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Evaluation of NSW Community-based Mental Health Programs: Housing and Accommodation Support Initiative Plus

HASI Plus Evaluation Report

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Prepared for: NSW Ministry of Health

2022

Proudly funded by

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Acknowledgements
Thank you to the research participants and stakeholders for their contribution and advice in the evaluation. The research data collection and analysis were conducted from 2018 to 2021.

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The Social Policy Research Centre is based in the Faculty of Arts, Design & Architecture at UNSW Sydney. This report is an output of the Housing and Accommodation Support Initiative Plus (HASI Plus) Evaluation research project, funded by the NSW Ministry of Health.

ISBN: 978-1-76023-414-0

SHPN: (MH) 221159

Suggested citation

Purcal, C., Giuntoli, G., O'Shea, P., Zmudzki, F., Fisher, KR. and Campbell, E., (2021), *Evaluation of Housing and Accommodation Support Initiative Plus (HASI Plus). HASI Plus Evaluation Report*. Sydney: UNSW Social Policy Research Centre.

Contents

Meanings and abbreviations

In this report, the term ‘Aboriginal’ includes people from the Torres Strait Islands. We acknowledge the diversity of traditional countries and Aboriginal language groups across the state of New South Wales.

AMHCC	Australian Mental Health Care Classification
AR-DRG	Australian Refined – Diagnostic Related Group
BoCSAR ROD	NSW Bureau of Crime Statistics and Research Re-Offending Database
CALD	Culturally and linguistically diverse
CHeReL	NSW Health Centre for Health Record Linkage
CL MDS V2	NSW Mental Health Community Living Programs Minimum Data Set Version 2 (released April 2019).
CMO	Community managed organisation
Community treatment order	An order made by the Mental Health Review Tribunal or by a Magistrate that sets out the terms under which a person must accept medication and therapy, counselling, management, rehabilitation and other services while living in the community.
Custodial patient	A person with a severe mental illness in prison.
Custodial referral	A custodial patient referred for consideration for a HASI Plus statewide package.
Data linkage	Analysing data for a study group from several routinely collected government datasets, for example hospital admissions and social housing applications.
DCJ	Department of Communities and Justice, formerly FACS Housing
FACS Housing	Family and Community Services, now Department of Communities and Justice (DCJ)
Financial management order	An order made by a court or tribunal appointing a financial manager for a person with disability that affects their capacity to make financial decisions.
Forensic order	An order made by the Mental Health Review Tribunal under the *Mental Health and Cognitive Impairment Forensic Provisions Act 2020* (NSW) about the treatment, care, detention and release of forensic patients.

Forensic consumer	Generally, a person subject to an order made under the *Mental Health and Cognitive Impairment Forensic Provisions Act 2020* (NSW) because the Court has: - Found the person unfit to be tried for an offence and ordered them to be detained in a correctional centre, mental health facility or other place; or - Found that the person committed a serious offence but was not criminally responsible because of mental health impairment or cognitive impairment.
Forensic referral	A forensic consumer referred for consideration for a HASI Plus statewide package (see 'Forensic consumer').
Form 1 and Form 2 MDS	The manual forms-based Housing and Accommodation Support Initiative Minimum Data Set that was adopted and used for HASI Plus from 2013 until April 2019.
GP	General practitioner
Guardianship Order	An order made by a court or tribunal appointing someone to make decisions about a person's health, accommodation, services or other lifestyle matters when they have a decision making disability.
HASI	Housing and Accommodation Support Initiative
HoNOS	Health of the Nation Outcome Scores Scales
Host LHD	One of the local heath districts (LHDs) that had a HASI Plus site within its boundaries during the evaluation period (Northern Sydney LHD, Western Sydney LHD or Hunter New England LHD).
InforMH	A team of the System Information and Analytics Branch in the NSW Ministry of Health. InforMH is responsible for data development, collection, analysis and reporting for NSW public mental health services.
ISP	Integrated Services Program
JH&FMHN or Justice Health	Justice Health and Forensic Mental Health Network
K10	Kessler Psychological Distress Scale
LHD	Local health district

Local package	A HASI Plus package reserved for consumers who currently reside within the LHD where that HASI Plus service is offered (See 'Host LHD').
LSP-16	Life Skills Profile -16
MDS	Minimum Data Set
MHRT	Mental Health Review Tribunal
Ministry	NSW Ministry of Health
NDIS	National Disability Insurance Scheme
NEP	National Efficient Price
NHCDC	National Hospital Cost Data Collection
NOCC	National Outcomes and Casemix Collection
Non-host LHD	One of the 12 LHDs that did not have a HASI Plus site within its boundaries during the evaluation period.
NSW	New South Wales
PCLI	Pathways to Community Living Initiative
Psychosocial supports	Psychosocial supports are non-clinical interventions that can assist people with severe mental illness to live independently, participate in their community, manage daily tasks, undertake work or study, find housing, get involved in activities, and make connections with family and friends. Psychosocial supports are specific to the person and their needs.
Service model	The HASI Plus support model as described in the HASI Plus Program Manual.
SIL	Supported Independent Living
SHMT	Social Housing Management Transfer
Specialty health networks	Two statewide clinical networks providing specialist services to children, and to people in contact with the criminal justice system - Sydney Children's Hospitals Network and the Justice Health and Forensic Mental Health Network.
Statewide package	HASI Plus package reserved for consumers referred from all NSW LHDs in NSW that do not host the program, the Justice Health and Forensic Mental Health Network (JH&FMHN) and Corrective Services NSW (via JH&FMHN for people in custody).
SPRC	Social Policy Research Centre

The following words are used in this report when we refer to people who participated in evaluation interviews and focus groups:

- ‘consumers' or ‘people’ or ‘participants’ are people who received HASI Plus support or other types of support
- ‘forensic consumer’ is a person who received HASI Plus support and is subject to an order made under the Mental Health and Cognitive Impairment Forensic Provisions Act 2020 (NSW)
- ‘CMOs’ or ‘staff’ are CMO managers and staff members (frontline workers) in the HASI Plus sites. We distinguish between managers and staff roles only when it makes a difference to the voice while protecting anonymity.
- ‘LHDs’ are LHD managers and staff members, both in the HASI Plus sites and non-HASI Plus sites. We do not distinguish between the roles and the locations to protect anonymity.
- ‘families’ or ‘families and carers’ are informal supporters of the consumers
- ‘stakeholders' are all other interviewees from government and state-level positions, and from Aboriginal Community Controlled Health Organisations.

Appendices

This report has 8 appendices.

Short summary

The Housing and Accommodation Support Initiative Plus (HASI Plus) is a program for people with severe mental illness and significant difficulties managing day to day living. The program is transitional, rehabilitation and recovery-oriented, and community-based. HASI Plus integrates clinical and intensive psychosocial support that is available up to 16 or 24 hours per day, 7 days per week, with stable, community-based accommodation.

HASI Plus is a statewide program funded by the NSW Ministry of Health (the Ministry). The HASI Plus service model is delivered locally as a partnership between host local health districts (LHDs) and specialist mental health community managed organisations (CMOs). Started in 2013, there are currently 70 HASI Plus places across 8 accommodation sites hosted in 4 LHDs.

The Ministry commissioned the Social Policy Research Centre (SPRC) to evaluate the HASI Plus program. The evaluation involved 2 rounds of qualitative interviews and focus groups, as well as the analysis of quantitative program data and statewide outcomes data about consumers. The evaluation ran from August 2018 to August 2021.

HASI Plus supported 101 consumers in the study period from 2013 to September 2019. Overall, the evaluation shows that the program is working well and achieving most of its intended aims. At a broad summary level:

- consumers and their families liked HASI Plus – they reported a wide range of positive experiences in the evaluation fieldwork (and overwhelming support for the housing component of the service model)
- CMO and LHD staff were generally satisfied with the operations, management and staffing arrangements at the sites, including training
- consumer outcomes were generally positive – including a statistically significant reduction in mental health hospital admissions and length of stay after entry to the HASI Plus program
- the decrease in frequency and length of hospital admissions after consumers entered HASI Plus meant a saving, or cost offset, of between 35 to 85% of the average cost of a HASI Plus package (depending on how hospital inpatient costs are calculated)
- the average cost of a HASI Plus package was $186,011 per annum, which was substantially less than the annual cost of supporting a consumer with a

similar clinical profile or phase of illness in hospital; and also less than other comparable support programs in NSW.

The factors identified as most important for the success of the program were:

- the access to safe and secure housing as part of the service model
- intensive on-site supports
- strong local partnerships between CMOs and LHDs; and
- the flexible, person-centred approach to service provision.

The main areas where the program was either not performing as some stakeholders expected, or where the evaluation suggested inconsistency with the documented service model were:

- inequitable access to HASI Plus as a statewide resource, especially for consumers referred from non-host LHDs
- low numbers of people supported in HASI Plus following release from prison. The multiple reasons included challenges with custodial release timing and processes; low awareness of the program among the prison sector; difficulties for the cohort to satisfy the eligibility criteria; and CMO provider and LHD clinician concerns about the suitability of the program for this client group.

To continue to improve HASI Plus, program partners could consider:

<u>Key actions to improve equity of access to the program</u>

- **Improve availability of information** about the program for referring groups, especially in non-host LHDs and custodial settings. This includes information about the eligibility criteria, the status of vacancies and the progress of referrals.
- **Review the barriers to access for people who are exiting prison.** Barriers include the current screening process and criteria, and custodial access restrictions for suitability assessment. Explore how formal, integrated partnerships with other programs may address concerns about risk and about capability to respond effectively to the challenges of this group.
- Develop the cultural responsiveness of the program so that it meets its objective to **respond to the diversity** of consumers. Actions include promoting access for culturally diverse consumers, along with cultural responsiveness training for staff.

<u>Key actions to address consumer-led support and planning issues</u>

- Promote discussion and problem-solving, within and among CMOs, with LHDs and the Ministry, to develop strategies for effective psychosocial support to each consumer that **respects their autonomy and freedom of movement**.

- **Review program activities regularly** at a local level with input from consumers, to ensure that activities meet consumer preferences. Focus on involving consumers in meaningful activities in the community, **including work and education.**
- Continue to share success stories and discussion among CMOs about how to effectively support each consumer's **physical health**. Consider training on evidence-based interventions.

Key actions to improve transfer of care into HASI Plus

- **Improve information flows about the support needs** of people referred to HASI Plus so that frontline CMO staff can put support strategies in place. Consider including frontline staff in referral processes, to ensure that adequate support for the applicant is available.

Responsiveness of support

- Consider ways to **strengthen partnerships** with other local services, to enhance the spectrum of supports available for consumers.

Key actions to improve timely consumer transition to more independent community living

- Pursue agreements between the Department of Communities and Justice (DCJ) and the Ministry to **facilitate more timely access to social housing** (which would be combined with similar but less intensive mental health supports) as a priority for people transitioning out of HASI Plus. This would reduce program 'bed block'. Encourage CMOs to invest in strengthening relationships with social housing providers.
- Develop formal and informal **links between the program and Supported Independent Living (SIL) options** funded by the National Disability Insurance Scheme (NDIS) as a transition option for people with high support needs. Consider the feasibility and usefulness of agreements between CMOs and local NDIS providers about suitable support towards independence.

Monitoring and reporting requirements

- **Review the mental health outcomes measures** used for the program with a focus on how such measures can usefully inform consumer recovery goals and progress.

Executive summary

The Housing and Accommodation Support Initiative Plus (HASI Plus) program is a transitional rehabilitation and recovery program in NSW. It is targeted to support people with severe mental illness and significant functional impairment to recover and live a quality life in the community.

HASI Plus integrates clinical support and high-intensity psychosocial support with stable, community-based, fit-for-purpose housing. The program was established in 2013. It is funded by the NSW Ministry of Health (the Ministry) as a statewide resource and delivered as a local partnership between local health districts (LHDs) and community managed organisations (CMOs).

At the time of the evaluation, HASI Plus offered 60 packages of 2 intensity levels (support available up to 16 or 24 hours per day) across 7 accommodation sites hosted in 3 LHDs. It has now been enhanced to 70 packages across 8 sites hosted in 4 LHDs.

Method

The Ministry commissioned the Social Policy Research Centre (SPRC) at the University of New South Wales (UNSW) Sydney to evaluate HASI Plus. The evaluation commenced in August 2018 and finished in August 2021. It involved 2 rounds of qualitative interviews and focus groups, as well as quantitative analysis of program data and statewide outcomes data about consumers.

The time scope for the evaluation was from the commencement of the program in 2013 until September 2019. There were substantial limitations to the quantitative data analysis possible for this period due to:

- the limited content, completeness, and reliability of the manual forms-based minimum data set reporting system (known as the Form 1 and Form 2 Minimum Data Set collection – ‘Form 1 and Form 2 MDS’) that was used for the program from 2013 until May 2019
- the fundamental differences between the Form 1 and Form 2 data set and the subsequent contemporary minimum data collection implemented in May 2019 (known as the NSW Mental Health Community Living Programs Minimum Data Set Version 2 – ‘CL MDS V2’)
- the relatively small numbers of consumers participating in the program (and a further reduction in the size of this group for the study after several consumers did not consent to data linkage)

- the significant challenge of developing an appropriate comparison group and linking data for that small group.

These factors meant that many quantitative outcomes were not statistically significant; and therefore many findings for this evaluation rely on the detailed qualitative data gathered in the fieldwork.

HASI Plus consumer profile

HASI Plus supported 101 consumers from the start of the program in 2013 until September 2019. Ninety (90) of these consumers consented to data linkage for the evaluation and formed the study group.

Some key demographics of this group were:

- about two thirds of the participants were male (64%)
- the average age was 42.8 years (with almost two thirds of participants in the 2 middle age groups of 35 to 44 years and 45 to 55 years)
- 7% identified as Aboriginal or Torres Strait Islander.

The mental health clinical profile of the group was[1]:

- almost all had a primary diagnosis of schizophrenia (75%) or schizo-affective disorder (24%)
- clinically significant needs (on average) for behaviour (46%), impairment (58%), symptom (80%) and social (80%) in the year prior to entry as measured by the Health of the Nation Outcome Scales (HoNOS) subscales
- low levels of psychological distress in the year prior to entry with an average Kesler 10 (K10) score of 18.3 (albeit with large individual variation).

The functional 'life skills' impairment of the group was, on average, characterised by:

- some form of mental health, guardianship or financial management order in place (74%)

[1] Mental health clinical profile based on available pre-entry data for 59 consumers.

- difficulties with social withdrawal and relationships, self-care, compliance and anti-social behaviour in the year prior to entering HASI Plus as measured by the Life Skills Profile -16 (LSP-16) measure.[2]

The main findings are listed below. Details are in **Appendices 1** to **7**.

Consumer and carer experience

Consumers, families and carers liked the HASI Plus program. They reported a wide range of positive experiences in the interviews. Consumers gave a clear message that they felt they benefited from the program, particularly the psychosocial support and the safe, secure housing.

HASI Plus support improved consumers' subjective experience of wellbeing - the way they felt about themselves and their lives. The main reasons for this improvement as reported by consumers (and families) were:

- the experience of taking charge of their own home
- having choice about their goals and daily life
- having opportunities to connect with other people
- having opportunities to join various activities.

There was overwhelming support from consumers and carers for the housing component of the HASI Plus service model. While the structure, age and arrangement of the accommodation varied significantly across the 7 locations, it was generally appropriately located in safe neighbourhoods and suitably close to local services and amenities. Some housing offered particularly welcoming spaces for activities and socialising.

Consumers valued the support they got from CMOs to increase social participation in various ways and depending on individual goals: connecting with family, building friendships, taking part in community activities, training and working. New friendships were generally with other residents. Where consumers had very high support needs, 'social participation' objectives were sometimes interpreted more narrowly as supporting consumers to live in the community, such as in HASI Plus housing, rather than living independently.

[2] Individual sub scores before and after program entry were not analysed as the sample size was too small and the total LSP-16 score was not statistically significant. These indicative profile characteristics are based on available LSP-16 responses from before program entry (n=25).

Generally, consumers were happy with the degree of observation and freedom at their housing. There were, however, a few people (staff and consumers) who raised issues about tensions between being supported and being allowed choice (or dignity of risk).

Most consumers had at least some contact with family members. Some CMOs supported consumers to reconnect, where appropriate. Some family members (especially of statewide referrals) mentioned their disappointment with the limited number of sites and the program not being available locally in all LHDs.

Consumer outcomes

The evaluation findings indicate that HASI Plus was meeting most aspects of the consumer-related outcome aims as established in the program logic (see **Appendix 2**):

- People with severe and persistent mental illness have sustained improvements in their mental and physical health and experience greater wellbeing
- Avoidable presentations to emergency departments, mental health facilities and related support services are reduced
- People with severe and persistent mental illness who have resided in mental health facilities, prisons or hospitals transition to live in the community.

People with severe and persistent mental illness have sustained improvements in their mental and physical health and experience greater wellbeing

The reports from the qualitative fieldwork indicate that consumers, carers and staff all believed that HASI Plus support improved psychosocial functioning, engagement with treatment, social connection and general wellbeing.

Quantitative analysis of consumer mental health outcomes was more challenging due to the small number of linked records with available Mental Health National Outcomes and Casemix Collection (NOCC) outcome measures and a high degree of variation in scores. While overall severity of illness (HoNOS scores) did improve following entry to the program, the very small sample size for this linked analysis (n=32) meant this finding was not statistically significant. Similarly, consumer psychological distress (K10 scores) had large variations, and no statistically significant conclusions could be made. The recent changes to the program data set, including the suite of outcome measures, will likely provide a more robust insight into measured consumer outcomes in the future.

Fieldwork findings suggest that interventions to address physical health were less effective in changing behaviour than the psychosocial interventions. While consumers were generally well linked to doctors and specialists, some CMOs reported negative effects of being in HASI Plus on consumers' physical health. CMOs attributed this to increased freedom of choice to purchase and consume unhealthy food and cigarettes. Some tensions were reported in providing physical health support while respecting consumers' autonomy and freedom of movement.

Avoidable presentations to emergency departments, mental health facilities and related support services are reduced

Mental health hospital admissions and length of stay decreased after entry to the HASI Plus program. Admissions were 56% lower in year one in the program, and the average number of days fell by 80% (from an average of 121.7 mental health admitted days in the year prior to HASI Plus to 24.8 admitted days in the year post admission to HASI Plus). The lower levels continued into year 2 in the program, and the findings are statistically significant.

Hospital emergency department presentations were also examined for the 2 years prior and 2 years post program entry. However, because of high variation in the number of emergency department presentations and the small sample size, the slight decrease in the number of presentations following program entry is not statistically significant.

Similarly, while the number of criminal offences committed by HASI Plus consumers decreased from the year before program entry to the year following entry, the small sample size meant these findings were also not statistically significant.

People with severe and persistent mental illness who have resided in mental health facilities, prisons or hospitals transition to live in the community

The overwhelming view expressed in the interviews with consumers, families, CMOs, LHDs and other stakeholders was that HASI Plus was effective at transitioning people from health institutions to living in the community.

The number of consumers exiting the program over the evaluation period was not clear. This was because there was a discrepancy between the data from the combined Form 1 and Form 2 MDS and CL MDS V2, and the administrative exit report data collected by the Ministry as part of the contract management process. According to the administrative data, 69 consumers exited the program in the

evaluation period from 2013 to September 2019, with about half of the exits (33 consumers) transitioning to alternative community arrangements, and 29 people (42% of exits) moving to less intensive supports. According to the Form 1 and Form 2 MDS data, which is likely incomplete, there were 32 exits during the study period, of which 31 were reported as 'planned' exits. Few details were available about the post-program support arrangements.

Using the Form 1 and Form 2 MDS data, the average time in HASI Plus was about 1.5 years for those consumers who entered and exited. Consumers who were in the program at the end of the evaluation in 2019 had, on average, been in HASI Plus for about 2.5 years.

The evaluation identified several barriers that prevented the program from adequately supporting people with severe mental illness who had exited from prison.

Consumers had different views about leaving HASI Plus to more independent living in the community, as is intended by the transitional service model. Some consumers looked forward to exiting the program, while others were reluctant to leave what they considered a safe, supportive environment.

Similarly, some CMOs felt that some consumers continued to need the high intensity of clinical and psychosocial support offered by HASI Plus; and that these consumers could not safely transition out of the program unless it was into another arrangement with similarly high levels of support.

CMO staff experience

Overall, most CMO staff were happy with the operations, management and staffing arrangements at the sites. Some staff expressed concern about roster structures such as long shifts, insufficient breaks and limited choice about doing day and night shifts.

CMO staff were also mostly content with the level of training offered.

LHD staff experience

LHD staff who participated in the fieldwork were overwhelmingly positive about HASI Plus. They said it filled a gap, and that there should be more program places. All non-host LHDs asked for HASI Plus to be established in their areas too.

Most non-host LHDs who participated in the focus groups did not know much detail about the HASI Plus model. For example, they were unsure where it fitted in the service landscape with National Disability Insurance Scheme (NDIS) Supported Independent Living (SIL) or the Pathways to Community Living Initiative (PCLI).

Host LHD staff in the focus groups (not limited to the dedicated HASI Plus clinicians) seemed to understand the program well. They knew the specific setup in their area and talked about experiences with individual consumers. They praised the program for enabling successful transition into the community for most consumers.

HASI Plus service model in operation

Flexible, high-intensity psychosocial support services

Consumers liked that CMOs encouraged them to set goals and support them to more independent living, learning new skills and developing new interests. Practical examples of psychosocial support included transport training, shopping, and support to attend training or access supported work.

CMOs provided psychosocial support one on one with consumers and through group activities. On average (and across both the 16- and 24-hour support packages) consumers received about 8 to 9 hours of direct support per day. About a third of this was for self-care, 21% for 'other' support (with no further detail provided) and 13% for domestic skills. Group activities are estimated to be about 10% of the total direct support hours.

Coordinated multi-disciplinary mental health clinical support

Mental health clinical support of consumers was a successful element of the close cooperation between CMOs and LHDs. In general, clinical psychiatrists and mental health teams at the LHDs worked closely with CMO staff to monitor medications and adjust them where appropriate.

Some areas seemed to have closer connections than others. Connections seemed to be facilitated by location, visibility and involvement in other activities, which meant that consumers and staff had closer relationships with them. In one area, the LHD clinician visited the HASI Plus location 4 days a week. They participated, for example, in consumer planning meetings and were available to give clinical advice to CMO staff and consumers. Areas with closer connections were generally more positive about the cooperation.

Stable, community-based and fit-for-purpose accommodation

The structure, age and arrangements of the HASI Plus housing varied across locations. Some housing was more modern and better equipped than others, for example regarding furnishings or landscaping. The different structures of the accommodation influenced how consumers were observed in their home and how they experienced freedom and privacy.

Overall, consumers typically reported that the HASI Plus housing was good and that it met their needs. Consumers also appreciated the safety and the stability of the housing. Staff were more likely to say that accommodation 'could be better'.

Flexible, high-intensity accommodation support services

Within the 2 HASI Plus package intensities of support available up to 16 or 24 hours of support per day, actual support hours were highly variable as intended, according to each consumer's specific needs.[3] Actual support of around 248 hours on average per month varied among consumers from 150 to 700 hours, which was around 5 to 24 hours per day.[4]

Insufficient data were available to determine how support hours for each consumer varied across their time in HASI Plus[5].

Support was also flexible between packages. This means a consumer on a 16-hour package might on occasion receive more than 16 hours. This could happen, for example, if that person was in the same housing as people with 24-hour packages and asked for support at night, which was not included in 16-hour packages. Staff were always available and would attend to any consumer calls. CMOs raised budget concerns about this issue.

Types of support were also highly variable and flexible. CMOs reported hours per support types in the original Form 1 and Form 2 MDS and the CL MDS V2.[6] In addition to the reported support types, the 'other' category included a variety of non-listed kinds of support[7]. 'Other' was the second-highest category after self-care, which may indicate that kinds of support were highly variable according to individual consumer need.

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[3] Reported support types included activities and did not further articulate details about the support, for example overnight hours in 24-hour packages.

[4] These are indicative figures, as the study group sample was not complete, program reporting changed during the study period and figures were aggregated across 16- and 24-hour packages.

[5] Most of the HASI Plus data did not distinguish between 16- and 24-hour packages and were quarterly aggregates. Variation in the data was clear, but could be partly due to incomplete quarters, for example entry/exit or consumers in hospital.

[6] CL MDS V2 was implemented during the evaluation and provided data only for the final five months of the study period.

[7] 'Other' support hours were reported in the Form 1 and Form 2 MDS collection and are not broken down further.

Data were not available about the support provided by Community Housing Providers, if any.

A statewide resource

HASI Plus is a statewide resource. To ensure equitable access to the program, a mix of so-called 'local packages' and 'statewide packages' are specified in each of the host LHDs.

Local packages are reserved for consumers who currently live within the LHD where the HASI Plus service is offered. Referrals for statewide packages are accepted from all NSW LHDs that do not host the program, from the Justice Health and Forensic Mental Health Network (JH&FMHN) and from Corrective Services NSW (via JH&FMHN custodial services if the person is in custody).

The evaluation indicates that most of the packages allocated for statewide referrals are accessed by consumers subject to a mental health forensic order ('forensic referrals') after referral by JH&FMHN. The remaining statewide packages were not equitably distributed to consumers referred by non-host LHDs. In the focus groups, the non-host LHDs mentioned difficulties with getting referrals accepted. Some were so discouraged that they said they now concentrated on referring to PCLI and NDIS SIL.

Few consumers came into the program after exit from custody.

Consumer-led support planning and implementation

HASI Plus is a voluntary program, and consumers can only be referred with their consent. The service model requires that all participants are then supported to recognise and take responsibility for their own recovery and wellbeing, and to define their goals, wishes and aspirations.

Overall, individualised support planning was comprehensive and well embedded into the support process. There was also evidence that HASI Plus worked with the NDIS to offer complementary supports.

Transfer of care

HASI Plus consumers were typically referred from public mental health services (77% of 56 consumers for whom data were available). This is consistent with the objectives of the model.

Referral and transfer processes appeared most successful when consumers were referred from a service that had strong relationships with the CMO. This could be a local referral or a statewide referral.

The evaluation identified several barriers to effective transfer of care that contributed to the low numbers of custodial referrals.

Responding to diversity

About 7% of HASI Plus consumers identified as Aboriginal, which was about double the estimated resident population in NSW.

The number of consumers from culturally and linguistically diverse (CALD) backgrounds in the program was less than would be expected according to population proportions. About 13% of consumers were born in a country other than Australia, which is less than half of the 30% of people born overseas in the NSW population; and 7% reported preferring a language other than English, which is less than the 25% of the NSW population who speak a language other than English at home.

The qualitative findings indicate that consumer supports were rarely modified to address cultural differences.

A partnership approach

Both LHD and CMO staff recognised the importance of the clinical and psychosocial partnership element of the service model, and they reported effective partnerships with their counterparts. Some CMO staff felt that the exchange of information between the CMOs and LHD about consumer support could be further improved.

There were no formal partnerships, and limited evidence of effective informal partnerships, with Corrective Services NSW or other specialist services to support custodial referrals.

The fieldwork identified a few examples of partnerships with other local services, such as day programs, disability support, and Aboriginal and culturally and linguistically diverse networks.

A transitional program model

The limitations of the evaluation data (Form 1 and Form 2 MDS) meant that the evaluation gained little quantitative insight into the consumer pathways out of HASI Plus. The following detail was available from the administrative exit data collected by the Ministry:

- 69 consumers exited the program up to September 2019
- about half of the exits (33 consumers) transitioned to alternative community arrangements, with 29 people (42% of exits) moving to less intensive supports that were provided mostly by the related general Housing and Accommodation Support Initiative (HASI)
- 21 consumers (30%) had 'unplanned' exits. These were mainly an unplanned mental health readmission, a breach of a community corrections order with a return to custody, or an exit of the consumer's own decision to no support arrangements.

In the interviews, CMOs said consumers exited mostly to social housing or private rental, with a few to aged care, hospital and the NDIS SIL program. CMOs also said that a shortage of appropriate affordable housing delayed timely exits from the program. Good relationships between CMOs and social housing providers helped, but these varied across locations.

Monitoring and reporting outcomes measures

At the time of the interviews, CMO staff reported being generally content with the outcome measures collected as part of reporting in the program. Although at the time some staff did find that some measures were long and repetitive; and that the data were not always accurate, especially for self-administered instruments that consumers might find challenging.

Average cost per package

The total program cost was $11.2 million in 2018-2019. The average cost per package was $186,011 per annum. This was across both 16- and 24-hour package types and accounted for psychosocial support costs (85%), dedicated LHD clinical support costs (4.7%), procurement and administrative support at the Ministry (3%), non-clinical coordination support in the host LHDs (1.4%), capital investment for program property refurbishment (4.7%), and Ministry-paid rental shortfall (about 1%).

The average cost per HASI Plus package was substantially less than the annual cost of supporting a consumer with a similar clinical profile or phase of illness in hospital, and less than other comparable support programs in NSW.

While CMO managers were generally content with the structure of the funding model some raised concerns about aspects of the funding, including the quantum. Specifically, some managers said that:

- the funding model did not properly recognise that some consumers in 16-hour packages were in the same building as consumers on 24-hour packages and

therefore were effectively able to access 24-hour support without being funded for it
- the Ministry did not increase program funding when staff costs increased because of an Equal Remuneration Order by the Fair Work Commission for employees in the social and community services industry; and that this reduced CMO capacity to implement the model within the funding envelope.

Cost effectiveness

Cost effectiveness analysis indicates that the decrease in frequency and length of hospital admissions after consumers entered HASI Plus meant a saving, or cost offset, of between 35 and 85% of the average cost of a HASI Plus package (depending on how hospital inpatient costs are calculated).

The available HASI Plus cost offsets were consistent with recent economic modelling by the Productivity Commission. The modelling indicates that investment in community mental health programs, including integrated clinical and other support services like HASI Plus, were highly cost effective (Productivity Commission, 2020).

Success factors

The evaluation identified the following factors as most important for the success of the program:

- the access to safe and secure housing as part of the service model
- intensive on-site supports
- strong local partnerships between CMOs and LHDs; and
- the flexible, person-centred approach to service provision.

Opportunities to improve HASI Plus

The HASI Plus evaluation suggests there are 5 main potential focus areas to improve the program and ensure consistency with the service model:

- equity of access to the program
- consumer-led support and planning
- transfer of care
- responsiveness of support
- timely transition to more independent community living.

1 Introduction

HASI Plus is a transitional rehabilitation and recovery program supporting people with severe mental illness and functional impairment to recover and live a quality life in the community. The service model integrates dedicated clinical support and high-intensity psychosocial support with stable, community-based, fit-for-purpose housing.

HASI Plus was established in 2013. It is funded by the NSW Ministry of Health (the Ministry) as a statewide resource and delivered as a local partnership between local health districts (LHDs) and community managed organisations (CMOs). HASI Plus currently offers 70 packages of 2 intensity levels, with psychosocial support available up to 16 or 24 hours per day. The program operates across 4 LHDs and 8 accommodation sites.

The Ministry commissioned the Social Policy Research Centre (SPRC) at the University of New South Wales (UNSW) Sydney to evaluate HASI Plus. The evaluation ran from August 2018 to August 2021. It aimed to assess:

- the effectiveness of program governance and implementation (process evaluation)
- the impact of HASI Plus on consumer outcomes (impact/outcome evaluation)
- costs and benefits of HASI Plus compared to other service models (economic evaluation).

This is the final evaluation report. It answers the evaluation questions by presenting a summary of findings from the 2 rounds of qualitative fieldwork and from the analysis of quantitative program data and linked outcomes data. This report also summarises opportunities for improving HASI Plus further. The main findings are listed in this summary. Details of the evaluation approach and findings are in **Appendices 1** to **7**.

2 Methods

The evaluation adopted a mixed-method design comprised of:

- literature and document review
- 2 rounds of interviews in the HASI Plus sites with consumers, families, CMO and LHD staff and managers
- 2 rounds of interviews and focus groups with government and state-level stakeholders
- analysis of qualitative and quantitative program data
- analysis of consumer outcome data linked across partner agencies
- analysis of administrative data about consumers who exited the program
- economic analysis and cost modelling.

Data analysis was structured according to the evaluation aims and the HASI Plus program logic developed with the Ministry (**Appendix 2**). More detail about the evaluation methods is in the evaluation plan (Purcal et al. 2019) and at **Appendix 3**. The literature review summarises evidence from evaluations of programs similar to HASI Plus (Blunden 2019).

The samples for interviews and the analysis of quantitative data are in **Table 1** and **Table 2**.

Table 1 Sample for interviews

Participant group	Number of interviews			Repeat interviews	People interviewed
	Round 1	Round 2	Total		
Current consumers	39	35	74	20	54
Family members[1]	3	2	5	2	3
CMO	47	28	75	15	60
LHD	2	12	14[2]	0	14
Exited consumers			6	n/a	6
Stakeholders			12[3]	n/a	12
Total			186	37	149

Notes: [1] Fewer family members than anticipated took part in the interviews.
[2] Includes 2 focus groups and 3 interviews with 14 participants in total
[3] Includes 3 focus groups with 12 participants in total

Table 2 Sample for the quantitative analysis - study and comparison groups

Method	Sample sizes		Data transfer or collection process
	HASI Plus	Comparison group	
Program data	90[1]	-	As available from the Ministry or CMOs
Program outcomes data	HASI Plus 58 + 32 exited[2]	34 from HASI Plus wait list[3]	Combined available program data and data linkage content through CHeReL
Economic analysis of costs and benefits	90 as above	34 as above	Collated program funding, cost data and resource usage from the program data linkage for cost estimation[4]
Cost modelling data	90 as above	-	Program expenditure data from the Ministry and CMOs where available with the economic cost effectiveness results[5]

Notes:
Study period from January 2013 to September 2019
HASI Plus program reporting was a manual form-based quarterly collection until April 2019 (known as the 'Form 1 and Form 2' MDS collection). The program was integrated into the NSW Mental Health Community Living Programs Minimum Data Set Version 2 (CL MDS V2) from May 2019, with substantially enhanced content, analysis and reporting capability.
1. consenting consumers
2. Sourced from the Form 1 and Form 2 MDS collection noting there was a considerable discrepancy between this figure and the 69 exits reported in the administrative exit data collected by the Ministry as part of the contract management process.
3. Including 3 who later entered the program
4. At the time of evaluation, the program offered 60 packages across 7 sites within 3 LHDs. Economic and cost modelling analysis is based on these settings.
5. As above.

2.1 HASI Plus Minimum Data Set

When the HASI Plus program was established in 2013, the program adopted the Minimum Data Set (MDS) that was used at the time for the Housing and Accommodation Support Initiative (HASI). The HASI MDS consisted of two forms: *HASI Monitoring Form 1: Applicant Profile*[8] and *HASI Monitoring Form 2: Consumer*

[8] NSW Ministry of Health, Mental Health Drug and Alcohol Office 2010 Version 12.1

Receiving Support[9] (known as the 'Form 1 and Form 2 MDS' collection). CMO providers had to complete the forms manually and then submit all forms quarterly to InforMH, the Ministry's specialist mental health information and analytics branch.

In April 2019 the Ministry and InforMH updated the HASI Plus minimum data set by integrating the program into the NSW Mental Health Community Living Supports Minimum Data Set Version 2 (CL MDS V2) collection. This new collection and process has substantially enhanced content, data analysis and reporting capability.

The HASI Form 1 and Form 2 MDS collection was the main source of data for the evaluation. The scope of information in the collection was limited, and data analysis was further constrained by reliability and completeness issues with the collection. Where possible, CL MDS V2 data was considered along with other data sources such as Ministry administrative data. Ultimately, these factors meant that many quantitative outcomes were not statistically significant. Therefore, many findings for this evaluation rely on the detailed qualitative data gathered in the fieldwork.

[9] NSW Ministry of Health, Mental Health Drug and Alcohol Office 2012 Version 12.1

3 HASI Plus consumer profile

This section presents information about the number of HASI Plus consumers and their characteristics at entry to the program. Numbers are based mainly on the HASI Plus Form 1 and Form 2 MDS collection and CL MDS V2. This information was supplemented with information from the data linkage where available. During the study period from January 2013 to September 2019, HASI Plus had places for 60 consumers at any one time, and HASI Plus packages were almost fully used throughout the period.

3.1 Number of program consumers

The data linkage included a study group sample of 90 consumers who received support from HASI Plus. The sample comprised 58 current consumers and 32 who had exited by the time of the evaluation. Eleven (11) current consumers (10% of the study group) did not consent to the data linkage and were therefore not included in the sample.

Notably, the Ministry separately collated administrative data as part of its contract management process. According to this data set, 61 consumers exited the program between 2014 and September 2019, **Appendix 8**.

3.2 Duration in program

According to the Form 1 and Form 2 MDS collection data set, 32 consumers exited the program during the study period, about 5 consumers per year. For those 32 consumers, the average length of time in HASI Plus was 19.8 months (1.7 years). Time in the program varied among these consumers from a few months to 4.3 years. Of the 32 exits, 31 were reported as ‘planned’ exits, but few details were available about the arrangements after exit.

Among the 58 consumers still in HASI Plus, the average length of time in the program was 30.0 months (2.5 years). Their time in the program ranged from a few months to 6.1 years (as at the end of the study period, September 2019).

3.3 Demographic characteristics

The demographic profile reflects the 90 consumers who were included in the data linkage – 58 current consumers who consented to the linkage, and 32 exited consumers. Some data from the early forms collection was incomplete.

HASI Plus aims to respond to consumers with diverse support needs and cultural backgrounds. This includes ensuring culturally safe and appropriate support for Aboriginal consumers. The characteristics of HASI Plus consumers when they entered the program were:

- 64% were men (55 consumers), and 35% were women (30 consumers).
- The average age of consumers was 42.8 years, ranging from 24 to 63 years. Most consumers were in the middle age groups 35 to 44 years (27 consumers, or 31.4%) and 45 to 55 years (28, or 32.6%).
- 5 consumers (7.1%) identified as Aboriginal or Torres Strait Islander. This proportion was more than twice the general population.
- About 13% of consumers were born in a country other than Australia. The largest proportions were 4.8% born in New Zealand and 2.4% in Vietnam. Other countries of birth included England, China, India, Japan and Lebanon.
- About 7% of consumers reported a preferred language other than English. This compared to about 27% of the Australian population speaking a language other than English at home (Australian Bureau of Statistics, 2016). The data on country of birth and language diversity indicate that people with a culturally and linguistically diverse (CALD) background were under-represented in HASI Plus.
- 4.3% of consumers (<5 of 46 consumers) identified as lesbian, gay, bisexual, trans and/or intersex.[10]
- About 74% of consumers had a legal order in place relating to their support.[11]
- Fewer than 5 of 53 consumers had a community correction order in place at some time from May to September 2019.[12]

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[10] Sexuality and gender identity were not reported in the Form 1 and Form 2 MDS collection to April 2019, figures based on the last 5 months of the study period when CL MDS V2 commenced (n=46).

[11] This included around 34% under a forensic order, 30% under a financial management order, 11% under a guardianship order and 9% under a community treatment order. Source: CLS MDS V2 (n=53) from May 2019 to September 2019.

[12] Based on the last 5 months of the study period when CL MDS V2 data content was available. The number of consumers on community correction orders was less than 5,

- Consumers' housing at the time they entered HASI Plus varied. About 62% of consumers were in hospital in a mental health inpatient unit (56 consumers). Twenty-two percent lived in social housing (20 consumers)[13]. Five consumers came from either a correctional facility, living with friends or family, or own home. The consumers who were in hospital when they entered HASI Plus did not have records of any other accommodation they may have had at the time.

- Many HASI Plus consumers reported the risks they faced in their previous housing at program entry. Consumers could report more than one risk factor. The most common were risk of domestic violence (60% of reporting consumers, or 43 consumers) and unmet support need and vulnerability (44% or 32 consumers each).

The HASI Plus evaluation comparison group were 34 consumers who were on the program waitlist from February 2017 to September 2019. Their gender and age were the only demographic data available.[14] The group was too small to support statistical analyses of the linkage data (**Appendix 3**).

3.4 Clinical and life skills profile

HASI Plus is intended to support people to recover from a complex combination of mental illness and 'functional impairment'.

The clinical profile of the group in the year prior to or on entry into the program was:

- almost all had a primary diagnosis of schizophrenia (75%) or schizo-affective disorder (24%)

therefore more accurate details are not presented to protect confidentiality (based on 53 consumers who had data reported through CL MDS V2).

[13] Social housing includes public housing, community housing, Aboriginal public housing and Aboriginal community housing. The number of mental health inpatients was sourced from CL MDS V2. The Form 1 and Form 2 MDS collection only noted 'hospital' as housing at entry to the program.

[14] The waitlist collection provided gender and age only. Linkage data for this group were patchy, and combined with the small waitlist sample size, no meaningful findings could be generated.

- clinically significant needs (on average) for behaviour (46%), impairment (58%), symptom (80%) and social (80%) in the year prior to entry, as measured by the Health of the Nation Outcome Scores (HoNOS) subscales[15]
- low levels of psychological distress in the year prior to entry, with an average Kesler 10 (K10) score of 18.3% (albeit with large individual variation)
- The major coexisting conditions and risk factors were drug and alcohol dependency in 5 of 44 consumers, or 11.4%,[16] and smoking in 20 out of 53 consumers, or 37.7%.[17]

The functional (life skills) profile of the group in the year prior to or on entry into the program was:

- three quarters had some form of mental health, guardianship or financial management order in place (74%)
- difficulties with social withdrawal and relationships, self-care, compliance and anti-social behaviour in the year prior to entry to HASI Plus as measured by the Life Skills Profile 16 (LSP-16) measure.[18]

[15] Indicative based on at least one clinically significant component item per subscale in year prior to program entry (n=59), clinical significance defined as HoNOS scores of 2, 3 or 4 in each measure.

[16] Smaller sample due to missing data.

[17] These data were only in the HASI Plus CL MDS V2 data from May 2019 for 53 consumers.

[18] These indicative profile characteristics are based on available LSP-16 responses from before program entry (n=25). Individual sub scores before and after program entry were not analysed as the sample size was too small and the total LSP-16 score was not statistically significant.

4 HASI Plus in operation – the consumer and staff experience

The interviews and focus groups indicate that consumers, family members, LHDs, CMOs and other program stakeholders were overwhelmingly positive about HASI Plus. Most people were enthusiastic about the program and reported a wide range of positive experiences.

The interviews also indicate that HASI Plus operation was generally consistent with the key features of the service model (**Appendices 2 and 5**) and meeting program objectives.

4.1 Transition support

The aim of HASI Plus is to support people with severe and persistent mental illness to lead their own rehabilitation and recovery and then to transition to independent living in the community. The program prioritises people who have spent a long time in inpatient services and people at risk of or experiencing homelessness. Transition to community living includes several parts: entering HASI Plus; settling in; and exiting the program. Many people also commented on the overall transition.

4.1.1 Overall transition to community living

Interview participants overwhelmingly felt that HASI Plus was effective at transitioning people to living in the community. Most consumers felt safe and supported and enjoyed a sense of independence and freedom in the program. They considered HASI Plus a good step towards community living.

> Even if I don't stay here forever, it's a stepping stone to getting out of the hospital and reintegrating into society. (Consumer)

Most LHDs, CMOs and stakeholders had similarly positive views.

Some raised questions about how to best support some consumers in the long term whose ongoing support needs were considered too high to transition into the community.

4.1.2 Entering HASI Plus

Due to the limited number of HASI Plus packages, it took a long time for suitable consumers to access the program, with most being on the HASI Plus waitlist for more than a year before entering. Most consumers were happy to be able to move from

hospital or another institution into HASI Plus, although many said they knew little about HASI Plus at the time of moving.

Most consumers had a gradual transition into HASI Plus. This typically involved day visits first and then increasing overnight stays. It was organised at a pace that suited the consumer. However, some consumers found a gradual transition was stressful because they had to move back and forth between their HASI Plus accommodation and hospital.

Most forensic consumers and many CMOs thought that the very slow transitions for forensic consumers, which are determined by the Mental Health Review Tribunal (MHRT), took too long.

4.1.3 Program orientation and 'settling in'

All CMOs offered activities and support to assist new consumers to settle into the program, although this varied across locations. Most consumers were satisfied with the way they entered the program. There were also differences in CMO staff expectations about how engaged consumers 'should' be during their initial period in the program, both across sites and sometimes among staff at the same sites. Some staff expected consumers to be engaged in activities and psychosocial support from the beginning, while other staff allowed consumers to start engaging in their own time.

4.1.4 Exiting HASI Plus

HASI Plus is a transitional program that aims to support consumers towards a recovery-oriented exit from the program to more independent life in the community.

The exact number of consumers exiting the program over the evaluation period was not clear. This was because there was a discrepancy between the data from the:

- combined Form 1 and Form 2 and CL MDS V2 collections; and
- administrative exit report data collected by the Ministry as part of the contract management process.

According to the Form 1 and Form 2 MDS collection, 32 consumers exited HASI Plus. Of the 28 on whom further information was available:

- 10 consumers had a planned exit with no detail on exit destination
- 8 consumers had a planned exit to 'another long-term support program' destination with no further details; and

- 10 had ‘other’ exit reasons including consumer deceased, consumer relocated, unplanned exit or returned to hospital.

According to the administrative data, 69 consumers exited the program in the evaluation period. About half of those exits (33 consumers) transitioned to alternative community arrangements, and 40% of exits (28 consumers) moved to less intensive supports.

Detailed analysis of the administrative exit data indicates (with percentages rounded):

- the largest proportion of consumers (28 people or 40%) exited to lower intensity support arrangements, where the support came from either general HASI (17 people) or LHD community mental health services (7 people). Other arrangements were through the NDIS, private psychiatrists or not known.
- the next highest proportion of exits was 12 people (17%) being admitted (or readmitted) to a mental health facility. This was accompanied by an assessment that HASI Plus was not a suitable option for discharge.
- 8 people (12%) were recorded as exiting the program because they were either lost to care[19], were actively not engaging with the program despite concerted efforts, or had behaviours of concern that could not be safely managed within the service model
- 6 people (9%) were recorded as exiting the program to prison due to a breach of a community corrections order
- 6% (<5 of 69 consumers) exited with no alternative support arrangements
- 4% (<5 of 69 consumers) died of underlying health reasons not related to the program
- 3% (<5 of 69 consumers) moved to speciality aged care support
- 3% (<5 of 69 consumers) moved to higher intensity support arrangements with NDIS support.

Consumers had different views about moving from HASI Plus into more independent living arrangements. Some consumers looked forward to transitioning out, whereas others were reluctant to leave what they considered a safe, supportive environment in HASI Plus.

CMOs seemed generally respectful and sensitive in managing consumers’ exits.

[19] Lost to care means the person was discharged from the program because they were missing or otherwise left the program unexpectedly with no alternative arrangements and no follow up possible.

The NDIS SIL program was reported as an increasingly common source of ongoing support for some consumers after HASI Plus.

Finding long-term, stable and affordable housing in the community was repeatedly reported as a barrier to timely exits from the program.

4.2 Housing in HASI Plus

> It's in a good neighbourhood. It's a safe neighbourhood. (Consumer)

Consumers typically reported that the HASI Plus housing was good and that it met their needs. Consumers also appreciated the safety and stability of the housing. Staff were more likely to say that accommodation ‘could be better’.

The structure, age and arrangements of the HASI Plus housing varied across locations. Some housing was more modern and better equipped than others, such as with furnishings or landscaping. The variation in architectural structure had implications for how consumers were observed in their home and for their experience of freedom and privacy.

4.2.1 Communal spaces and privacy

Communal spaces varied by location, with some housing offering welcoming spaces that were well used. In these houses, consumers and staff reported that common spaces were important to support socialising.

4.2.2 Observation and freedom

There were notable differences between HASI Plus sites about:

- the proximity of staff offices to consumer apartments
- the local arrangements about locking front gates or front doors
- local rules about visitors
- local rules about alcohol and other drug use.

Despite these differences, consumers were generally happy with the degree of observation and freedom at their housing. There were, however, a few staff and consumers who recognised tensions between providing support and allowing the consumer choice or dignity of risk.

Forensic consumers were often subject to more restrictions due to conditions of their forensic orders. Sometimes these restrictions were applied to non-forensic consumers as well at that site.

4.2.3 Neighbourhood location

All current HASI Plus housing was considered to be in safe neighbourhoods, which was comforting for consumers. Most locations had good access to public transport and CMOs supported consumers to work towards independent travel.

4.3 Support offered in HASI Plus

Interview and focus group participants shared their views and experiences of the various types of HASI Plus supports, as reported in this section: psychosocial, clinical mental health and physical health support, support planning, integration with other support sources and support for various consumer subgroups.

Overall, the way that support was planned was as intended: individualised, comprehensive and integrated; the types of support varied according to consumer needs; and consumers valued both the psychosocial and clinical mental health supports.

Some key issues were that CMOs found their support less effective in improving physical health behaviour; there was a lack of consistency in how the program worked with NDIS-funded providers to offer complementary support; and consumers' cultural diversity was rarely considered in the support.

4.3.1 Support hours and services

HASI Plus consumers received about 9 hours of direct support per day or 280 hours of direct support per month (using the data from the Form 1 and Form 2 MDS collection). This was on average and across the 2 package intensity types of 16 and 24-hour support. Within these packages, the support hours are flexible over time to respond to the consumers' changing needs.

About a third of the direct support was for self-care (32% or 89 hours per consumer per month [3 hours per day]), followed by 'other' support (21% or 59 hours [2 hours per day], with no further detail provided) and domestic skills (13% or 36 hours per month [1 hour per day]).[20]

[20] Figures in square brackets show indicative hours per day. Most support hour data were reported quarterly through the original Form 1 and Form 2 MDS collection and then monthly for CL MDS V2.

Indirect support (such as advocacy) was 108 hours per consumer per month or 3.5 hours per consumer per day; and mental health education to consumer families or support networks was 44 hours per month or about 1.5 hours per consumer per day.

Using the data from the new CL MDS V2 from May to September 2019, HASI Plus consumers received (again on average and across the 2 package intensity types), about 8 hours of direct support per day or 248 hours of direct support per month. Most of this was psychosocial intervention not reported elsewhere (60% or 149 hours per consumer per month [5 hours per day]) and daily living support (20% or 48 hours per consumer per month [1.5 hours per day]).[21]

Group activities made up about 9% of the direct supports (an average of 22 hours per consumer per month), and social activities and medication support were about 6% each (16 hours per consumer per month).

4.3.2 Psychosocial support

Many consumers reported that just knowing support was available whenever they needed it helped them transition to more independent living.

> So, it's not necessarily the different types of support but that there's somebody there. (Consumer)

Consumers liked that CMOs encouraged them to set and achieve their goals towards more independent living, learning new skills and developing new interests. Practical examples of psychosocial support included transport training, shopping and support to attend training or access supported work.

CMOs provided psychosocial support directly and through group activities. By the second round of data collection, consumers were reporting more interest in the group activities, possibly as a result of consumers being involved in choosing the activities.

There were some tensions between the support that consumers wanted and what staff thought was in the consumers' best interests. For example, there were differences in opinion about how tidy or clean the consumer's own space needed to be. Another example was how to keep consumers safe without unduly limiting their autonomy and freedom of movement, especially outside the HASI Plus housing.

Some consumers did not engage much with the program. Staff suggested that more individual work with these consumers might help improve engagement, but they said

[21] Figures in square brackets show indicative hours per day.

they were limited by the willingness of the consumer to interact and by time and resource constraints.

4.3.3 Mental health clinical support

The HASI Plus service model requires a specialist mental health clinician as a lead position in both the CMO and LHD. This effectively means a maximum consumer to clinician ratio of 10:1, or in other words up to 10 consumers per clinician.

The CMO clinician must have:

- tertiary qualifications as a Registered Nurse, Social Worker, Occupational Therapist or Psychologist
- current unrestricted registration with the Australian Health Practitioners Regulation Agency; and
- specialist mental health skills and experience working with the HASI Plus target cohort.

The LHD clinician has to be similarly skilled and at least be at clinical nurse consultant level 2, year 2 level of experience.

CMO staff reported strong, effective relationships and cooperation with the dedicated HASI Plus LHD clinician and the LHD Community Mental Health services more broadly. Implementation of this clinical component of the service model varied across sites. Some sites said they had guidelines about their respective roles and responsibilities. At the same time, several CMO and LHD staff mentioned lack of clarity between the partners about who was to monitor the degree of compliance with taking medication.

Some areas seemed to have closer connections than others. Connections seemed to be facilitated by location, visibility and involvement in other activities, which meant that consumers and staff had closer relationships with them. One CMO clinician seemed to have a particularly close collaboration with their LHD counterpart. The LHD clinician came to the housing several times a week, doing joint planning with the CMO clinician, and assessments and consultation with consumers and staff. They also went on activities with consumers such as to TAFE or for a walk. These activities were scheduled, as well as ad hoc. When not on site, the LHD clinician was available on the phone to advise the support staff. Overall, consumers appreciated the clinical support they received, including support to take their medication independently.

4.3.4 Physical health support

HASI Plus consumers reported a range of health problems, which included chronic conditions resulting from smoking, diet and medication. Consumers and CMOs also felt that poor physical health impacted achieving their recovery goals.

CMOs reported a range of physical health supports such as exercise programs, and supported shopping to inform healthy choices. Nonetheless, many staff felt their interventions to address physical health were less effective in changing behaviour than the psychosocial interventions. Several CMO staff were particularly frustrated with not being able to change consumers' unhealthy choices.

LHD staff reported that dealing with the HASI Plus consumers helped them learn about the complexity of people's needs. They said they were surprised how common serious physical health issues were among the consumers. One mentioned diabetes and incontinence as particularly prevalent. LHD staff recognised that physical and mental health support were both needed and that progress in one area could have positive impact on the other.

4.3.5 Support planning

Almost all consumers had individual support plans in place at program entry. Plans were regularly reviewed and updated when needed. Most consumers also had a collaborative care plan with other support services (92%) and a risk management and safety plan (90%).

Consumers and CMOs gave a range of examples of how support planning was individualised and tailored to the consumer's choices, both daily and longer term. There were, however, a few consumers who felt they did not have much choice, possibly because they were not aware of the extent of choice and freedom available to them. A small number of consumers did not know what was in their support plan or whether they had one.

4.3.6 Integration with other funding sources

NDIS was the main source of funding for complementary supports identified in the study. At the end of the evaluation, two thirds of participants (66% or 35 of 53 consumers) had an NDIS plan in place.

The study showed marked differences across sites in the types of support HASI Plus consumers were accessing through their NDIS packages. At some sites, NDIS-funded supports were assisting consumers with their personal care, such as showering or cleaning. In other sites, NDIS plans were primarily used for one-on-one

support for consumers to engage in the local community or access specific services, such as psychological services. The supports were successfully coordinated mainly through CMO staff involvement in the NDIS planning process; and this process was more evident in the second round of fieldwork.

CMOs felt that the quality and effectiveness of NDIS support varied, depending on the NDIS provider's level of understanding of severe mental illness and recovery. Some CMOs said they needed more formal arrangements with local NDIS providers to make sure that the 2 programs were always complimentary and supported mental health recovery. One CMO had such an agreement with their local NDIS providers, and they said it worked well.

4.3.7 Support for diverse consumer subgroups

Consumer diversity was lower than in the general population for age, culture and language background (**Section 3**). Overall, support provision showed little variation to respond to consumer diversity or consumers' cultural preferences.

4.4 Family involvement

The HASI Plus service model recognises the importance of carers and family members to the wellbeing and recovery process for consumers. The fieldwork indicates that CMOs saw family connections as important and assisted some consumers to reconnect where appropriate. Consumers appreciated this support.

Quantitative data about family and carer involvement was only available from the CL MDS V2 data set. About 85% of consumers had family or carer contact at least once during the 5 months of available CL MDS V2 data; and about 60% of consumers had regular contact with family or carer involvement in that time.

Families who were engaged and who took part in interviews felt that HASI Plus was highly beneficial for the consumer.

> It's helped him become more independent, definitely, and I'm not as fearful as I was about what would happen to [him] … He's secure and comfortable with the staff, and has his routines, and … he's quite motivated to be productive, and to do things. (Family member)

Some family members mentioned the challenge to maintain contact across geographical distance, especially for statewide referrals.

4.5 Program partnerships

The evaluation interviews confirmed that the core of the HASI Plus service model in practice is the formal, service-level agreed, integrated partnership between LHDs and CMOs. Both LHD and CMO staff recognised the importance of the clinical and psychosocial partnership element of the service model; and both reported overall effective partnerships with the other.

There was also some evidence of both formal and informal partnerships between CMOs and local services to support consumer independence and social inclusion. These included local TAFE, other mental health services (day programs), disability services and a few Aboriginal and culturally and linguistically diverse networks. While CMOs generally acknowledged that good connections with social housing providers were a key to facilitating transitions to less intensive support arrangements, these relationships were often not effectively in place at the sites.

Some CMO staff felt that information access and exchange between LHD services and CMOs could be improved, in line with the partnership commitments.

There was limited evidence of effective partnerships between CMOs and LHDs on the one hand and other NSW Government agencies on the other. For example, little or no collaboration seemed to exist with local representatives from the Department of Communities and Justice (DCJ) or other specialist community criminal justice services. This is likely to hinder the program's capacity to work effectively with people who were exiting correctional facilities and people who were subject to community-based orders.

4.6 Referral processes

During the evaluation period, 3 approaches were taken for assessing referrals to HASI Plus:

- 2013 – 2015: centralised assessment by the NSW Chief Psychiatrist
- 2015 – 2017: centralised, Ministry-led, statewide review committee
- 2017 onwards: devolved local assessment committees in each of the host LHDs.

The primary referral source to HASI Plus between 2013 and April 2019 was public mental health services (77%, or 43 consumers). Similarly, the CL MDS V2 data showed that in the last 5 months of the evaluation period in 2019, 72% of referrals (or 13 out of 18 referrals) came from public mental health services. The Justice Health and Forensic Mental Health Network (JH&FMHN) was reported separately only in the CL MDS V2 and counted fewer than five referrals.

Most CMO and LHD staff involved in the current nomination assessment process were satisfied that it was fit-for-purpose. The interviews did suggest that referral processes were more successful when consumers were referred from a service that had strong formal or informal relationships with the HASI Plus program. This was typically local referrals from inpatient hospitals in the host LHD.

Some CMO staff felt that some referrals were inappropriate, despite the referral assessment process. They deemed a referral inappropriate where consumers seemed not committed to engaging sufficiently with the program, or where consumers had higher or different support needs than HASI Plus could meet.

LHDs, CMOs and stakeholders spoke about several barriers to effective referrals of people from prison (custodial referrals). These barriers were:

- low awareness about HASI Plus, the service model and the referral process
- difficulties for custodial referrals to satisfy the eligibility criteria
- very short notice from the date of referral to the release date (especially for people on remand)
- difficulties with accessing consumers in prison for appropriate suitability assessments
- no opportunity for gradual transition due to ‘hard’ release dates
- inadequate program supports and capabilities for some issues such as alcohol and other drug use.

Equity of access for people from diverse cultural backgrounds did not appear to be a priority in the way the referral process operated in practice.

Several stakeholders said referring agencies, such as Corrective Services NSW and non-host LHDs needed more information about the HASI Plus program and service model, the eligibility criteria, the referral process and status of referrals, the process to challenge decisions, and the status of program vacancies.

4.7 CMO workforce

Most CMO staff were satisfied with operations, management and staffing arrangements at the sites, including training. Some CMO staff were concerned about the structure of rosters, with some reporting long shifts, insufficient breaks between shifts and limited choice about doing day and night shifts. Other concerns were staff cuts, lack of replacement for sick staff and shifting rosters.

CMO staff were mostly content with the training offered and felt well supported. Some staff wanted additional training on working with people with complex mental health issues and more information on medication and side effects.

4.8 Reporting

Overall, at the time of the interviews, CMO staff reported being content with the outcome measures collected as part of reporting in the program. Although at the time some staff found some measures long and repetitive. They also thought the data were not always accurate, especially for self-administered instruments that consumers might find challenging because they could not or chose not to answer the questions because of their mental health issues.

Consumers were asked about the outcome measures but did not offer a view.

5 Program outcomes for HASI Plus consumers

The evaluation indicates that HASI Plus was meeting most aspects of its consumer-related outcome aims as established in the program logic (**Appendix 2**):

- People with severe and persistent mental illness have sustained improvements in their mental and physical health and experience greater wellbeing
- Avoidable presentations to emergency departments, mental health facilities and related support services are reduced
- People with severe and persistent mental illness who have resided in mental health facilities, prisons or hospitals transition to live in the community.

The evaluation analysed consumer outcomes in the following areas:

- mental health and wellbeing22
- physical health
- social participation, including connection with family
- hospital and emergency department use
- safe and secure housing after exit from HASI Plus; and
- reduced criminal offences.

The quantitative analysis of HASI Plus program outcomes was from the relatively small group of consumers who consented to the data linkage, and mostly from the limited data content of the Form 1 and Form 2 MDS collection. The qualitative interviews and focus groups provided additional information about consumer outcomes.

Overall, the linkage data showed statistically significant reductions in the frequency and length of hospital admissions; and effective support with social housing applications. Fieldwork findings indicate that consumer mental health and wellbeing improved in HASI Plus; physical health improved for some consumers and worsened for others; and social activities were valued by consumers.

5.1 Mental health and wellbeing

The fieldwork indicates a positive impact from HASI Plus on consumers' mental health and wellbeing.

[22] Although there is no agreement in the literature on a single definition of wellbeing, it is generally described as the way people feel about themselves and their lives (Giuntoli 2014).

5.1.1 Wellbeing and support needs

I'm happier now than I've ever been. (Consumer)

HASI Plus support improved consumers' subjective experience of wellbeing - the way they felt about themselves and their lives. The main reasons for this improvement as reported by consumers (and families) were:

- the experience of taking charge of their own home
- having choice about their goals and daily life
- having opportunities to connect with other people
- having opportunities to join various activities.

5.1.2 Mental health outcome scores

The evaluation had only a small number of linked records with available outcome measures from the Mental Health National Outcomes and Casemix Collection (NOCC). Given the shortage of data, combined with a high degree of variation in scores, no statistically significant findings could be made using quantitative mental health outcomes measures.

While overall severity of illness (HoNOS scores) did improve following entry to the program, the small sample size for this linked analysis (n=32) meant this finding was not statistically significant. Similarly, consumer psychological distress (K10 scores) had large variations, and no statistically significant conclusions could be made.

Accessing community mental health services

Fieldwork showed how staff supported consumers to engage with health services and maintain these relationships (**Section, 4.3**). In the linked data, the number of times a consumer had contact with community mental health services decreased slightly after entering HASI Plus. This finding was not statistically significant.[23] It does however suggest support for the fieldwork findings about effective mental health support from the CMOs. As pointed out in this report, the effectiveness is due to factors such as the dedicated CMO clinician, regular involvement of the LHD clinician and mental health support from CMO staff.

[23] It was not possible to reliably validate whether the community mental health service contacts from the linked Community mental health care national minimum data set (CMHC NMDS) reflected the specialist HASI Plus funded clinical support hours or other community mental health services, or whether the data was complete.

5.2 Physical health

The fieldwork suggests that the main way that HASI Plus addressed consumers' physical health needs was through linking them with general practitioners and specialists; physical health supports including exercise programs; and supported shopping to inform healthy choices.

Consumers, families, CMOs and LHDs all said that being out of hospital and more settled in the community gave consumers space to identify and address their physical health needs. CMOs and LHDs observed that consumers might have increased contact with health services when they entered HASI Plus because they took better care of themselves than before.

> I feel like their physical health is really being addressed. People are really linked in with GPs and dentists. And if you think about the overall wellbeing, mental health, and physical health, I mean, physical health impacts people's mental wellbeing. And I think that HASI Plus is doing that really well, kind of supporting people to see their GPs but then also the follow up from that: specialists, treatments, investigations. (LHD)

Some CMOs also reported that HASI Plus might have a negative effect on consumers' physical health, which they attributed to increased freedom of choice to purchase unhealthy food and cigarettes (**Section 4.3.4**).

No quantitative outcome data were available for physical health outcomes.

5.3 Social participation

> Just being around people makes you happy. That's something I never had before was friends. (Consumer)

CMOs in the fieldwork sites supported increased social participation of consumers in various ways: connecting with family, building new friendships (typically with other residents), taking part in community activities, training and working.

There were different ways how CMOs offered activities to meet consumers' individual needs and preferences. Some CMOs offered most activities from within the service, while others involved external organisations, or they outsourced and referred consumers to other services. Staff regarded external activities as a positive step towards community engagement, but some staff were concerned that they excluded consumers who found it more challenging to go out.

The HASI Plus program supported consumers also to study or attend training, or to work, depending on the consumer's goals.

Where consumers had very high support needs, social participation was seen narrowly as supporting consumers to live in the community, such as in HASI Plus housing, rather than living independently.

The majority of HASI Plus consumers (85%) had some contact with family, and about 60% had ongoing contact. For those who had been estranged on entry to the program, re-connecting with family seemed easier if they lived close by.

The linkage data were insufficient to provide insight into social participation.

5.4 Reduced hospital stays

The evaluation linkage data confirmed that mental health hospital admissions and length of stay decreased after entry to the HASI Plus program. The findings were statistically significant; they were also consistent with feedback from almost all fieldwork participants that HASI Plus support lowered consumers' use of hospital services.

The average number of mental health hospital admissions per person per year reduced by 56.1% from 1.30 admissions in the year before to 0.57 in the year following entry ($p=0.038$, $n=60$). The reduced level continued in year 2 following program entry, at 0.63 admissions.

When consumers were admitted to hospital due to mental illness, the average number of days in hospital fell by 79.6% per person in year one following program entry, from 121.7 to 24.8 days. The reduced average length of stay continued in year 2 after program entry at 25.1 days. The number of involuntary hospital days also decreased. HASI Plus support staff said they visited consumers in hospital, which may have contributed to shortened hospital stays.

Emergency department presentations reflected high variation, but average rates were similar before and after entry to the program (2.3 presentations before, 2.2 after). The change was not statistically significant.

5.5 Safe and secure housing

> The staff here helped in so many areas, and now I'm in government housing. (Consumer)

As noted above, according to the administrative data collected by the Ministry, 69 consumers exited the program in the evaluation period. Among these, 52 exit reports included information about the type of accommodation after exit.

Of the 33 consumers who transitioned to alternative community arrangements:

- more than half (18 people or 55%) moved into social housing, typically with HASI general support
- 15% (5 people) moved into private rental
- the remaining consumers (all < 5) moved into their own home, SIL accommodation, boarding houses, residential aged care, crisis accommodation or to homelessness.

These proportions were consistent with the feedback from CMOs in the qualitative interviews.

A consistent theme in the feedback from CMOs was that a shortage of appropriate affordable housing delayed exits from the HASI Plus program. Good relationships with social housing providers helped to overcome the shortage, but these relationships varied across locations.

CMO staff also reported discrimination in the private rental market as a barrier to discharge. Forensic consumers sometimes encountered delays securing housing due to financial restrictions resulting from guardianship.

There was some linked data suggesting that a high proportion of HASI Plus consumers were eligible for social housing but had not made applications prior to entry into the program. Linkage data from DCJ Housing showed that the number of consumers applying for social housing increased from 3 of 17 consumers in the year before entry to 10 of 17 in the year after entry to the program. All applications were through priority and medical waitlist registers. Of the 10 consumers who filed applications after joining HASI Plus, 7 consumers accessed housing in the year following entry.

5.6 Reduced criminal offences

Criminal offence data linkage was from the NSW Bureau of Crime Statistics and Research Reoffending Database (BoCSAR ROD). While the number of criminal offences by HASI Plus consumers dropped from 3 in the year before program entry to zero in the year following entry, the very limited numbers were not statistically significant.

6 Economic analysis

The economic component of the evaluation examined the costs of the HASI Plus program and the financial benefits, or cost offsets, to the NSW Government. The relatively small data samples and data limitations did not allow detailed cost effectiveness modelling.

The analysis shows that total program cost was $11.2 million in 2018-2019, and the average cost per package was $186,011.

This average cost per HASI Plus package is substantially less than the annual cost of supporting a consumer with a similar clinical profile or phase of illness in hospital, and less than other comparable support programs in NSW.

The reduction in frequency and length of hospital admissions after consumers entered HASI Plus meant a saving, or cost offset, of between 39 and 85%[24] of the average cost of a HASI Plus package (depending on how hospital inpatient costs are calculated). More detail is below and in **Appendix 7**.

6.1 HASI Plus program costs

HASI Plus CMO program costs are contained in funding agreements between the CMOs and the Ministry. The agreements are about:

- program operations, which are the ongoing costs of delivering the program. Data were available from financial years 2014-2015 to 2018-2019
- capital funding, which were initial costs for modifying and improving HASI Plus properties.

In addition, there were program costs for:

- operating the statewide program in the Ministry
- local non-clinical service management in the 3 host LHDs; and
- Ministry payment for shortfalls in rental income from consumers.

[24] These percentages are based on updated data presented in section 6.2 of this report. These data were not available at the time that the economic analysis was conducted for the evaluation. Appendix 1 includes the calculation of a 74% offset, based on current and available data at the time of the analysis.

HASI Plus CMO costs were $9.5 million in 2018-19, similar to previous years. Employee expenses represented about 75% ($7 million) of total costs. About 15% ($1.3 million) was for administration, and 6% ($0.7 million) were for operational costs.

The specialist rehabilitation mental health clinicians dedicated to HASI Plus at each of the 3 host LHDs cost $530,000 in 2018-19.

The Ministry estimated that the peak of its costs for staff working on HASI Plus (at the establishment of the program and during peak procurement phases) was $337,000 per annum; and that LHD non-clinical staff support for the program was $152,000 per annum (2018-19).[25]

The initial capital funding investment of $3.6 million were spent on property improvements. This cost represents a simple average of about $60,000 per package[26] or about $10,000 per package per year (over the 6 years to 2018-2019). It will be likely lower at about $5,000 if properties are retained for the program in further years.

Rental shortfalls occur when CMOs keep a consumer's place when they are absent, for example when they go to hospital, which may be up to several months. During this time, consumers do not pay rent. On occasion, the Ministry has paid the shortfall instead, which amounted to a total of $530,939 from 2013 to June 2018.

The combined total program cost was $11.2 million in 2018-19. The total average cost per package was $186,011 in 2018-2019. This included:

- CMO costs of about $158,600 (85%)
- dedicated specialist community rehabilitation LHD clinicians at about $8,000 (4.7%)
- capital investment distributed across packages and years at about $8,800 (4.7%)
- Ministry staff costs (peak) of about $5,597 (3%)
- LHD non-clinical support at about $2,604 (1.4%), and
- rental shortfalls of about $1,600 (1%) per package.

[25] Calculated as 3 x 0.3 cost of Health Service Manager (HSM) Level 3.

[26] $3,608,744 / 60 = $60,146

6.2 Comparative costs

There are 3 ways of reasonably estimating a comparison 2018-19 per annum cost for a consumer with comparable needs being supported in hospital:

1. Annual cost derived from the National Hospital Cost Data Collection Cost (NHCDC) with applicable Australian Refined – Diagnostic Related Group (AR-DRG),
2. Annual cost calculated using the National Efficient Price Determination (NEP) with applicable AR-DRG, and
3. Annual cost calculated using the NEP with applicable Australian Mental Health Care Classification (AMHCC) V1.0 class.

These methods consistently show the annual cost of hospital support for comparable HASI Plus consumer needs is substantially higher than the average HASI Plus package cost, **Appendix 1**.[27]

Other community-based support programs

There are few similar programs for consumers with high support needs with which HASI Plus could be compared. The cost of HASI Plus ($186,000 per package) is below the average cost of NDIS SIL of about $230,000 in 2019 [28]. NDIS average costs increased about 17% per year from 2018 to 2021, with the average annualised committed supports for people with a primary psychosocial disability in SIL at $313,100 (National Disability Insurance Agency, 2021). The now closed Integrated Services Program (ISP) was evaluated in 2014-2015 and reported average cost per consumer of $302,000 (Zmudzki, Purcal, & Fisher, 2017).[29]

6.3 Program cost effectiveness

The program cost effectiveness analysis for HASI Plus examined estimated cost savings or 'offsets' to services that consumers might use less because of the program.

[27] NHCDC Round 23 (2018-19) $595,596; NEP 2018-19 with AR-DRG $336,788; NEP 2018-19 with AMHCC V1.0 class $274,955 (see Appendix 1 and 7 for further details)

[28] Includes people with primary psychosocial disability and others. At the time the economic analysis was conducted for the evaluation, the average cost available from the NDIA for SIL packages did not provide breakdown by primary disability. This SIL figure was used as the best available comparative cost in 2019.

[29] Indexed at 2.5% per annum from base average cost reported in 2014-2015 of $273,686.

Notably, a societal assessment of program cost-effectiveness would include all consumer outcomes, quantitative and qualitative, within and beyond the health care sector, positioned against total program funding. In this evaluation, the cost-effectiveness perspective was limited by the small and incomplete study group data, despite attempts to consider outcomes beyond the health system such as criminal justice system contacts.

The evaluation cost-effectiveness analysis therefore focused on service use measures that could be quantified, as a subset of total outcomes. It examined estimated cost savings or 'offsets' to related services including hospital and community mental health services. For this reason, the cost-effectiveness analysis represents a conservative estimate of program cost effectiveness in broad terms, noting that it only implicitly accounts for consumer wellbeing and other non-quantifiable outcomes.

The estimated cost offset due to the decrease in hospital admissions and lengths of stay after consumers entered HASI Plus is about $136,000 per consumer in 2018-2019, (**Section 5.4**).[30] This suggests an offset of about 74% of the average cost per HASI Plus package in the first year in the program. Alternative costing methods (**Section 6.2**) also indicate substantial hospital cost offsets, ranging from 39% to 85% of the average cost of a HASI Plus package.

There were not enough data to examine cost offsets in other services, like community mental health and criminal justice.

The available HASI Plus cost offsets were consistent with the recent Productivity Commission inquiry into the wider mental health system, service planning and reform (Productivity Commission, 2020). The economic modelling in that inquiry indicated that investment in community mental health programs, including integrated clinical and other support services, like HASI Plus, were highly cost effective.

[30] Based on Diagnosis Related Group (DRG) U61a Schizophrenia disorders with major complications costs using the National Hospital Cost Data Collection Cost (NHCDC) Round 22 (2017-18) with 2.5% increase for indexation with the length of stay data from the hospital data linkage indicating an average cost of $1,439 per hospital day.

7 Opportunities to improve HASI Plus (facilitators of good practice)

The HASI Plus evaluation revealed areas for improvement as well as multiple 'pockets' of good practice, which could be scaled to be consistent across the program.

Good practice was enabled by a range of facilitators. These facilitators could be used to continue to improve the program. This could be done by the Ministry making opportunities for program partners and other relevant services to share and discuss the facilitators of good practice.

Opportunities for the program partners to improve HASI Plus further are:

Equity of access to the program

- **Improve availability of information** about the program for referring groups, especially in non-host LHDs and custodial settings. This includes information about the eligibility criteria, the status of vacancies and the progress of referrals.
- **Review the barriers to access for people who are exiting prison**. Barriers include the current screening process and criteria and custodial access restrictions for suitability assessment. Explore how formal, integrated partnerships with other programs may address concerns about risk and about capability to respond effectively to the challenges of this group.
- Develop the cultural responsiveness of the program so that it meets its objective to **respond to the diversity** of consumers. Actions include promoting access for culturally diverse consumers, along with cultural responsiveness training for staff.

Consumer-led support and planning

- Support all consumers to be aware of their **right to choice in support planning** and support them to make choices in goal setting and selecting activities.
- Promote discussion and problem-solving, within and among CMOs, with LHDs and the Ministry, to develop strategies for effective psychosocial support to each consumer that **respects their autonomy and freedom of movement**.
- **Review program activities regularly** at a local level with input from consumers, to ensure that activities meet consumer preferences. Focus on involving consumers in meaningful activities in the community, **including work and education.**

- Continue to share success stories and discussion among CMOs how to effectively support each individual consumer's **physical health**. Consider training on evidence-based interventions.

- Review the suitability of HASI Plus housing designs to create inviting communal spaces and offer privacy while allowing adequate staff observation. Consider **additional capital funding** to improve setup, furniture and appearance of physical spaces in HASI Plus houses.

Transfer of care

- **Improve information flows about the support needs** of people referred to HASI Plus so that frontline CMO staff can put support strategies in place. Consider including frontline staff in referral processes, to ensure that adequate support for the applicant is available.
- Give consumers **accessible information about HASI Plus** to help them understand the program and to prevent potential stress and anxiety.

- Discuss **expectations with consumers during entry** to the program (starting at referral stage). This could help to balance requirements to engage with the program with allowing people to respond at their own pace.

- Develop a consistent, statewide approach to **managing simultaneous rent obligations** during the transition from the current housing into HASI Plus.

- Consider ways to **improve service coordination through information exchange and sharing** between LHDs and CMOs about consumer needs and support.

Responsiveness of support

- **Review rules about curfews and visitors** according to the needs of the people living in the housing. This includes considering how to maintain each tenant's rights to freedom and autonomy, including people with high support needs.

- Include **options and goals for independent travel** in support plans (where appropriate) as a fundamental enabler to independent community living, especially where housing is away from public transport.

- Continue to develop the program **focus on engaging families** (where appropriate). Family engagement can be in program activities and visiting the HASI Plus location, and it can be individual engagement with the consumer.

- **Review training programs for HASI Plus** staff with co-design input from frontline staff, peer workers and consumers about what additional content they would find useful for staff training.

- Consider ways to **strengthen partnerships** with other local services, to enhance the spectrum of supports available for consumers.

Timely consumer transitions to more independent community living

- Pursue agreements between the Department of Communities and Justice (DCJ) and the Ministry to **facilitate more timely access to social housing** (which would be combined with similar but less intensive mental health supports) as a priority for people transitioning out of HASI Plus and reduce program 'bed block'.
- Encourage CMOs to invest to **strengthen relationships with social housing providers**. This applies especially in areas with the Social Housing Management Transfer (SHMT) program, where government-owned dwellings are transferred from DCJ to select Community Housing Providers under the Future Directions for Social Housing reforms to 2025.
- Develop formal and informal **links between the program and Supported Independent Living (SIL) options** funded by the National Disability Insurance Scheme (NDIS) as a transition option for people with high support needs.
- Consider the feasibility and usefulness of **formal arrangements** between CMOs and local NDIS providers about suitable support.
- **Review the role of HASI Plus** in supporting consumers with long-term, high support needs in the context of the current and planned NSW complex needs community-based supports (including the Pathways to Community Living Initiative and the NDIS).

Monitoring and reporting requirements

- **Review the mental health outcomes measures** used for the program with a focus on how such measures can usefully inform consumer recovery goals and progress.

Operation, funding and agreements

- Review CMO concerns about the financial implications of **supporting both 16- and 24-hour consumers** in the same building.
- Review CMO staff concerns about **roster issues**, the impact on staff and effective provision of support to consumers.

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Appendix 1 Full analysis

Evaluation of Housing and Accommodation Support Initiative Plus (HASI Plus) – Final Evaluation Report

Prepared for NSW Ministry of Health, 2022

Acknowledgements

Thank you to the research participants, evaluation reference group and advisors for their contribution to the evaluation.

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Suggested citation

Purcal, C., Giuntoli, G., O'Shea, P. Zmudzki, F., Fisher, K.R. (2022). *Evaluation of Housing & Accommodation Support Initiative Plus (HASI Plus) – Evaluation Report. Appendix 1: Full Analysis*. Sydney: UNSW Social Policy Research Centre.

Contents

Tables

Figures

Meanings and abbreviations

In this report, the term ‘Aboriginal’ includes people from the Torres Strait Islands. We acknowledge the diversity of traditional countries and Aboriginal language groups across the state of New South Wales.

AMHCC	Australian Mental Health Care Classification
APDC	NSW Admitted Patient Data Collection
AR-DRG	Australian Refined – Diagnostic Related Group
BoCSAR ROD	NSW Bureau of Crime Statistics and Research Re-Offending Database
CALD	Culturally and linguistically diverse
CHeReL	NSW Health Centre for Health Record Linkage
CHP	Community housing provider
CL MDS V2	NSW Mental Health Community Living Programs Minimum Data Set Version 2 (released April 2019)
CMO	Community managed organisation
Community treatment order	An order made by the Mental Health Review Tribunal or by a Magistrate that sets out the terms under which a person must accept medication and therapy, counselling, management, rehabilitation and other services while living in the community.
Custodial patient	A person with a severe mental illness in prison
Custodial referral	A custodial patient referred for consideration for a HASI Plus statewide package
Data linkage	Analysing data for a study group from several routinely collected government datasets, for example hospital admissions and social housing applications.
DCJ	Department of Communities and Justice, formerly FACS Housing
Effect size	Effect size is a statistical measure that emphasises the size of the difference. It indicates the practical significance of a research outcome. A large effect size means that a research finding has practical significance, while a small effect size indicates limited practical significance.
FACS Housing	Family and Community Services, now Department of Communities and Justice (DCJ)
Financial management order	An order made by a court or tribunal appointing a financial manager for a person with disability that affects their capacity to make financial decisions.
Forensic order	An order made by the Mental Health Review Tribunal under the *Mental Health and Cognitive Impairment Forensic Provisions Act 2020* (NSW) about the

	treatment, care, detention and release of forensic consumers
Forensic consumer	Generally, a person subject to an order made under the *Mental Health and Cognitive Impairment Forensic Provisions Act 2020* (NSW) because the Court has: - Found the person unfit to be tried for an offence and ordered them to be detained in a correctional centre, mental health facility or other place; or - Found that the person committed a serious offence but was not criminally responsible because of mental health impairment or cognitive impairment.
Forensic referral	A forensic consumer referred for consideration for a HASI Plus statewide package (see 'forensic consumer')
Form 1 and Form 2 MDS	The manual forms-based Housing and Accommodation Support Initiative Minimum Data Set that was adopted and used for HASI Plus from 2013 until April 2019
GP	General practitioner
Guardianship Order	An order made by a court or tribunal appointing someone to make decisions about a person's health, accommodation, services or other lifestyle matters when they have a decision making disability.
HASI	Housing and Accommodation Support Initiative
HoNOS	Health of the Nation Outcome Scores Scales
Host LHD	One of the local health districts (LHDs) that had a HASI Plus site within its boundaries during the evaluation period (Northern Sydney LHD, Western Sydney LHD or Hunter New England LHD).
InforMH	A team of the System Information and Analytics Branch in the NSW Ministry of Health. InforMH is responsible for data development, collection, analysis and reporting for NSW public mental health services.
ISP	Integrated Services Program
JH&FMHN or Justice Health	Justice Health and Forensic Mental Health Network
K10	Kessler Psychological Distress Scale
LGBTI	Lesbian, gay, bisexual, transgender, and intersex
LHD	Local health district
Local package	A HASI Plus package reserved for consumers who currently reside within the LHD where that HASI Plus service is offered (see 'Host LHD')
LSP-16	Life Skills Profile -16
MDS	Minimum Data Set

MH-AMB	Mental Health Ambulatory data set
MHOAT	NSW Mental Health Outcomes and Assessment Tool
MHRT	Mental Health Review Tribunal
Ministry	NSW Ministry of Health
NDIA	National Disability Insurance Agency
NDIS	National Disability Insurance Scheme
NEP	National Efficient Price
NHCDC	National Hospital Cost Data Collection
NOCC	National Outcomes and Casemix Collection
Non-host LHD	One of the 12 LHDs that did not have a HASI Plus site within its boundaries during the evaluation period
NSW	New South Wales
OIMS	Offender Inmate Management System
PCLI	Pathways to Community Living Initiative
Psychosocial supports	Psychosocial supports are non-clinical interventions that can assist people with severe mental illness to live independently, participate in their community, manage daily tasks, undertake work or study, find housing, get involved in activities, and make connections with family and friends. Psychosocial supports are specific to the person and their needs.
Service model	The HASI Plus support model as described in the HASI Plus Program Manual
SIL	Supported Independent Living
SHMT	Social Housing Management Transfer
Specialty health networks	Two statewide clinical networks providing specialist services to children, and to people in contact with the criminal justice system - Sydney Children's Hospitals Network and the Justice Health and Forensic Mental Health Network.
Statewide package	HASI Plus package reserved for consumers referred from all NSW LHDs in NSW that do not host the program, the Justice Health and Forensic Mental Health Network (JH&FMHN) and Corrective Services NSW (via JH&FMHN for people in custody).
SPRC	Social Policy Research Centre
Statistically significant	A statistically significant result (usually a difference) is a result that is very likely not random. More technically, a difference is statistically significant when its p-value falls below a certain threshold, called the level of significance. Most authors refer to statistically significant as $P<0.05$ and statistically highly significant as $P< 0.001$ (less than one in a thousand chance of

	being wrong). In this report, statistical significance is represented in diagrams as a 95% confidence interval based on a P<0.05 threshold.
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The following words are used in this report when we refer to people who participated in evaluation interviews and focus groups:

- ‘consumers' or ‘people’ or ‘participants’ are people who received HASI Plus support or other types of support
- ‘forensic consumer’ is a person who received HASI Plus support and is subject to an order made under the Mental Health and Cognitive Impairment Forensic Provisions Act 2020 (NSW)
- ‘CMOs’ or ‘staff’ are CMO managers and staff members (frontline workers) in the HASI Plus sites. We distinguish between managers and staff roles only when it makes a difference to the voice while protecting anonymity.
- ‘LHDs’ are LHD managers and staff members, both in the HASI Plus sites and non-HASI Plus sites. We do not distinguish between the roles and the locations to protect anonymity.
- ‘families’ or ‘families and carers’ are informal supporters of the consumers
- ‘stakeholders' are all other interviewees from government and state-level positions, and from Aboriginal Community Controlled Health Organisations.

1 Introduction

This is **Appendix 1** of the final evaluation report of the evaluation of the HASI Plus program. It is an extended version of the final evaluation report.

HASI Plus is a program for people with severe mental illness and significant difficulties managing day to day living. The program is transitional, rehabilitation and recovery-oriented, and community-based. HASI Plus integrates clinical and intensive psychosocial support that is available up to 16 or 24 hours per day, 7 days per week, with stable, community-based accommodation.

HASI Plus is a statewide program funded by the NSW Ministry of Health (the Ministry). The HASI Plus service model is delivered locally as a partnership between host local health districts (LHDs) and specialist mental health community managed organisations (CMOs). Started in 2013, there are currently 70 HASI Plus places across 8 accommodation sites hosted in 4 LHDs.

The Ministry commissioned the Social Policy Research Centre (SPRC) to evaluate the HASI Plus program. The evaluation questions are addressed with findings from 2 rounds of qualitative interviews and focus groups, as well as the analysis of quantitative program data and statewide outcomes data about consumers. The evaluation ran from August 2018 to August 2021.

The evaluation received ethics approvals from the Aboriginal Health and Medical Research Council, Western Sydney LHD, NSW Population and Human Services Research Ethics Committee, Corrective Services NSW and NSW Family and Community Services (FACS).

1.1 Short description of the HASI Plus program

HASI Plus supports people who live with a severe mental illness that has a significant impact on their ability to manage day to day living. The program integrates intensive clinical and psychosocial support with stable, community-based housing. It is voluntary and aims to support recovery and allow consumers to live and participate in the community. People who cannot leave institutional settings without this type of intensive support are prioritised.

At the core of the program is a partnership between LHD community mental health teams and CMOs. The Ministry funds LHDs to provide dedicated low case load specialist rehabilitation clinical care, and the CMOs are funded by the Ministry to provide additional clinical support as well as psychosocial and tenancy support and housing.

HASI Plus is available to consumers from across NSW. At the time of the evaluation, HASI Plus offered 60 places across 7 locations in 3 LHDs. It has now been expanded with a total of 70 HASI Plus packages currently offered across 8 community-based residential settings in 4 LHDs – Northern Sydney, Hunter New England, Western Sydney and the Mid North Coast.

There are 2 package intensity levels for HASI Plus. Of the current 70 packages, 40 are specified as having psychosocial support available 24 hours per day and 30 packages must have support available 16 hours a day.

HASI Plus is a statewide resource with a mix of so-called ‘local packages’ and ‘statewide packages’ in each of the 4 host LHDs. Local packages are reserved for people who currently reside within the LHD where the HASI Plus service is located. Referrals for statewide packages are accepted from all LHDs in NSW that do not host the program, the Justice Health and Forensic Mental Health Network (JH&FMHN) and Corrective Services NSW (via JH&FMHN if the person is in custody).

The HASI Plus service model requires CMOs to recognise the cultural and social diversity of consumers and to offer appropriate support. The model also recognises how important family members and carers are to the wellbeing and recovery process for consumers. This requires CMOs to have clear strategies to involve family members in decision making if the consumer agrees.

As a recovery-oriented support model, a key aim of HASI Plus is for consumers to transition out of the HASI Plus housing to less intensive, community-based support arrangements when the consumers are ready.

A more detailed description of the HASI Plus program and of how the evaluation questions relate to various elements of the program is at **Appendix 5**.

2 Evaluation methods

2.1 Evaluation description

The Ministry commissioned the Social Policy Research Centre (SPRC) at the University of NSW (UNSW) Sydney to evaluate HASI Plus. The evaluation commenced in August 2018 and finished in August 2021. Its purpose was to:

- identify what works well in the program governance and implementation, and identify opportunities for improvement (process evaluation)
- assess the impact of HASI Plus and the extent to which the program achieves its aims (impact/outcome evaluation)
- conduct an economic analysis of HASI Plus to determine the program's costs and benefits compared to other models (economic evaluation).

The evaluation adopted a mixed-methods design that included:

- literature and document reviews
- 2 rounds of interviews in the HASI Plus sites with consumers, families, CMO and LHD staff and managers
- 2 rounds of interviews and focus groups with government and state-level stakeholders
- analysis of qualitative and quantitative program data
- analysis of consumer outcome data linked across partner agencies
- analysis of administrative data about consumers who exited the program
- economic analysis and cost modelling.

More detail about the evaluation methods is available in the evaluation plan (Purcal et al. 2019) and at **Appendix 3**. The literature review summarises evidence from evaluations of programs similar to HASI Plus (Blunden 2019).

2.2 Interviews

Table 1 gives an overview of the sample sizes for interviews, which were conducted mainly face-to-face. Two rounds of evaluation interviews occurred with HASI Plus

consumers, their family members and CMOs and LHDs in the HASI Plus sites. The purpose of conducting 2 rounds of interviews was to identify changes in the program and its outcomes over time. The 2 rounds of fieldwork visits were 6 to 8 months apart. Interview round one was from March to May 2019, and round 2, in November 2019. There were also interviews with HASI Plus consumers who had exited the program from April to November 2019.

Interviews and focus groups with state-level stakeholders included:

- staff from the Ministry involved with the program
- other relevant NSW government departments and agencies such as Department of Communities and Justice (DCJ), Corrective Services NSW and the Mental Health Review Tribunal
- consumer and carer advocacy organisations.

Table 1 Sample for interviews

Participant group	Number of interviews			Repeat interviews	People interviewed
	Round 1	Round 2	Total		
Current consumers	39	35	74	20	54
Family members[1]	3	2	5	2	3
CMO	47	28	75	15	60
LHD	2	12	14[2]	0	14
Exited consumers			6	n/a	6
Stakeholders			12[3]	n/a	12
Total			186	37	149

Notes: [1] Fewer family members than anticipated took part in the interviews.
[2] Includes 2 focus groups and 3 interviews with 14 participants in total
[3] Includes 3 focus groups with 12 participants in total

The evaluators conducted interviews and focus groups with 186 participants. Of these, 37 were repeat interviews, which involved interviewing the same consumer, family member, CMO or LHD in rounds one and 2. A total of 149 people were interviewed. Interview participation was voluntary.

More than half of the consumers in the program at the time of the interviews participated. Among the consumers interviewed, two-thirds were men and one-third were women. Ages ranged from 26 to 63 years. Two of the consumers who were interviewed were identified as Aboriginal or Torres Strait Islanders, and 9 were from culturally and linguistically diverse (CALD) backgrounds.

Limitations of the interviews were:

- a relatively short time between the 2 rounds of interviews, which meant that few changes were observed
- the small number of family members who participated in interviews. This was largely due to the limited involvement of family members in the lives of the consumers who were interviewed, **Section 4.4**.

2.3 Quantitative data collection

The quantitative sample incorporated all previous and consenting current HASI Plus consumers, **Table 2**. It consisted of 58 current consumers and 32 who exited before or during the evaluation. Quantitative data for the evaluation were from program data collected by the CMOs, and from data linkage.

2.3.1 HASI Plus Minimum Data Set

When the HASI Plus program was established in 2013, the program adopted the Minimum Data Set (MDS) that was used at the time for the Housing and Accommodation Support Initiative (HASI). The HASI MDS consisted of two forms: *HASI Monitoring Form 1: Applicant Profile*[1] and *HASI Monitoring Form 2: Consumer Receiving Support*[2] (known as the 'Form 1 and Form 2' collection). CMO providers had to complete the forms manually and then submit all forms quarterly to InforMH, the Ministry's specialist mental health information and analytics branch.

In April 2019, the Ministry and InforMH updated the HASI Plus minimum data set by integrating the program into the NSW Mental Health Community Living Supports Minimum Data Set Version 2 (CL MDS V2) collection. This new collection and process has substantially enhanced content, data analysis and reporting capability.

The HASI Form 1 and Form 2 MDS collection was the main source of data for the evaluation. The scope of information in the collection was limited, and data analysis was further constrained by reliability and completeness issues with the collection. Where possible, CL MDS V2 data was considered along with other data sources such as Ministry administrative data. Ultimately, these factors meant that many quantitative outcomes were not statistically significant. Therefore, many findings for this evaluation rely on the detailed qualitative data gathered in the fieldwork.

[1] NSW Ministry of Health, Mental Health Drug and Alcohol Office 2010 Version 12.1
[2] NSW Ministry of Health, Mental Health Drug and Alcohol Office 2010 Version 12.1

The data linkage offered program and administrative data on consumer outcomes from datasets that are managed by program partner agencies, including the Ministry, Corrective Services NSW, Justice Health and DCJ Housing. Data linkage was undertaken by the NSW Health Centre for Health Record Linkage (CHeReL) for the study and comparison groups.

Table 2 Sample for the quantitative analysis - study and comparison groups

Method	Sample sizes		Data transfer or collection process
	HASI Plus	Comparison group	
Program data	90[1]	-	As available from the Ministry or CMOs
Program outcomes data	HASI Plus 58 + 32 exited[2]	34 from HASI Plus wait list[3]	Combined available program data and data linkage content through CHeReL
Economic analysis of costs and benefits	90 as above	34 as above	Collated program funding, cost data and resource usage from the program data linkage for cost estimation[4]
Cost modelling data	90 as above	-	Program expenditure data from the Ministry and CMOs where available with the economic cost effectiveness results[5]

Notes:
Study period from January 2013 to September 2019
HASI Plus program reporting was a manual form-based quarterly collection until April 2019 (known as the 'Form 1 and Form 2' MDS collection). The program was integrated into the NSW Mental Health Community Living Programs Minimum Data Set Version 2 (CL MDS V2) from May 2019, with substantially enhanced content, analysis and reporting capability.
1. consenting consumers
2. Sourced from the Form 1 and Form 2 MDS collection noting there was a considerable discrepancy between this figure and the 69 exits reported in the administrative exit data collected by the Ministry as part of the contract management process.
3. Including 3 who later entered the program
4. At the time of evaluation, the program offered 60 packages across 7 sites within 3 LHDs. Economic and cost modelling analysis is based on these settings.
5. As above.

The intended comparison group was:

- eligible consumers who were previously or currently on the program wait lists
- consumers who were referred but assessed as unsuitable for the program.

Due to the small sample size and incomplete linked data, the comparison group could not support statistically significant analyses. Consumer outcomes findings are therefore based on consumer measures before and after they entered HASI Plus.

2.3.2 Quantitative data analysis limitations

There were substantial limitations to the quantitative data linkage analyses that could be conducted for the evaluation due to:

- The small study group and incomplete data. 11% of consumers, that is 11 out of 101 consumers, were excluded as they did not give consent for the data linkage.
- Protecting privacy of consumers of subgroups. Analyses of consumer subgroups, such as groups based on age, gender or cultural background, was limited because samples fewer than 5 were not reported to protect confidentiality.
- An incomplete program data set with a manual ‘form-based’ submission process. Most program data available for the evaluation period was from the Form 1 and Form 2 MDS. This MDS had limited content and several factors contributing to poor data quality.
- A very small comparison group with low linkage. The comparison group had low data linkage sample sizes and was not sufficient for statistically significant analyses.

Further details of the quantitative samples and methods are in **Appendix 3**.

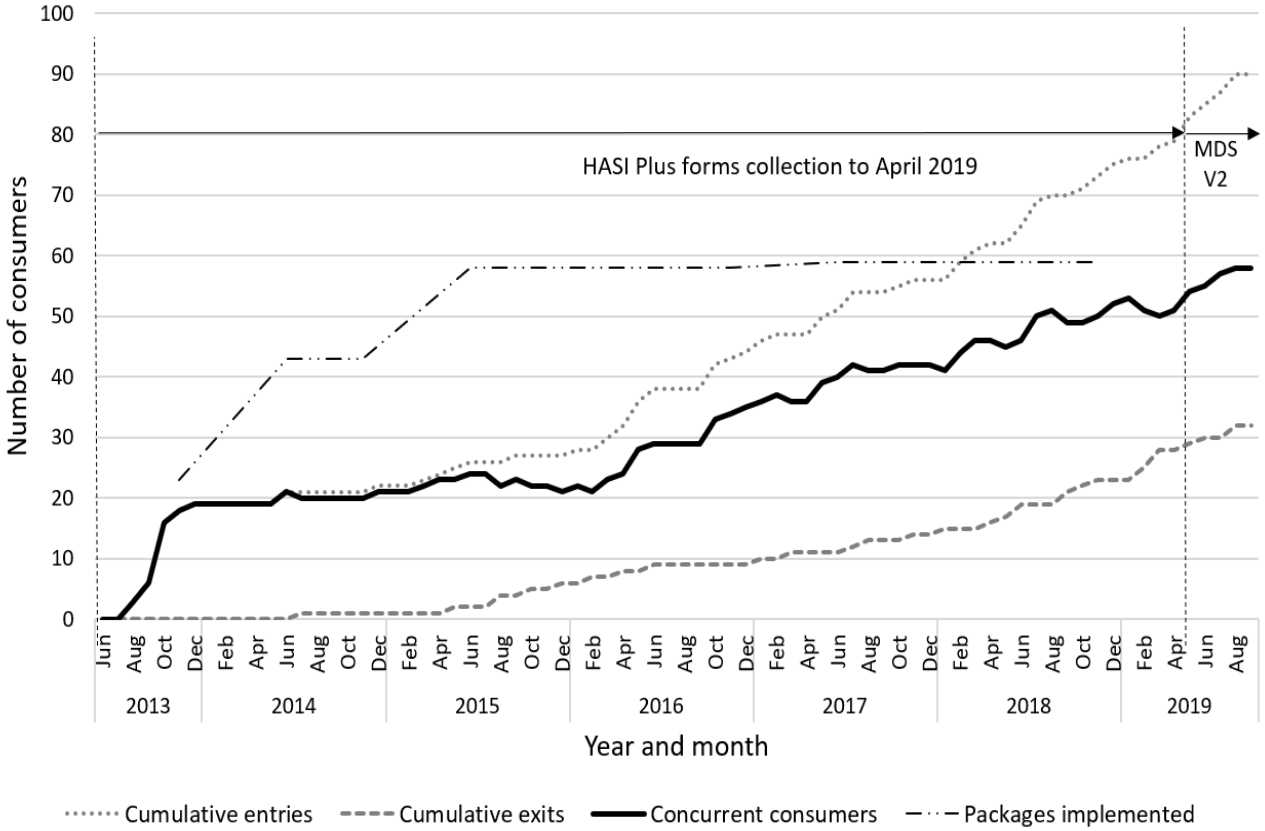
3 HASI Plus consumer profile

This section presents information about the number of HASI Plus consumers and their characteristics at entry to the program. Numbers are based mainly on the HASI Plus Form 1 and Form 2 MDS collection and CL MDS V2. This information was supplemented with information from the data linkages where available. During the study period from January 2013 to September 2019, HASI Plus had places for 60 consumers at any one time.

3.1 Number of program consumers

The data linkage included a study group sample of 90 consumers who received support from HASI Plus and who agreed to be included in the data linkage, **Figure 1** dotted line. Eleven (11) current consumers (10% of the study group) did not consent to the data linkage and were therefore not included in the sample.

Figure 1: HASI Plus packages and program consumers January 2013 to September 2019



Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, n=90.
Note: Consumer entries and exits are indicative based on available linkage data.

The number of consumers who were in the program at any one time increased during the initial phase in 2013, which established the first 20 packages, **Figure 1**

solid line. The number of consumers increased to the almost full capacity of 60 packages by July 2019.

3.1.1 Program exits

HASI Plus is a transitional program that aims to support consumers towards a recovery-oriented exit from the program to more independent life in the community.

The number of consumers exiting the program over the evaluation period was not clear. This was because there was a discrepancy between the data from the:

- combined Form 1 and Form 2 and CL MDS V2 collections; and
- administrative exit report data collected by the Ministry as part of the contract management process.

Based on the data linkage from the Form 1 and Form 2 and CL MDS V2 collections, 32 consumers exited HASI Plus, about 5 per year. Thirty-one (31) were reported as 'planned' exits but there was very little further detail available about where consumers exited to, **Figure 1** grey dashed line. One of the exits was reported as unplanned. These MDS data sources are not complete due to exclusion of non-consenting consumers.

According to the administrative data collected by the Ministry, 69 consumers exited the program in the evaluation period, **Appendix 8**. About half of these exits (33 consumers) transitioned to alternative community arrangements, and 40% of exits (28 consumers) moved to less intensive supports as intended by the service model.[3]

3.2 Duration in program

For the 32 consumers recorded as exiting the program during the study period (in the Form 1 and Form 2 MDS), the average length of time in HASI Plus was 19.8 months (1.7 years). The time in the program varied among these consumers from a few months to 4.3 years.[4]

At the end of the study period in September 2019, 58 consumers occupied the 60 available packages in HASI Plus. Their average length of time in the program was

[3] The HASI Plus package monitoring is reported monthly by CMOs and provides additional detail not available in the MDS collection. This reporting included a high proportion of 21 unplanned exits, compared to only 1 reported in the MDS.
[4] Based on 32 consumers, average 19.2 months, standard deviation 13.7 months.

30.0 months (2.5 years). Their time in the program ranged from a few months to 6.1 years.[5]

3.3 Demographic characteristics

The HASI Plus service model[6] requires providers to recognise and respond appropriately to consumer cultural and social diversity. This includes providing culturally appropriate support for Aboriginal consumers.

The demographic characteristics of consumers were recorded in the program MDS. Figures were from the Form 1 and Form 2 MDS to April 2019 as well as the CL MDS V2 from May 2019 to September 2019. The demographic profiles reflect the 90 consumers who consented to be included in the data linkage – 58 current consumers who consented to the linkage and 32 exited consumers. Some data from the early forms collection was incomplete.

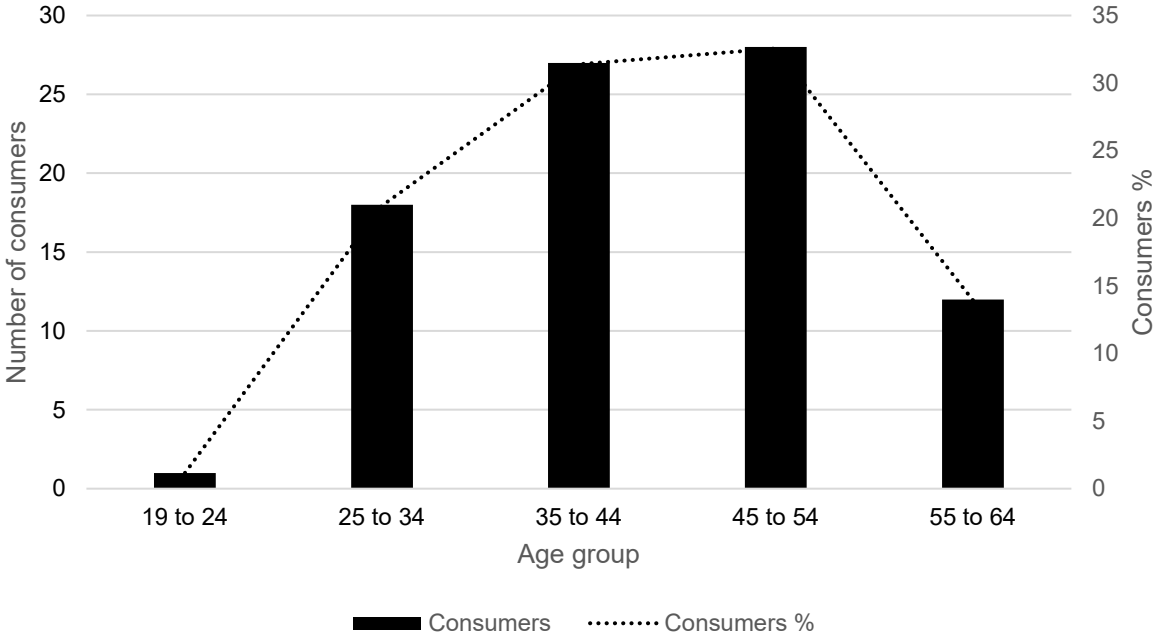
3.3.1 Gender and age

Among the HASI Plus consumers, 64% were men (55 consumers), and 35% were women (30 consumers). One consumer's gender was not determined.

The average age of consumers on entry to the program was 42.8 years, ranging from 24 to 63 years. **Figure 2** shows that most consumers were in the middle age groups 35 to 44 years (27 consumers, or 31.4%) and 45 to 55 years (28, or 32.6%). The fewest consumers were in the youngest and oldest age groups (1.16% and 13.95%). The 25 to 34 year age group comprised 20.93%, or 18 consumers.

[5] Based on 58 consumers, average 30.0 months, standard deviation 24.8 months.
[6] See NSW Ministry of Health (2021) HASI Plus Program Manual

Figure 2: HASI Plus consumers by age group



Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, n=86. Four records excluded due to missing data.
Note: Age calculated at program entry

3.3.2 Aboriginal consumers

The proportion of HASI Plus consumers identifying as Aboriginal or Torres Strait Islander was 7.1% (n=5) (**Table 3**). This is above the proportion in the general Australian population of 3.3% and the NSW estimated resident population of 3.5% (Australian Bureau of Statistics, 2016c).

The relatively high numbers of Aboriginal consumers in the HASI Plus program is consistent with data showing that Aboriginal people are more likely to experience poorer mental health than the general population and that they are almost 3 times as likely to have high or very high levels of psychological distress (Australian Institute of Health and Welfare, 2018).

Table 3: HASI Plus consumers of Aboriginal and/or Torres Strait Islander background

	Consumers	%
Neither Aboriginal nor Torres Strait Islander	65	92.9%
Aboriginal	4	5.7%
Indigenous not further specified	1	1.4%
Total	70	100.0%

Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, n=70. Twenty records excluded due to missing data.

3.3.3 Country of birth

About 13% of consumers were born in a country other than Australia, **Table 4**. Due to the small study group sample, all other countries had less than 5 consumers each and were therefore grouped as 'other' to protect confidentiality. The largest proportions were 4.8% born in New Zealand and 2.4% in Vietnam. Countries of birth included England, China, India, Japan and Lebanon.

Table 4: HASI Plus consumer country of birth

	Consumers	%
Australia	73	86.9%
Other	11	13.1%
Total	84	100.0%

Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, n=84. Six records excluded due to missing data. Countries of birth with less than 5 consumers were grouped as 'other' to protect confidentiality.

HASI Plus consumers were less varied in country of birth than the Australian population as a whole, where about one out of 3 was born in a country other than Australia (Australian Bureau of Statistics, 2016a).

3.3.4 Preferred language

About 7% of HASI Plus consumers reported a preferred language other than English, **Table 5**. Other preferred languages included Arabic, Cantonese, Vietnamese and Tongan. This compared to about 27% of the Australian population speaking a language other than English at home (Australian Bureau of Statistics,

2016b). The data on country of birth and language diversity indicate that people with a culturally and linguistically diverse (CALD) background may be underrepresented in HASI Plus.

Table 5: HASI Plus consumer preferred language

	Consumers	%
English	75	92.6%
Other	6	7.4%
Total	81	100.0%

Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, n=81. Nine records excluded due to missing data. Preferred languages with less than 5 consumers grouped as 'other' to protect confidentiality.

3.3.5 Sexual orientation and gender identity

From May 2019 to September 2019, 4.3% of consumers (<5 of 46 consumers) identified as lesbian, gay, bisexual, trans and/or intersex (LGBTI).[7] This suggests the program may support a similar proportion of LGBTI people as existed in the Australian general population (3%) (Australian Bureau of Statistics, 2014).

3.4 Legal orders

HASI Plus reporting on consumer legal status and community correction orders commenced with the introduction of CL MDS V2 in May 2019.[8] Based on this limited sample (n=53), around 74% of consumers had a legal order in place relating to their support. This included around 34% under a forensic order, 30% under a financial management order, 11% under a guardianship order and 9% under a community treatment order.[9]

[7] Sexuality and gender identity were not reported in the Form 1 and Form 2 MDS collection to April 2019, figures based on the last 5 months of the study period when CL MDS V2 commenced (n=46). The sexuality and gender identify items are non mandatory and self reported.

[8] Indicative figure as based on last 5 months of study period where CL MDS V2 data content was available.

[9] Consumers under a guardianship order were also under a financial management order. Percentage figures sum to greater than 74% as some consumers were under more than one type of order.

Fewer than 5 of the 53 consumers (about 5%) had a community correction order in place at some time from May to September 2019. Figures are not presented to protect confidentiality. The types of community correction orders for HASI Plus consumers included community service orders and parole orders.

3.5 Housing

About 62% of consumers entered HASI Plus from hospital (56 consumers). Of this group, almost all were in a mental health inpatient unit, **Table 6**. Twenty-two percent of consumers were living in social housing immediately before entry (including public housing, community housing, Aboriginal public housing and Aboriginal community housing). The 'other' category included a correctional facility, living with friends or family, or own home.

For those consumers who came to HASI Plus from hospital, the data did not record any other housing before hospitalisation.

Table 6: HASI Plus consumers' type of housing at entry to the program

	Consumers	%
Hospital	56	62.2%
Social housing	20	22.2%
HASI Plus - shared house or apartment[1]	9	10.0%
Other	5	5.6%
Total	90	100.0%

Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, n=90.
Notes: 'Other' was grouped to protect confidentiality.
1. Likely to indicate a transition from a 24-hour package to a 16-hour package.

Many HASI Plus consumers reported that they faced risks in their housing prior to entering HASI Plus. Consumers could report more than one risk factor. The most common factors included being at risk of domestic violence (60% of reporting consumers, or 43 consumers) and unmet support need and vulnerability (44% or 32 consumers each), **Table 7**. Eighteen percent of consumers also reported risk of homelessness or rental arrears.

Table 7: Housing risks of HASI Plus consumers

Risk	Consumers	%
Family violence	43	59.7%
Unmet support need	32	44.4%
Vulnerability	32	44.4%
Nuisance complaints related to tenancy	20	27.8%
Non-permanent housing	14	19.4%
Period of homelessness	13	18.1%
Rental arrears	13	18.1%
Unauthorised tenants	11	15.3%
Other	10	13.9%
	72	100.0%

Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, n=72. Eighteen consumers excluded due to missing data. Notes: 'Other' was grouped to ensure confidentiality, includes high turnover in housing, damage to property, applications for orders to Consumer, Trader & Tenancy Tribunal (CTTT) and None.

3.6 Diagnoses

Seventy-five percent of HASI Plus consumers reported a primary diagnosis of schizophrenia, **Table 8**. Most of the remaining consumers had a primary diagnosis of schizoaffective disorder.

Table 8: HASI Plus consumers' primary diagnoses

Primary diagnosis	Consumers	%
Schizophrenia	62	74.7%
Schizoaffective disorder	20	24.1%
Other	<5	1.2%
Total	83	100.0%

Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, n=83. Seven consumers excluded due to missing data. Notes: Details for 'Other' not supplied to protect confidentiality. Nine consumers also reported a secondary diagnosis, which included schizophrenia, schizoaffective disorder, personality disorder, depression or anxiety. There were fewer than 5 consumers per diagnosis.

The HASI Plus CL MDS V2 data from May 2019 included coexisting conditions and consumer risk factors for 53 consumers. The most frequently reported were drug and alcohol dependency (11.4%, 5 of 44[10]) and smoking (37.7%, 20 of 53). HASI Plus consumers reflected Australian population data, which show that people with mental health conditions and high levels of psychological distress are more likely than other people to smoke, consume alcohol at risky levels and use illicit drugs (Australian Institute of Health and Welfare, 2019).

3.7 Comparison group

The HASI Plus evaluation comparison group consisted of 34 consumers who were on the program waitlist from February 2017 to the end of the study period in September 2019. Their gender and age are compared with the study group in **Table 9**. No other demographic data for the comparison group was available.

Most people on the waitlist did not enter the program during the study period to September 2019 (31 of 34, or 91%). This reflects the limited number of program packages and length of time consumers stay in the program, **Section 3.2**. The process to establish an additional 10 HASI Plus packages was in progress during the evaluation. Three people on the waitlist entered the HASI Plus program during the study period. They were included in the comparison group for the time before entering the program and in the study group after they entered.

[10] Missing data resulted in smaller samples.

Table 9: Study and comparison group demographics

	Study group		Comparison group		
Subgroup	Consumers	%	Consumers	%	p-value
Gender					
Male	55	64.0	25	73.5	
Female	30	34.9	9	26.5	
Other	<5	<2.0	0	0	
Total	86	100.0	34	100.0	0.532
Age group					
45 to 54	28	32.6	12	35.3	
35 to 44	27	31.4	7	20.6	
25 to 34	18	20.9	<5	<12.0	
55 to 64	12	14.0	10	29.4	
19 to 24	<5	<2.0	<5	<3.0	
Total	86	100.0	34	100.0	0.213

Source: HASI Plus Form 1 and Form 2 collection and CL MDS V2 to September 2019, study group n=86. Four consumers excluded from study group due to missing data.
Notes: Figures below 5 not presented to protect confidentiality.

The evaluation comparison group did not have sufficient sample size for statistically significant analyses of the data linkage sources. For example, the admitted patient data identified 12 people from the waitlist with any hospital contact, which did not have statistically significant rates of admissions or days admitted for comparison. Therefore, the evaluation comparison group was not used in the analyses. The quantitative outcomes are based on data for the study group from before and after entering HASI Plus, where statistically significant analyses were possible.

4 HASI Plus in operation

This section reports findings mainly from the 2 rounds of interviews with consumers, family members, CMOs and LHDs at the HASI Plus sites; and interviews and focus groups with state-level stakeholders. Quantitative linkage data are added where available. The fieldwork explored the following themes to answer the evaluation questions, **Appendix 4**:

- Transition support
- Housing
- Support to consumers
- Family involvement
- Program partnerships
- Referrals
- Operations, workforce and reporting.

Overall, interview participants from all groups liked HASI Plus. Many voiced enthusiastic and positive attitudes about the program, for example:

> So, this program saved my life. Simple as that. I could be homeless, still on drugs. (Consumer)
>
> I'm very happy to advocate … for the care and service [the service] provided [consumer name] and just to thank them on record for what they've done, and I think it's a great program. (Family member)

When asked 'What is one thing you would improve?', the most common answer was 'More HASI Plus'.

Little change was observed in the HASI Plus sites between the 2 interview rounds. This may be partly due to the relatively short time between the interviews (about 6 months). Any change in interview findings and any new themes that emerged in the second round are mentioned in this report.

The fieldwork findings were compared against the intended set up of the program as described in the HASI Plus program document review, **Appendix 5**. Overall, the fieldwork findings suggest that HASI Plus was operating according to the service model and meeting program intentions. Any findings indicating that the implementation differed from intentions are outlined in this section.

4.1 Transition support

The aim of HASI Plus is to support people with severe and persistent mental illness to lead their own rehabilitation and recovery and then to transition to independent living in the community. Participants' answers about the effectiveness of HASI Plus transition support are summarised under 4 main aspects:

- overall effectiveness to support transition to community living
- supporting consumers to enter the program from institutions
- supporting consumers to settle into the program
- supporting consumers transition out of HASI Plus into the community.

The findings include interviewees' views on how effective HASI Plus is and any factors promoting or hindering the successful implementation of the program.

4.1.1 Overall transition to community living

Overall, the interviews and focus groups with all participant groups (consumers, family members, stakeholders, CMOs and LHDs) indicate the program is effective in supporting consumer transition to living in the community. Most consumers said that they felt supported to safely transition to more independent living. Some consumers referred to HASI Plus as a good 'stepping stone':

> I think having a support is necessary for moving forward and it's only going to be of benefit to me in aiding me to get out of the system. Even if I don't stay here forever, it's a stepping stone to getting out of the hospital and reintegrating into society. (Consumer)

An Exit Case study provided by the Ministry from the administrative data also illustrates this point:

> The consumer was referred by medium security forensic unit at their LHD. The consumer had resided at the hospital for more than 12 months with a diagnosis of schizophrenia. A lack of affordable housing and a need for support while living in the community had prevented their earlier discharge from hospital.
>
> The consumer settled into the program without difficulty and engaged well with staff and other residents. They developed independence and confidence in themselves and in managing their life.

> After 3 years in the program it was agreed that the consumer had met their recovery goals and no longer needed the support of the HASI Plus program. During their time in HASI Plus the consumer had no admissions to hospital. The consumer was given 3 months to vacate the program and was agreeable to this approach.
>
> The consumer moved into a private rental share and continued to receive clinical support through their LHD. The consumer expressed that they were grateful for the support their received in HASI Plus and gained a good insight into their medication needs.

Many consumers said they experienced a sense of freedom in HASI Plus and that this supported them to adjust to life in the community:

> I can honestly say I think what really works is the autonomy. You're not independent, but you have got autonomy. So, you can organise yourself and you can organise your own week and they are helpful and they do what you want. So, you feel like you're in charge of your own life in a way. (Consumer)

Consumers and family members also said the program had supported them or their loved one to engage more with other people in the community. They saw this as an important step in transition to more independent living:

> I think [consumer name] has always been a quiet person. Always, always a quiet person. So, they've actually helped him a great deal, thank you. (Family member)

Similar to the consumers and families, most CMOs, LHDs and stakeholders considered the HASI Plus program effective at transitioning people from inpatient settings to community:

> [HASI Plus] fulfils a pretty crucial role in helping people transition out from hospital because without a program like this, they would just go from, you know, living in what's not a very independent sort of place in terms of lifestyle to just being flooded with all sorts of life decisions and choices and having to wrap your head around being fully independent potentially … So, I think it's way less jarring. (CMO)

Some CMO staff felt HASI Plus was not always able to meet this transitional program objective because some people continued to need the intense high levels of support the program offers. They said that transitioning out of HASI Plus was not achievable for some consumers, or that if they did transition, it was into other programs with similarly high levels of support:

> To me, somebody that's been in [hospital] for [more than 10] years and is living in their own unit [in HASI Plus], making their own choices about what

> activities they do, what food they eat, all that kind of thing, I think is a better quality of life for them [to be in HASI Plus]. Even if they didn't move from here, I think they are in the community, to the best of their ability. (CMO staff)

The exit report analysis provided by the Ministry also gave several examples of consumers whose support needs were more intensive than could be met in the program, and they had to exit, often back to hospital. High support needs were not always due to mental illness. For example, a consumer who participated in the first round of interviews had returned to inpatient treatment by the second round because of physical health problems.

4.1.2 Entering HASI Plus

Consumers typically enter HASI Plus after being on a program waitlist. The waitlist consists of people assessed as satisfying the program eligibility criteria and being 'suitable'[11] for HASI Plus, **Appendix 5**.

Program data shows that most people on the waitlist (comparison group) had not been allocated a package by the end of the study period in September 2019 (31 of 34, or 91%).[12] The 3 waitlisted consumers who did enter the program had been on the waitlist from 1.2 to 2.6 years (average 1.7 years). Those who had not received a package had been on the waitlist an average of 10.8 months, up to a maximum of 31 months (1.8 years).

Several consumers in the interviews had difficulties remembering what they knew about HASI Plus before they came to visit the service for the first time. Some consumers reported that they did not receive any information or did not know much about HASI Plus when they first visited. This suggests a possible area for improvement with transition support. For example, the program documentation intends for comprehensive transition planning to occur, including close communication and liaison with the consumer. However, some consumers seemed to receive insufficient information about HASI Plus, which caused stress and anxiety. A few people reported misunderstandings about the program including being concerned that they were going to another service where they would be extensively monitored. One consumer was against coming to HASI Plus because they were told

[11] The suitability assessment is a process of determining whether the accommodation and support model available in the area will be suitable for someone who is eligible for the program. Suitability assessment is typically done in-person or via telehealth by the specialist HASI Plus clinicians from the host LHD and CMO (and may be combined with an eligibility assessment, depending on local process).

[12] Waitlist data was collected from February 2017 to the end of the study period in September 2019, see section 3.7 Comparison Group.

that it was a 16 hour support program, and they thought this meant someone would be with them 16 hours a day:

> HASI Plus came to see me and I was right on against coming here. Yeah, I was going to myself, “There is 16 hours supervision. I don’t want 16 hours supervision.” (Consumer)

These responses indicate that more in-depth information about HASI Plus could be provided to consumers. For example, more online information at the time of referral or more opportunities for consumers to ask any questions they may have.

Despite some consumers not knowing much about the program, most consumers were happy to be able to move on from hospital (or other institution):

> One time in hospital I had no idea as to when I was actually getting out of hospital, because they were having trouble finding housing for me. And then eventually they did find this place, and I thought “Oh well, at least I’ll be getting discharged”. (Consumer)

A few consumers saw the move to HASI Plus as just another in a series of moves that authorities decided for them. It was unclear whether they were happy about it or just compliant:

> I’m used to being moved on … They moved me on from the hospital to [mental health institution], then they moved me to here. So, I just keep moving. (Consumer)

Most consumers saw the first visit as the most important part of the process in the referral to HASI Plus. Most thought they did not have a real choice about transitioning to HASI Plus or not, or that their choices were limited. However, once they had seen what HASI Plus had to offer and understood more about it, they wanted to be in the program:

> I was a bit hesitant to move here first. I didn’t know it was going to be good or not but after I moved here, found it’s really good (Consumer)

In some referring LHDs, the Pathways to Community Living Initiative (PCLI) appeared to enable smoother transitions. Some consumers said that they had been assessed though the PCLI process but told in advance that they would transition into HASI Plus.

Most consumers transitioned into HASI Plus in a gradual way – typically this involved initial day visits first and then increasing overnight stays. Most consumers who had a gradual transition liked it and felt that it was organised at a pace that suited them:

> Yeah, it was quite nice actually. … The transition took about a month where we would just come and sit in the consumer room and watch movies and meet people and then slowly but surely. Then they take you shopping … and they buy you all these things like pots and pans and knife sets and linen and quilts and all of these exciting things, pillows, so it's all exciting when you start. (Consumer)

Some CMOs expressed the view that consumers who transitioned in stages settled into HASI Plus more quickly and tended to be more engaged in the program than consumers who came directly and quickly to the program.

On the other hand, some consumers found a gradual transition process stressful:

> It was difficult, because I was … 5 days a week at the hospital and 2 days here. I spent all these hours organising what I had to bring and bring back. Now I'm all settled. (Consumer)

For some consumers who did not have a gradual transition, this appeared to be pragmatic and sometimes unavoidable. For example, referrals into statewide packages where the consumer was moving a long way from the referral service, and people entering the program after being released from prison.

Transitions for consumers subject to forensic orders were largely determined by the Mental Health Review Tribunal (MHRT). Many CMOs and consumers saw these transitions as long and drawn out, **Section 5**. Forensic consumers talked about the anxiety and discomfort of a very long transitional period. Comments included: spending "half my life" in transit, needing to go back in and out of a high security forensic service, taking possessions from one place to another and/or anxiety about leaving them behind:

> Yeah, it's quite hard to adapt, it's a bit of a shock to the system as you walk back in the door there [medium secure mental health facility]. They're in your face, wipe you down, pat you down, empty your pockets, go through your bag, fine tooth scrutiny. It's sometimes dehumanising … (Consumer)

On the other hand, some LHDs and CMOs felt that the longer transition period for forensic consumers worked well:

> So, if they are forensic, they normally take a longer time to transition in than if they are not forensic. So, yeah. I think it's working really well … It's good for them to get a sense of where they'll be staying and to kind of meet a few other people. (CMO)

Even during transition, most consumers viewed the HASI Plus site as their new home. Many consumers said they had moved their personal effects into their room at

the beginning of the transition period. They also said the HASI Plus room or unit was more like home to them than their current housing. This was even if they were near the beginning of their transition when they might be staying fewer nights at the HASI Plus site than the hospital or other institution they were moving from.

The length of transitions into the program varied among consumers, consistent with the individual planning approach of the service model. Most CMOs said that the length and progress of transitions was the choice of the consumer (except for forensic referrals as above). Some consumers confirmed that it was their decision. Others said they had no choice or were not asked.

CMOs spoke about financial issues that CMOs and consumers faced during transitional stages. For example, consumers could be expected to pay rent at the previous institution (usually a long stay hospital), which made it financially unviable to pay rent at the HASI Plus housing as well. This meant the community housing provider (CHP) had to maintain a room or unit without any rental income during the transition. By the second round of interviews, this issue had been resolved in some areas with agreements between CMOs and health services. A more formal, statewide resolution could be considered. This would alleviate undue stress about this issue and to ensure neither the consumer nor the CMO is financially disadvantaged.

4.1.3 Program orientation and ‘settling in’

Consumers spoke about the importance of ‘space’ to settle in and that it took a while to feel safe and trust the staff:

> First couple of weeks, it was hard to get anything out of me. And then, about 3 or 4 weeks it was, … the lady said, "Now we can't shut you up". … . It took me a while to talk to these people here. I don't trust people straight off. You got to earn my trust. (Consumer)

All CMOs offered some activities or support to assist new consumers to settle in. What these supports entailed and how settling in was approached varied across locations. There were different management approaches and different opinions among CMOs about how much support new consumers were offered and how much they were required to engage with the program supports.

This variation appeared to cause some tension among CMO staff and between staff and managers in some locations. Some staff and managers thought it was best to leave consumers to settle and get used to the program at their own pace. Others advocated for some formal requirement to engage in activities and to accept offers of support from the very beginning of their stay:

> I think once the consumers sometimes realise that they have all this freedom, they don't so much withdraw, but they know that if they don't want to go out today, then they don't have to. If they don't want to participate in certain activities, they don't have to. We encourage them to. But I think where it could be improved …they need to be involved in some kind of activities, because otherwise, they withdraw, or we don't see them. They might be becoming unwell, but there is just not a huge amount of interaction sometimes. (CMO staff)

The above topics are further discussed under **Section 4.3.2** Psychosocial Support.

4.1.4 Exiting HASI Plus

The HASI Plus model aims for consumers to transition from the program when they are ready to less intensive, community-based support.

The exact number of consumers exiting the program over the evaluation period was not clear. This was because there was a discrepancy between the data from the:

- combined Form 1 and Form 2 and CL MDS V2 collections; and
- administrative exit report data collected by the Ministry as part of the contract management process.

According to the Form 1 and Form 2 MDS and CL MDS V2 collection, 32 consumers exited HASI Plus. Of the 28 on whom further information was available, **Table 10**:[13]

- 10 consumers had a planned exit with no detail on exit destination
- 8 consumers had a planned exit to 'another long-term support program' destination with no further details; and
- 10 had 'other' exit reasons including consumer deceased, consumer relocated, unplanned exit or returned to hospital.

[13] The 3 exits that occurred through CL MDS V2 during the final 5 months of the study period were less than 5 in total and are not included to protect consumer confidentiality. One consumer was reported as exited but no 'reason for exit' details were provided, giving 28 consumers reported with program exit reasons.

Table 10: Program exit reasons

	Consumers	%
Planned exit	10	35.7%
Consumer moved to other long-term support program	8	28.6%
Other	10	35.7%
Total	28	100.0%

Source: HASI Plus Form 1 and Form 2 collection to April 2019, n=28. One consumer excluded due to missing data. Notes: Details for 'Other' not supplied to protect confidentiality.

Details of the 3 consumers exiting after May 2019 when the new CL MDS V2 reporting commenced are not presented to protect confidentiality. All 3 had an exit plan in place to manage the transition. Exit reasons included relocation with alternative support arrangements, and support needs reduced with no alternative support arrangements. Primary support following exit for these 3 consumers was through Primary Health Network (PHN) funded services.

According to the administrative data, 69 consumers exited the program in the evaluation period.[14] About half of those exits (33 consumers) transitioned to alternative community arrangements, and 40% of exits (28 consumers) moved to less intensive supports.

Detailed analysis of the administrative exit data indicates (with percentages rounded):

- the largest proportion of consumers (28 people or 40%) exited to lower intensity support arrangements, where the support came from either general HASI (17 people) or LHD community mental health services (7 people). Other arrangements were through the NDIS, private psychiatrists or not known.
- the next highest proportion of exits was 12 people (17%) being admitted (or readmitted) to a mental health facility. This was accompanied by an assessment that HASI Plus was not a suitable option for discharge.

[14] Based on HASI Plus program monitoring reported monthly by CMOs separate to the MDS data collection used for the data linkage.

- 8 people (12%) were recorded as exiting the program because they were either lost to care15, were actively not engaging with the program despite concerted efforts, or had behaviours of concern that could not be safely managed within the service model
- 6 people (9%) were recorded as exiting the program to prison due to a breach of a community corrections order
- 6% (<5 of 69 consumers) exited with no alternative support arrangements
- 4% (<5 of 69 consumers) died of underlying health reasons not related to the program
- 3% (<5 of 69 consumers) moved to speciality aged care support
- 3% (<5 of 69 consumers) moved to higher intensity support arrangements with NDIS support.

The fieldwork interviews indicate different approaches among CMOs and different attitudes among consumers about transitioning out of HASI Plus. Some consumers were excited about the transition:

> I'm excited to leave. I'm happy. I'm excited. I'm happy. I don't know what I am going to do yet, but I do have a few options. (Consumer)

Other consumers appeared concerned about moving on from HASI Plus. Some consumers said they were reluctant to leave, as they found the HASI Plus housing and support significantly better than their previous experience and better than they believed they could get elsewhere:

> I'm really happy here. I just want to stay here forever. (Consumer)

One CMO staff gave an example where a consumer's reluctance stemmed from anxiety due to insufficient or wrong information:

> "[There was a] concern by one of the residents here that, because [they were] doing really well, that [they] would be transitioned out and, basically, [they] thought [they'd] be left by [themselves]. (CMO staff)

CMOs reported a range of approaches to discussing transition out with consumers. Staff from one service, for example, started the discussion before consumers' entry,

[15] Lost to care means the person was discharged from the program because they were missing or otherwise left the program unexpectedly with no alternative arrangements and no follow up possible.

whereas staff from other services were careful about the way transition out was raised with the consumer. They said it was not raised until they thought the consumer was ready to engage with it. One staff member said they did not generally raise the idea of transitioning out of HASI Plus until the consumer did. Another staff member reported that they told the consumer “you need to start looking” and then supported them towards exiting the program.

CMOs regarded good connections with social housing as a facilitator for supporting good transitions out, **Section 5.5**. They said it was important the housing provider had a good understanding of HASI Plus. Another enabler to transition out was access to continued support. This support was usually from the general HASI program or the NDIS. Continuity of support appeared to work best where the same organisation offered the support post HASI Plus – for example, in the general HASI program.

Consumers with ongoing very high support needs seemed to have limited options to transition out. At the time of the second round of interviews, at least one site was actively using the NDIS Supported Independent Living (SIL) program to help transition out consumers who needed a high level of support, **Section 5.5**. This raised questions about conflict of interest, for example, where the same provider might be involved.

There is further discussion relevant to program exits in **Section 5.5**.

4.2 Housing in HASI Plus

This section reports on the interview and focus group participants’ views and experiences of how suitable HASI Plus housing was for achieving program goals. Following general comments, 3 sub-sections explore the findings relating to the following housing aspects: communal spaces and privacy; observation and contact with staff; and neighbourhood location. Pathways to stable housing after HASI Plus are discussed in **Section 5.5**.

HASI Plus housing is intended to offer an environment that is safe and minimises risks for consumers and support staff. Set-ups differed among the 7 locations. The models included:

- separate units in a multi-story building; some units with 3 bedrooms and 2 tenants, some with 2 bedrooms and 2 tenants, and some with one bedroom and one tenant
- self-contained ground level apartments with individual, privately fenced court yards

- self-contained studios in one-story buildings overlooking a common yard
- shared houses with individual bedrooms and shared facilities, including kitchen, bathrooms and common areas.

The size of the units and personal space varied across locations. Some locations had the common areas and staff offices in the same building as the consumer housing. Others had staff offices and common areas in a separate building on the property.

Overall, views as to whether the housing was suitable were mixed and sometimes depended on the location. CMOs were more likely to say that housing could be better, while consumers tended to say housing was good and met their needs:

> I just love the apartment I'm living in. I think it's a really nice place to live. (Consumer)

The stability of the housing was also important to consumers. It allowed them to think about future plans:

> Long term, I want to go back to [study] … If I have a place like this, it’s good because I have got my own desk there. (Consumer)

Likewise, some CMOs felt that the contrast between HASI Plus and many consumers’ previous housing increased the consumers’ satisfaction. This was especially true for consumers who had been homeless in the community or lived in mental health or correctional facilities before HASI Plus:

> And in fact, most of the people who access this particular home like the idea that they've got a place to live where they're secure, because they've been shoved from pillar to post their entire lives, and here they finally find security and the kinds of supports that they need. (CMO)

Many CMOs were satisfied with the housing at their location:

> I think this particular building is perfect, and I think it's perfect for HASI Plus. It allows them their own individual space. The spaces are small. I mean, in an ideal world, you'd like a larger unit. But, at least to me, none of them have ever found that difficult. They've got a complete bathroom, a complete bedroom, their own private veranda area, and they are nice units. (CMO)

Some consumers mentioned aspects that could be improved in the housing, for example installing air conditioning. In locations with air conditioning, some staff said that not all consumers used it because they were concerned about its cost.

Overall, the housing differed across locations and met the expectations outlined in the program documents to varying degrees. Some CMO managers, LHDs and stakeholders were concerned that, in some sites, the units for consumers on 24 hour and 16 hour support packages were located in the same building or precinct. Interviewees said this made it difficult to clarify to consumers the difference in support when stepping down from 24 to 16 hour packages. Some staff at these sites reported that this meant they tended to give the same type and intensity of support to all consumers, regardless of their package. This caused financial concerns, as the CMO may not have been adequately funded to provide this support:

> So you might have a building that houses 10 consumers but only 5 of those support packages are 24 hour support. So I'd love somebody to explain to me how that works. Because if somebody in a 16 hour support package is getting up at night, needing support, you know there's no way that the staff member says "No sorry I can't support you, you're on a 16 hour support package." So in my mind the 10 consumers in that building are all getting 24 hour support but we're only getting paid for half of them (CMO manager)

Some housing was more modern and better equipped than others, such as with furnishings and landscaping. CMO staff talked about the need for purpose-built housing and raised questions about the suitability of housing models and design. The issues differed across locations and included:

- the suitability of consumers sharing apartments
- many people in small units facing each other around a central courtyard
- lack of common areas
- cramped office spaces or office spaces that were not well placed on the grounds.

The HASI Plus program guidelines state that housing should be consistent with community norms in appearance and function. The program documents also outline that CMOs are expected to arrange access to furniture. This was appreciated by consumers:

> I like the furniture. The furniture's been very helpful, like, you're allowed to take the furniture with you. Yeah, so everything is good. (Consumer)

However, there seemed to be differences in capital investments between locations, noticeable in the furnishings of consumer units and common areas and in landscaping. At the time of the first round of interviews, consumers at one location were given second hand, worn-out furniture. The CMO manager recognised it needed to be replaced, but they said limited funding had prevented them from doing

so. By the second round of interviews, the old furniture had been replaced with new. Although most consumers were happy to have new furniture, one expressed their dislike of one of the new furniture pieces. Consumers reported having been consulted about the choice of the furniture colour, otherwise furniture was selected for practicality and durability.

4.2.1 Communal spaces and privacy

Common spaces varied from location to location, with some offering welcoming, useful and well-used spaces and others less so. Few consumers commented on using the communal spaces:

> Yeah, [I use the courtyard] a little bit. … A few people I talk to a bit, yeah. (Consumer)

CMOs said the common spaces for consumers were important for socialising:

> The upside has been the community kitchen. Because they have started to ... combine ingredients to save money. To cook things together. To sit down to a community meal on the odd occasion, to talk to each other. It's been used also to invite others over and have a family gathering. To have friends over. (CMO)

4.2.2 Observation and freedom

The differences in housing influenced the degree of observation of consumers and their sense of freedom. Some offices were tucked out of the way – under the building or at the back of the property. Other locations had offices looking directly at consumers' apartments or situated near the front door of the property. These design aspects may influence the level of freedom consumers felt, although in the interviews no consumer commented on this aspect. One staff member said:

> And we're at the other end of the house, so there's that little bit of separation as well. And staff work very, very hard to find that balance between allowing them to have their independence … and provide the support that's needed. So, I think it's a perfect situation, yeah. (CMO manager*)*

Some locations had open access at all hours while others had locked gates or doors that could only be opened by staff after hours. Consumers said that, though they found some of the restrictions difficult, they saw the housing, support and more freedom relative to hospital (or other institution) as a positive trade-off:

> I love it. I love this apartment. I love living here. I don't care that it's surveillance in here and there's 24 hour staff down there. We've got our freedom. We can go out whenever we like. (Consumer)

Rules about having visitors varied between locations, resulting in different consumer experiences:

> You can go when you want; you can come back when you want. You can have people stay over if you like. So, that's all the good things. (Consumer)

> The only thing I don't like about it is I can't have people inside my unit. Like, I can't have friends come and visit. … That really upsets me. (Consumer)

Forensic consumers were often subject to more restrictions due to conditions of their forensic orders:

> We've got an alarm system, we've got sensors for [forensic consumers] … This gets turned on at night time, so if [they] walks out of [their] door... It's not to say that [they] can't do it, [they're] allowed to do that, it's just to make sure that we're aware of that. (CMO)

Sometimes these restrictions were applied to both forensic and non-forensic consumers at that site. This indicates further discussion may be needed about how to implement rules about curfews and visitors according to the needs of the people living in the house. This includes considering how to maintain each tenant's rights to freedom and autonomy, including people with high support needs:

> We have a policy here that it's an alcohol and drug-free environment; and we do our best to maintain that, but there are some tenants that would like to be able to have a drink, which isn't illegal, in the community. But because there's others that are under forensic orders and things, and can't drink, it's that, "What is fair?" You know, finding that balance. It's always tricky. (CMO)

A few staff and consumers raised tensions between providing support and allowing the consumer dignity of risk:

> If we've got a tenant that is high and complex needs, … and [they] … walk in front of traffic when [they're] out there on [their] own. We can't lock the gate because that's considered a restrictive practice … (CMO staff)

4.2.3 Neighbourhood location

Consumers and CMOs said how important the area where the HASI Plus housing was located for consumers to feel safe in and around their housing:

> It's in a good neighbourhood. It's a safe neighbourhood. (Consumer)

Most locations had good access to public transport. CMOs supported consumers to work towards independent travel. At a location with less access to public transport, staff appeared to be more likely to drive consumers to and from town. This may enable community access but may also have drawbacks for gaining independence:

> So the … staff transport the participants to whatever the appointment it may be, to shopping, to basically everything. [The consumers will then not become] independent in catching public transport whatsoever. (LHD)

At this location, one consumer considered buying a scooter to improve their independence and do more activities in the community.

4.3 Support to consumers

This section reports on the interview and focus group participants' views and experiences of the support provided in HASI Plus. It is divided into sub-sections based on the following aspects of support, which refer to the evaluation questions and the intended program setup, **Appendices 4** and **5**:

- Support hours and services
- Psychosocial supports
- Mental health clinical support
- Physical health support
- Support planning
- Integration with other funding sources
- Support for different consumer subgroups.

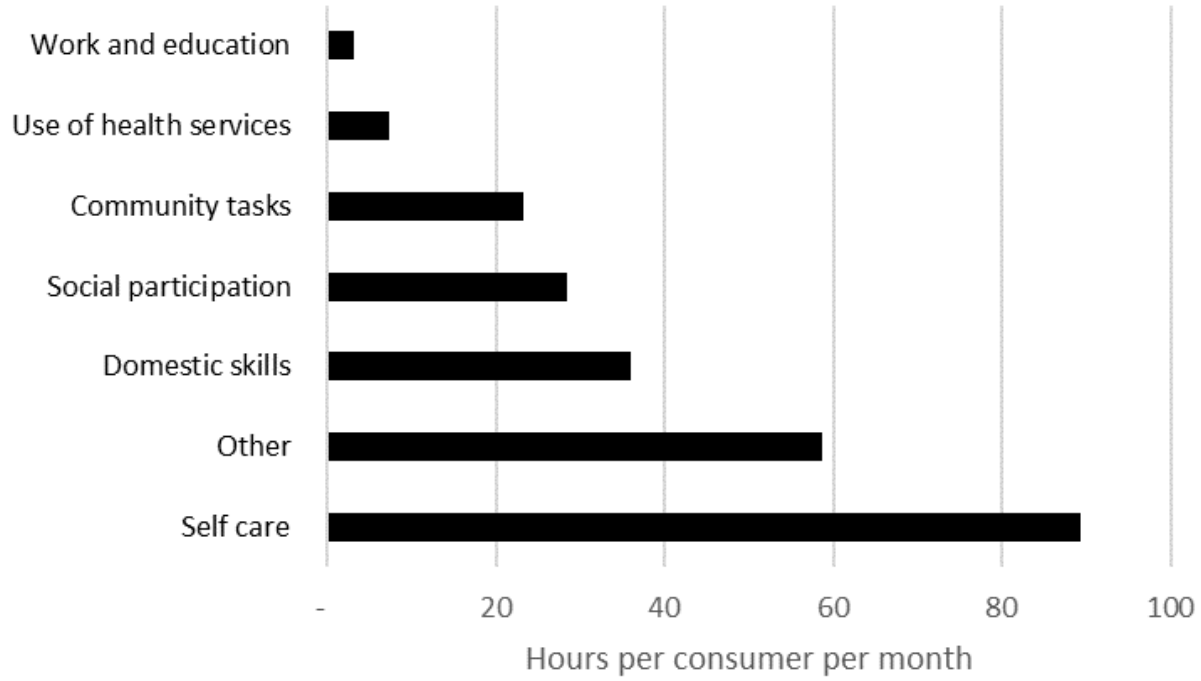
4.3.1 Support hours and services

HASI Plus offers 2 package intensity types of either 16 or 24 hour support. Within these packages, the support hours are flexible over time to respond to the consumers' changing needs.

Data on which types of support were offered, and how many hours of each type of support was collected from the Form 1 and Form 2 MDS and the CL MDS V2. The reporting of support hours changed between the 2 collection types and the data is therefore not directly comparable. The Form 1 and Form 2 MDS forms collection

reported direct support hours for 72 consumers, **Figure 3**.[16] In the Form 1 and Form 2 MDS, support types were exclusive of each other.

Figure 3: Average hours by support type per consumer per month – direct support



Source: HASI Plus Form 1 and Form 2 MDS collection to April 2019, n=72.
Notes: Forms data were reported quarterly and were converted to hours per month.

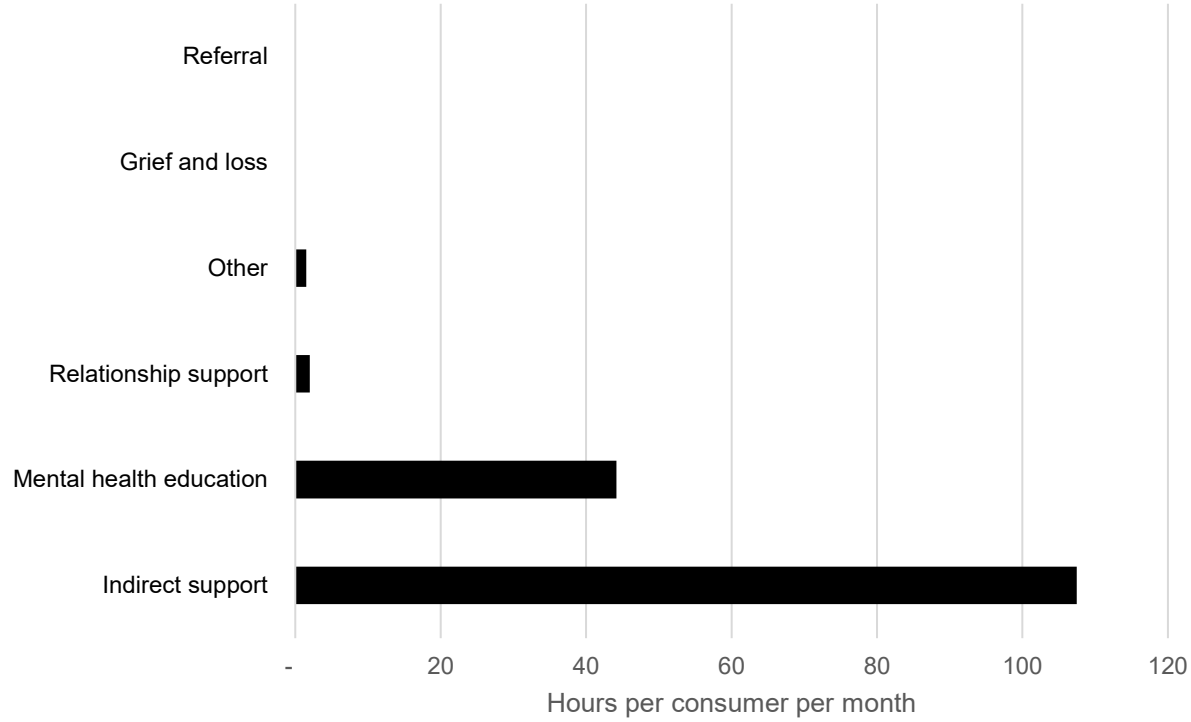
The highest average support hours were for self-care (89.3 hours), other[17] (58.7 hours) and domestic skills (36.1 hours). The types and total hours of direct support varied over time at around 280 hours per consumer per month, or around 9 hours per day.[18]

The Form 1 and Form 2 MDS separately collected the total number of support hours for indirect support, for example advocacy.[19] Separate hours were also reported for 'additional' support provided to family and consumers' support networks, **Figure 4**.

[16] The Form 1 and Form 2 notes that direct support hours are totals per period.
[17] 'Other' is as reported in the forms collection and is not broken down further.
[18] Support hours are based on average hours reported quarterly across the 2 package intensity types. The data include variation for partial quarters when consumers may have entered or exited the program or been in hospital during a reporting period. Support types include active activities and do not articulate support further, for example, overnight hours for 24 hour packages.
[19] Indirect support hours are a separate item on the Form 1 and Form 2 MDS collection, question 13 on Form 2.

The total hours reported for indirect support were 107.5 hours per consumer per month. The 'additional' support was mostly mental health education (44.2 hours per consumer per month), including education for mental and physical health, such as drug and alcohol support.[20]

Figure 4: Average hours by support type per consumer per month – indirect and additional support



Source: HASI Plus Form 1 and Form 2 MDS collection to April 2019, n=72.
Notes: Form 1 and Form 2 data were reported quarterly and converted to hours per month. Indirect support based on a separate question.

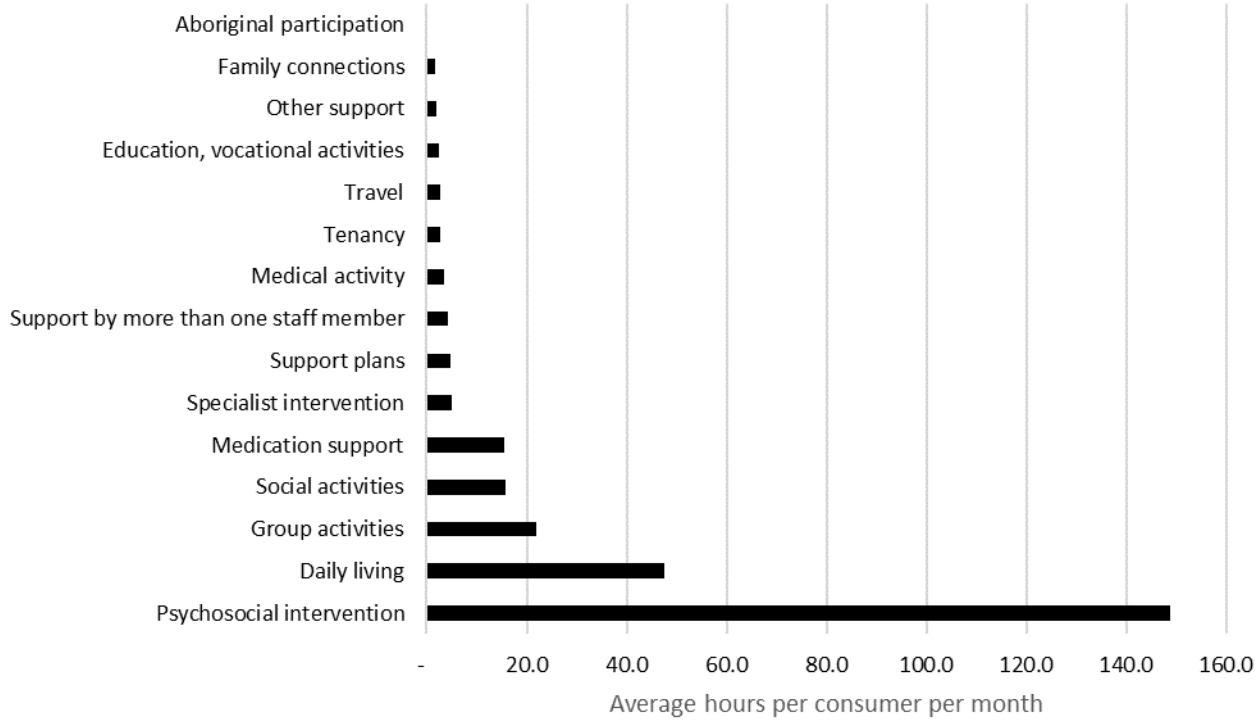
The types and hours of indirect and additional support also varied over time at around 155 hours per consumer per month or around 5 hours per day. This indicates combined direct and indirect total support of around 437 hours per consumer per month, or around 14 hours per day.

From May 2019, when the CL MDS V2 commenced, additional support type data were reported for 53 consumers, **Figure 5**. Consumers received (on average and across the 2 package intensity types), about 8 hours of direct support per day or 248

[20] The number of 'additional support hours' are separately reported in the Form 1 and Form 2 MDS collection, question 14, Form 2. 'Indirect' and 'additional' items are presented in Figure 4 but are not breakdowns of the same data item.

hours of direct support per month.[21] Most support hours were psychosocial intervention not reported elsewhere (148.8 hours per consumer per month) and daily living support (47.6 hours per consumer per month). Group activity support made up an average of 22 hours per consumer per month, and social activities and medication support were about 16 hours per consumer per month each.

Figure 5: Average hours by support type per consumer per month



Source: HASI Plus CL MDS V2 from May 2019 to September 2019, n=53.
Notes: Most consumers remained in the program following transition to the new CL MDS V2 reporting in May 2019 (29 of 53) and are also reported in the previous Form 1 and Form 2 MDS data collection.

The types of support reported through CL MDS V2 from May 2019 increased and are not directly comparable to the Form 1 and Form 2 collection.[22]

[21] The study group sample was not complete and provides aggregate figures across 16 and 24 hour package consumers
[22] CL MDS V2 implemented monthly reporting rather than quarterly reporting.

4.3.2 Psychosocial support

HASI Plus aims to provide consumers a range of psychosocial supports, so they can build independence in daily life and experience mental health recovery.

Many consumers reported that just knowing support was there helped them transition to more independent living:

> If I ever have a problem, I always consult with the staff, the HASI Plus staff. I feel that's always available to me, and yeah. … So, it's not necessarily the different types of support but that there's somebody there. (Consumer)

Some consumers said it was important that they could access support at night and some consumers reported that this had helped them in a crisis. Many others had not accessed the night staff but said that knowing they could do so had kept them from getting to crisis level.

Apart from being available when consumers needed them, staff gave practical psychosocial support. Examples were transport training, workshops, shopping, support to attend training or access supported work, **Section 5.3**:

> I needed to buy a tempered glass screen protector for my mobile phone with a case. So, I went with [CMO staff], with one of the workers here on Saturday afternoon at [location] and we could solve the problem in 10 minutes. I really get unwell when I go to big shopping centres. Yeah. It was good to have her because I couldn't have done it on my own. (Consumer)

Consumers also appreciated that CMOs encouraged them to set and achieve their goals towards more independent living, learning new skills or developing new interests:

> I've learned to cook … nearly 20 different meals and stuff like that. (Consumer)

> They take us fishing on the weekend, that's what I like now, fishing. (Consumer)

CMOs said the flexibility of support that they could offer consumers improved their practice:

> The fact that you have between 16 and 24 hours face to face available to [consumers], depending on the size of what they call the package, I think is very good, because it offers us flexibility. There are times when some people require a full-on 8 hours' support. And there are some times, where somebody might, on the odd occasion, only require an hour. But you need to have it

> there, because each one, at one point or another, requires intensive work. (CMO)

All locations offered some group activities. Staff saw these as a way of assisting consumers to socialise in a safe environment. Some locations had a process to involve consumers in choosing group activities. By the second round of data collection, consumers appeared more engaged and reported that the types of activities now offered were more meaningful to them.

The fieldwork data identified some tension between what psychosocial support consumers wanted and what CMOs thought was in the best interests of the consumer. Examples of this tension included differences of opinion on physical health goals and support (**Section 4.3.4**), how tidy or clean consumer spaces should be, and how much consumers should engage with the program. Some staff suggested that more one-to-one work with consumers would help with their engagement. At the same time, they also said they were limited both by the willingness of some consumers to interact and by time and resource constraints.

Some locations managed the tension by setting rules, for example: restricted after-hour access, curfews, dedicated smoking areas, no-alcohol policies, no visitors in consumer spaces, **Section 4.2.2**. There is opportunity for more discussion and problem solving, both within and among CMOs, with LHDs and the Ministry, to develop strategies to keep consumers safe without unduly limiting their autonomy of freedom and movement.

The definition of participation in the program and the level of participation required of consumers was not clear and varied across locations. Some consumers said that the activities offered were not relevant or interesting to them or that they did not feel comfortable joining in. Some said they knew the support was there if they needed it and would engage with it then. Consumers and CMOs reported that limited engagement of some consumers in the program was because of the consumers' lack of confidence to interact socially and feeling safer in their own rooms. Some staff believed consumers should be compelled to engage in the program, for example:

> I think there should be some kind of standard overall thing that people should be kind of involved in it a little bit more. If they want to sleep in, if they want to go to the shops, that is completely recovery orientated, they are able to do what they want, but we just don't want them to … withdraw completely … So, I think that somewhere in that contract, there should be, you know, "Must participate in 3 activities a week." Or, you know, "Must come out on an outing." … or, you know, they have to engage in some kind of support, even if it's not group activities, engage in some kind of one-on-one support. (CMO staff)

Staff questioned whether the assessment process during referral always accurately established the consumer's capacity to engage with the program. Limited consumer engagement may also indicate that CMOs are not always able to offer adequate support to consumers, **Section 4.6**.

Some CMOs included a condition in the tenancy agreements for consumers that they are required to participate in activities and support. It was unclear whether this had been, or could be, legally enforced.

4.3.3 Mental health clinical support

The HASI Plus service model requires a specialist mental health clinician as a lead position in both the CMO and LHD. This effectively means a maximum consumer to clinician ratio of 10:1, or in other words up to 10 consumers per clinician.

The CMO clinician must have:

- tertiary qualifications as a Registered Nurse, Social Worker, Occupational Therapist or Psychologist
- current unrestricted registration with the Australian Health Practitioners Regulation Agency; and
- specialist mental health skills and experience working with the HASI Plus target cohort.

The LHD clinician has to be similarly skilled and at least be at clinical nurse consultant level 2, year 2 level of experience.

Across all locations, mental health clinical support appeared to be an effective aspect of HASI Plus. CMOs reported that they worked well with LHD Community Mental Health services to improve the consumers' wellbeing. One CMO had a formal connection with the LHD Community Mental Health service, where the LHD clinician worked at the HASI Plus location at least once a week.

CMOs described elements of mental health clinical support, for example one-on-one support when consumers had difficult thoughts and anxiety on a particular day. Consumers appreciated support to take their medication. Many showed satisfaction and pride when they described the staged support staff were offering to help them work towards taking their medication by themselves:

> [Staff are] supervising my meds of a night. Just recently, last 2 weeks ago, I got permission to do my own of a morning. (Consumer)

> I now get my own access to my own medication. I won't touch it without staff being there, but yeah, all my own keys to my safe, now. (Consumer)
>
> At this stage of my journey with HASI Plus, I am even able to take my medication by myself now. (Consumer)

4.3.4 Physical health support

A key aim of HASI Plus is for consumers to improve and maintain their physical health. Generally, CMOs and LHDs noted that many consumers had a range of physical health issues. This included chronic conditions resulting from smoking and diet and from medication. CMOs and LHDs were concerned about the impact of the physical health of consumers on achieving recovery goals:

> I know it's a mental health program, but we tend to be looking at the person from top to bottom. The mental health side of it is only one part of it, but the physical health is just as important, so we spend a lot of time seeing GPs and doctors. (CMO).
>
> Obesity is very common amongst the people here. Metabolic disorders, because of the medications they're on. There's a number of smokers here with chest conditions; they're on inhalers. Cholesterol, blood pressure. A lot of health issues, yeah. (CMO)
>
> I didn't realise how many people have kind of sleep disorders. Incontinence has been a really big issue. I had no idea that incontinence was such an issue for people … And obviously with medications, and smoking, and diet … metabolic syndrome is really high. So we're trying to manage diabetes … So I think the consumers of HASI Plus are very complex. We've had a number of consumers who have an intellectual disability or have low IQ, so that impacts them taking care of themselves. (LHD)

Staff had noticed a decline in some consumers' physical health since entering HASI Plus. They attributed this to less healthy food choices and consumers' limited knowledge of how to buy and cook healthy food. This appeared to be an issue across locations. CMOs were trying different approaches to address this, including cooking classes and supported shopping to inform consumers how to recognise healthy choices:

> We support people with shopping, and the purpose behind that is not just to give them a ride but also to help them make some healthy choices around their dietary intake. So maybe just kind of try to steer them away from sweets and things like that, for instance, and explore new vegetables, you know, within reason. Sometimes that works and sometimes it doesn't. (CMO staff)

CMOs also offered equipment and programs to promote exercise and healthy lifestyle – for example walks, free or subsidised gym membership and exercise equipment on site. The clinicians talked to consumers about healthy choices and consequences of less healthy choices. At least one of these clinicians also cooked healthy meals with consumers.

At the time of the second round of interviews, one location had contracted an exercise physiologist for one year to facilitate healthy behaviour choices with the consumers. This role was in its early stages, building rapport with the residents and exploring what each consumer found important for themselves. At that time, staff and consumers made positive comments about the importance and impact of this role.

Despite these attempts, several staff in both rounds of interviews expressed frustration about their ability to change consumers' habits to smoke, drink alcohol and eat unhealthy food. Some staff were concerned that their support was enabling poor health choices, for example when they supported consumers to do their shopping:

> Just being able to have more of a say into what consumers can and can't do. But because we're recovery-oriented, which is the nature of the program, it kind of… I feel like that recovery is just taken a bit too literally. It's like, if you see a consumer going downhill because all they're spending their money on is cigarettes and fast food … They want us to be able to help these people but we're not able, because the program doesn't allow us to do certain things. It's just frustrating. (CMO staff)

As with providing effective psychosocial support (**Section 4.3.2**), there is opportunity for more discussion and problem-solving within and among program partners, to develop effective strategies to provide physical health support to consumers while respecting their lifestyle choices.

4.3.5 Support planning

When consumers enter HASI Plus, CMOs are required to develop individualised support plans with each consumer. This includes developing goals, timelines, risk management and responsibilities, and updating them regularly.

Program data (from Form 1 and Form 2 and CL MDS V2) showed that 89 of 90 consumers had an individual support plan in place at program entry.[23] Plans were regularly reviewed and updated when needed. According to the Form 1 and Form 2

[23] One record from Form 1 and Form 2 MDS reporting had incomplete data. It is likely that all consumers have a support plan.

data collection, most consumers also had a collaborative care plan with other support services (91.7%) and a risk management and safety plan (90.3%).

Consumers and CMOs gave examples of how support planning was tailored to the consumers' choices, both daily and longer term. This included support in goal setting, offering flexible activities and organising tenant meetings:

> They ask your goals, the goals I want in the future. (Consumer)

> Every month they ask, "What would you like to see happen?" Or, "What activities do you want?" So, the activities we have are the choice of the consumers, I could honestly say, to a big degree. (Consumer)

> It's pretty much up to you as to where you want to go when they take you for drives. (Consumer)

> They don't tell you to go to activities. It's like a leisurely pace and you can go at your own pace so to speak, which is the best thing of all, and they don't even make you feel bad about it. You can sleep in if you like, and you can get up early if you want. (Consumer)

> …We have things like tenant meetings, where they come down once a month, they talk about what activities they want, what dine-out; you know, they have choices, and that. It started off with us encouraging people to come, running the meetings, and it's progressed to one of the tenants each month chairing that meeting themselves, and basically just talking about what they want to talk about, not us saying, "There's problems with this, this, and this." It's now their meeting, and they own it. (CMO)

CMOs said they worked with consumers to set goals relevant to the consumer's needs. CMOs reported that individual support plans included working towards more independence in life skills such as cleaning, self-care, shopping and cooking. Many staff said that goal setting and ability to choose improved consumer self-esteem:

> For some of these people, for the first time in a very long time, they're given choice, but they're also given an opportunity to kind of plan and implement different kinds of ways to – how they want to manage their life, with some structure. (CMO staff)

A few consumers however did not feel they had much choice. This was possibly because they were not aware of the extent of choice and freedom available, or they did not specify in the interview which aspect of their lives they were referring to:

> Well, you can't debate it with them. Once they make up their minds, that's it. I don't think you even have a choice. (Consumer)

Some consumers were not sure about what was in their support plan or whether they had one, and consequently appeared not to be attached to the goals in their plans.

4.3.6 Integration with other funding sources

The interviews indicate that the NDIS was the main source of complementary supports for HASI Plus consumers. CL MDS V2 data showed that in 2019 more than 70% of HASI Plus consumers for whom data were available had submitted an NDIS application form. Most of those (35 consumers, or 66% of the total 53) had an NDIS plan in place, **Table 11**.

Table 11: Consumers' NDIS eligibility and access

NDIS category	Consumers	%
Total number of HASI Plus consumers	53	
Submitted an NDIS Access Request Form	38	71.7%
Eligible for NDIS	35	66.0%
Among those eligible for NDIS:		
Approved NDIS Plan in Place[1]	35	100.0%
NDIS support coordination funded[2]	33	94.3%
Received NDIS funded services[3]	31	88.6%

Source: HASI Plus CL MDS V2 May to Sept 2019, n=53. One consumer excluded due to missing data.
Notes: 1 Mandatory response if consumer submitted an NDIS Request Form.
2 Does the consumer have support coordination funded in their NDIS plan?
3 Has the consumer received funded support through the NDIS in the reporting month?

Few consumers commented on any NDIS support they were receiving. Those who did were generally appreciative:

> HASI takes me to appointments, shopping and all that. But the NDIS just takes me out for the day. (Consumer)

Most CMOs felt having NDIS funded supports helped to transition consumers out of HASI Plus, **Section 4.1.4**.

Staff in many locations said they would like more formal arrangements with local NDIS providers about what types of support each program offered. One CMO had set up such an agreement with local NDIS providers.

The exit report analysis provided by the Ministry offers examples of how HASI Plus and the NDIS worked well together, such as:

> The consumer transitioned to the HASI Plus program from an inpatient unit through a period of trial leave. During the trial leave period HASI staff were concerned that the consumer did not have the living skills and would require additional support. An NDIS provider was engaged to support the consumer in areas that were outside of HASI Plus' scope. After 7 months the consumer transitioned completely into HASI Plus with outreach clinical support and NDIS support.

Overall, there were some differences across sites in the types of support HASI Plus consumers were accessing through their NDIS packages. In some sites, NDIS funded supports were assisting consumers with their personal care, such as showering or cleaning. In other sites, there was a stronger emphasis on ensuring that NDIS support was different to the support that could be offered by the HASI Plus program. At these sites, NDIS plans primarily offered one-on-one support for consumers to engage in the local community or access specific services, such as psychological services. The supports were successfully coordinated mainly through CMO staff involvement in the NDIS planning process and this process was more evident in the second round of fieldwork.

Some CMOs expressed concern that NDIS funded supports could reduce independence by doing tasks for consumers that they could do for themselves, for example cleaning and transport. CMOs believed that the quality and effectiveness of NDIS support depended on the specific National Disability Insurance Agency (NDIA) planners and NDIS providers and their level of understanding of severe mental illness and recovery:

> There's a lack of knowledge in the NDIA, around mental health. … I guess the [NDIS] is growing so fast … it's going to be some years before [it] settles down to being, you know, a standard model ... (CMO manager)

4.3.7 Support for cultural, linguistic and religious preferences

Consumer diversity was lower than in the general population for cultural and language background. Age of consumers was skewed towards the middle age groups, with fewer consumers in the youngest and oldest age groups than in the general population, **Section 3.3**.

A few consumers in the fieldwork locations identified as Aboriginal or were from a culturally and linguistically diverse (CALD) background. Most consumers interviewed reported that the program was open to everyone and that they did not feel there was any form of discrimination:

> Yeah. All backgrounds and different mental illness from hospitals. I really recommend they stay with the HASI place as long as you can because it's just good and works. (Consumer)

> Well, I have my own beliefs and they don't judge me for it or anything, spiritual I suppose. (Consumer)

CMO staff and managers said that individualised plans and 'fairness' in their approach removed the need to cater for specific subgroups. Across locations, CMOs stated that "we are accepting of everyone", "treat everyone the same".

Many staff felt the cultural diversity of staff themselves informed the cultural competency of the service. Some said that the CMOs offered cultural competency training. While most staff appeared not to have noticed the limited cultural and ethnic diversity among consumers, at least one staff member talked about invisibility of Aboriginal cultures in HASI Plus:

> On a personal level, I don't think that it's there for the people, in terms of family and interaction with that instance, kind of thing, and particularly for Aboriginal people. … I can understand that taking people away from culture and community – and there is someone here who is Aboriginal and acknowledges that they're away from country, and it's very hard to get them to engage in a program where they're not feeling culturally accepted, and [to make it] culturally appropriate in some other location, off-country. (CMO staff)

Overall, there appeared to be little variation in activity, cultural allowance or ways of working with consumers according to their backgrounds or cultural preferences. One CMO reported that a consumer was regularly taken to Sunday service at their chosen church. There is opportunity to strengthen the recovery-orientated approach by including a greater focus on asking consumers and their cultural communities, preferences and connections and strengthening culturally responsive practices.

4.4 Family involvement

The HASI Plus service model recognises the importance of carers and family members to the wellbeing and recovery process for consumers. Quantitative data about family and carer involvement were only available from the CL MDS V2 data set. In the 5 months of available CL MDS V2 data in 2019, about 85% of consumers had family or carer contact at least once and about 60% of consumers had ongoing family or carer involvement.

However, in contrast to the data, CMOs reported that most HASI Plus consumers had lost connections with their families. They either did not have family, or past trauma had severed connections, or connection might not be in the consumer's best

interest. Therefore, CMO staff reported that it was difficult for CMOs to meet the program intention that family members are included in decision making.

CMOs saw family connections as important and had assisted some consumers to reconnect with families where appropriate. This was easier where families lived close by.

CMOs had the impression that families who were engaged with the consumers were satisfied with the service and program. Those family members who took part in the interviews felt that their loved ones were well looked after, and they were hopeful about their loved one's future:

> [The staff] like to include [consumer name] in all the things that are going on there, and [they] enjoy the gardening and … the kick-boxing for exercise. They take [them] shopping once a fortnight and they really keep a good eye on [them]. (Family member)

Family members also said that they had seen significant improvement in their loved one's health, level of independence and/or outlook on life:

> If you look at when he first arrived there, he was very withdrawn and there were a lot of – he was very withdrawn and not functioning well in the community and now he is – I mean, it's been small progress but the progress over time has been amazing in the 2 years, that he now gets out of bed. (Family member)

One family member also spoke about how HASI Plus staff supported the consumer's interests:

> That's been really good, [that staff help the consumer to pursue their interest] ... that [the consumer] can continue with [their interest] like that. (Family member)

Family members also said that HASI Plus had lessened their worry for their loved ones:

> It's just been wonderful for my husband and I to have [them] there, because we've had a long struggle with [consumer name] over the years. Now my husband is [older] .... There's just no way I can have [them] live with us anymore. So, it's a big relief for us to have them there with [service name]. We're terribly grateful for everything they do for [them]. (Family member)
>
> It's helped him become more independent, definitely, and I'm not as fearful as I was about what would happen to [consumer name], because he's monitored, and he's looked after. … He's secure and comfortable with the staff, and has

> his routines, and … he's quite motivated to be productive, and to do things. … I'm happy with the [HASI Plus location] and all they do. (Family member)

Some staff suggested family engagement could be improved with more focus on activities and processes to engage families, for example community days and news flyers. Other staff were concerned that such initiatives could risk re-traumatising consumers who did not have contact with their families or had negative past experiences with them.

4.5 Program partnerships

The core of the HASI Plus service model is the formal, service-level agreed integrated partnership between LHDs and CMOs. LHDs, CMOs and stakeholders also gave various examples of formal and informal partnerships with other organisations both government and non-government. Partnerships to support independence and social inclusion included: local TAFE, other mental health services (day programs), disability services and Aboriginal and culturally and linguistically diverse networks. Partnerships within the same organisation to support transition included day programs in the community and post transition support as outlined above (**Section 4.1.4**).

Most CMOs said they had a good relationship with the LHD, especially with the Community Mental Health Service, as both were working directly with consumers:

> We have a very good relationship with supported recovery, mental health team. We will see their supported staff recovery team at least once a week. If there's an issue with any of our clients and they are declining in their mental health, we will contact the mental health team straight away. And then so we have an assessment done straight away with the mental health team. If it's seen that the client will need to go to the hospital, then that can be put into place straight away. We wouldn't let people continue without contacting other support needs. Like, we're not a medical model so we have a good relationship with our partners. (CMO staff)

Some CMOs reported that information access and exchange between LHD services and CMOs could be improved. For example, they reported that at one time a HASI Plus consumer did not come home at the expected time and was reported missing. Later it was confirmed that they have been admitted to the local mental health unit and, although the person was known to be a HASI Plus consumer, the LHD had not advised the HASI Plus service.

Partnerships with other NSW Government agencies, particularly Justice Health, Corrective Services NSW and the Department of Communities and Justice,

appeared to differ between the sites and could, overall, be improved, see **Sections 4.1.4** and **4.6**.

4.6 Referral processes

People enter HASI Plus if they are assessed as satisfying the program eligibility criteria and assessed as being suitable[24], **Appendix 5**.

During the evaluation period, the referral and intake process for HASI Plus changed. Between 2013 and 2015, the NSW Chief Psychiatrist within the Ministry assessed eligibility for the program. Between 2015 and 2017, the Ministry chaired a centralised, statewide review committee. The Committee comprised the following representatives: NSW Chief Psychiatrist, Ministry of Health (Chair); Ministry of Health; host LHD; rural and regional LHD; Justice Health.

In 2017, the NSW Chief Psychiatrist recommended devolving the responsibility for referral and intake to local assessment committees in each of the host LHDs. As such, determining eligibility or suitability for the program is now managed at the local level.

4.6.1 Referral sources

According to the Form 1 and Form 2 data set, the primary referral source to HASI Plus between 2013 and April 2019 was public mental health services (43 consumers, or 77%, **Table 12**). Fewer consumers were referred from public health services (7 consumers) and other referral sources (6 consumers). Other referral sources were aggregated where less than 5 consumers were referred, to protect confidentiality. ‘Other’ includes other government department, Justice Health – Forensic, non-government organisation (NGO), other HASI provider and Primary Health Network (PHN) funded service.

[24] The suitability assessment is a process of determining whether the accommodation and support model available in the area will be suitable for someone who is eligible for the program. Suitability assessment is typically done in-person or via telehealth by the specialist HASI Plus clinicians from the host LHD and CMO (and may be combined with an eligibility assessment, depending on local process).

Table 12: HASI Plus source of consumer referrals – combined statewide and local packages

Source of referrals[1]	Form 1 and Form 2		CL MDS V2	
	Consumers	%	Consumers	%
Public mental health service[2]	43	76.8%		0.0%
Public Community Mental Health Services			8	44.4%
Public health service[2]	7	12.5%		
Public Inpatient Mental Health Services			5	27.8%
Other[3]	6	10.7%	5	27.8%
Total	56	100.0%	18	100.0%

Source: Form 1 and Form 2 collection to April 2019 and CL MDS V2 from May to September 2019, n=74. Sixteen consumers excluded due to missing data.
Notes: 1 Referral source reporting options and definitions changed between the Form 1 and Form 2 collection and CL MDS V2 and are not directly comparable.
2 These categories are from the Form 1 and Form 2 collection and no further details are available.
3 'Other' category across both data sets includes other CMO, other government department, PHN service and Justice Health. It is combined for confidentiality reasons.

Referral sources – statewide packages

Of the 60 HASI Plus packages available during the evaluation period, 34 (57%) were designated 'state-wide' packages and were only available to referrals from all non-host LHDs, JH&FMHN and Corrective Services NSW (via JH&FMHN).

Based on consumers entering the program under a forensic order at least one third (34%) of the state-wide packages were accessed by forensic consumers, **Section 3.4**. Due to missing data and limited CL MDS V2 data submitted from May 2019 to September 2019, it is likely the number of forensic consumers accessing the program is higher in line with the proportion of statewide packages allocated (over 50%).[25]

[25] There was no reliable way of quantifying the referral sources for the statewide packages using the Form 1 and Form 2 data set available from 2013 to April 2019.

4.6.2 Referral experience - providers

Consumers' experiences with referral processes into HASI Plus were explored in Section **4.1.2**. This section looks at LHD, CMO and stakeholder experiences. Overall, most CMO and LHD staff seemed satisfied with the referral process and its outcomes:

> The referral documentation is very thorough, which is awesome. And the assessment process, I think you see, is very, very good as well. (CMO manager)

Some CMO staff felt that not all referrals into the program were appropriate. They felt either the consumer did not engage sufficiently with the program, or the consumer appeared to have higher or different support needs (for example, high physical health needs or high level of supervision needs):

> I think everyone has got a ton of potential but they have to accept support and they have to accept that there's things in this program that they're going to work on personally, that we're here to help them, you know, because if they don't … there's no progress and we're not helping people with anything because we sort of can't. (CMO staff)

These comments indicate that there may be some opportunities to improve the referral process and program support. A few criteria are outside the scope of CMO staff, for example, the suitability of the HASI Plus housing, compatibility with other consumers, and mandated specific living arrangements for consumers on forensic orders. However, other suitability factors could possibly be resolved with appropriate support. This includes instances where CMO staff feel they cannot engage with the consumer sufficiently or cannot support the consumer's needs. Such barriers could possibly be resolved, for example by examining CMO approaches to recovery or by modifying resources for support.

Some CMOs said they often did not receive enough information from the referring service to make a good decision about whether to accept the referral or to know what supports a person might need:

> I don't feel that we get adequate handover from hospitals as well. I think that's a much bigger issue … I don't always think that we're given enough information to make that evaluation correctly. (CMO)

This might vary from one location to another, depending on the level of local collaboration between CMOs and LHDs. A few CMOs said referrals were more successful when consumers came from a host LHD service that had strong formal or informal understandings with the CMO:

> I think the big thing with the referrals is the networks and the relationships with where the majority of those referrals are coming from. Luckily for me, that's often [mental health facility close by]. So, they know who's in here, and how many packages we've got ... So, I think the process is very, very good, very smooth. (CMO manager)

CMO frontline staff said that they did not have much involvement in the referral process. A few staff suggested that having more involvement might be helpful in assessing suitability, for example, how well a potential consumer would fit with the program and the current residents.

Some CMO staff suggested that the transition into HASI Plus could be seen as a trial period to assess the consumer's suitability for the program, including if they would be a good fit for the program and site. However, according to staff, transition was currently focused on the program's suitability for the consumer, for example, is this somewhere the consumer would like to live.

LHDs, CMOs and some stakeholders also spoke about issues with referrals from the JH&FMHN. The interview findings suggest that partnerships between the JH&FMHN and program stakeholders were not functioning as intended in the program design, which has resulted in few custodial referrals into the program. The main reasons identified related to timing of referrals and eligibility criteria. Both CMOs and justice stakeholders said that timing was difficult as people released from corrections facilities needed an immediate placement, which meant there was no opportunity for a gradual transition into HASI Plus. There was also often very little notice for CMOs from the date of referral to the person's release date:

> I think Corrections people, we don't see a lot of referrals from there … [partly] because of how the corrections system operates in that you're incarcerated, I suppose, for two years, but anywhere in there you might be able to be paroled. You don't know when that's going to be approved to be able to pre plan, so you're getting short-notice referrals that by the time they go through the process … that person has already been paroled and gone. (CMO manager)

> In custody we hardly can organise a visit from HASI Plus to come and see our patients and it's not like in a hospital where they can go … and come back and slowly transition into the HASI Plus program, for us it's the court date or parole date comes, the jail doors open and they have to leave, and they often leave without proper clothes in their prison greens. (Stakeholder)

Justice stakeholders also reported that some elements of the HASI Plus eligibility criteria excluded people for whom HASI Plus may have been a good fit. In particular, people coming from correctional facilities often did not meet the criterion 'frequent and lengthy admission to a mental health facility'.

> With some of our patients they actually don't have that. Most of them their first presentation is in custody and the diagnosis happened in custody. We have people who spend 10 or 15 years in custody and they look very eligible for HASI Plus however they don't meet the criteria. (Stakeholder)

Some CMO staff said their service preferred not to take custodial referrals now that there was no longer a targeted number of places across the state for custodial referrals. Reasons staff cited included unresolved issues with alcohol and other drugs, violent outbursts and being less engaged in support than people who had transitioned from mental health settings:

> That's one of the difficulties of HASI Plus, is that the correctional people … often come with drug and alcohol issues that are current, and it has an impact on the rest of the population here … (CMO staff)

These comments indicate that there may be barriers to people from custody accessing HASI Plus because suitable support is not available in the program for some issues such as alcohol and other drug use. Some stakeholders suggested reintroducing targeted placements:

> Yeah, it was much easier in the beginning… [It would be good to have] more funding for identified packages for Corrective Services. (Stakeholder)

Stakeholders reported that some custodial patients or forensic consumers did not want to move to HASI Plus locations with shared housing. One stakeholder suggested that HASI Plus, or a model similar to HASI Plus, could be offered for an interim period of 6 months for these consumers while they transition into social housing, SIL or private rental (possibly with some support).

Several stakeholders suggested referral pathways would be smoother if referring agencies had more information about the HASI Plus program, the referral process, the eligibility criteria and any vacancies.

> Certainly those that are working in services and programs with offenders in the custodial space, they don't even know how to make the referrals ... being able to identify a clear referral pathway will be a massive improvement.… a one pager or something that can go on our intranet that, you know, identifies what the program does and how [our staff] can make a referral. (Stakeholder)

> Can I just go back to the proposal of a portal of who's in HASI Plus, and sort of the vacancies that are available, or potential vacancies? You could also potentially include … expressions of interest in the program. So then you could capture or collate that information, … and it would be very transparent to everybody what's available and who's waiting. (LHD)

Equity of access for people from diverse cultural backgrounds did not appear to be a priority in the way the referral and selection process operated in practice. Program data showed that people from culturally diverse backgrounds may be underrepresented in HASI Plus, **Section 3.3.3**. There may be opportunities to review the referral and eligibility process to improve access to HASI Plus for people from diverse cultural backgrounds.

4.7 Operations and workforce

Most CMO staff were happy with the operations, management and staffing arrangements at the HASI Plus sites. Some staff reported issues, for example, at a few locations CMO staff were concerned that some practices were not recovery-oriented:

> If you get a [manager] who doesn't even know what restrictive practice is and is inclined to just do things like …take someone's liberties away, then staff will do that. So, it kind of creates not a very good environment. (CMO staff)

Some CMO staff were concerned about the structure of rosters with some reporting long shifts, insufficient breaks between shifts and limited choice about doing day or night shift (even when some staff were willing to do night shift more often). CMO staff felt this impacted on their ability to offer good support as they were tired.

Rostering practices varied across CMOs, with most requiring staff to work a combination of day, evening and night shifts in the interest of 'fairness'. At least one site allowed staff to choose, with some staff only doing days and others only doing night shifts. Staff at this site said that it prevented the tiredness associated with inconsistent sleep patterns and also allowed staff to manage other responsibilities. For example, parents of young children worked only day shifts, while staff who did only night shifts were able to pursue study during the day.

Some CMO staff reported there had been staff cuts, delays in filling vacancies and lack of replacements for sick staff. Staff at one location were concerned there would be further cuts due to CMO requirement for higher staff qualifications.

Some CMO managers said that the Ministry increased program funding in line with the Consumer Price Index (CPI), but that they were not funding Award increases such as the Equal Remuneration Order (ERO). Managers said the ERO wage increases, which occurred twice a year over a period of 3 years, strained CMO budgets. At one location, CMO staff said the roster was restructured to meet these budgetary challenges, leading to redundancies and deteriorating working conditions.

CMO staff were mostly content with the level of training offered by CMOs and felt they were well supported. Some staff wanted more training on working with people

with complex mental health issues. Some staff asked for more information on medications and side effects.

4.8 Reporting

Overall, CMO staff were satisfied with the outcome measures they were collecting routinely as part of HASI Plus service provision. There were some suggestions that questionnaires were repetitive and long and that the data was not always accurate, as instruments were self-administered, and staff felt consumers were not always able to self-rate accurately. Other staff managed this issue by using the tools to facilitate a discussion with consumers. Some suggested to introduce short but validated mental health scales that could be used on a regular basis to measure the consumer's progress in the program.

Consumers were asked about the outcome measures but did not offer a view.

5 Program outcomes for HASI Plus consumers

This section summarises findings about the intended outcomes of HASI Plus for consumers as established in the program logic, **Appendix 2**. The program outcomes discussed here relate to mental health and wellbeing, physical health, social participation, hospital and emergency department use, safe and secure housing after exit from HASI Plus, and reduced criminal offences.

The qualitative interviews and focus groups offered some information about consumer outcomes. Findings from the quantitative Form 1 and Form 2 and CL MDS V2 data and the linked outcomes data are added where available.

The quantitative analysis was limited by the relatively small group of consumers who consented to the data linkage and from the limited data content of the Form 1 and Form 2 MDS collection, **Section 2.3** and **Appendix 3**. The more extensive CL MDS V2 was only available for the final 5 months of the evaluation period. Therefore, many quantitative outcomes did not offer statistically significant results and are presented as indicative only.

5.1 Mental health and wellbeing

Improved mental health and wellbeing for consumers is one of the key outcomes of HASI Plus, **Appendix 2**.

5.1.1 Wellbeing and support needs

Although there is no agreement in the literature on a single definition of wellbeing, it is generally described as the way people feel about themselves and their lives (Giuntoli 2014, 2017). There are many factors in a person’s life that can influence their wellbeing. People’s physical and mental health play a central role in enhancing wellbeing.

In the interviews, consumers said that their wellbeing had improved since starting the HASI Plus program. Being involved in activities, having freedom of choice and having their own place all helped to improve their wellbeing and how they felt about their future:

> I'm happier now than I've ever been. (Consumer)

> Just being around people makes you happy. That's something I never had before was friends. (Consumer)

> Because [where I was before] … it's very poor hygiene, with mops and buckets, and sharing it with someone else. And it's very unhygienic. So, [now] I've got my own mop, my own bucket, just for my own unit, see, yeah. So that's improved the way I'm thinking. Very positive about things, because of my situation, yes. (Consumer)

> Yeah, well, it's made me think a lot more of myself. I'm treated more like an equal. I'm not treated just like I'm mentally incapacitated or unfit to go in the community or anything like that. (Consumer)

Family members also said that HASI Plus had improved the wellbeing of their loved ones:

> Oh, look [the program has] been absolutely marvellous. [Consumer name] has improved out of sight … (Family member)

> [Consumer name] was very, very unstable […] for a good while, you know; but now, [they have] improved, especially the last 2 years, 3 years [since entering HASI Plus]. (Family member)

> [Consumer name] is able to be more independent. … it's great to see [them] coming out of [their] shell and doing things for [themselves] – which is what we all want to do – and making connections with people again and engaging in the world. (Family member)

Most CMO staff also reported that they had seen improvements in the wellbeing of consumers since they entered HASI Plus, as they became more engaged and positive about life, with hope for the future:

> I've seen [consumer name], for example, that you had lunch with today. [They] started off, giving monosyllabic answers to questions ... yes, no. … It got to a point where we weren't sure if [consumer name] was capable of communicating. ... Look at him at the table today. [The consumer conversed with the researchers about current affairs over lunch] (CMO)

> Having access to someone with the ability to provide support through HASI Plus … improves their overall wellbeing because it allows them … social supports to access the community. (CMO)

> Yeah, because they have choices. Because it's a voluntary kind of participation in the program; it's not enforced … over time, I think that their self-esteem improves. (CMO)

Success factors

The fieldwork indicates that the mental health clinical support in HASI Plus was an important reason for improved wellbeing and mental health, **Section 4.3.3**. Most

consumers stressed how important the support was that they received to manage their medication, which in turn helped them manage their mental health.

Staff reported that most consumers were motivated to continue their treatment and medication. This was especially true for forensic consumers, who were required to adhere to certain conditions to remain in HASI Plus. These conditions were outlined in forensic orders issued by the Mental Health Review Tribunal (MHRT).

Consumers, families and CMOs reported the positive impact that participating in HASI Plus had on the mental health of consumers:

> Whenever I have any problems – because I hear voices … and they're out loud – [HASI Plus staff] are very supportive and they give me … medication when that happens.… And they chat with me and make me feel comfortable and ... They're like psychologists, counsellors. Whenever I've got a problem, I just go down there and chat to them. (Consumer)

> Oh look [HASI Plus] has been absolutely marvellous. [Consumer name] has improved out of sight because they give him his medication and he has an injection once a fortnight and this keeps him really well. (Family member)

> I think it supports [mental health] very effectively in that it provides avenues in which they can... they have support to access the community. … Because social interaction is very important when you have a lived experience of a mental illness. Like, it's important to socialise with members of the community and see that you can function as a member of the human society and that sort of stuff, and you're not defined by your mental illness. (CMO manager)

5.1.2 Mental health outcome scores

This section reports mental health outcomes from the Mental Health National Outcomes and Casemix Collection (NOCC) outcome measures (referred to as the NSW Mental Health Outcomes and Assessment Tools (MHOAT) database in NSW). Consumer outcomes were collected through a range of measures, including the Kessler 10 (K10), the Health of the Nation Outcome Scales (HoNOS) and the Life Skills Profile-16 (LSP-16). The findings include consumers who had a measure before and during their time in HASI Plus, to measure change. Due to insufficient sample sizes, the findings did not reach statistical significance.

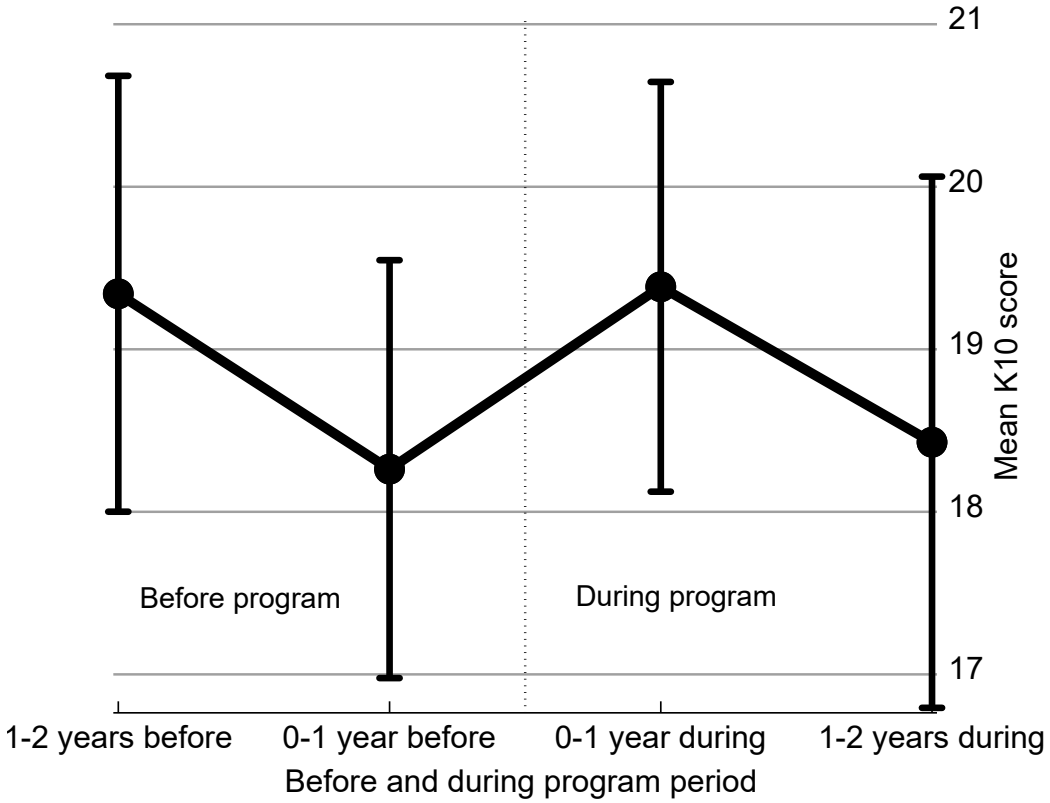
Kessler 10 (K10)

The K10 survey is routinely used in Australia to assess people's psychological distress (Kessler et al., 2003). The K10LM (last month) uses 10 questions and a five-level response scale for each question: one is the minimum score (not experienced

in the last month), and 5 is the maximum score (always experienced in the last month). This has a minimum possible score of 10 and a maximum possible score of 50 (Australian Bureau of Statistics, 2007-08).

