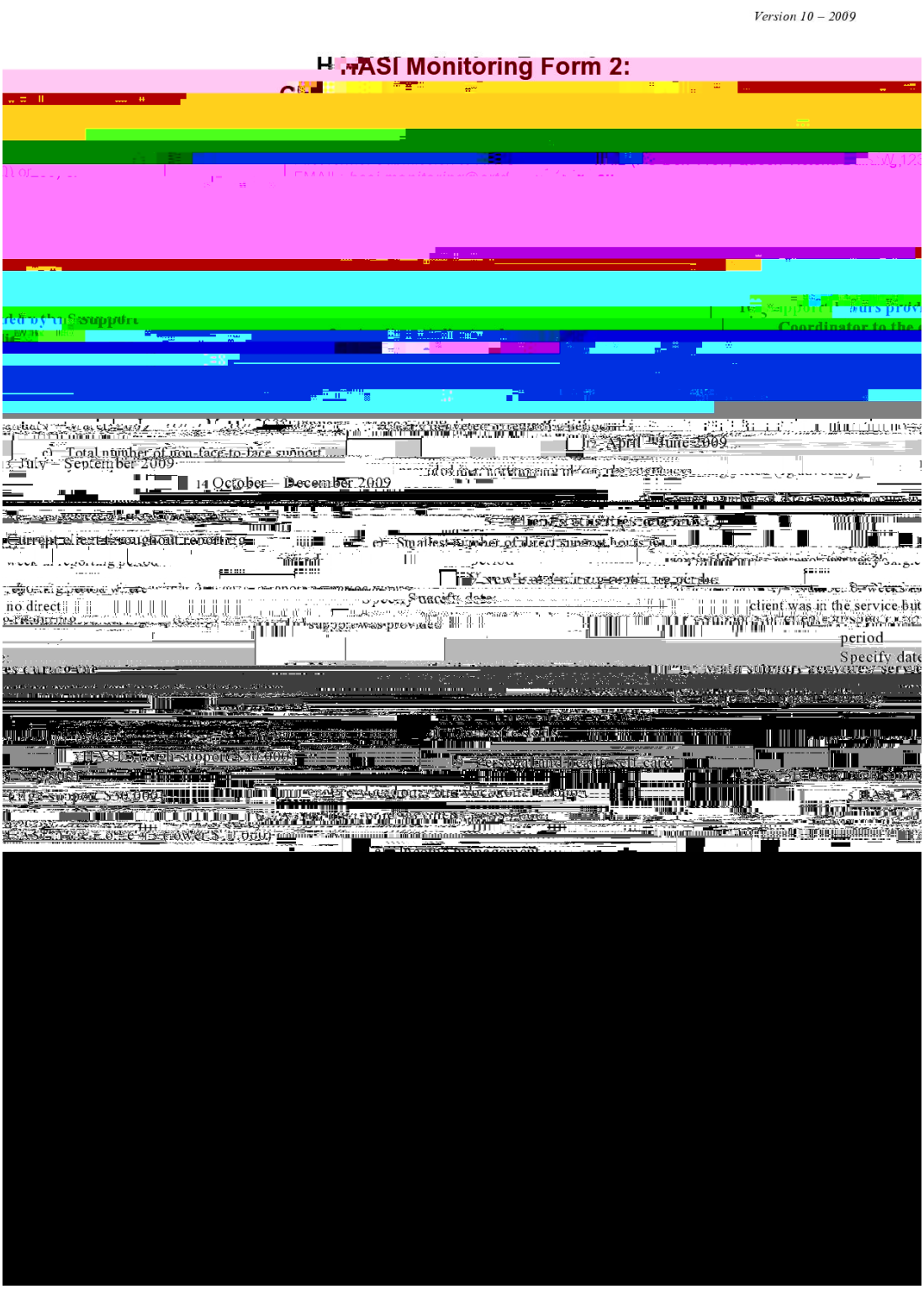
Version 10 – 2009

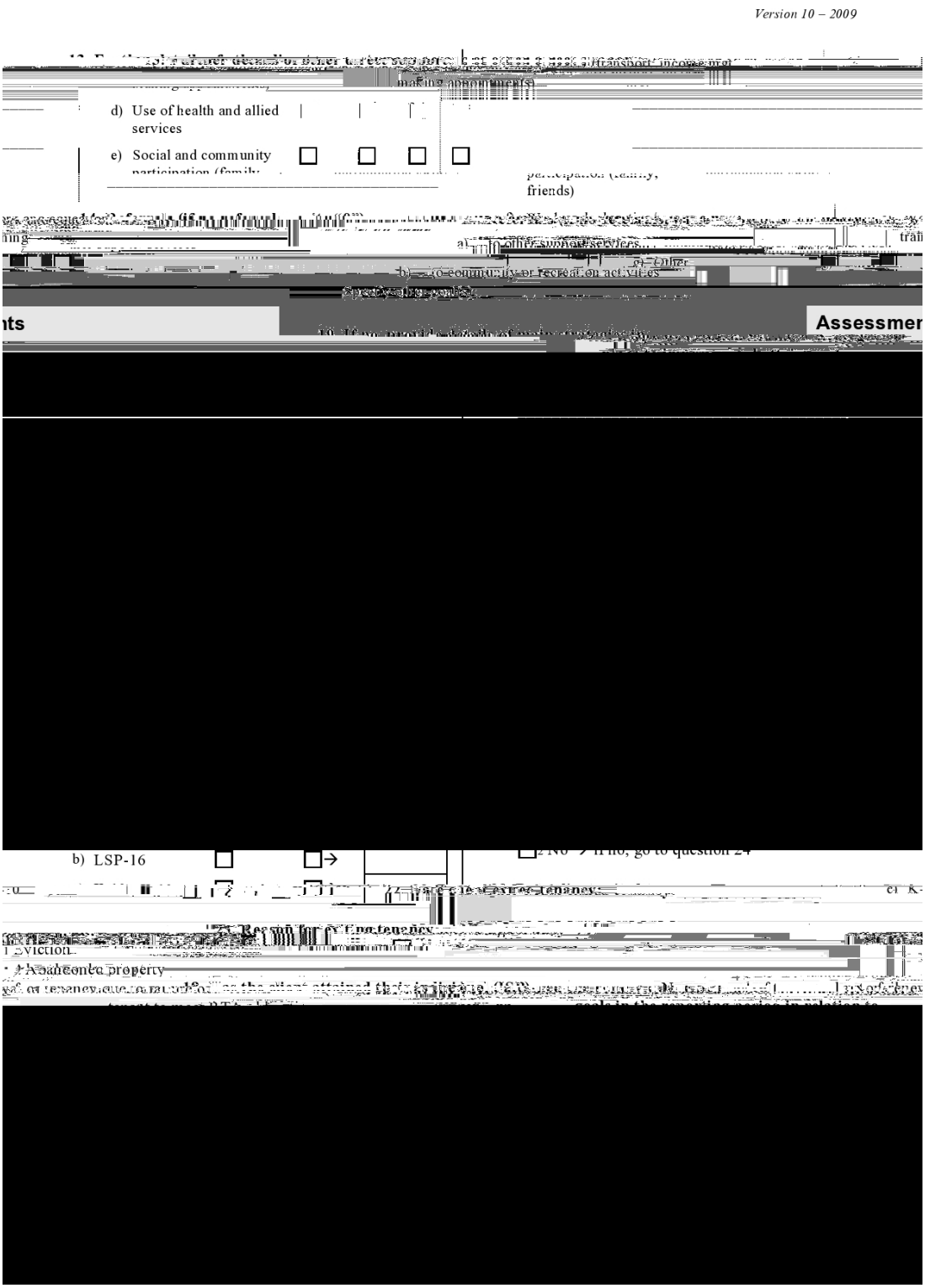
18. Tenancy risk factors

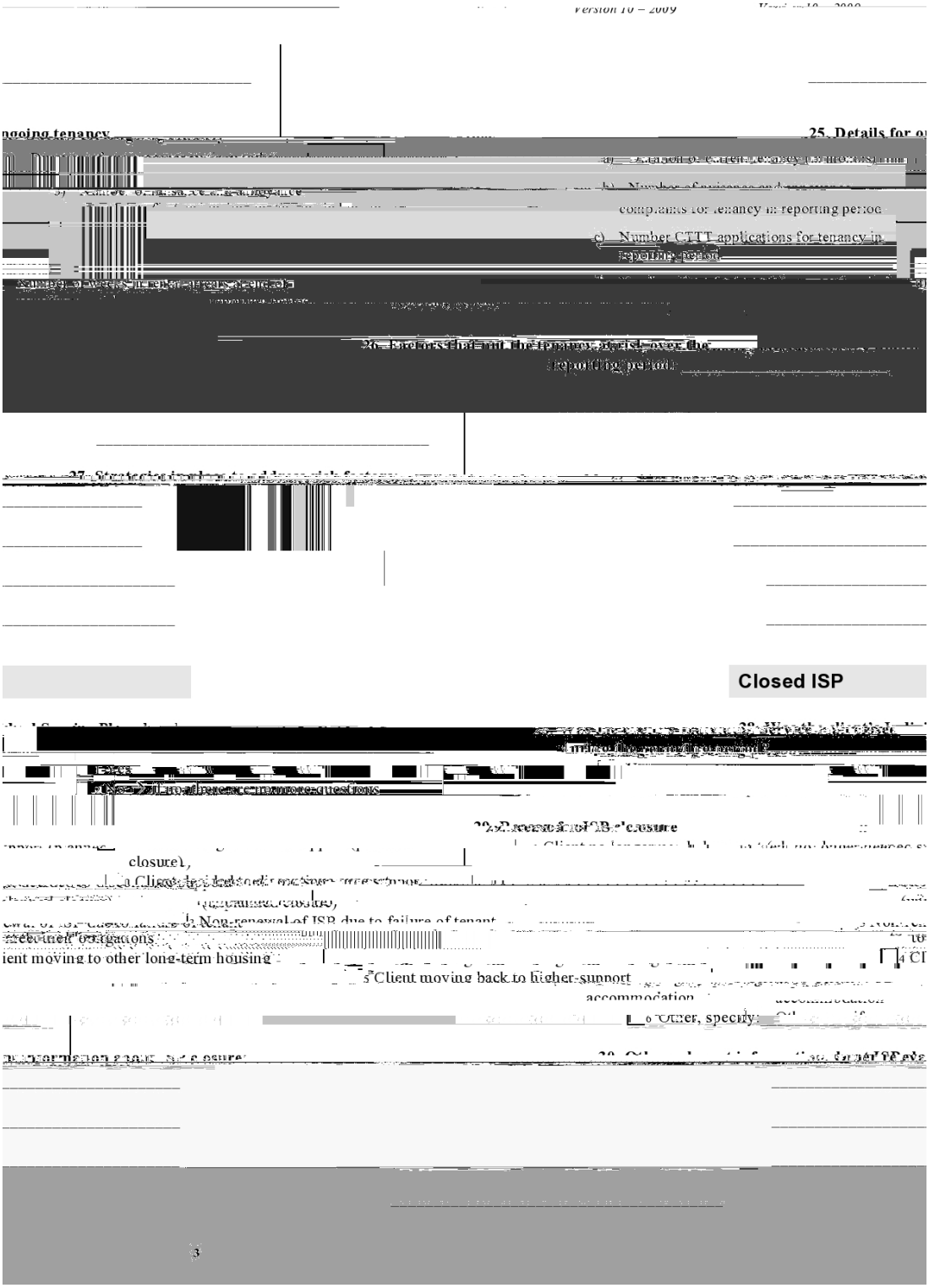
Number of tenancies/ houses in last 2 years:

Number of days homeless in last 2 years:

19. Other relevant information:


Version 10 – 2009
HASI Monitoring Form 2:
Total number of non-face-to-face support
April – June 2009
July – September 2009
October – December 2009
Smallest number of client support hours
period


Version 10 – 2009
d) Use of health and allied services
e) Social and community
friends)
Assessmer
b) LSP-16
Eviction
a tenancy


Version 10 – 2009
complaints for tenancy in reporting period
c) Number CTTT applications for tenancy in reporting period
Closed ISP
closure),
5 Client moving back to higher support accommodation
6 Other, specify: