Pathways to Community Living Initiative

Evaluation: Stage One implementation and outcomes

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CHSD centre for health service development

UNIVERSITY OF WOLLONGONG AUSTRALIA

This report has been prepared by the Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong for the NSW Ministry of Health.

NSW Ministry of Health
1 Reserve Road
St Leonards NSW 2065

Tel. (02) 9391 9000
Fax. (02) 9391 9101

www.health.nsw.gov.au

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We particularly acknowledge the lived experience of people with a mental illness; your preferences, wishes, needs and aspirations are at the heart of this program, your perspective is essential to defining and achieving the goals of the PCLI.

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Foreword

Enabling people who experience severe and persistent mental illness (SPMI) and who have had very long stays in hospital to live a meaningful life in the community is the success story of the Pathways to Community Living Initiative (PCLI).

This report by the University of Wollongong, Centre for Health Service Development presents part of this story. It is a qualitative and quantitative evaluation of the work of the PCLI with one cohort of patients – people with SPMI and significant issues of ageing. Many of these people, at the start of the program in 2015, had experienced hospital stays of over five years, some much longer.

The report shows the breadth of work under the PCLI. This initiative has become a catalyst for the hospital and community sectors to work together with individuals with SPMI and their families and carers to assess their needs and wishes and, with the aged care sector, to find the right supports to enable them to move out of hospital. Importantly, the evaluation findings indicate that people with SPMI and issues of ageing can live successfully in community settings when committed aged care services with strong leadership, skilled staff, and appropriate environments and resources are supported by skilled mental health clinicians.

The report shows the PCLI Stage One is contributing to good outcomes, including improved experiences of care and significantly reduced costs of care for those transitioned to aged care homes. These people have experienced low re-admission rates to hospital for mental health needs, reinforcing that people with SPMI can live outside hospital settings with the right care. Most importantly, the report highlights that the PCLI 'has allowed many people to regain their basic human rights, freedom and dignity, and to experience normal, healthy ageing in the community'.

The Ministry notes the University's findings and recommendations about the future development of the PCLI and the ways the Ministry can maximise the effectiveness and value of the mental health-residential aged care (MH-RAC) partnerships. The report is already informing the further development and iteration of the PCLI, and the further development of MH-RAC partnerships under the Older People's Mental Health Program in NSW.

The evaluation highlights that while much practice change is occurring '...there is a long time before things change, until practice becomes embedded in what people do ... so there still needs to be that overarching monitoring of what's happening, and where people are going...'. PCLI will be there for the future, to ensure we can support the excellent work of local mental health services and their service partners.

This initiative is first and foremost about improving the lives of people with complex mental health needs, and preventing long hospital stays in the future.

The detailed analysis and findings in this report have enabled the development of the complementary *PCLI Stage One Summary Report* (2021) published by the Ministry.

I commend this report.

Dr Nigel Lyons
Deputy Secretary,
Health System Strategy & Planning

CHSD
centre for health service development

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Glossary of terms and abbreviations

ACFI	Aged Care Funding Instrument
ACQSC	Aged Care Quality and Safety Commission
Ax	Assessment (baseline)
CAC	Clinical Advisory Committees: weekly client review meetings comprising representatives of RACF, LHD PCLI and community mental health teams.
CAN-C	Camberwell Assessment of Need clinical version
CANE	Camberwell Assessment of Need for the Elderly
CE	Chief Executive
CLS	Community Living Supports
CMO	Community Managed Organisations
CNC	Clinical Nurse Consultant
CRAM	Clinical Risk Assessment and Management
DemQOL	Dementia Quality of Life
eMR	Electronic Medical Record
EN	Enrolled Nurse – Diploma level educated nurse, works under the direct supervision of a registered nurse
FTE	Full Time Equivalent
HASI	Housing and Accommodation Support Initiative – a NSW program to support people with a severe mental illness to live and participate in the community
HASI Plus	Additional support (16 - 24 hour/day) for people with severe or persistent mental illness
HI	Health Infrastructure
HIE	Health Information Exchange. The NSW Health Information Exchange (HIE) is the primary and official source of all data relating to hospitals in NSW, including admitted patients, emergency department presentations and community health services provided by LHD / Specialty Health Network (SHN), mental health assessments and outcomes collections. Data from LHD / SHNs Patient Administration Systems (PAS), Community Ambulatory (CHAMB) and Mental Health Outcome and Assessment Tools (MHOAT) collections are routinely entered into the HIE. The data are used for funding purposes, reporting of Health Service Performance Agreements and other reporting.
HNE	Hunter New England
HoNOS	Health of the Nation Outcome Scales
HoNOS 65+	Adaptation of HoNOS for use with older people with a mental illness
ICT	Information Communication and Technology

Index Stay	The PCLI index stay was defined as the hospital inpatient stay that ended in transition into the community. For consumers who had not yet transitioned, the index stay was defined as the current stay.
InforMH	Information for Mental Health unit in System Information and Analytics (SIA) Branch of Ministry of Health. InforMH is responsible for collecting, distributing and supporting performance related reports on mental health services in NSW.
Initial Cohort	A group of around 380 mental health consumers who had been in hospital for over 365 days at the start of the PCLI. Information provided by the Ministry PCLI team shows that as at 31 December 2014 the estimated number of long stay patients was 387. At the time of the first census in June 2015 there were 350 consumers in the initial cohort.
K10	Kessler 10 Depression scale
KI	Key informant; stakeholder interviewed by the evaluation team
KPI	Key performance indicator
LCQ	Living in the Community Questionnaire
LHD	Local Health District
LSP-16	Abbreviated Life Skills Profile
M-DAD	Modified Disability Assessment for Dementia
MDC	Major Diagnostic Category
MDT	Multidisciplinary Team
MHB	Mental Health Branch
MHACPI	Mental Health Aged Care Partnerships Initiative
MHDA	Mental Health Drug & Alcohol
MH-OAT	Mental Health Outcomes Assessment Tool
MH-RAC	Mental Health – Residential Aged Care
MH-RAC Network	Network of Ministry and LHD PCLI staff, and representatives of participating Residential Aged Care Facilities
Ministry	Ministry of Health
Ministry PCLI team	Staff working in the Ministry of Health to provide strategic leadership for the PCLI
MOU	Memorandum of Understanding
MRN	Medical Record Number
NDIA	National Disability Insurance Agency
NDIS	National Disability Insurance Scheme

NGO	Non-Government Organisation
OPMH	Older People's Mental Health
OT	Occupational Therapist
PAS ID	Patient Administration System Identification
PCA/PCW	Personal Care Attendant/Worker – supports those whose health status is stable
PCLI	Pathways to Community Living Initiative
PCLI Collaborative Group	PCLI governance group meeting weekly to focus on the practical aspects of implementation. Comprises Ministry PCLI team and representatives from LHDs, contractors, and others as required.
PCLI Practice Network	Network of Ministry and LHD PCLI program managers, clinicians and peer workers
PCLI program managers	Staff responsible for implementation of the PCLI within the LHDs that comprise the six primary implementation sites
PCLI Steering Committee	Governance group for PCLI program, meets three times annually and comprises representatives of the Ministry PCLI team, LHDs, Mental Health Discipline Leads and other content experts
PHSREC	Population and Health Services Research Ethics Committee
PPE	Personal Protection Equipment
PRN	Pro Re Nata (as required), relates to the use of psychotropic medications
PTSD	Post-Traumatic Stress Disorder
PUG	Project User Group: team within Ministry that facilitates co-design of services through input from consumer and carer representatives on the service, functional and design requirements for the PCLI SLS services
RACF	Residential Aged Care Facility
RANZCP	Royal Australian and New Zealand College of Psychiatrists
RAS-DS	Recovery Assessment Scale - Domains and Stages
RFI	Request for Information
RFT	Request For Tender
RN	Registered Nurse – Degree level educated nurse, provides clinical leadership role in aged care
Routine Assessment Tools	K10, HoNOS, HoNOS 65+, LSP-16 and RUG-ADL. Completed every three months while admitted, every six-months post discharge
RUG-ADL	Resource Utilisation Groups – Activities of Daily Living

Second Wave	Consumers 'in scope' for the PCLI since 1 July 2015 because their length of stay exceeded 365 days or they were considered at risk of a long stay
SHN	Specialty Health Network
SLS	Supported Living Services. Stage Two clients only.
SPMI	Severe and Persistent Mental Illness
Stage One	Service development and clinical service enhancements targeted at those individuals in the PCLI cohort who experienced issues of ageing, approximately 100 individuals at July 2015.
Stage Two	Service development and clinical service enhancements targeted at individuals who are younger (18 years and upwards) without issues of ageing.
SWMHIP	State-wide Mental Health Infrastructure Program
WNSW	Western New South Wales

Executive Summary

The Pathways to Community Living Initiative (PCLI) was formally launched in mid-2015 and at the time of this report has been operating for approximately five years. It represents a transformational change in the care of people with **severe and persistent mental illness** (SPMI) who have had, or are at risk of experiencing, long inpatient hospital stays.

This is *PCLI Evaluation Report 5*. It focuses on one of the program's two target groups, namely those with SPMI and significant issues of ageing – known as **Stage One** – for whom implementation processes and service partnerships are well established[1].

Background

The Pathways to Community Living Initiative (PCLI) is a coordinated state-wide mental health reform program led by the NSW Ministry of Health ('the Ministry') in collaboration with NSW Local Health Districts (LHDs). This initiative is a component of the whole-of-government enhancement of mental health care under the *NSW Mental Health Reform 2014-2024*.

PCLI Stage One consumers have SPMI and care needs related to ageing, and have experienced long (>365 days) stays in hospital. A substantial proportion are younger than 65 years and have premature ageing due to their mental health conditions. This group is:

- Eligible for aged care funded support from the Australian Government for care in residential aged care homes or in the community (accessed via the Aged Care Assessment Teams (ACAT) processes); and/or
- Treated by Older People's Mental Health (OPMH) services or an OPMH clinician.

The PCLI Stage One program aims to ensure continuity of care and seamless support for this group of consumers through building mental health system capacity and cross-sectoral links, encompassing the health, aged care and disability service sectors. Overall, the PCLI aims to support people with SPMI who have been in hospital for more than 365 days to move into the community, and to reduce future long stay admissions.

Within the PCLI Stage One service models, there are three options for supported accommodation and community-based care for long stay consumers with issues of ageing. Two of these – the Mental Health Aged Care Partnership Initiative (MHACPI) transitional units and the Specialist Residential Aged Care Facilities – are provided by Mental Health-Residential Aged Care (MH-RAC) partner organisations. Generalist or mainstream aged care facilities are an option for many of the PCLI Stage One consumers.

In addition to the service developments in aged care, PCLI funding was secured for clinical enhancements to the Older People's Mental Health services in six LHDs leading to the establishment of the PCLI Stage One clinical teams. At 31 December 2019, a total of 17.3 full-time equivalent positions for PCLI Stage One clinicians were funded.

The PCLI is being implemented across NSW through a project team within the Ministry of Health, consisting of the PCLI program manager, the Director of OPMH, senior project officers, the clinical lead, the consumer lead, and the information lead.

[1] The other target group, known as Stage Two, is adults with SPMI and without significant ageing-related issues. Service developments for this group are at an earlier period of development.

Methods

In January 2017, the Centre for Health Service Development (CHSD), University of Wollongong, was engaged to evaluate the PCLI, with the following goals:

- To help consumers, carers, clinicians, managers and policy makers assess the impact of the PCLI and the extent to which it is meeting its objectives;
- To identify opportunities to refine the PCLI, and
- To inform future investment and practice (Masso et al., 2017).

Data collection and analysis for this report was shaped by the Evaluation Framework and finalised in partnership with the Ministry, and was designed to answer the following evaluation questions, with specific reference to Stage One:

- How successful was the PCLI in transitioning people from hospital into the community?
- What was the consumer/family/carer experience?
- What factors predicted success?
- Have high quality and responsive new services been established?
- Has practice in existing services been reformed?
- Was the model sustainable?
- Did the PCLI result in value for the money spent?
- How has the PCLI improved efficiency in systems/services/workforce?

This is a mixed methods evaluation, using routinely collected administrative data from the Health Information Exchange (HIE) and qualitative data from semi-structured interviews. Full details of the methods for collecting and analysing the data can be found in Chapter 2.

Summative findings – consumer outcomes

PCLI consumers are conceptualised as two cohorts, depending on when they became eligible for the program. The **initial cohort** consists of individuals who had been in hospital for more than 365 days at the start of the PCLI. The **second-wave cohort** are individuals who passed the 365-day mark after the initial census date of 30 June 2015.

The PCLI Stage One analysis dataset comprised index stay and post-discharge data for 194 consumers: 117 initial cohort and 77 second-wave cohort. Three out of five consumers were male, and approximately 30% were younger than 65 years. As would be expected, the initial cohort had had much longer stays: 50% had spent five years or more in hospital compared with 5% of the second-wave cohort.

The initial and second-wave cohorts had quite different profiles in terms of principal diagnoses with a greater incidence of psychotic illness in the initial cohort, whereas the second-wave cohort had a greater incidence of dementia, physical illness or disability. These differences were reflected somewhat in the baseline health status findings. There was a higher incidence of moderate to severe psychological distress in the initial cohort (K10) and more cognitive problems in the second-wave cohort (HoNOS 65+).

The cohorts had similar baseline scores on the two measures of function. Average scores on the LSP-16 indicated that PCLI Stage One consumers in both cohorts typically demonstrated poor self-care skills, but few problems with anti-social behaviours. Most of the consumers assessed with the RUG-ADL were independent or required only limited physical assistance with bed mobility, toileting, transfers and eating function.

As at 31 December 2019, 118 of the 194 PCLI Stage One consumers had transitioned to residential aged care: 43 to Mental Health-Residential Aged Care (MH-RAC) partners, and 75 to generalist facilities. When health outcomes data were available following transition, these were generally positive, with a small (not statistically significant) average reduction in psychological distress and statistically significantly improved life skills, particularly self-care, compliance, and anti-social behaviours.

Functional declines were also noted, as on average people became more dependent on others for assistance with activities of daily living. Older consumers (those assessed with the HoNOS 65+) had increased impairment related to cognition, physical illness, and disability.

Logistic regression was used to model predictors of discharge from hospital. Two independent predictors were identified – length of stay and the self-care subscale of the LSP-16. The longer the stay in hospital, the lower the chance of eventual transition to the community. For every additional six-month period spent in hospital, the chance of being discharged in the next six months decreased by 7.5%, all other factors being equal. PCLI Stage One consumers with fewer self-care problems were less likely to be discharged. This finding seems counterintuitive; however, it is possible that available aged care environments tended to be more suitable for consumers who required more assistance with self-care, whereas those with more intact self-care capabilities may require a different type of living environment in the community.

Readmissions to hospital occurred for around 40% of consumers. Most (71%) were not due to mental illness (that is, no days in specialist mental health wards were recorded). There were only 16 presentations (by seven consumers) to hospital emergency departments; again, almost all were not related to mental illness but were triaged as emergency or urgent.

Summative findings – provider and system change

Committed and able local leadership is available at each implementation site. Senior clinicians employed within PCLI Stage One are valued for the experience that they bring into the long stay units. Their input into transition planning has enhanced what was already happening on the wards to facilitate discharge, added value by building capacity among treating teams to improve standards of care, linked treating teams with community teams and vice versa, increased liaison with stakeholders in the community (particularly disability service providers), and supported partnerships with aged care. They are well supported by the PCLI program managers and executive leads, Older People's Mental Health Service Managers, by the PCLI Ministry team, and by each other through regular opportunities for networking and mutual learning.

There are promising, positive signs of greater acceptance and valuing of the PCLI assessment processes as a component of Stage One transitions to community. The requirement for collaborative monitoring and measurement has been at least partially achieved. PCLI structures and resources have improved discharge processes within MH services. Key Informants (KIs) attributed this change to the clearer, well-documented processes around transition planning combined with the PCLI's strong focus on discharge which is changing culture and attitudes towards discharge of long stay consumers. There have been targeted, successful efforts to engage with medical leaders through the Royal Australian and New Zealand College of Psychiatrists (RANZCP).

Seeing successful transitions – especially for people whose needs were considered too complex to leave hospital – has been by far the number one instigator of culture change within inpatient mental health services. Success stories have challenged previously held assumptions that the only place for good care for people with severe mental illness and other complex presentations is hospital.

The design of the PCLI has directly addressed contextual issues that historically prevented the discharge of some consumers with SPMI from long stay hospital wards. It has actively fostered the involvement of consumers in shared decision making and care planning. KIs said that the PCLI has made it easier to talk about discharge planning in recovery-oriented ways, focusing on the person and their strengths and ensuring that person and, where applicable, family carers are involved in decision-making processes. The PCLI has helped develop and embed recovery-oriented practice and recovery culture in mental health services.

The evaluation of the PCLI Stage One has confirmed the '5 simple rules' for embedding practice change in health services, as defined by Best et al. (2012): engaging individuals at all levels in leading the change, establishment of feedback loops, attending to history, engaging with physicians and involving patients and families in decisions. In addition, it has identified a sixth 'simple rule' relating to the importance of cross-sector collaboration in transforming mental health care for people with SPMI and issues of ageing. The MH-RAC partnerships have been facilitated by three key elements: policy and clinical leadership, program infrastructure and resourcing, and a receptive aged care context. In the aged care sector, the PCLI has contributed to a greater understanding of SPMI, challenging assumptions about the capacity of aged care providers to cater to this group of consumers.

The PCLI Stage One teams have capitalised on the advent of the NDIS to ensure that disability support has been part of the transition process for some Stage One consumers. The PCLI has played an important part in upskilling LHD staff in navigating the NDIS and enabling LHD staff to take advantage of the opportunity the NDIS provides consumers.

Summative findings – economic evaluation

The main aim of the economic evaluation was to estimate the costs associated with care during the index stay (that is, the stay that ended in transition from hospital) and compare these with the costs of care in the community. In the absence of consumer-level cost data, a 'cost to government' approach was adopted and funding levels were used to estimate costs. The scope of the analysis comprises costs related to:

- Hospital-based care: admitted care, ED presentations, community mental health services
- Commonwealth-funded residential aged care
- Partnership agreements between NSW Health and aged care providers
- National Disability Insurance Scheme.

The analysis was limited to those PCLI Stage One consumers in the initial cohort who had been discharged from hospital as at 31 December 2019 and who had not died during their index stay (n=66) to provide a comparison between inpatient stays and community living.

All hospital-based care costs were estimated based on activity-based funding (ABF) principles. For the index long stays the outlier *per diem* was used as a representation of the of the ongoing nature of the stays. For all hospital-based care provided after transition the usual ABF methodology was used as it best represented the episodic nature of the care provided.

For costs associated with residential aged and NDIS, information and documents provided by the Ministry PCLI team or publicly available were used.

The average annual cost of care per PCLI Stage One consumer during the index stays was $352,995. After transition to community living the annual care cost included hospital-based cost of $24,551 (including $12,419 for readmissions, $136 for ED presentations and $11,996 for community mental health care). Annual residential aged care cost ranged from $51,100 for generalist residential aged care and $72,539 for specialist residential aged care to $82,619 for MHACPI units. For PCLI Stage One consumers aged less than 65 years the average annual NDIS support was $62,899.

In summary, during their long stay in hospital the average annual cost of care per PCLI Stage One consumer was $352,995. After the transition into residential aged care the average annual cost of care was between $75,651 (PCLI Stage One consumers in generalist RAC) and $170,069 (PCLI Stage One consumer in MHACPI with NDIS), which was a reduction of 52% to 79%. At the same time, the consumer outcomes as measured by LSP-16 subscales 'compliance' and 'antisocial' and the total score improved, while function deteriorated (based on RUG-ADL 'bed mobility' and total scores). However, findings on outcomes should be treated with caution as baseline and follow-up assessments were not available at the time of this report for a large proportion of the consumers in this cohort.

For the 66 PCLI Stage One consumers who have transitioned to residential aged care, this amounts to a reduction in cost for their overall care of between $12.1M and $18.3M annually.

Formative findings – the future of the PCLI

In many LHDs the PCLI has a clear brand identity and this has added value. This identity is closely entwined with the Stage One service development and responding to consumers with issues of ageing as this has been the early focus of the PCLI. With the experience of successful transitions, the decrease in the Stage One cohort and the integration of other LHDs into the program this brand identity is shifting.

The role of Stage One teams is changing as consumers with issues of ageing who have had very long hospital stays gradually transition into more appropriate care settings and are not being replaced. This is a positive development and it is likely that the PCLI processes and service models are contributing to the reduction in the Stage One consumer numbers, in line with the program's aim to prevent future long stays. As the PCLI has evolved, the executive leads and program managers increasingly are working with Stage One clinical teams to help redefine their roles and articulate a model of care for the future. OPMH service managers are also playing a crucial role in the success and sustainability of Stage One through their leadership in embedding PCLI processes into the OPMH services' models of care and strategic directions. In addition, the MH-RAC network provides opportunities for service improvement through benchmarking and continual reflection and review. KIs agree that the time has not yet arrived to discard the PCLI label as it is still serving important purposes by providing a clear focus for strategic planning, coordination of activities, and funding.

Although there is still some evidence of resistance, most KIs noted positive changes in mental health service culture over time with a significant increase in support for the PCLI. This change has also been apparent over the timeline of the evaluation.

Several factors associated with successful partnerships have been previously identified by the evaluation, namely:

- A shared commitment to the overall program goals;
- Person-centred philosophy of care/support;
- Program infrastructure with appropriate staffing capacity;
- Agreed processes for oversight and ongoing support;
- Trust between individuals and organisations.

To this list, we would now add three further factors: sustained and effective leadership in LHDs and aged care facilities; willingness to learn from experience; and fidelity to the MHACPI model, without which the partnerships are less productive.

By providing advice and assistance with other (non-PCLI) residents who have SPMI and could benefit from their expertise, the Stage One clinical teams may add considerable value to the MH-RAC partnerships, with potential flow-on benefits for the health and aged care systems.

Conclusion

Overall, the findings support the conclusion that long stay patients with SPMI and issues of ageing can be managed successfully in community settings when aged care services are provided with additional support by skilled clinicians. The qualitative data on provider/system change allows a rigorous assessment of the mechanisms by which the outcomes have been achieved, which enables us to conclude with confidence that the PCLI has made a significant contribution to improved quality of transitions to community for PCLI Stage One consumers. The economic evaluation demonstrated substantial cost savings associated with the transition of 66 initial cohort Stage One consumers into aged care.

In *PCLI Evaluation Report 2*, we noted that an intervention or change in practice needed to fulfil three criteria in order to be considered successful and sustainable.

1. First and foremost the initiative or intervention must be acceptable to consumers and carers through its potential to improve their experience and care outcomes;
2. Second, it needs to be acceptable to the various service providers engaged in its delivery; and
3. Third, it has to generate 'returns' for the health system, however that may be defined, for example, perhaps through reduced clinical variation, improved productivity or more efficient service delivery models.

The findings of this study have demonstrated that each of these criteria are now being met, to a large extent, by the PCLI Stage One. One limitation of the current report is the lack of new, first-hand data on consumer and carer experiences; however previous evaluation reports containing this information have demonstrated the acceptability of the PCLI transition processes and outcomes to the Stage One cohort and their families.

The PCLI Stage One is underpinned by the concept of partnership, with health services working in partnership with aged care providers and consumers to identify appropriate and sustainable accommodation and care solutions. These arrangements have been facilitated by dedicated investments by the Ministry of Health and LHDs in funding highly experienced senior clinicians to support discharge planning, transitions and ongoing support in the community, and resourcing to support aged care partners in their redesign of services and staffing profiles.

Evidence from the evaluation shows the PCLI Stage One is contributing to good outcomes, including significantly reduced costs of care for those transitioned to aged care homes, without detrimental effects on consumers' health and wellbeing, on average. The program has provided the opportunity for health services to embed new practices and pathways, and aged care services to be resourced to provide a viable and sustainable network of accommodation and care services for older people with long-term mental health issues. Most importantly, it has allowed many people to regain their basic human rights, freedom and dignity, and to experience normal, healthy ageing in the community.

1. Introduction

The Pathways to Community Living Initiative (PCLI) is a coordinated state-wide mental health reform program led by the Ministry of Health in collaboration with NSW Local Health Districts (LHDs). This initiative is a component of the decade-long whole-of-government enhancement of mental health care under the *NSW Mental Health Reform 2014-2024*. It represents a transformational change in the care of long stay mental health consumers.

The program aims to support people with severe and persistent mental illness (SPMI) and complex clinical and support needs, who have been in hospital for more than 365 days, to move into the community, and to reduce future long stay admissions across the system, by changing practice in inpatient and community mental health settings and providing care pathways and community-based support.

1.1 Scope and structure of this report

This is *PCLI Evaluation Report 5*. The scope of this report was defined in discussions with the Ministry PCLI team in late 2019 and early 2020. It focuses on one of the program's two target groups, namely those with SPMI and significant issues of ageing – known as **Stage One** – for whom implementation processes and service partnerships are well established.

The other target group, known as **Stage Two**, is adults with SPMI and without significant ageing-related issues. The PCLI assessments, literature reviews, and consultations with consumers, carers and clinicians have helped develop an understanding of the specific needs of this cohort. Service developments for Stage Two are underway and preliminary evaluation findings will be presented in the PCLI final evaluation report in September 2021.

The period of this report covers the extensive work invested in service development for PCLI Stage One and actions taken to support and sustain the individual planning, assessment and transition mechanisms over the life of the PCLI.

It builds on lessons from previous reports about large system transformational change. It presents summative conclusions on the program to date and formative information to guide ongoing work.

The remainder of this chapter provides background information, followed by a chapter describing the evaluation methods. Chapter 3 presents findings on the consumer cohort and their outcomes, based on analysis of administrative data. Chapter 4 presents findings from interviews with key informants, regarding practice and system change, structured around a theoretical framework of the necessary conditions for large-system transformational change. Chapter 5 presents the results of the economic evaluation. These three 'summative' chapters are followed by the 'formative' findings in Chapter 6, focusing on the future of the PCLI. The report concludes with a discussion and conclusions (Chapter 7).

1.2 Background

A more detailed definition of the PCLI Stage One target group is provided below, along with a brief summary of the program's history, followed by a description of the main components of the PCLI and its strategic objectives.

1.2.1 PCLI Stage One consumers

The distinction between Stage One and Stage Two consumers is based on needs, rather than age. All Stage One consumers have issues and care needs related to ageing. Some Stage One consumers are younger than 65 years of age, acknowledging the fact that people with complex mental illness who have been hospitalised for extended periods experience poorer physical health and earlier ageing than the general population. Because of their ageing issues, they are:

- Eligible for funded support from the Australian Government for care in residential aged care homes or in the community (accessed via Aged Care Assessment Teams (ACAT)); and/or
- Treated by **Older People's Mental Health** (OPMH) services or an OPMH clinician.

For monitoring purposes, PCLI consumers are conceptualised as two cohorts, depending on when they became eligible for the program. The **initial cohort** consists of individuals who had been in hospital for more than 365 days at the start of the PCLI. The **second-wave** cohort are individuals who passed the 365-day mark after the initial census date of 30 June 2015.

1.2.2 History and early developments

Planning for the PCLI began in mid-2014 and the program was launched in mid-2015. The PCLI Stage One service development activities built on previous state-wide efforts, particularly modelling and evaluation of mental health aged care partnerships and accommodation options. The development of the OPMH services (formerly Specialist Mental Health Services for Older People; SMHSOP) over the past 10-15 years provided a strong platform (NSW Department of Health, 2006), as did the establishment of two pilot services within residential aged care facilities in NSW (Faculty of Psychiatry of Old Age, 2004). These pilot services were funded under the Mental Health Aged Care Partnership Initiative and would subsequently provide the evidence base for one of the three service models in the PCLI Stage One (Health Policy Analysis, 2013). One of these services, in Sydney LHD, had involved the transitioning of a significant number of long stay consumers from Rozelle Hospital into a dedicated unit within a residential aged care facility in the Sydney LHD. The decision to focus first on consumers with issues of ageing leveraged off this previous work and also contributed to the ongoing development of OPMH service models and strategic directions.

Development of the Stage One service models began in 2015 and was shaped by state-wide planning documents that provided a policy context and governance, first the *NSW Service Plan for SMHSOP 2005-2015* (NSW Health, 2006), and later the *NSW Older People's Mental Health Services Service Plan 2017-2027* (NSW Health, 2017). Evidence to guide service development was also available from two evaluations of the MHACPI (Health Outcomes International, 2011; Health Policy Analysis, 2013). For further details about the history and early development of the PCLI, see *PCLI Evaluation Report 1* (Thompson, Williams & Masso, 2018).

1.2.3 Key components of PCLI Stage One

The PCLI is a highly complex program requiring collaboration at the individual, organisational and system levels. It is multi-sectoral, encompassing the health, aged care and disability service sectors. The following sections describe the essential components of the PCLI Stage One: cross-sector partnerships with aged care; the clinical teams within LHDs; and strategic leadership and resourcing by the NSW Ministry of Health.

1.2.3.1 Cross-sector partnerships with aged care

Cross-sector partnerships between health and aged care, known as the **Mental Health-Residential Aged Care (MH-RAC)** partnership services, are central to the PCLI Stage One service models. These partnerships were established through a series of steps including a costing study summarising financial outcomes for potential service providers, a procurement plan, and a tender process, which closed in March 2016 (Thompson et al., 2018). Further tender processes took place to contract the full set of MH-RAC services, culminating in the signing of contracts with community-managed organisations (CMOs) to provide a total of 80 aged care places across six facilities, with top-up PCLI funding for additional aged care staff with mental health expertise and to assist with capital works.

All partner organisations are not-for-profit, and most are mission-based services with supportive governance arrangements and the capacity to draw on expertise and resources (e.g., volunteers) across a broader network of services. Further information about these service developments can be found in Section 1.3.1.3.

1.2.3.2 PCLI Stage One clinical teams

In addition to the service developments in aged care, funding was secured for clinical enhancements to the OPMH services in participating Local Health Districts, leading to the establishment of the PCLI Stage One clinical teams. The NSW Ministry of Health has funded PCLI **program managers** in six Local Health Districts (LHDs), referred to as the **primary implementation sites**: Hunter New England (HNE); Northern Sydney (NS); South-Western Sydney (SWS); Sydney; Western New South Wales (WNSW); and Western Sydney (WS). These sites were chosen because the mental health services in these LHDs, particularly the extended care beds in large hospitals, house most of the long stay mental health consumers in NSW public hospitals. The funding of these positions formed a state-wide leadership network to support the implementation of the PCLI, in collaboration with OPMH service managers.

Further enhancements were provided to these sites (with the exception of SWS LHD) to employ senior clinicians in dedicated PCLI Stage One roles, within or attached to OPMH services. Nepean Blue Mountains (NBM LHD) also received enhancement funding for PCLI Stage One clinicians because one of the MHACPI units is located in this district. At 31 December 2019, a total of 17.3 full-time equivalent positions for **PCLI Stage One clinicians** were funded, and 17.9 FTE staff were employed (the difference is due to utilising under-spends).

1.2.3.3 Ministry of Health leadership and resources

The PCLI is being implemented across NSW through a project team within the Ministry of Health, consisting of the PCLI program manager, the Director of OPMH, senior project officers, the clinical lead, the consumer lead, and the information lead from the Information for Mental Health (InforMH) unit.

The PCLI is delivered under a distributed leadership model; leadership functions are performed collectively across a group of committed individuals (Best et al., 2012). Central guidance is provided while local ownership and innovation is encouraged. This type of leadership is a feature of successful transformational change initiatives and is associated with sustained commitment to change at the highest levels of an organisation (Best et al., 2012). In the PCLI context, distributed leadership is exemplified by the relationship between the **Ministry PCLI team** and LHD leadership, particularly the PCLI program managers, **executive leads** and OPMH service managers. The Ministry PCLI team manages the contracts with MH-RAC providers and provides strategic direction and resources to support LHDs with implementation. In turn, representatives from LHDs contribute to task groups such as the PCLI Steering Committee, PCLI Collaborative Group, PCLI Practice Network and MH-RAC Network. As well as providing a foundation for program governance and direction, these state-wide groups and networks have proved to be an important means for communication and knowledge sharing, as discussed later in this report.