Of the 90 HASI Plus consumers who consented to the data linkage, 36 had a K10 score in the year before and the year after program entry. This sample was too small for statistically significant[26] outcomes (p=0.230), **Figure 6**.

Figure 6: Average K10 scores per person



Source: HASI Plus linked MHOAT database, n=36. Notes: Average K10 scores per person per year, before and after program entry with 95% confidence intervals shown as vertical bars.

There were possible issues with the quality of the data, as some results did not seem plausible due to the mental health support needs of the HASI Plus cohort.[27]

[26] See Glossary. A statistically significant result (usually a difference) is a result that is very likely not random.

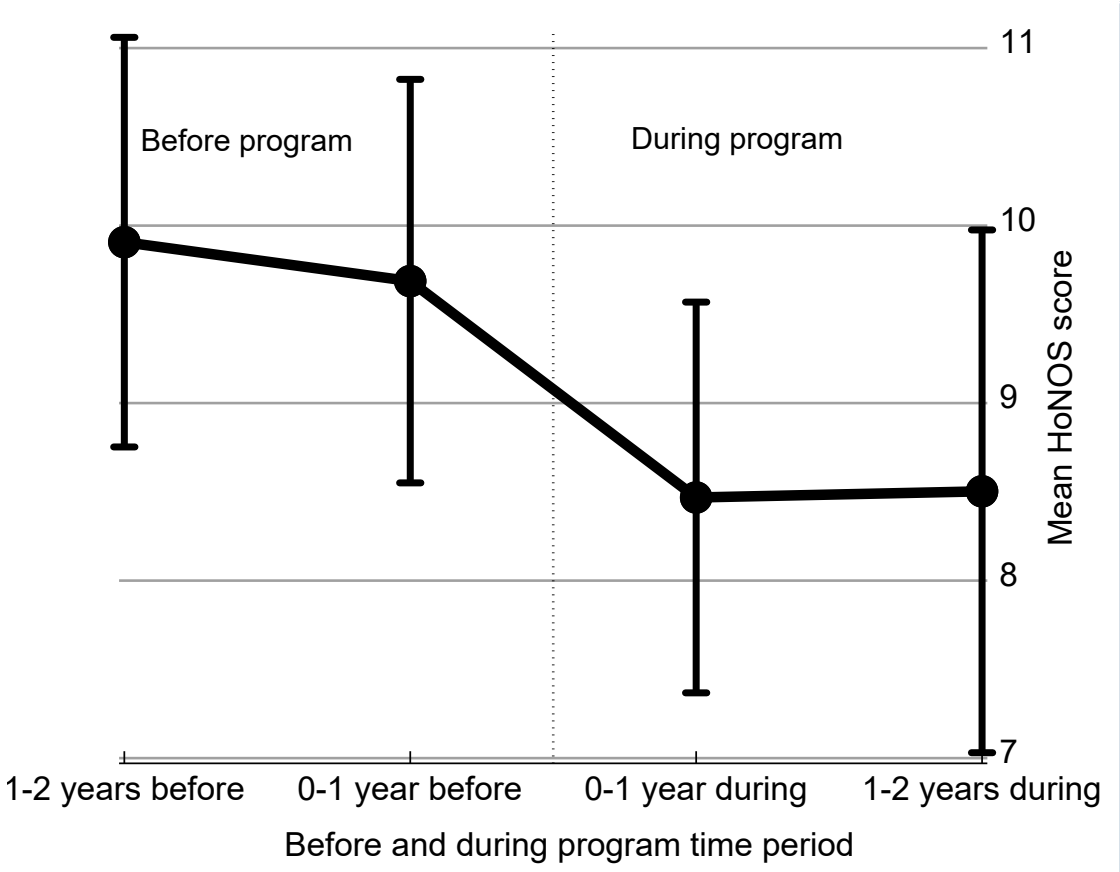
[27] The K10 scores are within a range indicating relatively low levels of psychological distress. Five of the available 36 responses reported the minimum possible score of 10 before and after HASI Plus entry.

Health of the Nation Outcome Scales (HoNOS)

The HoNOS is completed by a clinician. It contains 12 items across 4 domains – behaviour, impairment, symptoms and social functioning. For example, HoNOS asks whether the person has problems with drinking or drug taking or with relationships. Each item has a 5-point scale, where zero means low and 4 means high. Therefore, a higher HoNOS score means a person has been assessed by the clinician as having problems in that domain.

Of the 90 HASI Plus consumers who consented to the data linkage, 32 had a HoNOS score in the year before and the year after program entry. HoNOS scores improved slightly after entering the program and this continued into the second year in the program, **Figure 7**. The results were not statistically significant due to the small study group (p=0.129).

Figure 7: Average HoNOS scores per person



Source: HASI Plus linked MHOAT database, n=32. Notes: Average HoNOS scores per person per year, before and after program entry with 95% confidence intervals shown as vertical bars.

Life Skills Profile-16 (LSP-16)

The LSP-16 is a measure rated by a clinician that assesses social behaviour and self-care. Answers use a four-point scale – 0, 1, 2, 3. Higher scores indicate a higher

degree of functional impairment. A total LSP score has a possible range from 0 to 48. Items with missing data are excluded from the calculation.

Eighteen consumers had an LSP-16 score before and after program entry, **Appendix 6.** The scores did not show statistically significant change due to the small sample size.

Other mental health measures

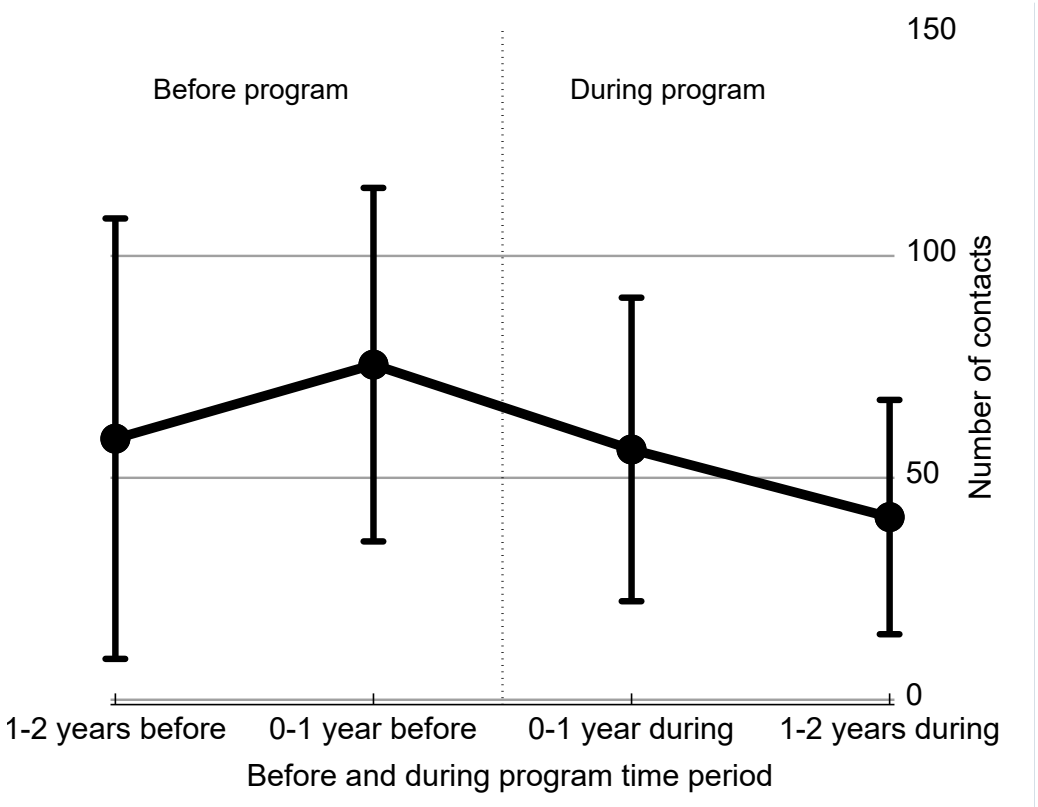
The Camberwell Assessment of Need Short Appraisal Schedule (CANSAS) and the Recovery Assessment Scale – Domains and Stages (RAS-DS) surveys became part of the HASI Plus program data collection with the introduction of the CL MDS V2 in May 2019. As the new data was only available for the final 5 months of the evaluation, there were not enough data to assess change related to the program.

5.1.3 Accessing community mental health services

The Mental Health Ambulatory data set (MH-AMB) shows how many community mental health services HASI Plus consumers used before and after entry to the program. Community mental health services include clinical services, rehabilitation, assessment, early intervention and other services.

The number of times a consumer had contact with community mental health services decreased 25.3% in the first year after entering HASI Plus, from an average of 75.5 contacts to 56.4 contacts, **Figure 8**. Community mental health contacts went down a further 20.2% in year 2 following program entry, to 41.2 contacts. Due to the small sample of 19 consumers, these decreases were not statistically significant (p=0.476).

Figure 8: Average community mental health service contacts per person



Source: HASI Plus linked MH-AMB data set, n=19. Notes: Average contacts per person per year before and after program entry with 95% confidence intervals shown as vertical bars.

5.2 Physical health

Improved physical health for consumers is one of the key outcomes of HASI Plus, alongside mental health and wellbeing. In the fieldwork, LHDs, CMOs and stakeholders discussed how HASI Plus addressed consumers' physical health needs as much as their mental illness:

> I feel like their physical health is really being addressed. People are really linked in with GPs and dentists. And if you think about the overall wellbeing, mental health, and physical health, I mean, physical health impacts people's mental wellbeing. And I think that HASI Plus is doing that really well, kind of supporting people to see their GPs but then also the follow up from that: specialists, treatments, investigations. (LHD)

Consumers, families, CMOs and LHDs spoke about how being out of hospital and more settled in the community gave consumers space to identify and address their physical health needs:

> I've lost weight before. I've lost 30, 40 kilos. And then I just pile it back on, worse, more than I did before. So, I'm not doing that again. It's a lifetime change. (Consumer)

> There was one person who did not engage with his health system that did not go to the doctor at all. In fact, they would swear at the doctor, and any mention of doctors would cause him considerable distress. They wouldn't go to the dentist or clean their teeth. But now this person is making his own doctor's appointments … he goes to appointments by himself such as he wanted contact with the podiatrist. … after a while he independently met with the podiatrist. He independently went for an eye test. He's getting along very well with his GP and he's now engaging with the services of a specialist for physical health needs, which was basically unheard of before and he's going up to be put on a waiting list for his dental check-ups. (LHD Manager)

LHDs, CMOs and stakeholders observed that consumers might have increased contact with health services after entering HASI Plus because they took better care of their physical health than before. This was considered a positive program outcome:

> At HASI, I've noticed because of psycho-education, in the health programs running through, for example dental we've had an increased interest in consumers looking after their teeth. So, they might engage more with their dental services. Also recently, they've been working on smoking cessation programs, so that might also spark extra visits to the GP to get more patches and nicotine gum and such. So, there might have been a bit more contact with the system just more on the positive side trying to prevent further health issues. (LHD)

Some CMOs also reported that HASI Plus might have a negative effect on consumers' physical health, which they attributed to increased freedom of choice to purchase and consume unhealthy food and cigarettes, **Section 4.3.4**. This indicates the need for more collective discussion and problem-solving about how and to what extent HASI Plus can support the physical health of consumers.

No quantitative outcome data were available for physical health conditions. However, almost all hospital admissions were because of psychiatric issues (only approximately 10% of admissions were non-psychiatric). The non-psychiatric admissions were mostly only for a few days each, compared to the generally long mental health admissions. The small number of non-psychiatric days was almost all for fewer than 5 consumers and is not presented separately to protect confidentiality.[28]

[28] Based on non-psychiatric AR-DRG admissions from APDC data linkage.

5.3 Social participation

One of the aims of HASI Plus is to support consumer participation in social, leisure and recreational activities. In line with this, CMOs and LHDs generally felt that social participation was important for consumers to move towards living in the community. CMOs supported social participation of consumers in various ways: connecting with family, building friendships, taking part in community activities, training and working. Program data (Form 1 and Form 2 and CL MDS V2) outlining support, activities and family connections is described in **Section 4**. There was no linkage data available to provide insight into social participation.

CMOs had assisted some consumers to reconnect with family where appropriate, **Section 4.4**. Staff also offered transport to consumers to visit family which consumers appreciated:

> The thing is, this place really is teaching me a lot you know. How to function with my family, I get to go there [regularly] to my family. (Consumer)

HASI Plus has assisted some consumers to build new friendships:

> Just being around people makes you happy. That's something I never had before was friends. (Consumer)
>
> I've made a few friends here … so gradually putting back the pieces, and I've made few girlfriends as well as male friends, you know. (Consumer)
>
> I'm great friends with [another resident]. [Other resident] and I are really good friends now. (Consumer)

Consumers participated in different social activities. Most CMOs ran in-house activities designed to increase social interaction. Some services mostly offered the consumers activities onsite, while others involved external organisations or outsourced and referred consumers to other services. Sometimes participation started with consumers mixing in the HASI Plus resident group and then going out into the community and joining wider social activities:

> Social inclusion might be something as … inclusion in a meal around a dinner table, or simply engaging with people that they're walking past or that live in the home with them. … all the little initial steps that happen within and around the home I think are really, really, important to recognise as social participation as they're the foundations. (CMO)

Overall, CMOs tried to offer different opportunities of interaction to meet different consumers' needs and preferences. For example, at one location a professional

personal trainer volunteered their time once a week to organise exercises for the residents. This was a well-received activity.

Between the first and second round of interviews, one location had moved most group activities from the HASI Plus house to a community centre. This opened an opportunity to go out:

> When the centre opened, [HASI Plus consumers] actually sort of transitioned to be going out there and that's kind of that next step, so now they're in the community and still sort of wrapped by [CMO] but in the community rather than here. (CMO)

Although most staff described the move as successful, some were concerned that having only few activities at the HASI Plus facility might reduce the engagement of some consumers who found it more challenging to engage externally.

Sport was a community activity that many consumers enjoyed. HASI Plus staff supported them to join classes and form social connections:

> [HASI Plus staff] got me to sign up for a kickboxing class a couple of months ago … It's been really good for me… They've got a young guy there [name] that does a lot of the instruction type training and stuff. I get along with him really well. The guy that owns the gym, I talk to him; he's really good. I've met some of the other people there that train and stuff. (Consumer)

> Oh yeah, well, he's saying "I want to join yoga class", and I said "Great, I'll help you". And I said "Great, I'll come to a class with you, first couple of sessions", to get him used to it. And that's kind of getting him out on his own. (CMO)

> I loved the people [at HASI Plus], the support. I loved their confidence in me and the way they gave me support to go out and do sports and things like swimming … and taught me how to fit in more into society. (Consumer)

Some social activities were organised through NDIS packages, complementing HASI Plus support, **Section 4.3.6**.

There were a few examples where HASI Plus supported consumers to study or attend training:

> I want to do a Cert IV. That's next year's plan. (Consumer)

> There's virtually every day there's plenty to do. There's a lot of groups and different things. I go to TAFE twice a week, cooking. (Consumer)

> I've been on TAFE for about three years. […] I think, I started, well, when I was here [at HASI Plus] […] it's been the best part of the year […] the course

> that I'm doing now. […] Well, hopefully, it'll let me in getting an apprenticeship. (Consumer)

Many consumers were supported by HASI Plus to obtain employment or develop work readiness. Some consumers saw employment as the ultimate goal of social participation:

> I feel like I'm ready. I want to get a job. (Consumer)

> If I get a full-time job as a chef, then I'd probably in a position, where I could think about having a family. (Consumer)

> I've got Vinnies up here at [Employment location] are keeping a good eye out for me for employment. …Yeah. Otherwise it's just voluntary. (Consumer)

At the time of the fieldwork, some CMOs were planning to employ interested consumers part-time for maintenance of the HASI Plus locations:

> We've got the funding for them to design and landscape the gardens in both places; the kitchen gardens; and to employ a couple of our [participants as] workers. So our participants won't just be gardening, they'll be earning money. (CMO manager)

In cases where consumers had very high support needs, social inclusion was seen more narrowly as supporting consumers to reside in the community, such as in a HASI Plus housing, rather than living independently:

> I know the ultimate goal is … independent living, holding tenancy and stuff like that, being able to make informed choices and all those things, but there is some people here I don't think are going to get there. (CMO)

5.4 Reduced hospital stays

HASI Plus aims to reduce avoidable presentations to emergency departments, mental health facilities and related support services, especially for mental health related issues. Some CMOs and LHDs said that the program was effective in reducing hospitalisations. They stressed that any hospital stay happened in a context of care and support, which helped to reduce further health risk for consumers.

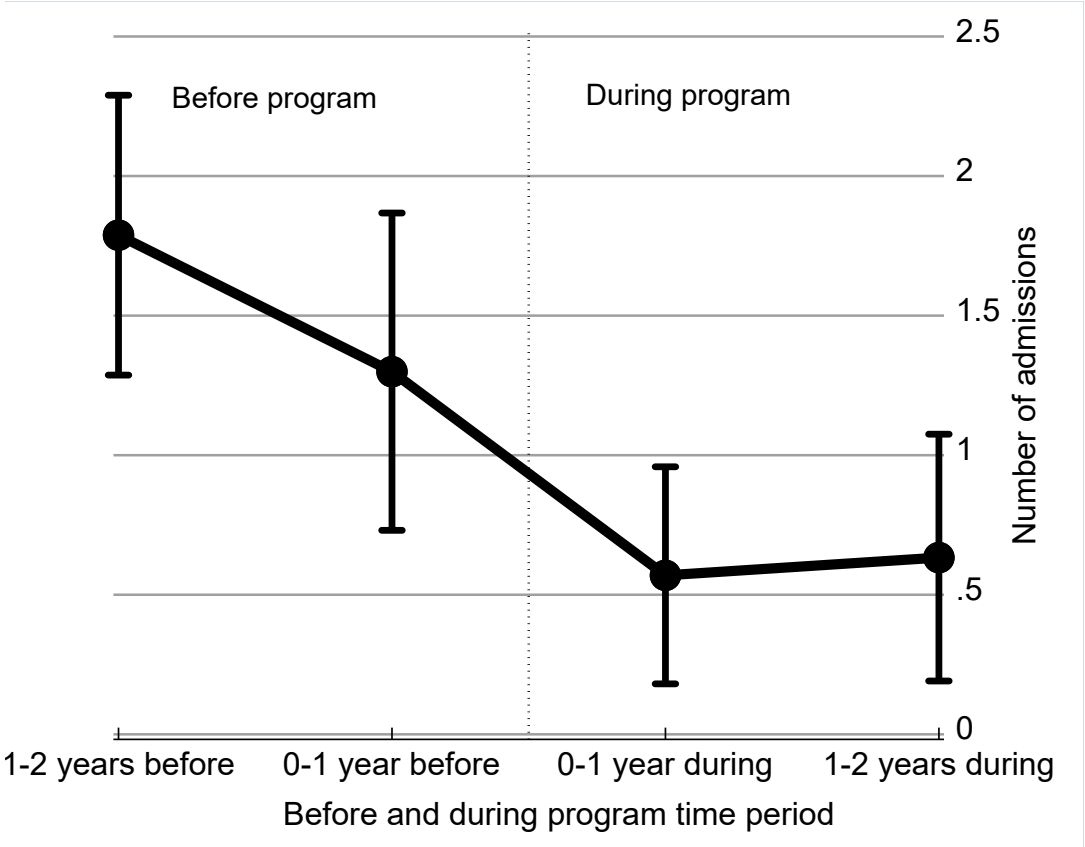
Between the first and second round of interviews, some consumers had been hospitalised either due to physical health problems or the deterioration of their mental health. CMOs and LHDs commented that HASI Plus support reduced the length of the consumers' hospitalisations and improved their recovery in hospital and once back in the program:

> We had one lady who was in hospital for a really long time and I think in the 4 years she's been with us, she had like a three-month stay and then she had like a one-month stay and then this last time she's had a week's stay and she was a voluntary patient the whole time … so I think we've had a positive impact on psychiatric admissions. (LHD)

> Over the years, the number of hospitalisations across [the LHD] has dropped a lot. [Consumers] are coming into HASI Plus and starting to understand what a mental illness is, what your mental diagnosis is … they're starting to understand what are the things that make you become unwell. You know, what's some of the stressors, what are some of the things that you can look for, so you can act on them before you get too unwell and end up in hospital. So over the years, working on a person's wellness plan and identifying stressors and coping strategies. (CMO Manager)

The data linkage supports these observations. Consumers experienced a statistically significant drop in mental health hospital admissions after joining HASI Plus, **Figure 9**. Data for 60 consumers shows that the average number of admissions per person per year reduced by 56.1% from 1.30 admissions in the year before program entry to 0.57 in the year after (p=0.038). The reduction remained stable in year 2 following program entry, at 0.63 admissions.

Figure 9: Mental health hospital admissions per person per year

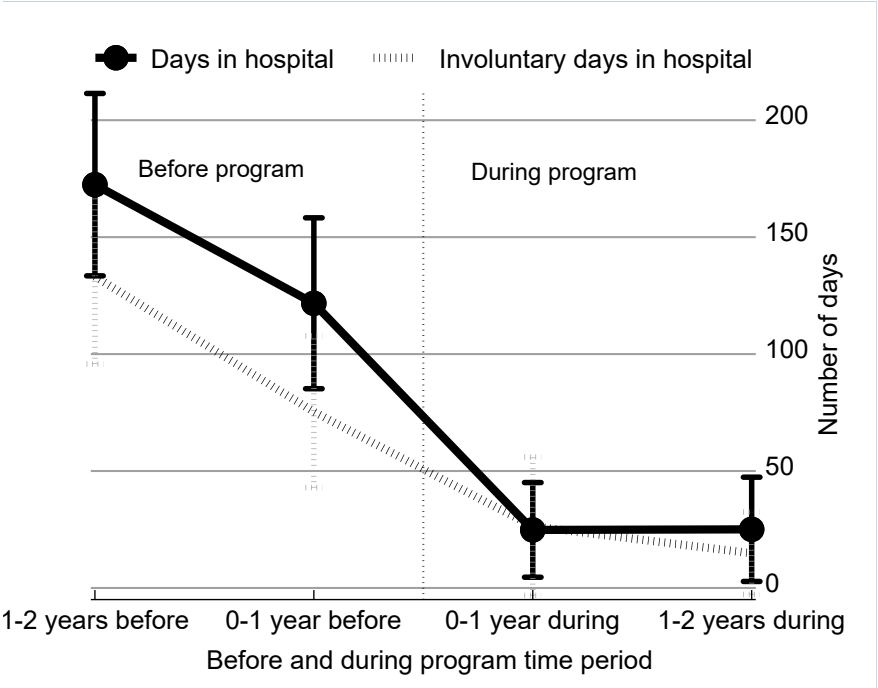


Source: HASI Plus linked NSW Admitted Patient Data Collection (APDC) n=60
Notes: Average admissions with 95% confidence intervals shown as vertical bars.

Reduced hospital admissions occurred across gender and age groups. There were not enough consumers in the data set to separately assess admissions of Aboriginal consumers. The available records showed decreases similar to non-Aboriginal consumers.[29]

When consumers were admitted to hospital due to mental illness, the average number of days in hospital decreased, **Figure 10**, black line. The number of days fell by an average of 79.6% per person in year one following program entry, from 121.7 to 24.8 days. This is statistically significant (p<0.001). The reduced average length of stay in hospital was similar in year 2, at 25.1 days.

Figure 10: Mental health inpatient days before and during program



Source: HASI Plus linked APDC data set n=60
Notes: Average admissions with 95% confidence intervals shown as vertical bars.

The number of involuntary days in hospital also decreased from 133.2 to 14.9 days after entering HASI Plus, **Figure 10** dotted line.[30] Involuntary lengths of stay were sustained at the reduced level in year 2 following program entry.

The average number of emergency department presentations was similar before and after entry to the program (2.3 presentations before, 2.2 after) with high variation. The change was not statistically significant, **Appendix 6**.

[29] Figures for fewer than 5 consumers are not presented in detail to protect confidentiality.
[30] Whole or part days that the person was an involuntary patient under the Mental Health Act 2007.

5.5 Safe and secure housing

HASI Plus aims to support consumers to transition to living in the community when they are ready. These transitions out of the program require safe and secure housing for the consumer to move into.

A consistent theme in the feedback from CMOs was that a shortage of appropriate affordable housing delayed exits from the program. CMOs dealt with the shortage in various ways some of which are outlined below, and most consumers did ultimately exit to social housing or private rental. CMOs also mentioned exits to aged care, hospital and the NDIS SIL program. There were no program or linkage data about consumer housing after exit. The Ministry's exit data (**Appendix 8**) offers some information.

As part of the fieldwork, 4 people were interviewed who had exited to social housing. All said that HASI Plus had supported them to find and secure housing appropriate to their needs:

> Yeah so I'm on the ground level. I have [medical condition] so I was really hoping to get my own clothesline. Because I'm going to be using it every day. I can't share it with other people. It's quite a nice place. It's very nice. (Consumer)

> I have a bus stop just around the corner from here … So it is very convenient actually … and it's only 5 minutes away from my mum's house, my parents, you know, where my parents live. So yeah, so I'm really lucky to move here. (Consumer)

> The staff here helped in so many areas, and now I'm in government housing, 2 or 3 minutes' walk from here. (Consumer)

The analysis of exit reports provided by the Ministry supports this finding. CMOs reported that access to social housing was helped when they had good connections with community housing associations and when the housing associations understood the HASI Plus program. Some CMOs said that HASI Plus consumers were given high priority while others reported long waiting periods. Suggested reasons for long waits were the high demand for social housing and that some social housing provision had moved from government to community providers, which disrupted processes:

> We've had clients who have been on the housing application for a long time, 6 months, 12 months, and they're a priority, and it's still taken that long amount of time for them to get a property. (CMO)

Another potential path to stable housing was private rental. CMOs explored options in the local area the consumer had selected. Staff then supported consumers to make decisions about suitability and affordability, and to access rent assistance:

> So, some we've recently been going more into … the private rentals and then obviously getting them to apply for rent assistance and that kind of thing in order to help them to be able to afford it. (CMO)

> It's about almost a month now we're looking for properties for [consumer's name]. It's because of the prices of the housing and she doesn't want to live in certain areas… And it's not good to force them out if it's going to affect them. It's good to have a good transition out where they can afford a house with the wages they're earning. We don't want them to move out and then a few months later they are on the street. (CMO)

CMO staff also reported discrimination within the private rental market as a barrier to consumer exits:

> This is where it gets difficult, because trying to find them a rental property that they can afford that they are going to be happy to live in. It can be quite hard. So, we drive them to all the inspections. We print things out as much as we can find. So, yeah. Heavy hearts sometimes. I think the consumers can also get really quite discouraged sometimes about it. (CMO)

Some CMOs and LHDs suggested a statewide agreement between FACS Housing (now DCJ) and the Ministry to arrange social housing as a priority for people transitioning out of HASI Plus.

Legal orders were identified as a barrier to accessing stable housing post exit from HASI Plus for some consumers. CMOs and consumers reported how financial restrictions resulting from guardianship might cause delays or undue stress:

> Because we have been held back because of […] Guardian. They have got my money and I have got about [large amount of $] and they won't let me touch it. They won't--they are meant to give me a budget for rent, rentals, for private rental, or a budget to buy a place and we have been waiting a month and they haven't got back to me. So, I am just waiting to see what happens. (Consumer)

> [Consumer name] was in a position to buy a place and [their] issues were around … Trustee and Guardian. So, [they were] very, very ready to move out, even had found a property … except then Trustee and Guardian had held up [their] money for too long. So, then [they were not] able to purchase the property. (CMO)

One consumer interviewed had high support needs and had exited into a shared bedroom in an aged care facility. While she had stable housing, the housing did not offer her sufficient privacy and comfort:

> [At the HASI Plus house] I had a big bedroom, a big set of drawers, which they said I couldn't bring the chest of drawers here. I had a video DVD recorder. They said I couldn't bring that here, so didn't bring that here either. I don't know where they are actually. (Consumer)

Another consumer in the interviews had exited back to hospital after becoming unwell. The consumer's goal was to return to HASI Plus and continue working on independent living skills:

> [My] Future plan is to get back in [to HASI Plus] and see if I can do some more exercises and things like shopping and - yep, but mainly put - putting those in reality, it's to get out into society again (Consumer)

CMOs, LHDs and stakeholders saw NDIS SIL packages as an exit option, especially for consumers who require significant ongoing support. The process of consumers transitioning from HASI Plus to SIL appeared to be still evolving with the roll-out of the NDIS at the time of the evaluation:

> Then people that have been in HASI Plus that can't transition towards independent living will be...now would be transitioned towards SIL. (CMO)

> I guess there's a similarity between HASI Plus and SIL, having that supported housing model. SIL is permanent, where HASI is still transitional. … But we've also had people go into SIL and then transition out of SIL. … So it's just being flexible in terms of that person's individual needs at that time. (LHD)

Some stakeholders raised concerns about the appropriateness of NDIS SIL for people with complex psychosocial needs. Concerns included where the NDIS provider did not specialise in supporting people with severe mental illness or where the SIL provider's connections with the LHD community mental health services were not as strong as those of HASI Plus:

> SILs created opportunities, but they're not necessarily as specialised in the psychosocial space. We've seen where SILs have failed, because the staff there really don't know how to work with mental health consumers. (LHD)

> So yeah when you think about the different support structure in NDIS compared to HASI Plus it's probably less - or definitely less clinical. Use of [mental health services] or support or connection. So you know that they'd be better off in a HASI Plus. (LHD)

The data linkage included records from DCJ Housing about social housing applications, waitlists and tenancy status. The housing data were based on a small sample of 17 consumers who applied for or lived in social housing 2 years before or 2 years following entry to HASI Plus.

The number of consumers applying for social housing increased from 3 (18% of 17 consumers) in the year before to 10 (59%) in the year after entry to the program. This supports the fieldwork findings that HASI Plus staff supported consumers with applications.

Most applications were through the priority medical register, followed by general medical, priority disability and medical transfer. As each housing application type was for fewer than 5 consumers, detailed figures are not presented to protect confidentiality. An additional 3 priority and general housing applications were made during year 2 following entry to HASI Plus.

Of the 10 consumers who filed applications after joining HASI Plus, 7 consumers accessed housing in the year following entry. Their relatively short time on the housing register waitlists is likely a result of the priority status of most consumers. It may also reflect the CMO reports of their good connections with community housing associations.

The data linkage showed that 21 consumers had received DCJ housing supports over several years before entering HASI Plus, including housing bond loans, Advance Rent, private rental subsidy (PRS) and Tenancy Assistance to help with rental arrears. However, consumers reported none of these supports during the 2 years before or 2 years after program entry.

5.6 Reduced criminal offences

One of the aims of HASI Plus is for consumers to have reduced contact with the criminal justice system and to reduce reoffending.

Criminal offence data linkage was from the NSW Bureau of Crime Statistics and Research's (BoCSAR) Reoffending Database (ROD). The ROD contains legal actions within the NSW Criminal Justice System. The data linkage also included DCJ's Offender Inmate Management System (OIMS). The OIMS reports community corrections orders for minor offences.

The study group had 9 consumers with a proven criminal offence within 2 years before and 2 years following entry to HASI Plus. Among this sample, the number of offences reduced from 3 in the year before program entry to zero in the year following entry. These limited numbers are not statistically significant.

Four consumers were on community correction orders during the study period from 2013 to 2019. Two of these were issued in the 2 years before entry to HASI Plus. No consumers were under correction orders in the year following program entry. Two consumers were placed on correction orders in the second year after entering the program. Their offences included break and enter and driving while licence suspended. These limited numbers are not statistically significant.

Some stakeholders felt that forensic patients sometimes needed longer transitions into HASI Plus, **Section 4.1.2**:

> … the process does tend to be a little bit longer because we desperately don't want that person to re-offend …, so I think there are a number of different safeguarding mechanisms that are in place there to ensure that that community transition, acknowledging that it's a slower process, it's a more successful and safer process. (Stakeholder)

6 Economic analysis

The economic component of the evaluation examined the costs of the HASI Plus program and the financial benefits, or cost offsets, to the NSW Government. This section commences with an overview of the funding model, available program costs per year, average cost per support package and cost categories.

It then examines program cost effectiveness more broadly by integrating the program cost analysis with the program outcomes and benefits from the data linkage (**Section 5**). The relatively small data samples and data limitations did not allow detailed cost effectiveness modelling.

The analysis estimated cost offsets to the NSW Government resulting from HASI Plus program support and improved mental health and recovery. These potential benefits include hospital admissions and lengths of stay, community mental health usage, emergency department presentations, charges in the criminal justice system and community correction orders. Further details are in **Appendix 7**.

HASI Plus program funding

HASI Plus was originally funded by the Commonwealth Government under the *National Partnership Agreement Supporting Mental Health Reform* from 2013 to 2016. Under that Agreement, the NSW Government received $35.2 million funding until 30 June 2016 to improve outcomes for people with severe and persistent mental illness, through a partnership between the Ministry and mental health specialist CMOs.

At the end of the National Partnership Agreement, the NSW Government committed to continue HASI Plus as part of the NSW Mental Health Reform 2014-24 investment[31] and consistent with its commitment in the *Fifth National Mental Health and Suicide Prevention Plan 2017 - 2022* to strengthen coordinated treatment and supports for people with severe and complex mental illness.

In June 2018, the Ministry finalised direct negotiation and reengaged the existing 3 providers for the continued delivery of the 60 packages for the next 5 years until 30 June 2023. In April 2020, following an open market procurement, a new provider was also selected to deliver an additional 10 packages as an enhancement to HASI Plus.

The economic analysis below is based on program funding for the 60 packages.

[31] Further information is available at https://www.health.nsw.gov.au/mentalhealth/reform/Pages/default.aspx

Preliminary financial analysis

The evaluation included preliminary financial analysis during April 2019 (Zmudzki, Purcal, & Fisher, 2019). This analysis was based on 5 years of annual financial reports from the 3 CMOs from 2013-14 to 2017-18. It showed the overall and relative costs of program elements such as support staff, operations, administration, maintenance and program establishment. Reporting was aggregated in this report to protect CMO confidentiality.

6.1 HASI Plus program costs

The program was established during 2012-13 and 2013-14. Full capacity was reached in 2014-15 with 60 packages available, **Figure 1**. Cost data was collated to 2018-2019.

CMO funding agreements

HASI Plus CMO program costs are contained in the funding agreements between the CMOs and the Ministry. The agreements describe HASI Plus program objectives, operations and details of planned packages and locations. The Ministry reviews packages periodically and may redirect unused funds where suitable.

At the establishment of the program, capital funding agreements were also signed which outlined initial costs for modifying and improving HASI Plus properties. The initial capital funding investment was $3.6 million. The HASI Plus model does not include funding for purpose-built facilities but enables the modification and refurbishment of existing properties. Ongoing property maintenance is covered under operational funding.

Program operating costs

Cost data are based on audited financial acquittal reports for the 3 CMOs. These reports contained aggregate annual figures and cost categories.[32] HASI Plus CMOs spent $9.5 million on the program in 2018-2019. This was in line with the average annual cost from 2014-2015 to 2018-2019, **Table 13**. Employee expenses represented about $7 million (75%) of total costs. About $1.3 million (15%) were for administration and $0.7 million (6%) for operational costs.

[32] The program cost analysis is based on aggregate employee figures and does not examine individual CMO staffing levels.

Table 13: HASI Plus CMO program operating costs by category

Cost category	2014-15	2015-16	2016-17	2017-18	2018-19	%
Employee	7,227,081	7,091,101	7,155,627	7,017,038	6,943,879	74.6%
Administrative	1,311,042	1,522,270	1,479,301	1,297,174	1,338,618	14.6%
Operational	405,838	742,495	541,924	620,330	702,726	6.3%
Motor vehicles	118,437	148,314	164,501	196,913	166,726	1.7%
Accruals/leave	128,665	64,025	57,535	91,118	191,569	1.1%
Establishment	300,091	6,854	7,773	22,998	-	0.7%
Maintenance	18,190	29,112	35,536	40,966	147,874	0.6%
Depreciation	32,227	-	30,408	14,612	9,550	0.2%
Other	39,959	-	-	-	15,121	0.1%
Total	9,581,530	9,604,170	9,472,605	9,301,148	9,516,064	100.0%

Source: HASI Plus audited operating acquittal reports by year.[33]
Notes: Figures reported as 2018-2019 dollars indexed at 2.5% per annum. 'Other' expenses include items reported as 'other' communications and IT, and property and equipment. Percentages are the average based on all years from 2014-2015 to 2018-2019.

Capital costs

The total capital funding of $3.6 million across the 7 locations represented a simple average of about $60,000 for each of the 60 packages.[34] This means about $10,000 per package per year over the 6 years to 2018-2019.[35] The average annual capital cost per package would reduce further if the properties were retained and remained fit for purpose over coming years.

Rental income and shortfalls

HASI Plus CMOs use properties from community housing providers (CHPs), their own housing stock or properties owned by the LHD. CHPs establish tenancy agreements with each consumer and then manage all tenancy matters. This includes collecting rent from consumers of no more than 30% of their income.

The cost of housing has increased substantially in recent years, particularly in metropolitan Sydney. HASI Plus continues to offer consumers affordable housing

[33] Acquittal reporting was not standardised, and there was minor variation in the categories reported across CMOs. Therefore, minor cost categories are not directly comparable.
[34] $3,608,744 / 60 = $60,146
[35] $60,146 over 6 years from 2013-2014 to 2018-2019 = $10,024 per year

while they are in the program. This means rents in HASI Plus are lower than in the open rental market.

HASI Plus also guarantees stable housing for consumers while they are participants in the program. CMOs keep a consumer's place when they are absent, for example when they go to hospital. CMO funding agreements show that packages are sometimes held for hospital admissions beyond six months. During these vacancy periods, consumers do not pay rent, and rental income shortfalls may occur. Such shortfalls may also happen during extended entry transitions for new consumers. Total rental shortfall costs were $530,939 from 2013 to June 2018. These costs are generally invoiced to the Ministry or covered from prior surplus funding.

NSW Health program operational costs

The number, staff position levels and estimated full time equivalents (FTEs) for managing the HASI Plus program at the Ministry and LHDs are included in the total program cost, **Appendix 7**. The Ministry and LHD staffing covers program management, procurement, contract management (including finance and legal), policy development, statewide governance and coordination, management of referrals and selection processes, local governance structures, operational management and administration.

The Ministry estimated that the peak of its costs for staff working on HASI Plus (at the establishment of the program and during peak procurement phases) was $337,000 per annum; and that LHD non-clinical staff support for the program was $152,000 per annum (2018-19).[36]

LHD clinician costs

The specialist rehabilitation mental health clinicians dedicated to HASI Plus at each of the 3 host LHDs cost $530,000 in 2018-2019, including on costs, **Appendix 7**.

Total and average cost per HASI Plus package

The combined total program cost was $11.2 million in 2018-2019 including costs for CMOs (operations, capital and rental shortfalls), Ministry program operations and LHD clinicians, **Table 14**.

The average cost per package was $186,011 in 2018-2019. This included:

- CMO costs of about $158,600 (85%)

[36] Calculated as 3 x 0.3 cost of Health Service Manager (HSM) Level 3.

- dedicated specialist community rehabilitation LHD clinicians at about $8,000 (4.7%)
- capital investment distributed across packages and years at about $8,800 (4.7%)
- Ministry staff costs (peak) of about $5,597 (3%)
- LHD non-clinical support at about $2,604 (1.4%), and
- rental shortfalls of about $1,600 (1%) per package.

There was no breakdown available for the cost of 16 and 24-hour packages.

Table 14: HASI Plus total and average costs per support package

Cost component	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
CMOs	7,467,906	9,581,530	9,604,170	9,472,605	9,301,148	9,516,064
LHD clinicians	429,000	439,725	450,718	503,985	516,585	529,500
Ministry	431,910	442,708	453,775	465,120	476,748	488,666
Capital costs	467,913	479,611	491,601	503,891	516,489	529,401
Rent shortfall	85,739	87,883	90,080	92,332	94,640	97,006
Total	8,882,469	11,031,457	11,090,344	11,037,933	10,905,609	11,160,637
Packages	43	58	58	59	60	60
Average cost per package	207,777	190,198	191,213	187,084	181,760	186,011

Source: The Ministry, HASI Plus audited financial acquittal reports by year.
Notes: figures indexed at 2.5% per annum, capital costs and rental shortfall averaged across 6 years to 2018-2019.

6.2 Program cost effectiveness

The program cost effectiveness analysis for HASI Plus examined estimated cost savings or ‘offsets’ to services that consumers might use less because of HASI Plus support.

Notably, a societal assessment of program cost-effectiveness would include all consumer outcomes, quantitative and qualitative, within and beyond the health care sector, positioned against total program funding. In this evaluation, the cost-effectiveness perspective was limited by the small and incomplete study group data, despite attempts to consider outcomes beyond the health system such as criminal justice system contacts.

The evaluation cost-effectiveness analysis therefore focused on service use measures that could be quantified, as a subset of total outcomes. It examined estimated cost savings or 'offsets' to related services including hospital and community mental health services. For this reason, the findings in this section are a conservative estimate of program cost effectiveness in broad terms, noting that it only implicitly accounts for consumer wellbeing and other non-quantifiable outcomes presented in **Section 5** of this report.

Hospital admissions and length of stay

The data linkage showed a statistically significant drop in hospital admissions and in lengths of stay in hospital following entry to HASI Plus, **Section 5.4**.

The Australian Refined Diagnosis Related Group (AR-DRG) costs from the hospital data linkage indicate an average cost of $1,439 per hospital day.[37] This means an average reduced cost of inpatient care of about $136,000 per consumer in 2018-2019, **Figure 11** black bars.[38]

This suggests an offset of about 74% of the average cost per HASI Plus package in the first year in the program.[39] The decrease in admissions and length of stay was sustained into the second year following program entry. If positive hospital outcomes remained over several years, this would add further to the cost offsets and the cost effectiveness of the program.

Reduced community mental health contacts in HASI Plus were not statistically significant due to the small sample size, **Section 5.1.3**. They are presented as

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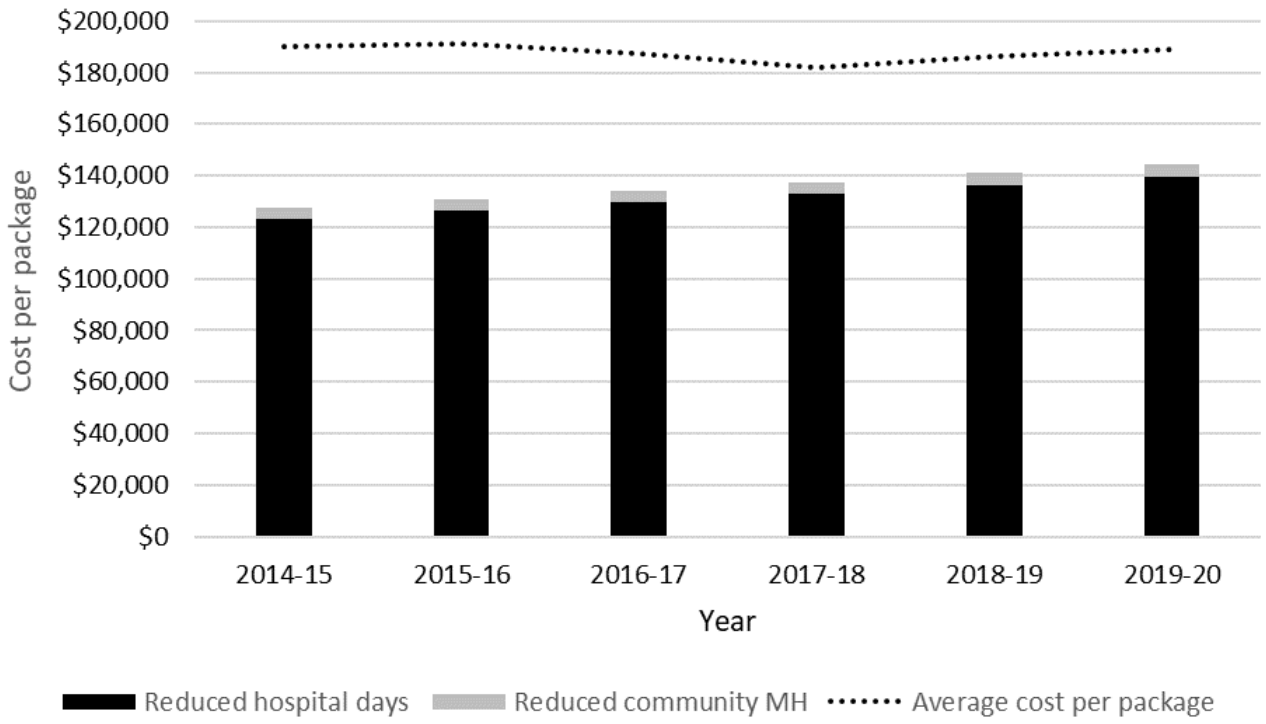
[37] Based on AR-DRG average cost per day. National hospital cost data collection, Cost weights for AR-DRG version 10.0, Round 22 (2017-18). DRG U61A Schizophrenia disorders with major complications. Total DRG cost $18,958 divided by average DRG LOS 13.9 days = $1,364 per day, indexed for 2 years at 2.5% per annum = $1,439 per day. This DRG was used as it has a mean LOS higher than U61B which is closer to average HASI Plus consumer admissions and results in a lower average cost per day, consistent with the conservative calculations and assumptions used for the estimated cost offsets.

[38] Alternative costing methods consistently indicate substantial hospital cost offsets: NHCDC Round 23 (2018-19); $1,631 daily cost derived from the NHCDC Round 23 (2018-19) indicates a saving of about $158,054 per consumer in 2018-19, which is a saving of about 85% of the average cost per HASI Plus package. NEP 2018-19 with $922.71 daily cost (AR-DRG U61A) indicates a saving of about $89,410 per consumer in 2018-19, a saving of about 48%; and NEP 2018-19 with AMHCC V1.0 class $753 daily cost using the NEP 2018-19 with AMHCC V1.0 class 132A indicates a saving of about $72,994 per consumer in 2018-19, about 39% of the average cost per HASI Plus package.

[39] Based on 2019-20: $139,451 decreased hospital cost / average package cost $189,004 (indexed at 2.5%).

indicative, **Figure 11** grey bar segment. If included in the analysis, they may demonstrate further cost offsets and program cost effectiveness.

Figure 11: Average program cost and estimated cost offsets per package



Source: The Ministry, HASI Plus linked APDC n=60, HASI Plus linked MHOAT n=19.
Notes: MH=Mental health, figures indexed at 2.5% per annum.

Other possible cost offsets, for example corrective services days, could not be assessed due to the small study group and incomplete data. Similarly, cost offsets for the NSW government for consumers who have exited the program could not be assessed due to the small study group and small number of exited consumers.

The available HASI Plus cost offsets are consistent with the recent Productivity Commission inquiry into the wider mental health system, service planning and reform (Productivity Commission, 2020). The inquiry recommended expansion of mental health services in Australia based on evidence of outcome cost effectiveness and equitable mental health access. The inquiry economic modelling indicates investment in community mental health programs, including integration of clinical and other support services like in HASI Plus, is highly cost effective.

Comparative program costs

There are three ways of reasonably estimating a comparison 2018-19 per annum cost for a consumer with comparable needs being supported in hospital:

1. Annual cost derived from the National Hospital Cost Data Collection Cost (NHCDC) with applicable AR-DRG
2. Annual cost calculated using the National Efficient Price Determination (NEP) with applicable AR-DRG
3. Annual cost calculated using the NEP with applicable Australian Mental Health Care Classification (AMHCC) V1.0 class.

NHCDC Round 23 (2018-19)

The estimated annual cost supporting a consumer classed U61A (Schizophrenia Disorders, Major Complexity) using the AR-DRG (Version 10.0) in hospital is $595,596.[40]

NEP 2018-19 with AR-DRG

The NEP was $5,012 per National Weighted Activity Unit in 2018-19. Therefore, using the Long Stay-Outlier Per Diem price weight of 0.18, the price of a 365-day admission for a consumer classed U61A using the AR-DRG classification would be $336,788.[41]

NEP 2018-19 with AMHCC V1.0 class

The Independent Hospital Pricing Authority (IHPA) commenced shadow pricing for mental health admissions using the (AMHCC) V1.0 in 2021-22. Using the 2021-22 Long Stay-Outlier Per Diem price weight of 0.1503, the price of a 365-day phase for a consumer classed 132A (Admitted, Intensive Extended, 18-64 years, High HoNOS Complexity) using the AMHCC V1.0 but applying the NEP 2018-19[42] would be $274,955.[43]

Other community-based support programs

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[40] U61A total cost from NHCDC Round 23 (2018-19) = ($13,870 / 8.5 days average length of stay = $1,631 per day) x 365 days = $595,596. See Independent Hospital Pricing Authority (2021) National Hospital Cost Data Collection Report, Public Sector, Round 23 (Financial year 2018–19) Appendix Tables Acute Cost Weights V10

[41] AR-DRG U61A total price for annual admission using NEP 2018-19 = ($5,012 x 0.1841 x 365 days = $336,788. See Independent Hospital Pricing Authority (2018) National Efficient Price Determination 2018-19 Price Weight Tables Admitted Acute

[42] IHPA determined shadow mental health care price weights for the AMHCC V1.0 in 2021-22 with respect to the 2021-22 NEP determination of $5,597. This approach of applying the 2018-19 NEP is noted as indicative only for this reason.

[43] AMHCC v1.0 132A total price for annual admission using NEP 2021-22 shadow price weights with NEP 2018-19 = ($5,012 x 0.1503 x 365 days = $274,955. See Independent Hospital Pricing Authority (2021) National Efficient Price Determination 2021-22 Shadow Price Weight Tables Admitted Mental Health

There are few similar programs for consumers with high support needs with which HASI Plus could be compared. The most similar NSW programs are HASI, Pathways to Community Living Initiative (PCLI) and the now closed Integrated Services Program (ISP).

NDIS SIL packages are the highest support level component of the NDIS and a potential alternative to HASI Plus.[44] In 2019, the annual NDIS cost for SIL packages was about $230,000 (National Disability Insurance Agency, 2021b). This was higher than the average HASI Plus package at $186,000. NDIS average costs increased about 17% per year from 2018 to 2021, with the average annualised committed supports for people with a primary psychosocial disability in SIL at $313,100 (National Disability Insurance Agency, 2021a).[45] The now closed ISP program was evaluated in 2014-2015 and reported average cost per consumer of $302,000 (Zmudzki, Purcal, & Fisher, 2017)[46] which again is higher than the average HASI Plus package at $186,000.

[44] The Partners in Recovery (PIR) program also offered potential alternative support. PIR is not a viable ongoing option as it has transitioned to the NDIS and no longer accepts referrals.
[45] Average costs for the PCLI and PIR programs are not currently reported.
[46] Indexed at 2.5% per annum from base average cost reported in 2014-15 of $273,686.

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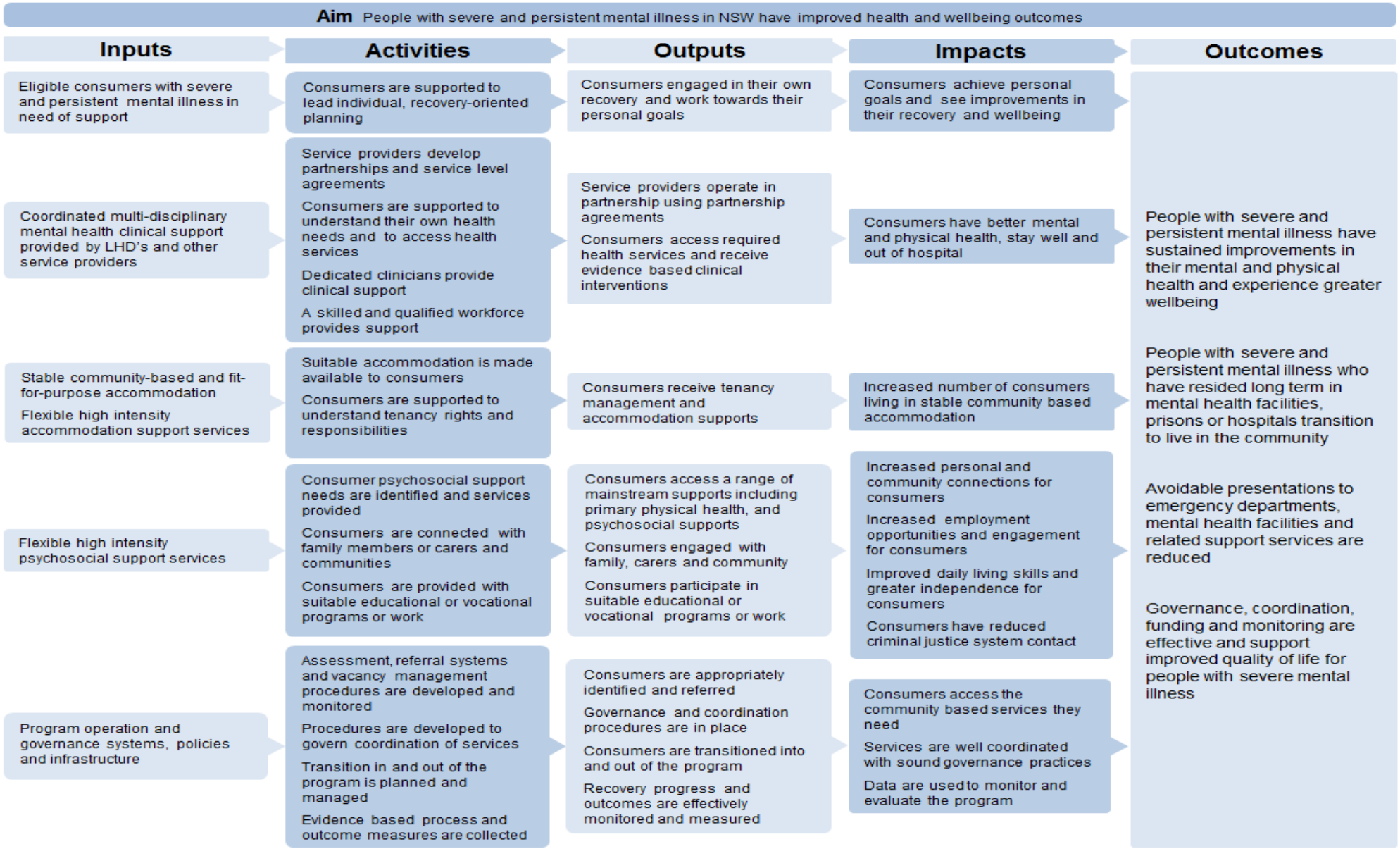
Appendix 2 HASI Plus program logic

Evaluation of Housing and Accommodation Support Initiative Plus (HASI Plus) – Evaluation Report



Appendix 3 Evaluation methods

Evaluation of Housing and Accommodation Support Initiative Plus (HASI Plus) – Evaluation Report – 2022

Contents

Evaluation approach

The evaluation explored:

- the extent to which HASI Plus supports transition of people with severe and persistent mental illness from institutional contexts to community living, and the experience and outcomes for different consumer groups where sufficient data is available
- whether consumers have sustained improvements in their mental and physical health and their wellbeing
- what the experiences of families and carers are of the program and their engagement
- whether organisations involved in the program have effective program operations, governance and partnerships
- whether the number of avoidable presentations to emergency departments, mental health facilities and related supports is reduced, and the associated impact on the health system
- what is the funding model for service provision, and what are the costs and benefits of the program

- how well the program data collection supports improved knowledge about the program and its outcomes.

Detailed evaluation questions are included in the evaluation plan (Purcal et al. 2019). The evaluation adopted a mixed-methods design comprised of literature and document reviews, interviews with consumers, families, community managed organisation (CMO) and local health district (LHD) staff and managers in the HASI Plus sites, interviews and focus groups with non-host LHDs, government and state-level stakeholders, analysis of qualitative and linked quantitative program data, economic analysis and cost modelling. The program logic developed by the NSW Ministry of Health (the Ministry) (**Appendix 2**) underpinned this approach.

Literature review

SPRC produced a detailed literature review focused on programs similar to HASI Plus that offer intensive, integrated community based services for people with severe mental illness who are leaving institutional contexts such as hospitals or correctional facilities (Blunden 2019). The aim of the review was to give an overview of the current evidence from evaluations of such programs, to help develop the conceptual basis for evaluating HASI Plus.

The review found that, while programs similar to HASI Plus tend to produce positive outcomes for many consumers, positive outcomes are less assured for those with serious mental illness, lower cognitive function and substance abuse issues. None of the evaluations that were reviewed indicated an on-average *deterioration* among program participants. Findings related to service use indicate reductions in use, and therefore costs, of mental and general health services, as well as reductions in incarceration. Consistent with these findings, cost-benefit analyses have identified and quantified savings for government due to intensive support programs. Finally, consumers themselves typically report being satisfied with the housing and support received on the whole, and evaluations and studies found that very few returned to institutionalised forms of care. From the literature reviewed it can be concluded that intensive support programs do, in general, provide benefits for many consumers.

Program document review

SPRC carried out a short review of HASI Plus program documents provided by the Ministry. The review describes the intended set up of the program, in particular its service model, consumer characteristics, program support, family participation, funding model and monitoring. The purpose of the review was to outline the anticipated features and functioning of HASI Plus.

This outline could then be compared to the evaluation findings and helped the evaluators to assess to what extent and in which ways program implementation and outcomes on the ground matched program intent. The content of the document review was guided by the evaluation questions. The document review is provided at **Appendix 5.**

Fieldwork in HASI Plus locations

The evaluators completed 2 rounds of fieldwork interviews at the 7 HASI Plus locations that were operating at the time of the evaluation. Interviews were with HASI Plus consumers, their family members and with staff and managers from CMOs and LHDs in the fieldwork sites. Fieldwork was conducted by SPRC researchers, including the team's lived experience researcher (or 'peer researcher' – a researcher with a lived experience of mental illness) and with the participation of the local lived experience researchers in the fieldwork sites. They were recruited by the SPRC to provide expert advice and assistance to the evaluation.

The interviews were conducted during visits to HASI Plus locations between March and May 2019 (round one), and in November 2019 (round 2). In the first round, researchers visited each of the 7 locations twice within a three-week period. This process, developed in consultation with the CMOs, was intended to give maximum opportunity to the consumers to receive information about the evaluation so they could decide whether they wanted to take part.

The first visit was an informal get-together, where consumers could meet the researchers if they wanted to, learn more about the evaluation and ask questions. During the first visit, the researchers also:

- interviewed CMO and LHD staff and managers who agreed to take part in the evaluation
- explained to the CMO managers the process to ask consent from consumers about using their deidentified health data for the evaluation
- discussed with the CMO managers options for recruiting exited consumers for interviews
- met the local lived experience researchers.

In a few locations, some consumers and family members chose to be interviewed at this first visit.

CMOs and the lived experience researchers advised that some consumers might find discussing their family distressing. Therefore, before conducting consumer

interviews, researchers asked CMO staff if it would be okay to ask consumers about their family. Researchers approached consumers about recruiting family members only when the CMO staff had advised this would not distress the consumer. Across the 7 locations, CMO staff reported that most HASI Plus consumers had no connection with family members, and many of the consumers approached about recruiting family members were reluctant to pass on the information, not wanting to ask family members to do something they might prefer not to do.

The second visit to each HASI Plus location occurred within 3 weeks after the first visit. Interviews were conducted with those consumers and family members who had decided to participate in the evaluation and with additional staff who were not available during the first visit and were willing to participate.

Round 2 of interviews consisted of one visit to each location.

Consumer and staff interviews were conducted face to face, while family interviews were held over the phone. All consumers were interviewed at the HASI Plus locations, either in common spaces inside or outside, or in their own rooms or units. Some consumers chose to have a support person present, either a staff member or a local lived experience researcher. Local lived experience researchers assisted in interviewing consumers at 5 of the 7 locations, and at another 2 locations they assisted by organising, preparing and supporting consumers. Staff interviews occurred in staff offices or common spaces at the HASI Plus locations. All interviews with family members occurred over the phone during the fieldwork visits to the HASI Plus locations.

All interviews explored the interviewees' experiences of HASI Plus to assess the program's effectiveness in achieving its goals and to explore opportunities for program improvement. Interviews were semi-structured, that is based on open-ended questions with the opportunity to ask follow-up questions or discuss other, related topics that might come up in the conversation. Interview questions were based on the evaluation questions and program logic.

The evaluation methods also included Aboriginal self-determination research strategies through the UNSW Community Reference Panel (CRP) Aboriginal staff. The CRP was an innovative way of ensuring research is culturally and ethically competent, and it promotes Aboriginal perspectives in the research. CRP Aboriginal staff gave advice on interview wording and approaches for Aboriginal consumers and their families.

The main limitation of the fieldwork was that few family members agreed to be interviewed. The reason was that existing family ties were often tenuous. A few

consumers who did have family connections agreed to approach their family members for interviews.

The CMOs, LHDs and the Justice Health and Forensic Mental Health Network (JH&FMHN) recruited consumers who had already exited HASI Plus for evaluation interviews. The SPRC provided instructions about the recruitment process, based on consultation with the agencies at the HASI Plus Steering Committee meeting in November 2018.

Focus groups and interviews with stakeholders

The sample for focus groups and interviews with stakeholders was agreed with the Ministry, and all were hosted at the Ministry with tele/video-conferencing options. Interviews and focus groups happened between April and October 2019. They included staff from:

- non-host LHDs and the Ministry involved with the program
- other relevant NSW government departments and agencies such as JH&FMHN, Corrective Services NSW and the Mental Health Review Tribunal (MHRT)
- and consumer and carer advocacy organisations.

Most agencies and organisations that were invited did participate, contributing a wide range of experiences with the HASI Plus program.

Analysis of quantitative program data

When the HASI Plus program was established in 2013, the program adopted the Minimum Data Set (MDS) that was used at the time for the Housing and Accommodation Support Initiative (HASI). The HASI MDS consisted of two forms: *HASI Monitoring Form 1: Applicant Profile*[1] and *HASI Monitoring Form 2: Consumer Receiving Support*[2] (known as the 'Form 1 and Form 2' collection). CMO providers had to complete the forms manually and then submit all forms quarterly to InforMH, the Ministry's specialist mental health information and analytics branch.

In April 2019, the Ministry and InforMH updated the HASI Plus minimum data set by integrating the program into the NSW Mental Health Community Living Supports Minimum Data Set Version 2 (CL MDS V2) collection. This new collection and process substantially enhanced the content, data analysis and reporting capability. It

[1] NSW Ministry of Health, Mental Health Drug and Alcohol Office 2010 Version 12.1
[2] NSW Ministry of Health, Mental Health Drug and Alcohol Office 2010 Version 12.1

occurs monthly and includes demographic data, details of program entry, exit and support services received as well as mental health diagnoses, risk factors and some self-reported outcome data.

All program data presented in the final evaluation report and the appendices are based on these two versions of the HASI Plus collection. The HASI Form 1 and Form 2 collection from 2013 and the CL MDS V2 from May 2019 to the end of the study period in September 2019. From the study group of 90 consumers, only 53 had available data through the CL MDS V2 and only for the final 5 months of the study period. For this reason, subgroup analyses are generally not presented to protect confidentiality.

The Form 1 and Form 2 collection and the CL MDS V2 data were provided by InforMH to the NSW Health Centre for Health Record Linkage (CHeReL) to undertake the evaluation data linkage. The data covered all available past and current consenting HASI Plus consumers as at September 2019. The target study group was limited to 90 as 11 consumers (11%) did not consent to the data linkage component of the evaluation. The target study group consisted of 58 current consumers and 32 who exited before or during the evaluation.

The evaluation was complicated by the implementation of the new HASI Plus CL MDS V2 data collection during the study period. The new CL MDS V2 adds valuable new content for program activity but was only available for the final 5 months of the evaluation. It created integration issues for comparison between versions due to changed content, different reporting timeframes (quarterly versus monthly) and structure of some data items. For this reason, data from each source are generally presented separately and the Form 1 and Form 2 or CL MDS V2 version is specified.

The number of program consumers in the combined Form 1 and Form 2 and CL MDS V2 versions was 90. The program sample was comprised of 72 consumers who entered prior to May 2019 and appear in the Form 1 and Form 2 collection, and 53 consumers who remained in the program or entered after April 2019 and appeared in CL MDS V2.

Analysing the Form 1 and Form 2 and CL MDS V2 data for the evaluation had three objectives:

1. provide a profile of the demographic characteristics of HASI Plus consumers and compare this to people on the waitlists for the programs (the target comparison group for the evaluation).

2. analyse data linkage outcomes for HASI Plus consumers before, during and after participation in the programs, and compare these outcomes with the waitlist group.

3. integrate consumer support services and outcomes with HASI Plus program cost analysis for the economic components of the evaluation.

This section provides details of each of these evaluation components as well as associated limitations.

Preliminary data issues and preparation

The initial phase of the data analysis required multiple steps to validate program data and establish single episodes of support. The Form 1 and Form 2 collection was provided with labelled question numbers which were mapped to each data item for identification. The content between the Form 1 and Form 2 collection and CL MDS V2 was reviewed to identify common items that could be reported for the complete study period. However, the level of detail, data definitions and format were substantially different and could not be consolidated. Support hours from the Form 1 and Form 2 collection were converted to monthly from the quarterly base reporting except for April 2019 which covered the final reporting month before transition and retained the hours as monthly. Some data from the Form 1 and Form 2 collection was incomplete and sample sizes are noted on all results.

The comparison group (consumers on waitlist) consisted of 34 individuals including 3 who subsequently entered the program. As the comparison group was small the approach was to combine the waitlist period prior to entry as a supplementary comparison period. The comparison group was not sufficient to support statistically significant analyses given variation in the linkage proportions across source datasets. The waitlist was targeted as the best available comparison group, but it was expected that the sample may not be sufficient for analyses. The repeated measure approach before and after program entry for the same individuals was also planned and was used for all linkage analyses.

The limitations of the quantitative data linkage analyses include:

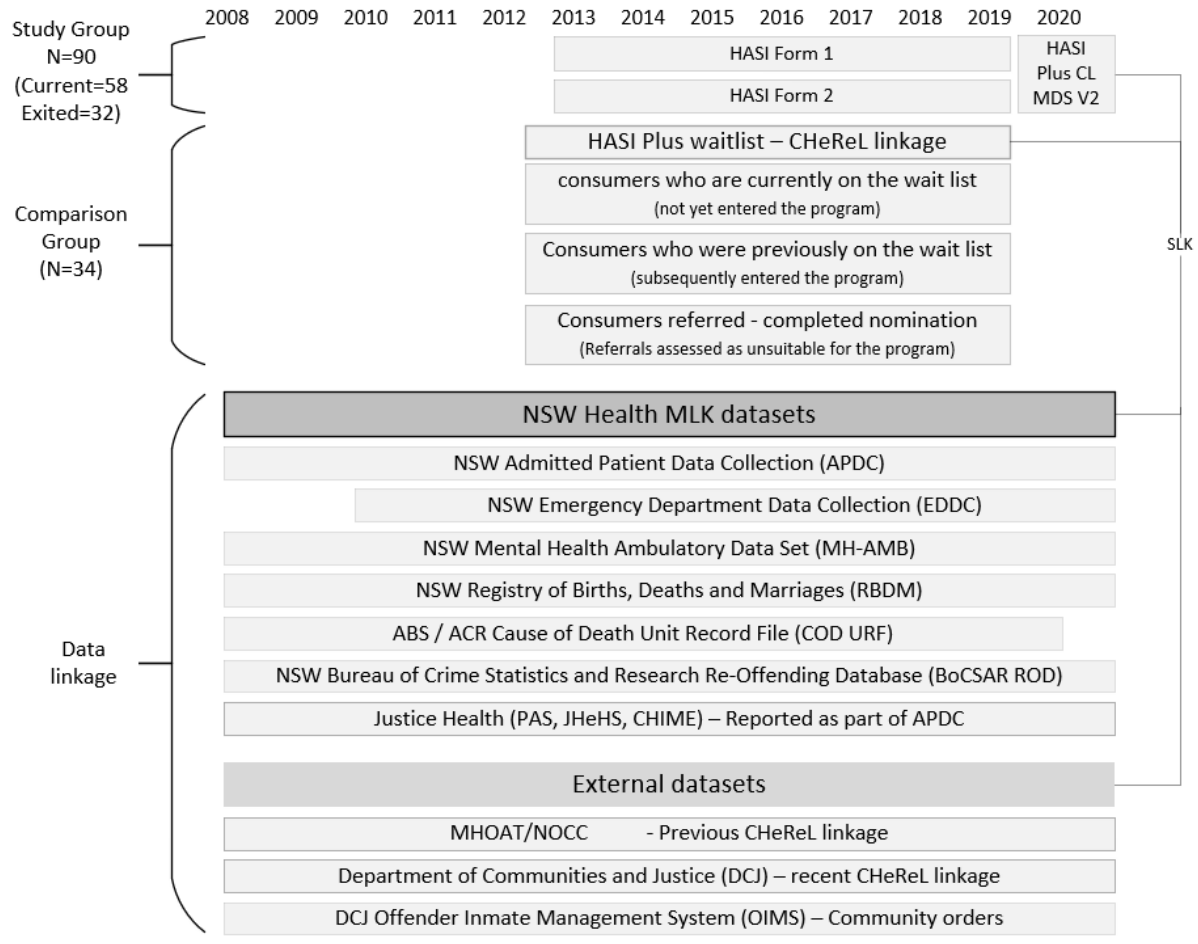
- The small and incomplete study group data. This was smaller than expected due to 11% of consumers (11 of 101) being excluded as they did not give consent for the data linkage. This restricted subgroup analyses as sample sizes fewer than 5 are not reported to protect confidentiality.
- Most program data was from the initial Form 1 and Form 2 collection prior to the introduction of the CL MDS V2. This initial program content reported substantially less detail than the later CL MDS V2. The Form 1 and Form 2 data also had data quality issues with incomplete data items.
- The comparison group sample resulted in low data linkage sample sizes and was not sufficient for statistically significant analyses. The repeated

measure approach before and after program entry for the same consumers analyses provided larger samples and statistically significant results in larger linkage datasets.

Analysis of linked consumer outcome data

The data linkage for the evaluation included HASI Plus program data (from the Form 1 and Form 2 collection and CL MDS V2 version as above) with multiple sources of routinely collected healthcare, housing and correctional services data, **Figure 1**. The linkage was undertaken through CHeReL. Each data source was linked to the HASI Plus study group and assigned a unique deidentified reference ID (PPN) as a linkage key. The CHeReL undertook probabilistic linkage where datasets provided name, gender and age for matching. Where only statistical linkage keys (SLKs) were available, deterministic linkage was used. CHeReL linkage reports confirmed matching rates were consistent with the Ministry's Master Linkage Key (MLK) regular checking indicating that missing of true matches and false positive rates are low, estimated to be below 0.5%.

Figure 1: HASI Plus data linkage sources



Preliminary phases subsequently linked the program data files with each source to develop the time series framework of source data activity relative to the entry and duration in the HASI Plus program. Several data linkage sources include multiple files for separate components, for example the Mental Health Outcomes and Assessment Tool (MHOAT) was provided in separate source files for the Kessler Psychological Distress Scale (K10), Health of the Nation Outcome Scores Scales (HoNOS) and Life Skills Profile -16 (LSP-16), and housing data was received with 3 separate sources across housing applications, tenancy and other support. Each source file was individually linked to the merged Form 1 and Form 2 and CL MDS V2 study group in preparation for development of the time series framework and analyses.

Time series framework

Following merging of each linkage source dataset with the consolidated Form 1 and Form 2 and CL MDS V2 versions, the datasets were developed into a longitudinal time series framework to define before, during and after HASI Plus support time periods. As retrospective data were available through the linkage this provided at least two years prior to entry.

Although the study group sample size was small, outcome data were generally right censored due to variation in total support periods, the limited number of exit points, as well as those who were still in the program at the end of the evaluation period in September 2019. For this reason, the number of support periods before censoring were calculated for each consumer as the basis of adjustment offsets in regression analyses to provide comparative before and during program rates of events and outcomes.

The core time series analyses developed before and during HASI Plus support for 2 years prior and 2 years following entry to the programs. Supplementary analyses following program exit was not possible due to the small study group, generally long support periods, the number of exits and available data period following exit.

Statistical analyses

Longitudinal analysis was undertaken using negative binomial regression for most datasets based on event count outcomes. Negative binomial models were used given the characteristic dispersion in most data sources. Regression analysis adjusted for the number of reporting months available to develop comparable before and after rates.

Descriptive statistics are presented as percentages where constant variables provide a basis. Healthcare utilisation is presented as mean counts per consumer per year, adjusted for right censoring, to estimate mean annual difference. Statistical

significance is defined as $p<0.05$, figures are presented with 95% confidence intervals where relevant.

The mental health indicators were examined in line with methods of mean difference, count of groups and effect size (ES) to assess clinically significant change in line with methods proposed by the Australian Mental Health Outcomes and Classification Network (AMHOCN, 2008). The ES examines the magnitude of a treatment effect based on before and after change and the standard deviation of the pre score where Cohen's scores of 0.2 are defined as small, 0.5 as medium and 0.8 a large effect. These ranges in ES are used to assess clinically meaningful change and have been calculated at an individual level (Eisen, Ranganathan, Seal, & Spiro, 2007). Although this approach is seen as robust to smaller samples, the HASI Plus data was not sufficient to support significant before and after change and for this reason clinical significance is not possible to determine.

The HASI Plus waitlist did not provide a sufficient sample for comparative statistical analyses. For this reason, the comparative analyses are based on repeated measure longitudinal data for the same individuals before and after entering the program. Further details of the comparison group are provided in the following section.

Study group

The study group is defined from HASI Plus program data across available Form 1 and Form 2 and CL MDS V2 collections from 2013 to the end of the study period in September 2019 (n=90). The study group is not complete due to 11% (11 of 101) of current consumers not consenting to the data linkage component of the evaluation. Non consenting consumers were excluded by InforMH as the data custodian prior to sending the sample to CHeReL for linkage. As the data linkage is deidentified it is unknown which consumers did not consent and whether this produced additional sample bias.

Comparison group

The evaluation aimed to establish a comparison group from potential consumers who were placed on HASI Plus program waitlists. As this group were assessed as eligible for HASI Plus, they were therefore seen as similar in support needs to those already in the program. The HASI Plus waitlist data were comprised of 36 unique identifiers (PPNs). Two people were excluded as they were placed on the waitlist following the end of the study period. There were 3 people on the waitlist that later entered the program, all remaining on the waitlist for over one year before entry. The waitlist period was intended to provide a potential comparison subgroup to supplement the comparison group sample size.

This left a comparison group sample of 31 who did not enter the program at all. During the data linkage to each source dataset, the number of comparison group individuals varied with the proportion having no activity reported before or after being placed on the waitlist. For this reason, the remaining comparison group was reduced to several individuals that had reported events in any of the 2 years before and after placement on the waitlist. These small comparison group sample sizes were not sufficient to support statistically significant analyses. The waitlist recorded basic demographic details for age and gender and is provided in the Full Analysis Report for reference, **Appendix 1**.

Economic analysis

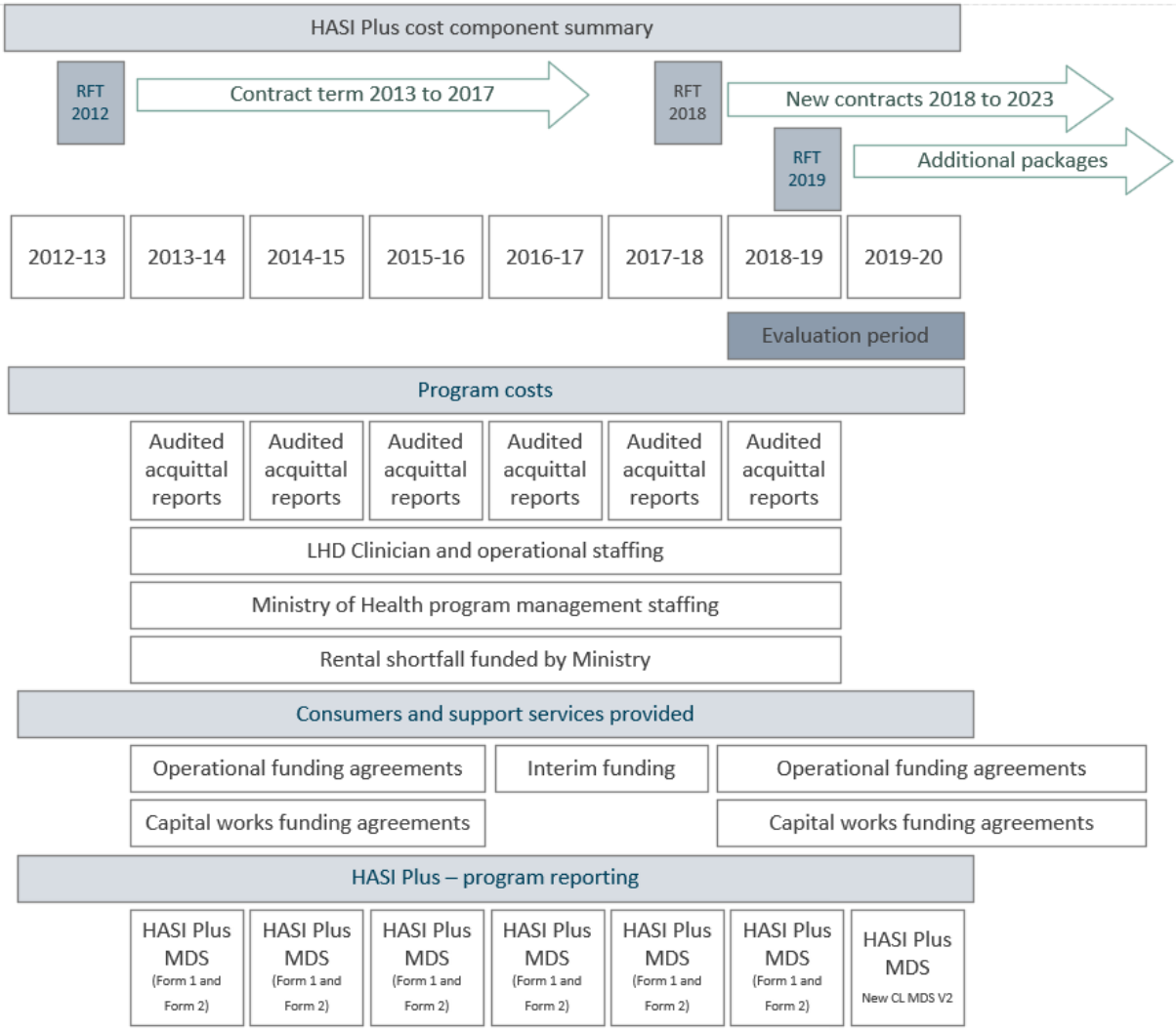
The economic component of the evaluation examined the costs of the HASI Plus program and the outcomes and benefits to consumers in monetary terms. The program cost analysis was then integrated with the program outcomes and benefits from the data linkage, **Appendix 1, Section 5**, to examine program cost effectiveness in broad terms. The relatively small data samples and data limitations did not allow detailed cost effectiveness modelling. The analysis estimated cost offsets to the NSW Government resulting from HASI Plus program support and improved mental health and recovery. These potential benefits include hospital admission and lengths of stay, community mental health services, emergency department presentations, charges in the criminal justice system and community correction orders.

The Ministry provided a detailed background paper for reference on historical development of the HASI Plus program and relevant tender documents (Mental Health Branch, 2018). The program request for tender (RFT) specification and subsequent operational and capital funding agreements with each CMO were also available for review. CMOs provide biannual financial acquittal reports to the Ministry with summary expenditure categories for all operational costs for the reporting period. The annual audited acquittal reports were used to establish total program cost across available years, **Figure 2.** The annual acquittal reports include any adjustments and are signed off through the independent external audit process.

In addition to the acquittal reports which formed the base of CMO costs, program related staffing at the Ministry and host LHDs was estimated based on staff level and FTE proportions allocated to HASI Plus activity. Further cost was included as funding provided for mental health clinicians at each HASI Plus host LHD, in addition to clinicians funded through the CMOs. Rental shortfalls funded separately by the Ministry were also included in the total program cost estimates.

During the initial year in 2012-13, properties were established and modified, and there was limited reported activity for various months. For this reason, the cost review focused on the 5 years of available annual acquittal reports for each CMO from 2014-15 to 2018-19. This period aligned with the initial HASI Plus contracting term from 2013 to 2017. A direct negotiation tender process was undertaken in 2018, and the existing services were recontracted for an additional 5 years through to 2023. Additionally, an open tender process was undertaken to expand the HASI Plus program with 10 new packages, in addition to the current 60. As the establishment of the new packages commenced in 2020 after the end of the study period, the new 10 packages are not included in the program costing or economic evaluation.

Figure 2: HASI Plus program cost and reporting components



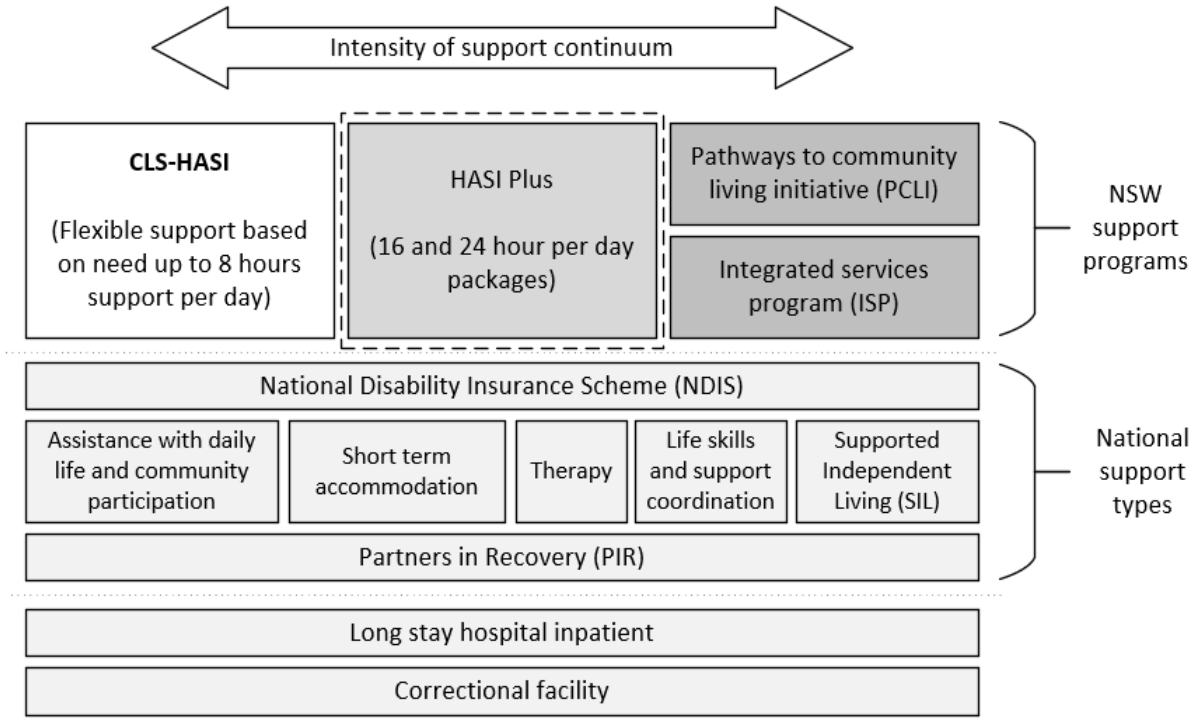
Notes: RFT = Request for tender, MDS = Minimum data set

The economic analysis provides a definition of the HASI Plus support model relative to alternative community based mental health programs available in NSW. HASI Plus is a highly specialised program supporting consumers with severe mental illness above the support level available through wider community-based programs.

As a high intensity support program HASI Plus provides high levels of specialised support with associated higher cost. In this context HASI Plus is examined as a high intensity program on a broader intensity of support continuum, **Figure 3**. As a recovery-oriented model, the implicit goal is that consumers will achieve positive outcomes and where suitable, transfer to sustainable community support through less intensive mainstream programs in the long term. This may present a pathway to lower intensity support through the wider HASI, Community Living Support (CLS) or other programs.

The economic analysis aimed to assess other high support programs in NSW including the Integrated Services Program (ISP), the Pathways to Community Living Initiative (PCLI), as well as comparable types of support available in NSW through the National Disability Insurance Scheme (NDIS). At the time of the evaluation the Commonwealth Partners in Recovery (PIR) program was still operational but in transition to be absorbed into the NDIS. Comparison to these programs implicitly masks variation in complexity, and comparisons need to consider comparative intensity of support to align with similar consumers.

Figure 3: NSW community based psychosocial support



Note: NDIS support types as summarised in Independent Pricing Review, (McKinsey & Company, 2018).

Program funding and average cost per package

The initial HASI Plus cost analysis collated all available contractual and financial reporting to establish the total annual program cost and estimated average annual

cost per package. This incorporates program operating as well as capital funding for investment in leased program property improvements. The figures have been indexed at 2.5% per annum to constant 2018-19 dollars to assess the proportion of costs across key categories for staffing, operational costs and overheads.

As the program data is not complete (due to exclusion of consumers who did not consent for the data linkage), the total number of support hours is not known. This prevents further calculations of average cost per hour as the CMO acquittal reporting includes all consumers. For this reason, the average cost figures focus on average cost per package overall, including 16 and 24 hour packages.

All figures from the acquittal reports for each CMO were collated in Microsoft Excel and grouped by available expense types and reporting categories. There was some variation across CMOs in reported cost types, revenue timing and expenditure on capital works to properties reported through excess funds rolled forward to following reporting periods. For consistency the focus is on actual program expenditure for each year, aligned with the actual number of operational packages at each location as specified in the HASI Plus operational funding agreements (Ministry of Health, 2013). Figures were recorded in each base year and indexed at the budgeted 2.5% per annum.

All program properties are provided through long term leases established by each CMO to ensure stable accommodation for consumers. The program additionally enabled some program funding for modification and refurbishment of properties during the establishment phase to be fit for purpose. The initial investment for each property was individually assessed and formalised through the HASI Plus Capital Works Funding Agreements (Minstry of Health, 2013). The timing and funding of capital works has been examined assuming an asset life of the initial contract period. Capital works reflect the useful timeframe of the investment and a corresponding potentially variable treatment of property depreciation. As the new contracting round in 2018 has utilised existing properties, the value of the initial capital works will likely provide ongoing benefits to the program beyond initial contracting timeframes.

Program cost offsets

The outcomes from the data linkage quantitative analysis provided the basis for estimating service use cost offsets across NSW government agencies including hospital admissions and length of stay, emergency department, community mental health services, corrective services and community correction orders. Due to the small and incomplete study group sample, outcomes that were not statistically significant were not included in estimated cost offsets.

The data linkage for inpatient hospital days showed a significant decrease following entry to the program. Admitted hospital days were assessed by Diagnostic Related Groups (DRG) cost weights (Independent Hospital Pricing Authority, 2020). As HASI Plus consumers often remained in hospital for long periods, over a year in many cases, the average length of stay was generally substantially longer than average DRG length of stay. For this reason, average daily cost was calculated for each DRG and multiplied by the change in average length of stay for consumers following entry to the program.

Limitations

The economic analysis is integrated with the data linkage and quantitative analyses and therefore is subject to the same limitations as noted previously including:

- The small and incomplete study group data. This was smaller than expected due to 11% of consumers (11 of 101) being excluded as they did not give consent for the data linkage. This restricted subgroup analyses as sample sizes fewer than 5 are not reported to protect confidentiality.
    - The incomplete study group prevented calculation of average costs per support hour as the cost data was complete and the total program support hours were unknown. For this reason, average cost is based on cost per package and estimated average cost by 16 or 24 hour packages was not possible.
- Most program data was from the initial Form 1 and Form 2 collection prior to the introduction of the CL MDS V2. This initial program content reported substantially less detail than the later CL MDS V2. The Form 1 and Form 2 data also had data quality issues with incomplete data items.
- The comparison group sample resulted in low data linkage sample sizes and was not sufficient for statistically significant analyses. The repeated measure before and after analyses provided larger samples and statistically significant results in larger linkage datasets.

Future program economic analysis

The economic component of the evaluation was limited by available data and study group sample sizes. The HASI Plus evaluation was undertaken by SPRC in parallel with the HASI/CLS evaluation. This provided potential benefits to the quantitative and economic component methods, as the approach across data sources and linkage were shared and leveraged where possible for the smaller HASI Plus evaluation.

The issue with poor HASI Plus program data was resolved towards the end of the study period in May 2019 with the implementation of the CL MDS V2. Although the first version of the HASI MDS was implemented for the HASI/CLS programs during 2017, HASI Plus retained the original Form 1 and Form 2 collection until the introduction of the CL MDS V2. The Ministry investment in the CL MDS V2 has allowed a substantially superior data collection which will benefit ongoing HASI Plus quantitative and integrated economic research.

The original project timeframe was to finish prior to the commencement of the CL MDS V2 HASI Plus implementation. As a result of significant delays with data source approvals and linkage as well as COVID-related complications, the evaluation period continued beyond the CL MDS V2 introduction. The research team actively extended the data linkage period to include ‘all available’ content. Although the CL MDS V2 data was only available for the final 5 months of the evaluation from May 2019, this provided the first available enhanced program data for preliminary assessment. The transition to the new CL MDS V2 collection (from the Form 1 and Form 2 collection, rather than through incremental change like in HASI/CLS) presented additional complications with comparability and substantially new data detail and format. This mid-evaluation change in program data was a one-off event and will not impact further HASI Plus research.

The HASI/CLS methodology and economic Markov modelling approach provides details of potential enhanced economic evaluation of program cost effectiveness. The HASI/CLS evaluation shared all data linkage sources with the HASI Plus evaluation, but the substantially larger HASI/CLS sample sizes supported more significant results, including novel methods of mental health bridging algorithms based on K10 scores to estimate Quality Adjusted Life Years (QALYs).

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Appendix 4 Evaluation questions matched to methods

Evaluation of Housing and Accommodation Support Initiative Plus (HASI Plus) – Evaluation Report

Evaluation compo-nents	Evaluation questions	Literature review	Consu-mers	Fami-lies / carers	HASI Plus local providers	Govern-ment stake-holders	Other state-level stakehol-ders	Outcome data	Econom ic and cost benefit analy-sis
		Similar intensive, integrated programs	People in the program and exited program		CMOs; LHD staff; other relevant local service providers	e.g. the Ministry, Justice, Corrective Services, FACS (now DCJ)	e.g. Being, MH Carers NSW, MH Commissi on NSW	Consumer outcome data (the Ministry), demograp hic data (MDS)	
	Data gathering approach/ process / Evaluation questions	Data base searches and grey literature	Field visits (including peer-interviewi ng)	Field visits and off-site phone	Field visits and off-site phone	Phone interviews	Phone interviews	Provided by the Ministry (InforMH) and CHeReL linkage	Provided by the Ministry
Process and outcome evaluation	**Extent to which the program supports transition of people with severe and persistent mental illness from institutional contexts to community living, and the experience and outcomes of different groups.**								
	Overall how **effectively** does the program support **transition** of people with severe and persistent mental illness to community living		x		x	x	x	x	

Evaluation compo-nents	Evaluation questions	Literature review	Consu-mers	Fami-lies / carers	HASI Plus local providers	Govern-ment stake-holders	Other state-level stakehol-ders	Outcome data	Econom ic and cost benefit analy-sis
	Accommodation models, their suitability for consumers, how they affect outcomes; and management of accommodation models	x	x	x	x				
	Accommodation support and its effectiveness (tenancy issues, tenancy skills, engagement of consumers and its success etc)	x	x	x	x				
	Referral pathways (effectiveness for different groups; eligibility criteria, equitability, differences to other community support models)	x	x	x	x	x	x		
	Transition Out – how many consumers, what have been their outcomes, issues around planning and support, factors supporting step down to other models of community support, factors preventing transition, continuity of care etc)	x	x	x	x	x	x		
	What are the **different needs** of the subgroups and are they being met by the program? And when exiting HASI Plus?		x	x	x	x	x		
	Do consumers have sustained improvements in their mental and physical health and greater wellbeing? Consumers' experience of the HASI Plus program								

Evaluation compo-nents	Evaluation questions	Literature review	Consu-mers	Fami-lies / carers	HASI Plus local providers	Govern-ment stake-holders	Other state-level stakehol-ders	Outcome data	Econom ic and cost benefit analy-sis
	Overall do consumers experience **sustained improvements** in their physical health and mental health and wellbeing? Do consumers have access and receive the support they require?		x	X	x	x	x	x	
	What are the **different needs** of the target groups (physical, mental health, psychosocial support) and are they being met?		x	X	x	x	x	x	
	Mental health: appropriateness of support, effectiveness of coordination of: level of care, recovery orientation, planning, goal setting, additional supports required		x	X	x	x	x	x	
	What are the outcomes for consumers **with drug and alcohol** use issues? How effectively does the program support them?		x	X	x	x	x	x	
	Psychosocial support and outcomes for consumers: how effectively the program links consumers to community-based services; extent of community engagement; what helps to		x	x	x	x	x		

Evaluation compo-nents	Evaluation questions	Literature review	Consu-mers	Fami-lies / carers	HASI Plus local providers	Govern-ment stake-holders	Other state-level stakehol-ders	Outcome data	Econom ic and cost benefit analy-sis
	increase daily living skills and participation in training, work, etc. Flexibility of packages								
	What are the experiences of consumers of the overall HASI Plus support including psychosocial support? What would they like to improve?		x	x	x				
	Culture: How sensitive and appropriate is the program to the needs of **Aboriginal people**, what are their needs? Are they being met?		x	x	x		x		
	What are the experiences of families and carers of the program and their engagement?								
	What are the **experiences of family and carers** of the program (and consumers' outcomes)? What aspects would they like to improve?			x	x	x	x		
	How satisfied are family/carers about their engagement in the program? How can it be improved?			x	x		x		
	Effectiveness of program operations, governance and partnerships								
	How **effective is the operational governance** and management of the program? (policies, procedures,				x	x	x		

Evaluation compo-nents	Evaluation questions	Literature review	Consu-mers	Fami-lies / carers	HASI Plus local providers	Govern-ment stake-holders	Other state-level stakehol-ders	Outcome data	Econom ic and cost benefit analy-sis
	funding, how LHDs use funding allocation etc)								
	What are **the workforce issues** for organisations in the program? (skills, qualifications, recruitment, retention, training needs, peer workforce etc)				x	x	x		
	Coordination and its effectiveness: Do organisations involved in the program have **effective partnerships**? (i.e. LHDs and community organisations) What helps and hinders these?				x	x	x	x	
	How do relationships **affect outcomes for consumers**? i.e. Admissions and referrals, coordination of support etc.		x	x	x	x	x	x	
Economic evaluation	**Reduction of avoidable presentations to emergency departments, mental health facilities and related services and the impact on the health system**								
	Crisis presentations: is the number of avoidable crisis presentations reduced? What is the overall impact on the health system?				x	x	x	x	

Evaluation compo-nents	Evaluation questions	Literature review	Consu-mers	Fami-lies / carers	HASI Plus local providers	Govern-ment stake-holders	Other state-level stakehol-ders	Outcome data	Econom ic and cost benefit analy-sis
	What are **critical factors** that lead to **success** in reduction of avoidable hospitalisations?		x	x	x	x	x	x	
	What is the funding model of the program and cost and benefits?								
	What is the **cost per consumer**, package type and consumer group in the program?					x		x	x
	What is the **funding model and how are resources spent across** the elements of the program: clinical, psychosocial, accommodation support				x	x	x		x
	Monitoring and data collection: how well does data collection support improved knowledge about the program and its outcomes?								
	What outcome **measures are collected** and reported? Do they provide adequate data about program impact and operations?				x	x	x	x	x
	What additional data could be collected to assist in monitoring?				x	x	x		x
	How is recovery progress monitored in the program?				x	x	x	x	x

Appendix 5 Review of HASI Plus program documents

Evaluation of Housing and Accommodation Support Initiative Plus (HASI Plus) – Evaluation Report 2022

Contents

Introduction

This short review of HASI Plus program documents supplied by the NSW Ministry of Health (the Ministry) describes the intended set up of the program, in particular its service model, consumer characteristics, program support, family participation, funding model and monitoring. The purpose of the review is to outline the anticipated features and functioning of HASI Plus, which can then be compared to the evaluation findings. This will enable the evaluation to assess to what extent and in which ways program implementation and outcomes on the ground match program intent. The content of the document review is guided by the evaluation questions.