1.3 Strategic outcomes

The strategic outcomes of the PCLI at completion will include:

- Long stay patient transitions
  - The number of long stay patients in mental health facilities in NSW will have decreased.
  - Individuals will have transitioned successfully to homes in the community with individually tailored 'wraparound' clinical and support services, permanent accommodation options, and improved health outcomes.
- Improved care pathways
  - A gap analysis and a future service spectrum will have been delineated for people with enduring mental illness across all settings and sectors.
  - Services will be supported to implement a re-configuration of existing resources, and/or additional service pathways.
  - Services will have developed a contemporary model of care across non-acute inpatient and community to further embed a recovery approach.
  - There will be a decrease in the build-up of long stay admissions (NSW Health 2016a, pp.9-10).

1.3.1 Quadrant framework for implementation

The strategic objectives of the PCLI have been conceptualised as a quadrant framework, around which activities of implementation are organised (Figure 1). These objectives are structured around the PCLI Program Logic, approved by the Steering Committee in 2017.

Figure 1: PCLI quadrant framework for program implementation

1.3.1.1 Program processes

Program processes include leadership and governance mechanisms, such as the PCLI Steering Committee which comprises representatives from each participating LHD, discipline leads, consumer and carer representatives, and members of the Ministry PCLI team. This group meets three times annually. Steering committees and working groups have also been established at each of the six primary implementation sites. There are several task-focused State-wide committees, such as the Data and Information Management Group, which meets monthly to discuss the development of the PCLI database, data and reporting requirements, and related issues. Weekly meetings of the PCLI Collaborative Group bring together the program managers from each primary implementation site with the Ministry PCLI team, with others (e.g., the evaluation team, PCLI clinicians from other LHDs, staff of InforMH) joining the meetings at

regular intervals. These provide an ongoing mechanism for discussion of issues relating to implementation.

Communication and workforce development are other important tasks within this quadrant. For example, the PCLI Practice Network meetings are interactive events which enable the PCLI clinician teams to share knowledge and contribute to program development. These replaced the Dialogue Days which were a mechanism for communication in the early years of the program (Thompson et al., 2018). A communication plan and various materials have been developed. A commissioned evidence check early in the program identified workforce development as an essential element in order to promote a recovery orientation among staff. Consequently, one of the first tasks was a training needs analysis, followed by development and rollout of tailored staff training programs. Ongoing workforce development is provided at LHD level as required.

1.3.1.2 Getting to know you

This quadrant refers to the individual assessment and transition planning processes promoted by the PCLI. These incorporate a set of PCLI-specific assessment tools, selected to complement existing, mandated mental health outcomes measures and intended to encourage person-centred, multi-disciplinary care for patients who have had long stays in hospital. In addition to providing information to guide individual transition planning, the assessments have been used at the aggregate level to guide service development. These processes are supported by two guidance documents created by an expert panel, one designed for patients and families, and the other to lead staff through stakeholder engagement and the use of the PCLI assessment tools for care planning. They have been revised twice, most recently in 2020.

Tailored assessments for individual consumers are a key element of successful transition from hospital, according to national and international evidence (NSW Health, 2018). Consequently, PCLI-specific assessment tools are integral to the transition process. Among other purposes, these tools are intended to provide a foundation for decisions around rehabilitation and care planning for all services involved in transitions (NSW Health, 2018). In the early implementation phase, the use of these tools in comprehensive assessment of PCLI consumers was a key performance indicator for participating local health districts. More recently, there have been considerable efforts to incorporate the tools into routine practice as well as recording them in a purpose-built PCLI database for ongoing monitoring and evaluation. The database has recently undergone a review and redevelopment with opportunities for input from all participating LHDs to improve useability and reporting functionality.

1.3.1.3 Stage One service developments

Within the PCLI Stage One service models, there are three options for supported accommodation and care for long stay consumers with issues of ageing. Two of these – the Mental Health Aged Care Partnership Initiative (MHACPI) transitional units and the Specialist Residential Aged Care Facilities (SRACFs) - are provided by PCLI partner organisations. Each have their own distinctive models of care and environmental features, and anticipated consumer cohort[2]. They aim to provide home-like environments that include a range of evidence-based design features, predominantly drawn from dementia design principles[3].

2. NSW Ministry of Health Submission to Australian Government Department of Social Services (NSW Office): Mental Health and Aged Care Planning
3. https://www.dementiafriendly.org.au/find-resources/dementia-enabling-environment-project-deep

These incorporate unobtrusive safety features, smaller sized living units (8-10 consumers), controlled stimulation, good visual access, opportunities for community engagement, familiar furnishings, a variety of spaces to congregate and/or be alone, and access to outdoor areas. Each unit delivers person-centred, recovery-focused approach and philosophy of care, with use of psychosocial approaches to behaviour management. This includes actively facilitating consumer choice in the activities of their daily lives, and respecting consumer preferences. There is a strong focus on promoting linkages with families and friends, and providing opportunities for meaningful activities and community engagement.