HASI Plus provides recovery-oriented, high-intensity, community-based support for people with severe mental illness and significant functional impairment. The program

integrates intensive clinical and psychosocial support (16 to 24 hours per day, seven days per week) with stable, community-based housing, to support consumers to live and participate in the community. A recovery framework underpins the program.

At the core of the program is a partnership between local health districts (LHDs) and community managed organisations (CMOs).

HASI Plus Service Model

Evaluation questions:
How **effective is the operational governance** and management of the program? (policies, procedures, funding, how LHDs use funding allocation etc).
Coordination and its effectiveness: Do organisations involved in the program have **effective partnerships**? (i.e. LHDs and CMOs). What helps and hinders these?
How do relationships **affect outcomes for consumers**? i.e. Admissions and referrals, coordination of support etc.

HASI Plus is available to consumers from **across NSW**, however support is offered at 8 community-based residential settings in 4 host LHDs - Northern Sydney, Hunter New England, Mid North Coast and Western Sydney. HASI Plus differs from other community-based programs (for example, Community Living Supports (CLS) and Housing and Accommodation Support Initiative (HASI)) as housing is also provided for the time consumers are participating in the program. When HASI Plus was established in 2013, 3 CMOs were selected through competitive tender to establish and deliver HASI Plus in 3 LHDs (Northern Sydney, Western Sydney and Hunter New England). A fourth was tendered for and established in Mid North Coast LHD in 2020 and has not been included in this evaluation. In 2018, the Ministry extended the funding agreements with the 3 original CMOs for another 5 years following a direct negotiation process.

During the evaluation period, a total of 60 HASI Plus **packages** were offered, consisting of 35 x 24 hour a day and 25 x 16 hour a day packages of integrated housing, psychosocial and clinical support. An additional 10 packages (5 x 16 hour a day and 5 x 24 hour a day) became available in mid-2021 as an enhancement to HASI Plus.

The HASI Plus service model requires effective **partnerships** between a range of organisations. CMOs need to deliver housing, psychosocial and clinical supports in partnership with dedicated specialist rehabilitation clinical supports from the LHD community mental health teams and other support services as appropriate, such as Aboriginal Community Controlled Organisations or private practitioners. A Service

Level Agreement must be established between the CMO and LHD mental health service and reviewed at least annually.

Effective partnerships with representatives from the Justice Health and Forensic Mental Health Network (JH&FMHN) and from Corrective Services NSW are another requirement of the service model, as consumers in contact with the criminal justice system may be eligible for HASI Plus. CMOs must have a demonstrated capacity to work effectively with forensic consumers and with people exiting correctional facilities or subject to community correction orders.

CMOs need to provide evidence to the Ministry of the systems and processes that have been put in place to maintain effective partnerships and shared **governance** arrangements with these stakeholders. This includes, for example, shared decision-making on consumer needs and support, and record sharing between partners and sub-contractors where relevant.

A HASI Plus **Steering Committee** oversees and advises about the development, implementation and ongoing design and improvement of the program including any significant process and/or service model changes. The Steering Committee is chaired by the Ministry and consists of representatives from:

- each CMO
- each host LHD
- JH&FMHN
- representatives from non-host LHDs to include perspectives from the state-wide HASI Plus referral network.

Consumer characteristics

Evaluation questions:
What are the **different needs** of the target subgroups (physical, mental health, psychosocial support) and are they being met by the program? And when exiting HASI Plus?

Eligibility and suitability

Broadly, people are eligible for HASI Plus if they have a primary diagnosis of severe mental illness that has a significant impact on their day-to-day functioning. These diagnoses predominantly include schizophrenia and related psychotic disorders or severe mood disorders. The program prioritises people who cannot be discharged from institutional care without the intense integrated supports provided by the HASI Plus program.

To be accepted into the program, people also need to be deemed suitable. Clinicians from the host LHD and the CMO consider whether the housing and support model available in the area will be suitable for someone who is found eligible for the program. LHDs and CMOs consider factors including:

- What are the consumer's personal recovery goals?
- Are their symptoms stable?
- If the consumer has drug or alcohol dependence, can their treatment support needs be met and are they willing to engage in treatment?
- How would the person fit with the current consumer group? Can non-clinical support staff meet the consumer's needs?
- How much support does the person need with self-care and activities of daily living?
- Is the housing model (individual/ shared apartment) suitable for the person?

Referral pathways

Evaluation questions:
Referral pathways (effectiveness for different groups; eligibility criteria, equitability, differences to other community support models)

HASI Plus is a state-wide resource with a mix of 'local packages' and 'state-wide packages' in each host LHD. Local packages are reserved for consumers who currently reside within the LHD where the HASI Plus service is offered. Referrals for state-wide packages are accepted from all LHDs in NSW that do not host the program, the JH&FMHN and Corrective Services NSW (via JH&FMHN if the person is in custody).

During the evaluation period, the referral and intake process for HASI Plus changed. Between 2013 and 2015, the NSW Chief Psychiatrist within the Ministry assessed eligibility for the program. Between 2015 and 2017, the Ministry chaired a centralised, statewide review committee. In 2017, the NSW Chief Psychiatrist recommended devolving the responsibility for referral and intake to local assessment committees in each host LHD. As such, determining eligibility or suitability for the program is now managed at the local level.

During the evaluation period, there were 34 state-wide packages and 26 local packages. Following the enhancement of 10 additional packages, there are currently 39 state-wide and 31 local packages.

Diversity of program consumers

Evaluation questions:

Effectiveness for **different kinds of consumers**:

Culture: How sensitive and appropriate is the program to the needs of **Aboriginal people?** What are their needs? Are they being met?

What are the outcomes for consumers **with drug and alcohol** use issues? How effectively does the program support them?

The HASI Plus service model requires CMOs to recognise the cultural and social **diversity** of consumers. Physical and social environments in the program, staff practices and program procedures need to ensure that people of different ages and cultural and social backgrounds feel safe and supported.

Effectively responding to diversity includes being able to demonstrate robust and sustainable strategies to ensure culturally appropriate supports for **Aboriginal** people. This includes Aboriginal cultural awareness training for all service delivery staff, established links with local Aboriginal communities, organisations and services, and sustainable strategies to ensure that local Aboriginal communities recognise the program, such as the ongoing maintenance of Aboriginal community cultural reference groups.

HASI Plus is intended to support people with a complex combination of mental illness and functional impairment. Many consumers may have additional **complex needs**, for example:

- coexisting **substance use** disorders
- complex experiences of grief and/or trauma
- a history of contact with the criminal justice system.

The Ministry has identified ensuring equitable access for highly complex consumers as a priority in the 2018 to 2023 funding agreement.

Program support

Evaluation questions:

Housing models, their suitability for consumers, how they affect outcomes; and management of housing models.

What are **the workforce issues** for organisations in the program? (skills, qualifications, recruitment, retention, training needs, peer workforce etc)

Effectiveness of program support.

What are the experiences of consumers of HASI Plus? What would they like to improve?

Overall do consumers experience **sustained improvements** in their physical health and mental health and wellbeing?

- **Housing support** and its effectiveness (tenancy issues, tenancy skills, engagement of consumers and its success etc). Do consumers have access and receive the support they require?
- **Mental health support:** appropriateness of support, effectiveness of coordination of: level of care, recovery orientation, planning, goal setting, additional supports required.
- **Psychosocial support and outcomes for consumers**: how effectively HASI Plus links consumers to community-based services; extent of community engagement; what helps to increase daily living skills and participation in training, work, etc. Flexibility of packages.
- **Hospital presentations**: is the number of avoidable hospital presentations reduced? What is the overall impact for the health system? What are **critical factors** that lead to **success** in reduction of avoidable hospitalisations?

HASI Plus consumers receive a **holistic** package of recovery-focused, integrated community support encompassing four key elements described below:

1. stable, community-based and fit-for-purpose housing for the duration of their participation in the program
2. flexible, high-intensity housing support services
3. flexible, high-intensity psychosocial support services and
4. coordinated multi-disciplinary mental health clinical support provided in partnership with the LHD mental health services and other support services as appropriate.

In addition, the service model includes consumer-led support planning, integration with other funding sources and transition support in and out of HASI Plus, as described below.

Housing

Each HASI Plus consumer accesses stable, community-based and fit-for-purpose housing for the duration of their participation in the program. CMOs provide housing services to support this component of the program, either directly or through sub-contracting or consortium arrangements.

The type and configuration of the housing varies across the current HASI Plus sites. In general, and where possible, properties are expected to be:

- self-contained and close to public transport, local services and amenities
- located within a reasonable distance from the associated integrated clinical services to ensure an appropriate access to support
- consistent with local community norms in terms of appearance and function
- sufficiently flexible so that, ideally, consumers do not have to move while they are participating in the program and their hours of support vary due to need
- as far as is reasonably practicable, an environment that is safe and minimises risks for consumers and support staff, in accordance with any applicable legislation or other standards.

Housing support

HASI Plus consumers are supported to maintain their tenancies. This support is flexible, high-intensity and should include:

- matching consumers to available housing to best meet their needs
- entering into and managing tenancy (or other similar) agreements with HASI Plus consumers consistent with statutory or other legal requirements including those established in the Residential Tenancies Act 2010 (NSW)
- supporting consumers to be aware of their tenancy rights and responsibilities and independently manage and sustain their tenancy
- participating in collaborative case management for issues which may impact on tenure, including neighbourhood problems
- brokerage or facilitating access to furniture
- where practicable, supporting consumers leaving the HASI Plus program to obtain suitable housing.

Psychosocial support

HASI Plus supports consumers to build independence in daily life and delivers a range of recovery-oriented psychosocial supports seven days per week.

The types of flexible psychosocial supports provided under HASI Plus include:

- assisting with daily living skills including self-care, personal hygiene, cleaning, shopping, cooking and transport
- support in understanding and complying with clinical care requirements including medication
- supporting attendance at appointments including with health and welfare services
- facilitating access to education, vocational training and employment
- supporting participation in social, leisure and recreation opportunities
- support in building and maintaining family and community connections
- brokerage / facilitating links to other related services including primary health General Practice, drug and alcohol treatment, aged care and therapeutic services such as occupational therapists, nutritionists, physiotherapists, and dentists
- where applicable, supporting participation in Aboriginal community activities that contribute to improved emotional and social wellbeing.

A coordinated, non-duplicative approach to support planning is expected including, where applicable, integrating access to complementary psychosocial supports funded under the National Disability Insurance Scheme (NDIS).

Mental health clinical support

HASI Plus participants typically have complex, and often coexisting, clinical care requirements. The service model provides for an intensive and holistic range of clinical supports by funding a dedicated clinician in both the CMO and the host LHD.

The CMO clinician must have:

- tertiary qualifications as a Registered Nurse, Social Worker, Occupational Therapist or Psychologist
- current unrestricted registration with the Australian Health Practitioners Regulation Agency (AHPRA)
- specialist mental health skills and experience working with the HASI Plus target cohort.

The CMO mental health clinician is required to work in close cooperation with the LHD clinician to jointly plan and implement clinical care and rehabilitation for HASI Plus consumers.

In addition, the clinicians are expected to participate in program governance structures as may be required by the Ministry and liaise with other program stakeholders, including the housing provider, if applicable.

Support planning

HASI Plus consumers are supported to take responsibility for their own recovery and wellbeing. This includes supporting all consumers to develop a recovery-oriented individual support plan that includes clear goals, timelines and an explanation of staff and consumer responsibilities. Plans should be formulated by the consumer in close consultation with family, carers and support staff.

Support planning is a critical element within the HASI Plus service model. It provides consumers and CMO staff with a tool to understand consumers' needs and goals and the steps to work towards these, including eventual exit to less intensive support arrangements. The support planning and implementation process must be consistent with and complement the clinical care planning processes of the local community mental health service partner and, if relevant, any legal orders that affect a consumer's support provision.

Integration with other funding sources

HASI Plus consumers may be eligible for support from other funding sources, such as the NDIS. HASI Plus does not preclude consumers from accessing other funding except from HASI or CLS. It is intended that additional supports complement those provided by HASI Plus.

Transition support

Evaluation questions:
Overall how **effectively** does the program support **transition** of people with severe and persistent mental illness to community living?
Transition Out – how many consumers, what have been their outcomes, issues around planning and support, factors supporting step down to other models of community support, factors preventing transition, continuity of care etc)?

A smooth **transition** from inpatient hospital, correctional or other facility **into** the community based HASI Plus housing is important to reduce unnecessary hospital readmissions and ensure sustainable community support. This relies on effective communication with inpatient clinical teams, other LHD mental health staff and/or other agency staff who are involved in the consumer's support, as well as carers and/or families.

It is expected that comprehensive transition planning commences before the person's discharge. This process should include:

- comprehensive assessment of the person's needs
- close communication and liaison with the consumer, their carer and/or family, inpatient clinical staff and other staff involved in their care
- practical support to ensure transport and that the HASI Plus housing is secure, clean and functional for the person's arrival
- ongoing support to comply with clinical care requirements (including medication) during any trial periods in the housing
- liaison with community and/or forensic mental health teams to support appropriate clinical support and follow-up in the community.

As a recovery-oriented support model, it is expected that the needs of HASI Plus consumers will change over time. While there is no time limit, it is anticipated that consumers will **transition out** of the HASI Plus housing to less intensive, community-based support arrangements. The Ministry has identified facilitating recovery-based transitions to less intensive support as a priority in the 2018 to 2023 funding agreement.

Family and carer participation

Evaluation questions:
What are the **experiences of family and carers** of the program (and consumers outcomes)? What aspects would they like to improve? How satisfied are family/carers about their engagement in the program? How can it be improved?

The HASI Plus service model recognises the importance of carers and family members to the wellbeing and recovery process for consumers. This includes having clear strategies to recognise and include carers and family members in decision making, consistent with the *Carers Recognition Act 2000* (NSW) and *NSW Carers Strategy 2014-2019* and the relevant provisions of the *Mental Health Act 2007* (NSW).

Funding model

Evaluation questions:

What is the **cost per consumer**, package type and consumer group in the program?

What is the **funding model and how are resources spent across** the elements of the program: clinical, psychosocial, housing support

HASI Plus was established in NSW in 2012 with funding support from the Commonwealth Government under the *National Partnership Agreement Supporting Mental Health Reform* (2011 – 2016) (NPA). Under the NPA, the NSW Government received funding until 30 June 2016 to improve outcomes for people with severe and persistent mental illness through state-wide partnership between the Ministry and specialist mental health CMOs. A portion of these funds were allocated to establish the HASI Plus program.

A competitive open tender was conducted in 2013 and 3 CMOs were selected to establish and deliver HASI Plus in 3 LHDs. Services and capital funding agreements were signed. All 3 HASI Plus CMOs also received additional funding to reflect increased wage costs ordered by Fair Work Australia.

At the end of the NPA, the NSW Government committed to continue funding HASI Plus as part of the NSW Mental Health Reform 2014-24 investment consistent with its commitment in the *Fifth National Mental Health and Suicide Prevention Plan 2017 – 2022.* The Ministry then conducted direct negotiations with the existing CMOs for procurement of HASI Plus for an additional five years from 2018 to 2023. In 2020-21, a competitive open tender process was undertaken to deliver an additional 10 packages announced as an enhancement to HASI Plus, which became operational in a fourth LHD in mid-2021.

Monitoring

Evaluation questions:

What outcome **measures are collected** and reported? Do they provide adequate data about program impact and operations?

What additional data could be collected to assist in monitoring?

How is recovery progress monitored in the program?

The key high-level **outcomes** of HASI Plus are:

- people with severe mental illness who have resided long-term in mental health facilities, prisons or hospitals transition to live in the community

- consumers have sustained improvements in their mental and physical health and experience greater wellbeing
- organisations have effective partnerships which support improved quality of life for people with severe mental illness
- there is a reduction in the number of avoidable presentations to emergency departments, mental health facilities and related support services
- the service provision is sustainable and financially viable
- consumer outcomes and the program performance are effectively monitored
- the program is appropriately governed.

Effectively measuring and reporting consumer outcomes is an essential part of service delivery. CMOs are expected to implement a regular, structured program of outcome measurement.

The HASI Plus Monitoring and Reporting Framework aims to guide consistent and transparent monitoring of the impact of HASI Plus, as evidenced by consumer outcomes and program outcomes. The key elements of the Monitoring and Reporting Framework are reporting against the Minimum Data Set Specification, the Service Performance Measures and Annual Program Report, Monthly Status Reports (including information on eligibility and suitability), Financial Reporting, Exit Reports and Incident Reports.

The **minimum data set** (MDS) was updated in May 2019 for the HASI Plus program. The MDS collects client information, including demographic, client status and referral information, package and accommodation type, outcome measures and types and hours of support provided. From May 2019, CMOs are required to submit the MDS every month for each consumer receiving services.

CMOs are required to submit an **annual report** against the Service Performance Measures in the Funding Agreement. The Service Performance Measures allow for reporting of outcomes in service development, governance, quality improvement, client case studies and other descriptions of service delivery. The annual report also gives CMOs the opportunity to notify the Ministry of any plans for the following year and any other issues not accounted for elsewhere in the monitoring framework. The Ministry provides a template for this report.

Appendix 6: Quantitative analysis results of outcomes for HASI Plus consumers

Evaluation of Housing and Accommodation Support Initiative (HASI Plus) – Evaluation Report – 2022

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Figures

Introduction

This appendix presents statistical analysis results from the HASI Plus data linkage. The results offer further detail to program outcomes in Section 5 of the Full Analysis Report, **Appendix 1**.

The figures are generally presented as change in year one following entry to the HASI Plus program. All results are calculated using regression methods adjusted for the number of months consumers were observed following entry. This gives consistent time periods for comparative before and after results, given the 'right' censored data resulting from consumers being in the program for varying timeframes or entering the program with limited months of follow up before the end of the study period.[1]

This Appendix examines HASI Plus program outcomes across mental health, healthcare service use of hospital, emergency department and community mental healthcare, housing status, as well as contact with corrective services and community correction orders. The analysis is based on the HASI Plus consumer data linkage undertaken by the NSW Health Centre for Health Record Linkage (CHeReL). Results are presented across 2 years prior to entering and 2 years following entry to the program. In line with the methodology the analyses are a time series framework examining individual consumers retrospectively before they joined the program and changes following program entry.

The evaluation attempted to establish a potential comparison group using program waiting lists, however there were insufficient sample sizes to support statistically significant analyses.

The study group data linkage also contained small samples of consumers (n=90) with substantially smaller groups for many outcomes due to missing data items and variation in linkage rates with each source dataset. For this reason, the outcomes are based on before and after program entry across each linked data source which supported statistically significant results across some outcomes.

[1] The statistical analysis approach adjusts for the number of observed months for each HASI Plus consumer before and after entry to the program. For example, the data linkage provides retrospective healthcare records for consumers for a full 12 months before program entry. But following entry some consumers may have less than 12 months of observed data, such as when a consumer may exit the program or have entered less than 12 months before the end of the study period. This 'right' censoring is adjusted for the number of observed months following entry to provide the basis for before and after entry comparison and analysis. For example, 2 hospital admissions over 12 months before entry compared to one admission over 8 months following entry. This provides a calculated comparable rate of each data event before and after entry. Further details of the statistical analysis are provided in **Appendix 3 Evaluation Methods**.

The results are for total study group linkage by year. Subgroup analysis across gender, age groups, and Aboriginal status are not presented due to very small sample sizes to protect confidentiality as many had less than 5 consumers.

Mental health outcome scales

This section examines mental health outcomes reported through the NSW Mental Health Outcomes and Assessment Tools (MHOAT) including the Kessler Psychological Distress Scale (K10), the Health of the Nation Outcome Scales (HoNOS) and the Life Skills Profile - 16 (LSP - 16). The metal health indicators have been examined in line with methods of average difference. As for the study group overall, due to small samples and variation in response rates to each mental health survey, many results are not statistically significant. Figures were separately examined for effect size (ES) to assess clinically significant change in line with methods proposed by the Australian Mental Health Outcomes and Classification Network (AMHOCN, 2008). Effect size methods are generally robust for small sample sizes, however in very small samples as for the HASI Plus data, there is insufficient data to support evidence of clinically meaningful mental health outcomes.

The ES examines the magnitude of a treatment effect based on before and after change and the standard deviation of the pre score where Cohen's scores of 0.2 are defined as small, 0.5 as medium and 0.8 a large effect. These ranges in ES are used to assess clinically meaningful change at an individual level (Eisen, Ranganathan, Seal, & Spiro, 2007). The small samples also reflected substantial variation (as shown in wide figure confidence intervals), as well as likely variable data quality in older data collections. It is likely that the routinely collected mental health surveys were assessed as not suitable for some consumers.

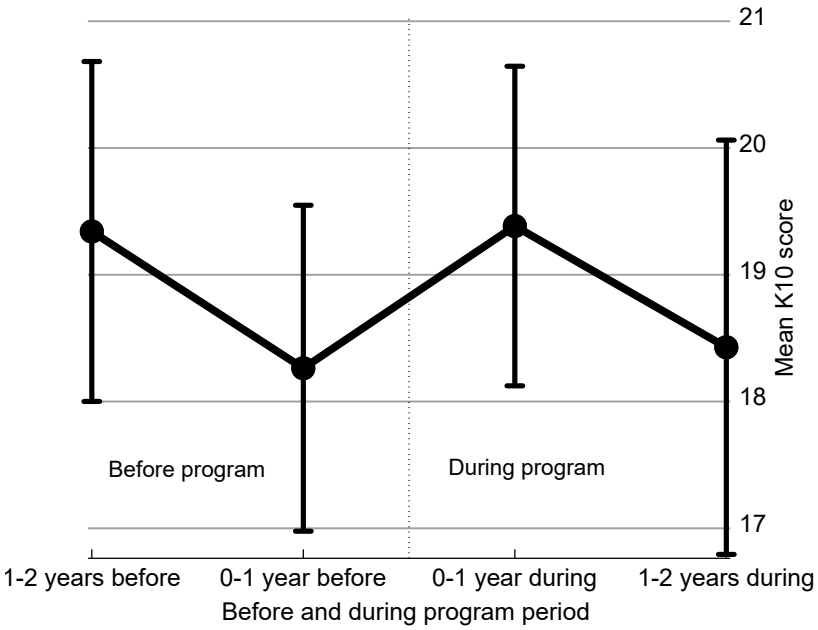
Overall, due to the small data samples, changes in consumer mental health outcomes following entry to the program are not statistically significant.

1.1 Kessler Psychological Distress Scale (K10)

The K10 is routinely used in Australia as an established screening survey for serious mental illness in the general population, (Kessler et al., 2003). The K10 is scored using a five-level response scale where one is the minimum score for each item (not experienced) and 5 is the maximum score (always experienced), giving a minimum possible score of 10 and a maximum possible score of 50 (Australian Bureau of Statistics, 2007-08). Consumers' level of psychological distress reflected substantial variation and was not statistically significant based on the small study group sample (n=34), **Figure 1**. The wide confidence intervals reflect variation in the small sample.[2]

[2] Repeated measures for same consumers, excluding consumers who did not have at least one K10 score before and after entry to the program.

Figure 1: Average K10 scores per person pre and post program entry



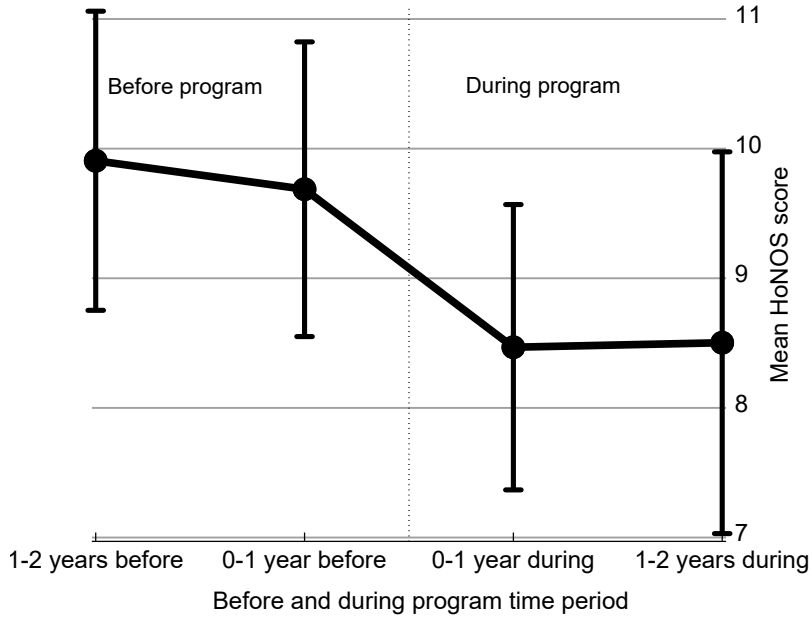
Source: HASI Plus linked MHOAT, n=36. Notes: Average K10 scores per person per year, before and after program entry with 95% confidence intervals shown as vertical bars.

1.2 Health of the Nation Outcome Scales (HoNOS)

The HoNOS is completed by a clinician and contains 12 scales across 4 domains: behaviour, impairment, symptoms and social functioning. Each item has a 5-point scale, where zero means low and 4 means high. Therefore, a lower HoNOS score indicates an improvement.

Of the 90 HASI Plus consumers in the study group, 32 had a HoNOS score in the year before and the year after program entry. HoNOS scores improved slightly after entering the program and seemed to continue into the second year in the program, **Figure 2**. The results were not statistically significant due to the small study group (p=0.129).

Figure 2: Average HoNOS scores per person pre and post program entry

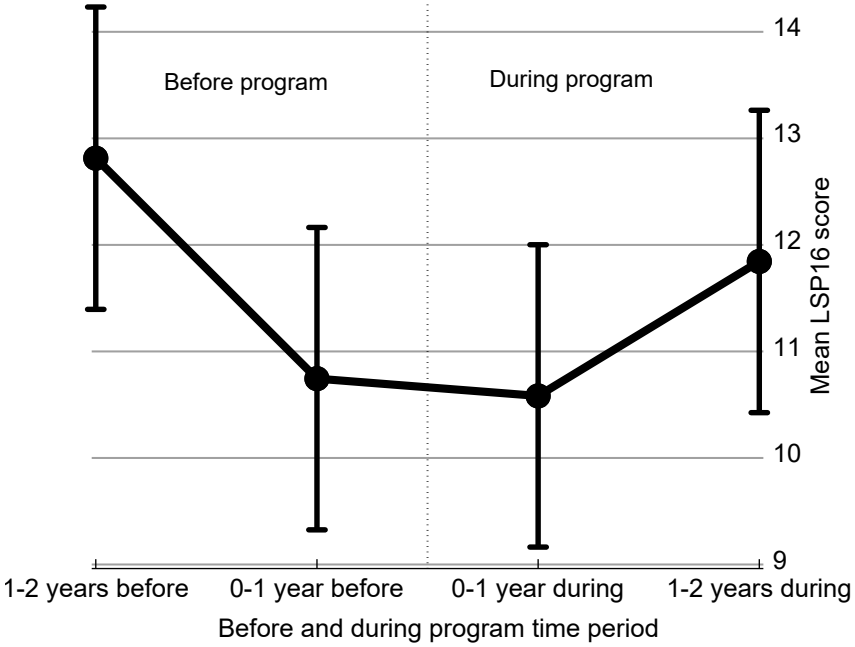


Source: HASI Plus linked MHOAT, n=32. Notes: Average HoNOS scores per person per year, before and after program entry with 95% confidence intervals shown as vertical bars.

1.3 Life Skills Profile - 16 (LSP - 16)

The LSP - 16 was developed by an Australian clinical research group to assess a consumer's abilities with respect to basic life skills (such as social behaviour and self-care). All items are answered on a four-point scale, with higher scores indicating a greater degree of functional impairment. A total LSP - 16 score is calculated by adding individual scores together with a possible range from zero to 48. Items with missing data are excluded from the calculation.

Figure 3: Average LSP - 16 scores per person pre and post program entry



Source: HASI Plus linked MHOAT, n=18. Notes: Average LSP – 16 scores per person per year with 95% confidence intervals shown as vertical bars.

Due to insufficient sample size (n=18), these results are not statistically significant.

The proportions of LSP-16 responses prior to entry are provided only as a supplementary descriptive profile at baseline, **Table 1**.[3] (The sample of n=25 is slightly larger than Figure 3 (n=18), which required before and after scores that were missing for 7 consumers.) The profile shows generally good functioning in relationship skills, compared to personal wellbeing and work.

[3] Life Skills Profile (LSP-16) | AMHOCN - Australian Mental Health Outcomes and Classification Network

Table 1: LSP - 16 indicative profile characteristics at program entry

	Question	0	1	2	3
1	Does this person generally have any difficulty with initiating and responding to conversation?	80%	16%	4%	0%
2	Does this person generally withdraw from social contact?	64%	32%	4%	0%
3	Does this person generally show warmth to others?	52%	32%	16%	0%
4	Is this person generally well groomed (eg, neatly dressed, hair combed)?	40%	36%	16%	8%
5	Does this person wear clean clothes generally, or ensure that they are cleaned if dirty?	48%	36%	8%	8%
6	Does this person generally neglect her or his physical health?	44%	36%	12%	8%
7	Is this person violent to others?	84%	12%	4%	0%
8	Does this person generally make and/or keep up friendships?	40%	40%	16%	4%
9	Does this person generally maintain an adequate diet?	44%	28%	16%	12%
10	Does this person generally look after and take her or his own prescribed medication (or attend for prescribed injections on time) without reminding?	68%	12%	20%	0%
11	Is this person willing to take psychiatric medication when prescribed by a doctor?	72%	28%	0%	0%
12	Does this person co-operate with health services (eg, doctors and/or other health workers)?	68%	32%	0%	0%
13	Does this person generally have problems (eg, friction, avoidance) living with others in the household?	64%	28%	8%	0%
14	Does this person behave offensively (includes sexual behaviour)?	92%	8%	0%	0%
15	Does this person behave irresponsibly?	52%	24%	20%	4%
16	What sort of work is this person generally capable of (even if unemployed, retired or doing unpaid domestic duties)?	8%	20%	32%	40%

Source: HASI Plus linked MHOAT, n=25.

Notes: Lower scores represent better functioning, sample size n=25

Accessing community mental health services

The evaluation data linkage included the Mental Health Ambulatory data set (MH-AMB) which gives details of community mental health services accessed by HASI Plus consumers before and after entry to the program. Community mental health services include clinical services, rehabilitation, assessment, early intervention and other services.

Data was only available for 19 consumers. Of these, around 30% of community mental health services accessed were Mental Health service not specified, 24% Rehabilitation - Clinical, 17% Non-acute - Clinical/social and 15% Extended – Clinical (**Table 2**). All other service types were below 10% and most were negligible. These are total figures across all years given the small sample as indicative proportions of service types.

Table 2: Number of community mental health contacts by service category

Principal Service Categories	Contacts	%
Mental Health Service not otherwise specified	1,772	29.0%
Rehabilitation – Clinical	1,441	23.5%
Non acute - Clinical/social	1,026	16.8%
Extended – Clinical	934	15.3%
Acute – Clinical	564	9.2%
Consultation (to a service unit not funded from the MH program)	102	1.7%
Emergency/acute - Clinical/social	56	0.9%
Mental Illness Prevention	54	0.9%
Consultation (to a Mental Health Service Unit)	53	0.9%
Mental Health Promotion	38	0.6%
Emergency - Clinical	27	0.4%
Rehabilitation - Social	20	0.3%
Extended - Social	17	0.3%
Early Intervention - General	8	0.1%
Other	8	0.1%
Total	6,120	100.0%

Source: HASI Plus linked MH-AMB. n=19

Reduced hospital stays

The data linkage examined hospital admissions, length of stay and the number of involuntary mental health hospital admissions before and after entering the HASI Plus program. Each health service type is presented as the change in admissions or length of stay for the 2 years prior and 2 years following entry to HASI Plus. The figures are based on repeated measure longitudinal linked data for the same group of consumers, which is sufficient basis for statistical tests of hospital activity.

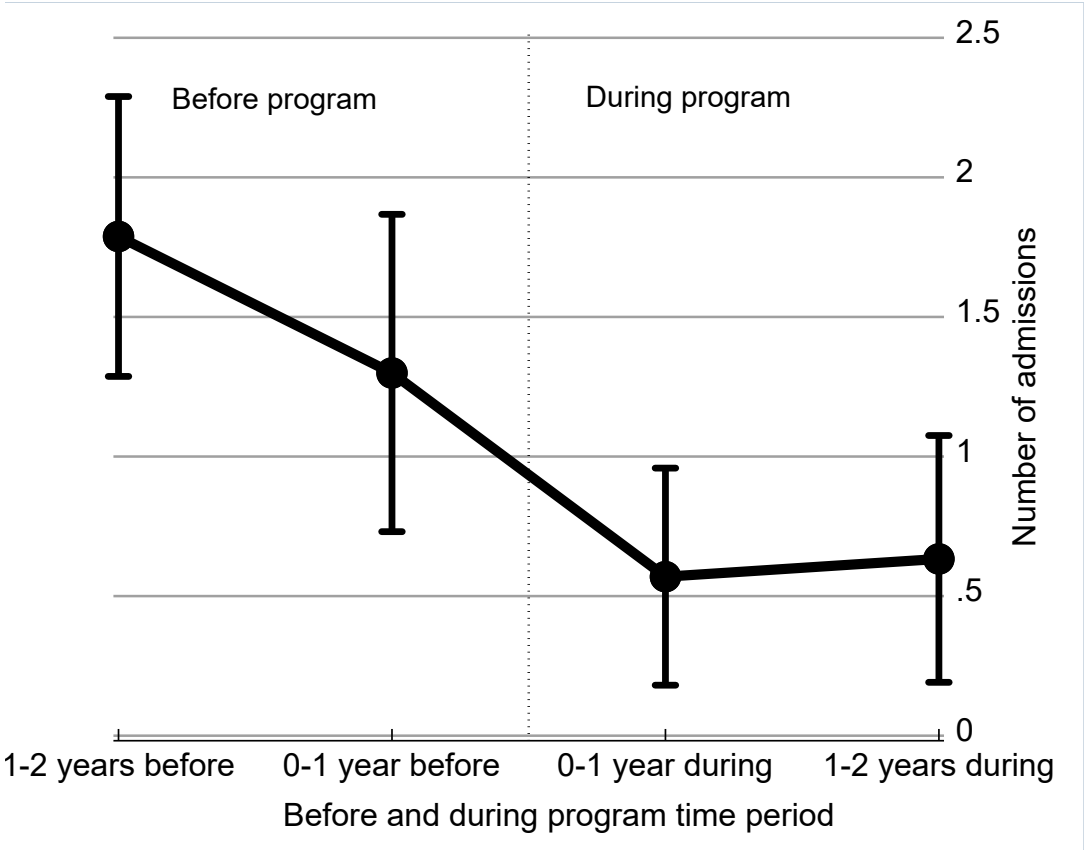
The evaluation comparison group, which was comprised of people on the HASI Plus waitlists, was not large enough to do statistically significant analyses.

The health care figures generally reflect an increased use of services between one and 2 years prior to entering the program. Overall, there was a substantial decline in total hospital admissions for consumers following entry, with substantial declines in the first year as well as sustained reductions during the second year.

1.4 Mental health hospital admissions

The number of mental health hospital admissions is an important outcome measure for consumers in the HASI Plus program. Mental health hospital admissions decreased significantly in the year following entry to the HASI Plus program by 56.1%, from 1.30 admissions per person per year in the year before program entry to 0.57 admissions per person per year in the year after program entry, **Figure 4.** This decrease was statistically significant (p=0.038, n=60). The reduction remained stable in year 2 following program entry, at 0.63 admissions.

Figure 4: Mental health hospital admissions per person per year



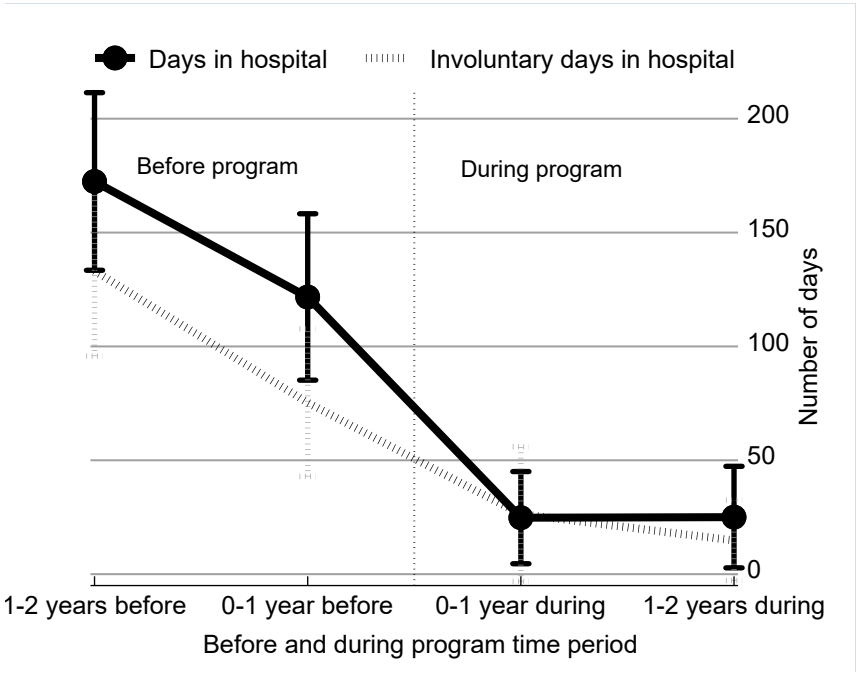
Source: HASI Plus linked NSW Admitted Patient Data Collection (APDC) n=60. Notes: Average admissions with 95% confidence intervals shown as vertical bars.

1.5 Total number of days in hospital

When consumers were admitted to hospital due to their mental health, the average number of days in hospital also decreased, **Figure 5**, black line. The number of days fell by an average of 79.6% per person in year one following program entry, from 121.7 to 24.8 days. This is statistically significant ($p<0.001$).

The reduced average length of stay in hospital was similar in year 2 following program entry at 25.1 days.

Figure 5: Mental health inpatient days before and during program



Source: HASI Plus linked APDC, n=60.
Notes: Average admissions with 95% confidence intervals shown as vertical bars.

The number of involuntary days in hospital also became lower once a person entered HASI Plus and this was sustained at the reduced level in year 2 following program entry.[4] Within the mental health inpatient days in hospital, a substantial proportion of admissions to psychiatric units were reported as involuntary. [5]

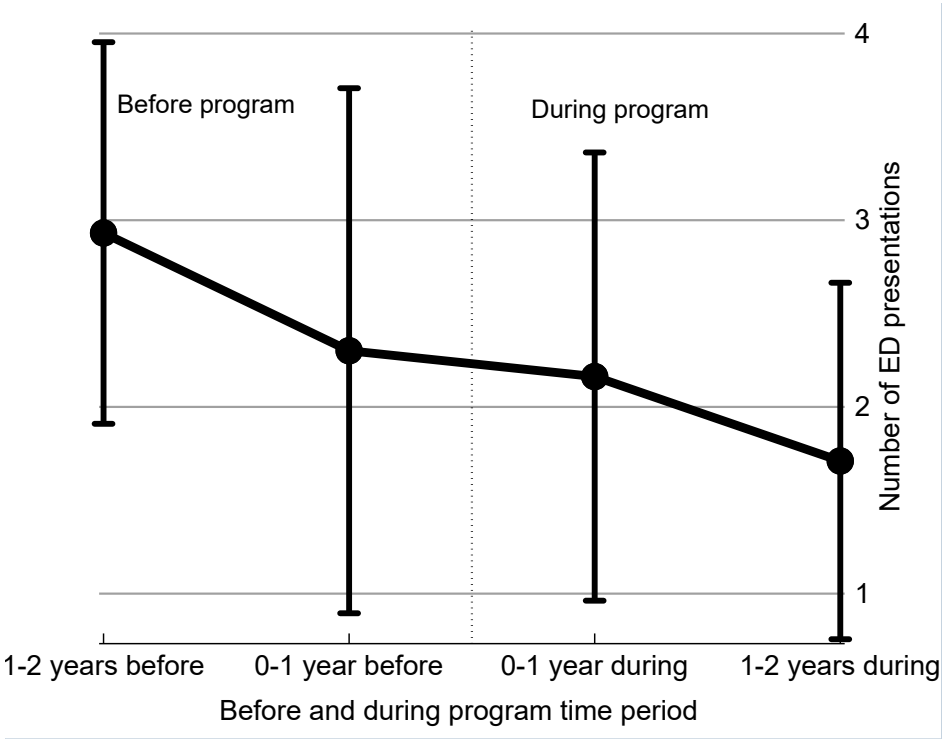
1.6 Emergency department (ED) presentations

This section presents consumer emergency department (ED) presentations before and after entry to the HASI Plus program. In line with previous sections, the ED linked data analysis covered 2 years prior and 2 years post program entry.

As a result of high variation in the number of ED presentations and the small sample size, the slight decrease in the number of presentations following program entry is not statistically significant.

[4] Whole or part days that the person was an involuntary patient under the Mental Health Act 2007.
[5] Reported in admitted patient linked data as the number of days or part days of the episode of care that the person was an involuntary patient under the Mental Health Act 2007, minus the sum of leave days occurring during the episode.

Figure 6: Emergency department presentations before and after program entry



Source: HASI Plus linked NSW Emergency Department Data Collection (EDDC) n=56.
Notes: Average ED presentations with 95% confidence intervals shown as vertical bars.

Data linkage supplementary results

1.7 Mental health outcomes from linked MHOAT data - K10

Table 3: Change in mean K10 scores per person per year

Study period year	Change	p-value	95% confidence interval upper	lower
2 years prior	1.08	0.259	- 0.80	2.96
1 year prior (base)	-			
1 year post	1.12	0.230	- 0.72	2.96
2 years post	0.17	0.879	- 1.98	2.31

Source: HASI Plus linked MHOAT n=36

1.8 HoNOS

Table 4: Change in mean HoNOS scores per person per year

Study period year	Change	p-value	95% confidence interval upper	lower
2 years prior	0.22	0.790	- 1.40	1.84
1 year prior (base)	-			
1 year post	- 1.22	0.129	- 2.80	0.36
2 years post	- 1.18	0.216	- 3.07	0.70

Source: HASI Plus linked MHOAT n=32

1.9 LSP-16

Table 5: Change in mean LSP-16 scores per person per year

Study period year	Change	p-value	95% confidence interval upper	lower
2 years prior	2.07	0.044	0.06	4.08
1 year prior (base)	-			
1 year post	- 0.16	0.872	- 2.17	1.84
2 years post	1.10	0.276	- 0.91	3.11

Source: HASI Plus linked MHOAT n=18

1.10 Mental health hospital admissions

Table 6: Change in Mental Health hospital admission rates per person per year

Study period year	Rate	Change	p-value	95% confidence interval upper	lower
2 years prior	1.79	0.51	0.206	-0.28	1.29
1 year prior (base)	1.30	-			
1 year post	0.57	- 0.76	0.038	-1.47	-0.04
2 years post	0.63	- 0.57	0.168	-1.38	0.24

Source: HASI Plus linked APDC n=60

1.11 Mental Health hospital inpatient days

Table 7: Change in Mental Health hospital inpatient days per person per year

Study period year	Days	Change	p-value	95% confidence interval upper	lower
2 years prior	172.4	50.7	0.063	- 2.7	104.2
1 year prior (base)	121.7	-			
1 year post	24.8 -	96.9	<0.001	- 138.7	- 55.1
2 years post	25.1 -	96.6	<0.001	- 139.4	- 53.8

Source: HASI Plus linked APDC n=60

1.12 Emergency department (ED) presentations

Table 8: Change in ED presentations per person per year

Study period year	days	Change	p-value	95% confidence interval upper	lower
2 years prior	2.93	0.63	0.477	- 1.11	2.37
1 year prior (base)	2.30	-			
1 year post	2.16	- 0.14	0.884	- 1.99	1.71
2 years post	1.71	- 0.59	0.497	- 2.29	1.11

Source: HASI Plus linked EDDC n=56

1.13 Accessing community mental health services

Table 9: Change in community mental health contacts per person per year

Study period year	Contacts	Change	p-value	95% confidence interval upper	lower
2 years prior	58.82	- 16.68	0.607	- 80.30	46.95
1 year prior (base)	75.50	-			
1 year post	56.39	- 19.11	0.476	- 71.60	33.38
2 years post	41.16	- 34.34	0.159	- 82.12	13.44

Source: HASI Plus linked MH-AMB. n=19

1.14 Housing – public housing applications

Table 10: Change in public housing applications per person per year

Study period year	Applications	Change	p-value	95% confidence interval upper	lower
2 years prior	<5	-2	n/a	n/a	n/a
1 year prior (base)	<5	-	n/a	n/a	n/a
1 year post	10	7	n/a	n/a	n/a
2 years post	<5	-	n/a	n/a	n/a

Source: HASI Plus linked NSW Department of Communities and Justice Housing. n=16

1.15 Corrective services - ROD

The data linkage included the NSW Bureau of Crime Statistics and Research's Reoffending Database (BoCSAR ROD) to assess the number of offences before and after entry to the program. The study group had 9 consumers with a proven criminal offence within 2 years before and 2 years following entry to HASI Plus. Among this sample, the number of offences reduced from 3 in the year before program entry to zero in the year following entry. Due to the small sample size, the findings were not statistically significant.

1.16 Community correction orders – OIMS

Similarly, the data linkage included the NSW Offender Inmate Management System (OIMS) to assess the change in community correction orders per person per year before and after program entry. Four consumers were on community correction orders during the study period from 2013 to 2019. Two of these were issued in the 2

years before entry to HASI Plus. No consumers were under community correction orders in the year following program entry. Two consumers were placed on community correction orders in the second year after entering the program. Their offences included break and enter and driving while licence suspended. These limited numbers are not statistically significant. As less than 5 correctional orders were identified during the study period, further details are not provided to protect confidentiality. Due to the small sample size, the findings were not statistically significant.

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Appendix 7: Economic analysis results

Evaluation of Housing and Accommodation Support Initiative (HASI Plus) – Evaluation Report – 2022

Contents

Tables

Figures

1.1 Background

This appendix provides supplementary details of the HASI Plus cost and economic analysis provided in the Full Analysis Report, **Appendix 1**. A preliminary component of the evaluation was to develop a descriptive overview of the current funding model and a summary of initial funding and cost data (Zmudzki, Purcal, & Fisher, 2019).

As described in the Full Analysis Report and methodology, the economic component of the evaluation is integrated with the quantitative analysis and data linkage, Section 5, **Appendix 1**. In this context the economic evaluation is limited due to the small and incomplete study group data as 11 of 101 (11%) of consumers did not consent to the data linkage. This limited the subgroup analysis as samples fewer than 5 are not reported to protect confidentiality. Further, most program data was from the initial Form 1 and Form 2 manual collection, prior to the introduction of the NSW Mental Health Community Living Programs Minimum Data Set Version 2 (CL MDS V2). The Form 1 and Form 2 content was limited and had data quality issues. Finally, the comparison group sample resulted in low data linkage sample sizes and was not sufficient for statistically significant analyses. For this reason, consumer outcomes findings are based on repeated measures before and after they entered HASI Plus.

1.2 HASI Plus model

HASI Plus offers recovery-oriented, high-intensity and community-based clinical and psychosocial supports to a small number of consumers, 60 packages as at June 2019 across 3 local health districts (LHDs). The program has been running since 2013. The HASI Plus program is consistent with the broad shift in mental health support in recent decades from a medical perspective of symptom management to a focus on recovery and reintegration into community life (Purcal et al., 2019).

This shift establishes program participation as a process rather than an outcome, with consumer referral and transition pathways reflecting complex need across a continuum of intensity of support. The program partner agencies provide an integrated government response for people exiting mental health and forensic facilities who require intensive support to transition from institutional care to live in the community. The HASI Plus program is a block funded model.

1.3 HASI Plus program costs

The program was established during 2012-13 and 2013-14. Full capacity was reached in 2014-15 with 60 packages available. Cost data was collated to 2018-19.

Community managed organisation (CMO) funding agreements

HASI Plus CMO program costs are contained in the funding agreements between the CMOs and the NSW Ministry of Health (the Ministry). The funding agreements describe HASI Plus program objectives, operations and details of planned packages and locations. At the establishment of the program, capital funding agreements were also signed which outlined initial costs for modifying and improving HASI Plus properties.

The initial capital funding investment was $3.6 million. The HASI Plus model does not include funding for purpose-built facilities but enables the modification and refurbishment of existing properties. Ongoing property maintenance is covered under operational funding.

Program costs

As described in the methodology, source cost data are based on audited financial acquittal reports for the 3 CMOs providing aggregate annual figures and cost categories.[1] Based on program financial reporting, HASI Plus CMOs were funded $9.5 million in 2018-19, in line with the average annual cost from 2014-15 to 2018-19, **Table 1**.

Table 1: HASI Plus CMO program costs by category

Cost category	2014-15	2015-16	2016-17	2017-18	2018-19	%
Employee	7,227,081	7,091,101	7,155,627	7,017,038	6,943,879	74.6%
Administrative	1,311,042	1,522,270	1,479,301	1,297,174	1,338,618	14.6%
Operational	405,838	742,495	541,924	620,330	702,726	6.3%
Motor vehicles	118,437	148,314	164,501	196,913	166,726	1.7%
Accruals/leave	128,665	64,025	57,535	91,118	191,569	1.1%
Establishment	300,091	6,854	7,773	22,998	-	0.7%
Maintenance	18,190	29,112	35,536	40,966	147,874	0.6%
Depreciation	32,227	-	30,408	14,612	9,550	0.2%
Other	39,959	-	-	-	15,121	0.1%
Total	**9,581,530**	**9,604,170**	**9,472,605**	**9,301,148**	**9,516,064**	**100.0%**

Source: HASI Plus audited operating acquittal reports by year.[2]

Notes: Figures reported as 2018-19 dollars indexed at 2.5% per annum. ‘Other’ expenses include items reported as ‘other’ communications and IT, and property and equipment. Percentages are the average based on all years from 2014-15 to 2018-19.

[1] The program cost analysis is based on aggregate employee figures and does not examine individual CMO staffing levels.

[2] Acquittal reporting is not standardised and there was minor variation in the categories reported across CMOs. For this reason minor cost categories are not directly comparable.

Consistent with the importance of staffing in the program model, employee expenses represent around $7 million (75%) of total costs including on-costs. Staffing includes a full time mental health clinician at each CMO at an annual cost of $120,000.[3] Around $1.3 million (15%) was for administration and $0.7 million (6%) for operational costs.

During the evaluation period, CMOs routinely accumulated small surplus funds due to package vacancies or delayed transitions and related staffing underspend. Surplus funds were periodically reviewed and generally rolled into future operating costs.

Capital costs

The initial capital funding investment was $3.6 million which was utilised by the CMOs for program property improvements. The treatment of capital costs is subject to subsequent accounting for depreciation and assumptions about the realistic useful life of the investment. Based on the total capital works of $3.6 million across the 7 locations, supporting 60 packages, this represents a simple average of around $60,000 per package.[4] Over the 6 years to 2018-19 this equates to around $10,000 per package per year.[5] The average annual capital cost per package would reduce further if the properties were retained and remained fit for purpose over coming years.[6] On the assumption that the original capital works provide continued fit for purpose properties for the program over the 5-year funding agreement extension from 2018 to 2023, this may effectively halve the average annual cost per package to around $5,000, with plausibly extended value if properties are retained for the program in further years.

Rental income and shortfalls

HASI Plus CMOs source properties through community housing providers (CHPs), their own housing stock or LHD owned properties, with separate capital works funding provided to undertake modification and fit for purpose improvements. CHPs establish tenancy agreements with each consumer and then manage all tenancy matters including collection of rents of no more than 30% of each consumer's income.

The HASI Plus model is configured on rental revenue from consumer support payments on a net cost basis, which was weighted in base planning estimates to reflect higher cost of rental accommodation across inner metropolitan sites. Although

[3] Based on a Clinical Nurse Consultant, year 2, level 2, including on costs.
[4] $3,608,744 / 60 = $60,146
[5] $60,146 over 6 years from 2013-14 to 2018-19 = $10,024
[6] Ongoing maintenance is funded and reported through CMO funding agreements and further capital investment was not allocated at the time of the evaluation.

the cost of accommodation has increased beyond expectation in recent years, particularly in metropolitan Sydney, the program arrangements help ensure affordable stable accommodation for HASI Plus consumers while they are in the program. This affordable accommodation element of HASI Plus represents a rental cost differential between the program and open rental market and may contribute to limited exit pathways available for consumers.

CMOs retain accommodation for consumers during absence such as temporary admission to hospital, in line with the core program objective to provide a stable residence for consumers. Funding agreements state packages may be held for longer hospital admissions of up to or beyond six months where necessary. During these vacancy periods, including extended entry transitions for new residents, consumer rent is not payable and rental income shortfalls may occur. These rental shortfall costs are generally separately invoiced to the Ministry or are repurposed from prior surplus funding. Total rental shortfall costs were $530,939 from 2013 to June 2018.

NSW Ministry of Health (the Ministry) program operational costs

The number, staff position levels and estimated full time equivalents (FTEs) for managing the HASI Plus program at the Ministry and LHDs is included in **Table 2**. Program staffing at the Ministry and host LHDs was estimated based on allocated positions with a total cost for 2018-19 of $489,000. The Ministry and LHD staffing covers program management, procurement, contract management (including finance and legal), policy development, state-wide governance and coordination, management of referrals and intake processes, local governance structures, operational management and administration.

Table 2: Ministry of Health and LHD program management (non-clinical) staff cost per year

Staff position	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Grade 7/8	95,051	97,427	99,862	102,359	104,918	107,541[1]
Grade 9/10	107,863	110,560	113,324	116,157	119,061	122,038[2]
Grade 11/12	26,186	26,840	27,511	28,199	28,904	29,627
LHD HSM3	103,139	105,717	108,360	111,069	113,846	116,692
Total salaries	332,238	340,544	349,058	357,784	366,729	375,897
On costs (30%)	99,672	102,163	104,717	107,335	110,019	112,769
Total staff cost	**431,910**	**442,708**	**453,775**	**465,120**	**476,748**	**488,666**

Source: The Ministry, maximum award salaries in 2017-18 indexed at 2.5% p.a. LHD=Local Health District, HSM3=Health services management level 3, FTE=Full time equivalent. Note: On costs estimated at 30% of total salaries. Grade 11/12 assumes 0.2 FTE, HSM3 assumes 3 X 0.3 = 0.9 FTE.
[1] Dedicated clerk Grade 7/8 allocated during establishment and procurement phases only – not applicable from 2019-20
[2] 1 x FTE Clerk Grade 9/10 reduced to approximately 0.5 FTE post establishment and procurement phases.

LHD clinical costs

In addition to the full-time mental health clinician at each CMO (included in CMO staff costs), there are also HASI Plus dedicated mental health clinicians at each LHD representing full time program related positions. From 2013-14 each LHD received funding of $110,000 per year for the LHD clinician, assumed to be indexed at 2.5% per annum. Ongoing funding for the LHD clinicians was increased in 2016-17 to $129,227 again assumed to be indexed annually at 2.5%.

The total funding for the LHD clinicians was estimated as $530,000 in 2018-19, including on costs, **Table 3**. The Ministry provides guidance on the qualifications of the dedicated HASI Plus clinicians.[7]

[7] Tertiary qualifications as a Registered Nurse, Social Worker, Occupational Therapist or Psychologist, current unrestricted registration with the Australian Health Practitioners Regulation Agency (AHPRA), and specialist mental health skills and experience working with the HASI Plus Target Group.

Table 3: LHD HASI Plus dedicated mental health clinician cost per annum

LHD	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
HNE	110,000	112,750	115,569	129,227	132,458	135,769
Northern Sydney	110,000	112,750	115,569	129,227	132,458	135,769
Western Sydney	110,000	112,750	115,569	129,227	132,458	135,769
Total salaries	330,000	338,250	346,706	387,681	397,373	407,307
On costs (30%)	99,000	101,475	104,012	116,304	119,212	122,192
Total staff cost	**429,000**	**439,725**	**450,718**	**503,985**	**516,585**	**529,500**

Source: The Ministry, advised base cost in 2013-14 and 2016-17, indexed at 2.5% p.a. LHD=Local Health District, HNE=Hunter New England

Total and average cost per HASI Plus package

The combined total program cost was $11.2 million in 2018-2019 including costs for CMOs (operations, capital and rental shortfalls), Ministry program operations and LHD clinicians, **Table 4**. The average cost per package was $186,011 in 2018-2019. This included:

- CMO costs of about $158,600 (85%)
- dedicated specialist community rehabilitation LHD clinicians at about $8,000 (4.7%)
- capital investment distributed across packages and years at about $8,800 (4.7%)
- Ministry staff costs (peak) of about $5,597 (3%)
- LHD non-clinical support at about $2,604 (1.4%), and
- rental shortfalls of about $1,600 (1%) per package.

Further detailed cost analysis was undertaken during the preliminary economic phase including detailed figures by CMO, LHD, and expense type. This analysis was provided as a separate internal Ministry report as it includes potentially identifiable CMO details (Zmudzki et al., 2019). Based on total program cost figures combined with the number of implemented packages per year, estimated average cost per package was derived, **Table 4**. These are total program estimates with no available breakdown for the relative mix of 16 and 24-hour packages. The average figures indicate expected slightly higher average cost during initial 2013-14 activity, reflecting early set up and establishment costs, as well as a lower number of initial packages in the denominator to spread the cost base.

The cost data is based on acquittal reporting which is the aggregate cost per CMO per year. This does not provide a breakdown by 16 or 24-hour package type. Consumer support hours from program reporting were not complete and it is not known whether those excluded are 16 or 24-hour package consumers. [8] For this reason, the average cost is based on total packages and total support cost per package. This cost has been examined in context of potential alternative support in NSW and for potential National Disability Insurance Scheme (NDIS) support at a comparable high level.

Table 4: HASI Plus total and average costs per support package

Cost component	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
CMOs	7,467,906	9,581,530	9,604,170	9,472,605	9,301,148	9,516,064
Clinicians	429,000	439,725	450,718	503,985	516,585	529,500
Ministry and LHD non-clinical	431,910	442,708	453,775	465,120	476,748	488,666
Capital cost	467,913	479,611	491,601	503,891	516,489	529,401
Rent shortfall	85,739	87,883	90,080	92,332	94,640	97,006
Total	8,882,469	11,031,457	11,090,344	11,037,933	10,905,609	11,160,637
Packages	43	58	58	59	60	60
Average cost	207,777	190,198	191,213	187,084	181,760	186,011

Source: The Ministry, HASI Plus audited financial acquittal reports by year
Notes: figures indexed at 2.5% per annum, capital costs and rental shortfall averaged across 6 years to 2018-19.

This aggregate average cost also masks details of dwelling configuration, whether consumers are individually accommodated or share with two consumers per dwelling. Initial planning suggested this would not be a substantial influence on cost per consumer as all packages provide high levels of support services and high levels of staffing. An implicit important part of the HASI Plus model is that services are adapted to the local accommodation facilities available.

1.4 Program cost effectiveness

Assessment of program cost-effectiveness implicitly includes all consumer outcomes, quantitative and qualitative, positioned against total program funding. In this context program cost effectiveness generally focuses on outcomes and service use measures that can be quantified, as a subset of total outcomes.

[8] Calculation of average cost per hour of support and package type (16 or 24 hours) was not possible due to the incomplete study group program data which excluded consumers who did not consent to the data linkage.

The program cost effectiveness analysis for HASI Plus examined estimated cost savings or 'offsets' to services that consumers might use less because of HASI Plus support, including hospital and community mental health services. The cost-effectiveness perspective for the HASI Plus program is limited by the small and incomplete study group data, despite attempts to consider outcomes beyond the health system such as criminal justice system contacts. For this reason, the results in this section represent a conservative estimate of program cost effectiveness in broad terms, implicitly including consumer wellbeing and outcomes presented in other sections of this report.

Hospital admissions and length of stay

The data linkage showed a substantial and statistically significant decrease in hospital admissions following entry to HASI Plus, **Appendix 1, Section 5.4**. In addition to the reduced admissions, the average length of stay in hospital also decreased significantly following entry to HASI Plus. Based on the available study group the average number of days in hospital declined 96.9 days (around 3 months) per consumer per year in the year following entry to the program.

From the hospital data linkage, the Australian Refined Diagnosis Related Group (AR-DRG) costs were assessed for the study group indicating an average cost of $1,439 per hospital day (2019-20).[9] This indicates an average reduced cost of inpatient care of around $136,000 per consumer in 2018-19, **Figure 1**. The reduced hospital days show that HASI Plus is providing a community-based transition pathway with around 17% (10 of 60) consumers having been in hospital for the entire year before entering the program.

The reduced time in hospital indicates an estimated cost offset of around 74% of the average cost per HASI Plus package.[10] This primary cost offset is based on the data linkage results for the year following entry to HASI Plus. The decrease in admissions and length of stay were sustained into the second year following program entry.

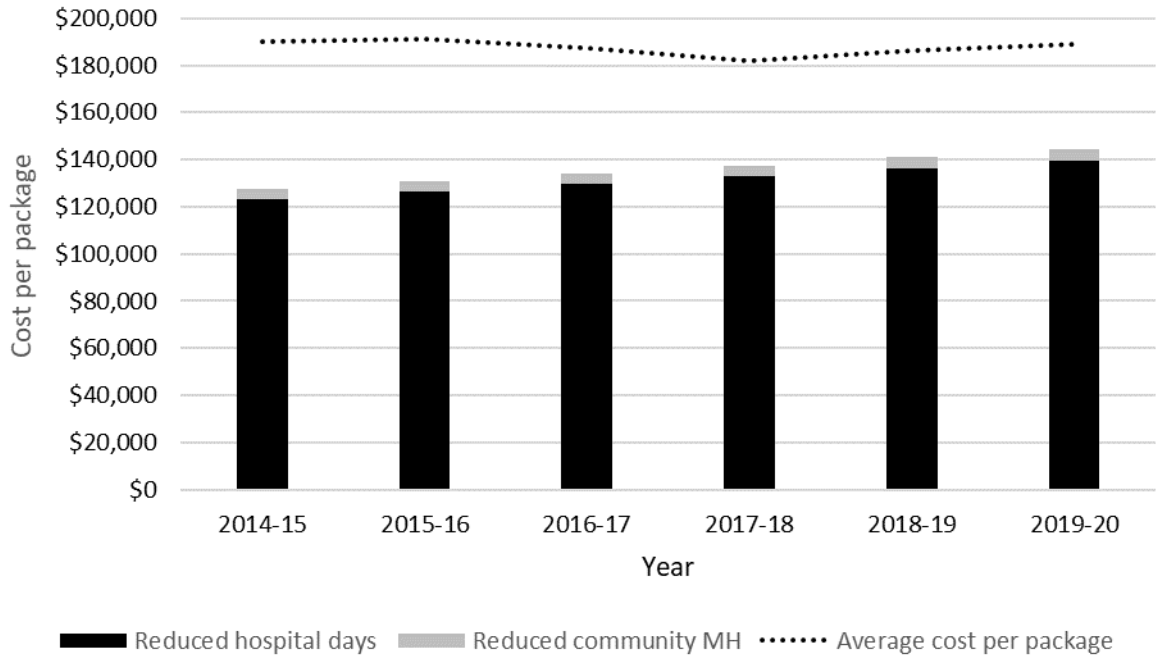
This indicates that program support is not only facilitating transition from long stay hospital admissions, but when established and supported in the community, consumers appear to stabilise and generally do not return to hospital, at least not for long periods. In the case hospital outcomes are sustained in the medium and longer

[9] Based on AR-DRG average cost per day. National hospital cost data collection, Cost weights for AR-DRG version 10.0, Round 22 (2017-18). DRG U61A Schizophrenia disorders with major complications. Total DRG cost $18,958 divided by average DRG LOS 13.9 days = $1,364 per day, indexed for 2 years at 2.5% per annum = $1,439 per day. This DRG was used as it has a mean LOS higher that U61B which is closer to average HASI Plus consumer admissions and results in a lower average cost per day, consistent with the conservative calculations and assumptions used for the estimated cost offsets.

[10] Based on 2019-20: $139,451 decreased hospital cost / average package cost $189,004 (indexed at 2.5%).

term this would potentially add further to the cost offsets and the cost effectiveness of the program.

Figure 1: Average program cost and estimated cost offsets per package



Source: The Ministry, HASI Plus linked NSW Admitted Patient Data Collection (APDC) n=60, HASI Plus linked NSW Mental Health Outcomes and Assessment Tools (MHOAT) n=19. Notes: MH=Mental health, figures indexed at 2.5% per annum.

In addition to reduced hospital days the data linkage indicated a decline in the average number of community mental health contacts following entry to the program, **Appendix 1, Section 5.1.3**. Due to the small available sample size the reduced community mental health contacts were not statistically significant and are presented as indicative, **Figure 1** (grey bar segment). This decrease continued into year 2 following entry, possibly reflecting improved mental health related to clinical support within the program. This may further contribute to cost offsets and program cost effectiveness.

There are also possible cost offsets through reduced contact with corrective services which were not able to be assessed due to the small and incomplete study group, **Appendix 1**, **Table 13** and **Section 5.6**. The limited data linkage and evaluation interviews indicated Corrective Services NSW was a source of referral for consumers. Even a small decrease in corrective services days has a potentially significant cost implication as the cost of a day in prison is around the level of a day in hospital. It is also plausible the program is generating further positive cost offsets for the NSW Government for consumers who have exited the program. Due to the small study group and number of exited consumers this could not be assessed.

Despite the data limitations, the HASI Plus available cost offsets are consistent with the recent Productivity Commission inquiry into the wider mental health system, service planning and reform (Productivity Commission, 2020). The inquiry recommended expansion of mental health services in Australia based on evidence of outcome cost effectiveness and equitable mental health access. The inquiry economic modelling indicates investment in community mental health programs are highly cost effective, including integration of clinical and other support services.

The program data limitations for the evaluation have been substantially addressed during the study period with the implementation of the CL MDS V2 for the HASI Plus program. Although the transition occurred at the end of the study period, this investment by the Ministry has enhanced program reporting and will provide valuable data moving forward for ongoing validation of program outcomes.

Given the small samples and the low numbers of consumers that have exited the program, there were insufficient sample sizes to separately investigate data linkage outcomes following program exit.

1.5 Program analysis

As discussed in the Full Analysis Report, it has not been possible to break down the average HASI Plus cost per package further by hourly estimated cost. This is a result of the incomplete program data for support hours.

The total cost per package has been examined in context of alternative support programs with an emphasis on comparable types and levels of support. HASI Plus is a high-intensity support program aimed to assist people with severe and ongoing mental illness transition to sustainable community living from long term institutional care. HASI Plus consumers typically have complex, and often coexisting, clinical care requirements and are often high cost service users in the healthcare system. In this context the preliminary cost review is a core starting point for further investigation of alternative consumer pathways and outcomes[11].

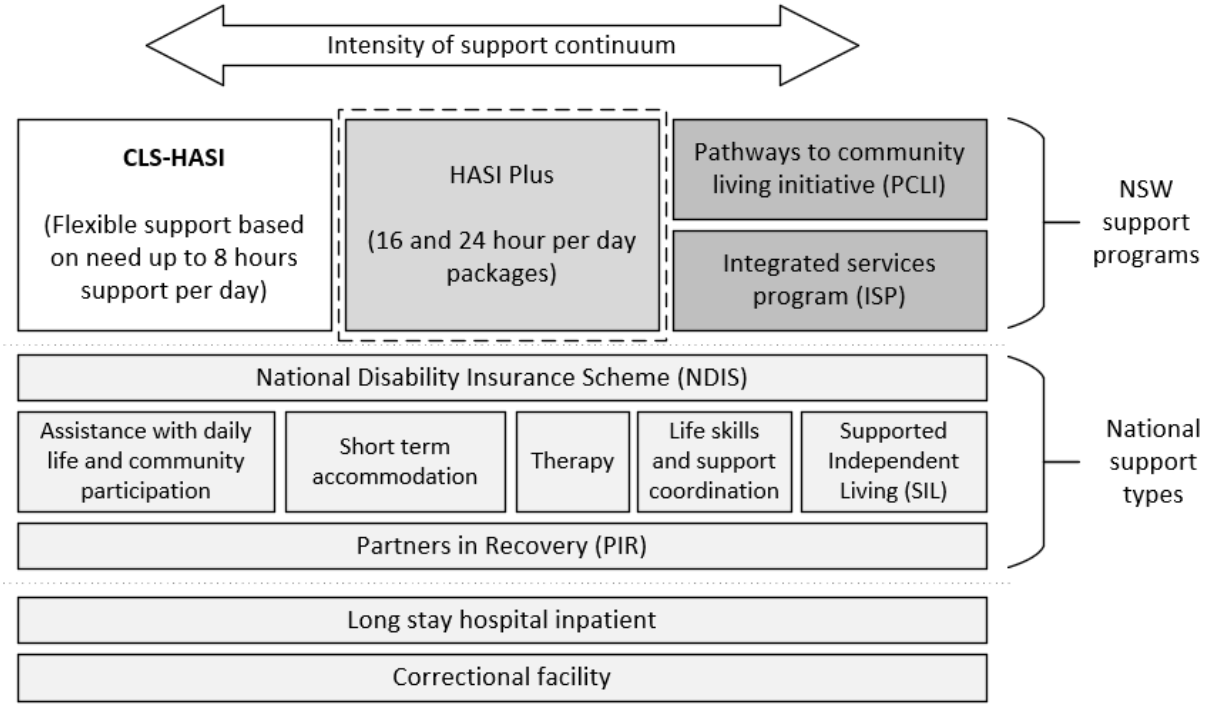
Comparative program costs

HASI Plus provides high intensity support and there are few alternative programs for potential comparison. The most relevant NSW comparative programs include Community Living Supports (CLS) and Housing and Accommodation Support Initiative (HASI), Pathways to Community Living Initiative (PCLI) and the Integrated Services Program (ISP), which ceased operations when it was rolled into the NDIS.

[11] Outcome data for these alternative programs were not available and were not part of the scope for the evaluation. The alternative program reference is in context of available comparative cost for high need support as for HASI Plus.

The NDIS Supported Independent Living (SIL) packages are the highest support level component of the NDIS and are a potential alternative to HASI Plus.[12] The National Disability Insurance Agency (NDIA) is working with disability service providers to establish a provider benchmarking function aimed to establish improved visibility and comparability of disability support costs. The challenges of establishing comparable benchmarks underline inherent issues in trying to compare alternative program services and costs, **Figure 2**.

Figure 2: NSW community based psychosocial support



Note: NDIS support types as summarised in Independent Pricing Review, (McKinsey & Company, 2018).

Housing and Accommodation Support Initiative (HASI) and Community Living Supports (CLS)

The standard HASI/CLS program is not a directly comparable alternative as it generally provides lower levels of support from 5 hours a week to usually up to 8 hours per day, compared to HASI Plus which provides 16 or 24-hour support per day. HASI/CLS does also not have the integrated clinical and accommodation support that HASI Plus provides. The previous evaluation of the HASI program from 2012 reported annual cost per consumer between $13,400 to $70,600 with an

[12] The Partners in Recovery (PIR) program also provides potential alternative support, however as this program is in the process of transition to the NDIS it is not a viable ongoing option.

additional project management cost of between $250 to $600 (Bruce, Mc Dermott, Ramia, Bullen, & Fisher, 2012).[13]

It is not possible to directly extrapolate comparable HASI Plus support levels, given that support above 8 hours per day includes evening staff penalty loadings and would not scale directly. Bearing in mind that simple extrapolation will understate support cost, doubling the upper HASI cost of 8 hours per day to 16 hours would suggest around $138,000 per consumer in 2017-18 dollars.

National Disability Insurance Scheme (NDIS)

The NDIA is working collaboratively with disability service providers to establish a provider benchmarking function aimed to establish improved visibility and comparability of disability support costs intended to benefit providers, the NDIA and ultimately participants. The challenges of establishing useful comparable benchmarks underline inherent issues in trying to compare alternative program services and costs.

The NDIS is an individualised funding model based on individual needs assessment and packages, where consumers choose service providers for their support. The NDIS is an individualised funding model, as opposed to HASI Plus, which remains a block funded model.

NDIS Independent Pricing Review

Comparability between programs reflects the continuum of care pathways for consumers with different levels of complexity that are changing over time in response to episodic events and recovery-oriented supports. The NDIS Independent Pricing Review report examined cost categories and relative service provider efficiencies, whether service provider returns are sufficient to cover capacity building, as well as the effectiveness of an hourly return approach to set support prices. A key issue raised during the review by service providers referred to current cost loadings for complex participants not fully reflected in the actual costs of supporting these consumers.

Cost components specifically referred to higher wages for more skilled support staff, higher requirements for more detailed reporting and staff training and the need for higher supervision ratios. It was also noted that there is no clear definition of complex cases, which has resulted in the high intensity support loading being implemented inconsistently. These aspects are directly relevant to HASI Plus

[13] Evaluation from 2012 of the CLS HASI program includes cost and economic analysis. Figures presented in 2018-19 dollars indexed at 2.5% per annum.

consumers as high and complex need consumers and underline the importance and priority of developing the NDIA provider benchmarking function.

Provider costs

The NDIS Independent Pricing Review examined feedback from providers including questioning of assumptions behind price levels.

The first pricing assumption relevant to HASI Plus is the wage level. The NDIA assumes that disability support workers will be employed at a level 2.3 under the Social, Community, Home Care and Disability Services Industry Award (SCHADS Award). The review raised feedback that this award is low and does not adequately cover career progression. Some providers were noted to be paying above award wages through Enterprise Bargaining Agreements (EBA) or operating within the current wage level through variation of full-time, part-time and casual employee mix, and accessing new talent pools.

The additional assumption relevant to HASI Plus is the level of program overheads. The NDIA assumes an overhead level of 10%, indicated to equate to 15% if payroll tax is not applicable. It was also noted that the states have provided supplementary funding to support transition. NDIS overhead funding reflects some elements related to the NDIS individual funding model, for example, for additional training, Information Technology, marketing and recruiting, which do not impact the HASI Plus model to the same extent.

Supported Independent Living (SIL)

SIL is an individually quoted NDIS support type that accommodates specific complex cases not funded routinely through packages based on benchmark rates. In this context SIL provides the most comparable level of support for HASI Plus consumer complex needs. SIL packages represent around 6% of all NDIS consumers and 30% of total NDIS funding (National Disability Insurance Scheme, 2020).[14] SIL provides assistance with supervising tasks of daily life with a focus on developing the skills of each individual to live as independently as possible.

SIL does not include accommodation support or capital costs associated with a participant's accommodation. The package does not have fixed price limits, and providers can quote for the specific SIL service that they offer to each participant to identify:

[14] $8.3 billion annualised in 2020

- The individual supports that will be available for the person, focused on maximising capacity to be as independent as possible with household decision making, personal care and domestic tasks,
- The typical roster of supports that is shared between participants to maximise the efficient use of resources, and
- What supports are available to all residents to ensure the smooth operation and running of the household.

Once a quote is received, the NDIA uses an 'SIL Tool' to analyse provider quotes and to make sure that they represent value for money. In some cases, negotiation between the NDIA and providers is necessary to agree appropriate prices for SIL.

Partners in Recovery (PIR)

The Commonwealth Partners in Recovery (PIR) program aimed to better support people with severe and persistent mental illness with complex needs and their carers and families, by getting multiple sectors, services and supports they may come into contact with (and could benefit from) to work in a more collaborative, coordinated, and integrated way (Australian Government Department of Health and Ageing, 2012).

The program integrated with HASI Plus related sectors including primary care (health and mental health), the state and territory specialist mental health systems, the mental health and broader non-government sector, alcohol and other drug treatment services, income support services, as well as education, employment and housing supports. PIR aimed to support multi-service integration and coordination consistent with HASI Plus tailoring and matching supports to consumer needs.

As part of the wider transition of disability support programs to the NDIS, the PIR integration with the NDIS was completed in 2019. For this reason, although it was a directly relevant program during the HASI Plus evaluation, the level of PIR activity has been declining since 2017 and the program was decommissioned in 2019. The nature of the PIR as a support to better system collaboration and coordination, rather than providing support services directly, limited direct comparison and integration with HASI Plus consumer pathways (Urbis, 2015).

Pathways to Community Living Initiative (PCLI)

The Pathways to Community Living Initiative (PCLI) is a coordinated state-wide program to support people with severe mental illness who have been in hospital for more than 12 months to transition and reintegrate their lives in the community.

An evaluation of PCLI is in progress during the HASI Plus study period and details of program cost were not available for comparison.

Integrated Services Program (ISP)

The Integrated Services Program (ISP) coordinated cross-agency support for adults with multiple and complex support needs, often as a result of mental illness, intellectual disability or drug and alcohol use. Formerly funded by the NSW Government, the ISP operated in the Sydney metropolitan area since 2005. As part of the transition from the former NSW Department of Ageing, Disability and Home Care (ADHC), all ISP consumers were transitioned to Disability Services Australia (DSA) in December 2018 (Family & Community Services NSW, 2018). The ISP service remains the same but has been renamed as part of DSA Mentoring Services.

The ISP was evaluated by the Social Policy Research Centre (SPRC) at the University of NSW (UNSW) in 2016 including a cost analysis and economic component (Purcal, Zmudzki, & Fisher, 2016). A supplementary component of the evaluation examined healthcare data linkage and related cost offsets as part of the economic evaluation and was separately reported (Zmudzki, Purcal, & Fisher, 2017a). The study reported program costs of around $274,000 per consumer per year in 2014-15, which was an increase from the previous ISP evaluation reporting average cost per consumer of $238,377 per year for the 2007-08 financial year. The support costs included housing, intensive accommodation support, clinical and other support, as well as case management.

Annualised average program cost per consumer per year was $273,686, ranging from $184,650 to $323,330 per year across the comparative quarters. Between the two ISP evaluations, average consumer cost increased by 14.8%, which was reported to be likely due to an increase in consumers with particularly high support needs. It was noted that large cost differences, with a small number of higher-cost consumers, increased the overall program cost and the associated average cost per consumer.

Comparative program cost

Comparison with these programs reflects the complexity and variation of consumer need, support types and intensity of support.

Although it is difficult to make direct comparison between alternative high need support programs, HASI Plus average support cost per package is below the average cost of the highest level NDIS support. In 2019 the annual NDIS cost for SIL packages was about $230,000 compared to the average HASI Plus package at $186,000 (National Disability Insurance Agency, 2021).

NDIS average costs increased about 17% per year from 2018 to 2021, with SIL at over $320,000 in 2021.[15] The ISP program was evaluated in 2014-15 reporting average cost per consumer of $302,000 (Zmudzki, Purcal, & Fisher, 2017b).[16]

1.6 Summary of economic analysis

HASI Plus extends the HASI/CLS program through increased support hour packages of either 16 or 24 hours per day, in addition to flexible clinical and psychosocial support services and stable, fit-for-purpose accommodation.

Program costs

- Based on program financial reporting, HASI Plus CMOs were funded $9.5 million in 2018-19, in line with the average annual cost from 2014-15 to 2018-19.
- CMO employee related expenses represent around $7 million (75%) of total costs per year including a mental health clinician at each CMO. Administration costs account for $1.3 million (15%) and $0.7 million (6%) for operational costs.
- In addition to the mental health clinician at each CMO there are HASI Plus dedicated mental health clinicians at each LHD at a cost of $529,500 in 2018-19.
- The initial capital funding investment was $3.6 million for the modification and refurbishment of HASI Plus properties. This represents a simple average of around $60,000 per package or around $10,000 per package per year, and likely lower at around $5,000 if properties are retained for the program in further years.
- CMOs retain housing for consumers during absence such as admission to hospital, a program objective to provide a stable residence. During this time rent is not payable and rental shortfalls are an additional cost to the Ministry.
- Program staffing at the Ministry and host LHDs was estimated based on allocated positions with a total cost for 2018-19 of $489,000.
- Combining CMO (operations, capital and rental shortfalls), LHD clinicians and Ministry program management, the total program cost was $11.2 million in 2018-19.

The estimated average cost per package was $186,011 in 2018-2019. This included CMO costs of about $158,600 per package (85%), dedicated specialist community rehabilitation LHD clinicians at about $8,000 (4.7%), capital investment distributed across packages and years at about $8,800 (4.7%), Ministry staff costs (peak) of

[15] Average costs for the PCLI and PIR programs are not currently reported.
[16] Indexed at 2.5% per annum from base average cost reported in 2014-15 of $273,686.

about $5,597 (3%), LHD non-clinical support at about $2,604 (1.4%), and rental shortfalls of about $1,600 (1%) per package.

Program cost effectiveness

- The data linkage showed a significant decrease in hospital admissions of 96.9 days (around 3 months) per year following entry to the program, with an estimated cost offset of around $136,000 per consumer in 2018-19.
- The reduced hospital days show that HASI Plus is providing a community-based transition pathway with around 17% (10 of 60) consumers having been in hospital for the entire year before entering the program.
- The reduced time in hospital indicates an estimated cost offset of around 74% of the average cost per HASI Plus package.
- There are also potential cost offsets through reduced contact with community mental health and corrective services which may add further to cost offsets.
- The HASI Plus cost offsets are in line with the recent Productivity Commission inquiry which indicates investment in community mental health programs is highly cost-effective including integration of clinical and other support services.
- HASI Plus provides high intensity support and there are few alternative programs for comparison. Although it is difficult to make direct comparison the cost of HASI Plus ($186,000) is below the average cost of NDIS SIL of about $230,000 in 2019. NDIS average costs increased about 17% per year from 2018 to 2021 with SIL support at over $320,000 in 2021.
- The ISP program was evaluated in 2014-15 reporting average cost per consumer of $302,000.

Economic analysis limitations

- The data linkage is based on small and incomplete study group data which was smaller than expected due to 11% of consumers (11 of 101) being excluded as they did not give consent for the data linkage.
    - This restricted subgroup analyses as sample sizes fewer than 5 are not reported to protect confidentiality.
    - The incomplete study group prevented calculation of average costs per support hour as the cost data was complete and the total program support hours were unknown. For this reason, average cost is based on cost per

package and estimated average cost by 16 or 24-hour packages was not possible.

- Most program data was from the initial Form 1 and Form 2 manual collection prior to the introduction of the CL MDS V2. This initial program content had data quality issues with incomplete data items and reported substantially less detail than the later CL MDS V2 now implemented.
- The comparison group sample resulted in low data linkage sample sizes and was not sufficient for statistically significant analyses. For this reason, quantitative results are based on repeated measure before and after analyses.

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Appendix 8 Exit analysis from the NSW Ministry of Health

Evaluation of Housing and Accommodation Support Initiative Plus (HASI Plus) – Evaluation Report

2022

NSW Mental Health
Community Living Programs

HASI Plus Evaluation

Background Paper: Program Exits

H20/149122

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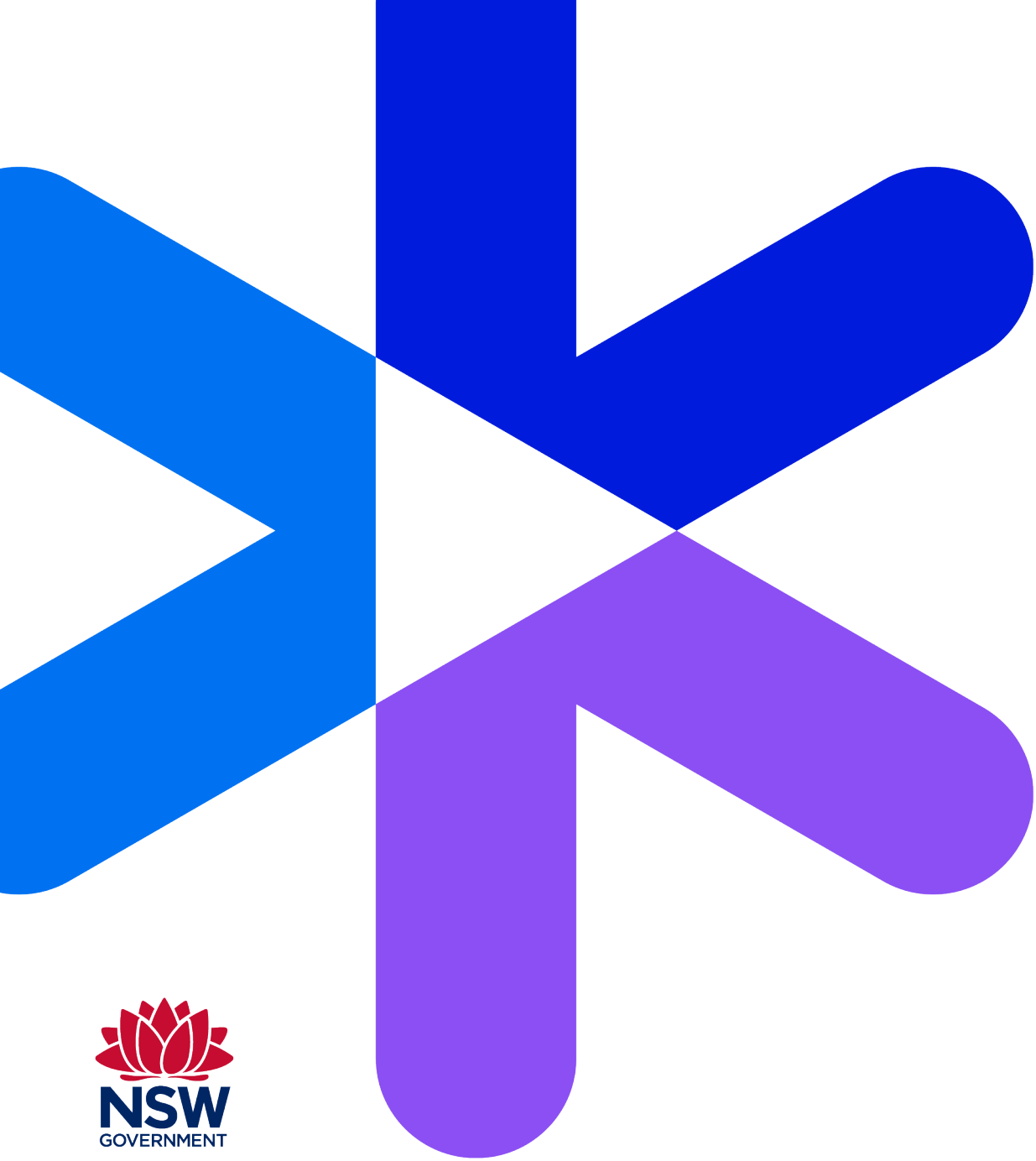

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Acknowledgment of Country

We acknowledge the Traditional Custodians of the lands where we work and live. We celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters. We pay our respects to Elders past, present and emerging and acknowledge the Aboriginal and Torres Strait Islander people that contributed to the HASI Plus program.

Acknowledgment of Lived Experience

We would like to recognise those with lived experience of mental health illness. We acknowledge that we can only provide quality care and support through valuing, respecting and drawing upon the lived experience and expert knowledge of consumers, their families, carers and friends, staff and the local communities. We acknowledge their contribution to the development of the HASI Plus program.

> Contents

1. Introduction

The Housing and Accommodation Support Initiative Plus (HASI Plus) is a recovery and rehabilitation oriented transitional program. It integrates clinical support with high intensity psychosocial supports in community accommodation.

The program aims to support people with a severe mental illness and day-to-day functional difficulties to leave institutional care in hospitals or prison and transition to community living.

As a transitional program, consumers in the HASI Plus program are expected to benefit from the high intensity clinical and psychosocial supports and improve their independent living skills over time. While there is no limit on the amount of time that a person can participate in the program, it is anticipated that consumers will eventually transition out of the HASI Plus accommodation to alternative lesser intensive community-based support arrangements.

This paper presents quantitative observations from a systematic review of two sources of program reporting information which provide some insight into consumers' pathways out of the HASI Plus program:

- HASI Plus Exit Reports
- HASI Plus Package Monitoring data.

2. Summary of program exit data

Background

Exit program data is sourced from:

- HASI Plus Package Monitoring data submitted monthly by community managed organisations (CMOs) and local health districts (LHDs)
- Exit reports submitted by CMOs.

Data

Number of exit records: 69

Exit dates: 2014 to September 2019

Distribution

	Count
Hunter New England Local Health District (HNELHD)	12
North Sydney Local Health District (NSLHD)	24
Western Sydney Local Health District (WSLHD)	33
Total	**69**

Gender

	Count
Female	27
Male	42
Total	**69**

Source of referral

	Count
Justice Health - Custodial	14
Justice Health - Forensic	19
Public Community Mental Health Services	4
Public Inpatient Mental Health Services	28
Unknown	4
Total	**69**

Referral Source

	Count
Central Coast LHD	2
Hunter New England LHD	6
Illawarra Shoalhaven LHD	1
Justice Health & Forensic Mental Health Network	33
Nepean Blue Mountains LHD	2
Northern NSW LHD	1
Northern Sydney LHD	10
South Eastern Sydney LHD	1
St Vincent's Speciality Health Network	2
Western Sydney LHD	10
Unknown	1
Total	**69**

HASI Plus Package Type

	Count
16-hours	33
24-hours	30
Unknown	6
Total	**69**

Exit Planned/unplanned

	Count
Planned Exit	46
Unplanned Exit	21
Unknown	2
Total	**69**

Exit Reason

	Count
Admitted to hospital (mental health related)	12
Breach of community corrections order (including parole) - return to custody	5
Died (not a reportable death or unknown)	3
Exited on own request - no alternative support arrangements	3
Exited to alternative community support - higher intensity support arrangements	2
Exited to alternative community support - lower intensity support arrangements	28
Exited to correctional facility (mental health related)	1
Exited to specialty support for aged care needs	2
Missing / lost to care	2
Other	6
Relocated – alternative support arrangements	1
Relocated – no alternative support arrangements	1
Unknown	3
Total	**69**

'Other' exit reason

	Count
Behaviours of concern - including alcohol and other drug use, non-engagement in supports, inappropriate behaviour towards other residents.	4
Evicted	1
Non-engagement	1
Total	**6**

Support after exit

	Count
Correctional facility	3
Housing and Accommodation Support Initiative (HASI)	18
Mental Health Inpatient	12
National Disability Insurance Scheme (NDIS) funded provider	4
No service	4
Other	12
Private psychiatrist	1
Unknown	13
Aged care service	2
Total	**69**

'Other' Exit support

	Count
Assertive Outreach Team (AOT)	1
Community Mental Health Service	9
Unknown	2
Total	**12**

Family or carer involvement at time of exit

	Count
No	8
Yes	25
Unknown	36
Total	**69**

Primary Diagnosis

	Count
Bipolar	1
Borderline Personality Disorder	1
Emotionally unstable personality disorder - Borderline type	1
Obsessive Compulsive Disorder	1
Schizophrenia	18
Unknown	47
Total	**69**

Secondary diagnosis

	Count
Borderline Personality Disorder	3
Mild intellectual disability	3
Obsessive Compulsive Disorder	1
Polysubstance abuse	3
Total	**10**

Exit Accommodation (based on Living in the Community Questionnaire - LCQ domains)

	Count
Home Public Rent (including social or community housing)	18
Privately rented house or unit	5
Own home or unit	1
Group home / Supported accommodation	4
Boarding house	1
Hospital	10
Residential aged care	2
Crisis accommodation	1
Homeless	1
Other housing	9
Total	**52**

Note: data only available for 52 consumers who completed LCQ questionnaire.

Exit Accommodation – 'Other housing' from LCQ responses

	Other housing description
Absconded	1
Ageing, Disability and Home Care (ADHC) and Community Mental Health	1
Correctional facility	4
Deceased	3
Total	**9**

Rehabilitation based exit

A binary (Yes, No) assessment by the NSW Ministry of Health (the Ministry) about whether the information suggests a 'rehabilitation based exit' (an exit which is based on the consumer having some functional improvement to greater independence).

	Recovery / rehabilitation based exit (functional improvement to greater independence)
No	32
Yes	33
Unknown	1
Total	**66**

Note: Total is 66 as 3 consumers who are deceased were not included.

NSW Mental Health
Community Living Programs

For more information please
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