Both MH-RAC models are provided with support through PCLI in terms of funding, clinical advice and support, and engagement processes. They receive an amount per place on a block-funded basis to support additional, more specialised aged care staffing (with a higher per place cost for MHACPI than SRACF to reflect the higher staffing intensity of MHACPI), and additional funding for PCLI OPMH clinicians to provide clinical and partnership support. MHACPI units have also received capital contributions towards appropriate facility developments and good practice facility design in MHACPI units.

Mental Health Aged Care Partnership Initiative (MHACPI) transitional units are discrete, secure, purpose-designed units within aged care homes. Additional funding is provided for staffing and clinical support from the PCLI team within the LHD. Three MHACPI units have been established with PCLI funding, in three LHDs (Table 1), each with capacity for up to 10 people.

The MHACPI units are regarded as 'transitional' because once consumers have adapted to their new living arrangements, they are offered the opportunity to transition to a less-intensive care setting within the existing care home or elsewhere. When this occurs, ongoing support is provided through OPMH services.

Specialist Residential Aged Care Facilities (SRACFs) are specifically designed aged care facilities with purposeful models of care for people with complex, chronic mental illness. These facilities provide a home for individuals who would otherwise be at risk of homelessness or inappropriate long stays in hospital. To date, three SRACFs have been supplemented by PCLI funding, two with funding to support 10 targeted places within the facility and one with funding to support 30 targeted places (Table 1).

These facilities receive funding to enhance clinical support for people with functional ageing who also have enduring mental illness. When PCLI consumers are transitioned to SRACFs, their care is supported through additional funding for staffing within the facility as well as clinical follow-up by the PCLI team within the LHD. Once settled in the facilities, ongoing support is provided through OPMH services as needed.

Generalist or mainstream aged care facilities are an option for many Stage One consumers. Generalist Residential Aged Care Facilities often have pre-existing relationships with local OPMH services and inpatient long stay units. Some have experience with consumers with mental illness, others do not. Specialist clinical mental health transition and consultation-liaison support is provided to these services by OPMH services.

Table 1: Stage One MH-RAC services

Facility name	Service type	Provider	Places	Location	LHD OPMH services
Governor Phillip Manor	MHACPI	RSL Lifecare	10	Penrith	Nepean Blue Mountains, Western Sydney
Tobruk Unit	MHACPI	RSL Lifecare	10	Narabeen	North Sydney
Charles O'Neill Court	MHACPI	Catholic Health Care	10	Mayfield (Newcastle)	Hunter New England
Benjamin Short Grove	SRACF	Mission Australia	10	Orange	Western NSW
Annie Green Court	SRACF	Mission Australia	10	Redfern	Sydney
Marian Nursing Home	SRACF	Southern Cross Care	30	Parramatta	Western Sydney

1.3.1.4 Information and evaluation

Activities in the information and evaluation quadrant have included the development of the PCLI program logic, which has provided a foundation for the commissioned program evaluation.

Scores for individual consumers on the PCLI assessment tools, described above, are entered into a purpose-built database to serve as a data collection for monitoring and evaluation. When the tools were introduced, each LHD had a spreadsheet for keeping track of the assessments for each consumer. As the PCLI cohort grew, an Access database was developed and rolled out to the primary implementation sites. There were issues with data security and the lack of reporting capabilities, which led to the engagement of consultants ARTD in mid-2017. Since then, ARTD has been involved with the Ministry PCLI team in the development and ongoing improvement of an integrated database.

Now, the PCLI database is an online portal with expanded functionality providing access for all LHDs. The primary purpose of the database is to monitor the consumer journey through PCLI processes including the collection of data from the suite of assessment and care planning tools selected for use within the program. The database was built as an administrative and project coordination tool for LHD PCLI project managers for the primary purpose of the administration, implementation and monitoring of the PCLI. The data contain details of the current episode of inpatient care, including hospital admission dates, and local Medical Record Numbers (MRNs) to allow linkage to other routinely collected data items for those episodes.

A key mechanism for governance and information sharing in this quadrant is the PCLI Data and Information Management Group which has an ongoing role in ensuring that data are collected and available for health planning, reporting and evaluation. It assists with resolving issues relevant to data collection. This group meets monthly, with representation from the Ministry PCLI team, InforMH, ARTD and the evaluation team. There is a monthly data and information meeting led by the Ministry with PCLI program managers and coordinators and InforMH.

The combination of PCLI-specific and mandated mental health measures provide a means to measure consumer outcomes following transition to the community (see Chapter 3). Overall, the baseline assessments provide insight into the health status of the PCLI Stage One cohort, and the follow-up assessments provide an opportunity to assess change in status, or health outcomes, to which the PCLI contributes.

Table 2: PCLI toolkit – selected mental health measures (Source: NSW Health, 2018)

Tool	Purpose
Recovery Assessment Scale – Domains and Stages (RAS-DS)	What does the person value? How do they feel they are tracking with their recovery?
Camberwell Assessment of Need (CAN-C) and CANE Elderly	What is going well? What type of help and support does the person need?
Living in the Community Questionnaire (LCQ)	How much is the person participating in community life and what would they like to change?
Modified Mini Mental State (3MS), WASI-II, RBANS Neurological Functioning, Trail Making Test A and B	What are the person's cognitive strengths and limitations?
Modified Disability Assessment for Dementia (MDAD), Large Allen's Cognitive Levels Screen 5 (Allens)	What is the person's level of functional cognition?
PCLI Risk Screening Assessment, Historical Clinical and Risk Management Tool (HCR-20)	What risks need to be considered and what management strategies might be needed?

2. Evaluation methods

In January 2017, the Centre for Health Service Development (CHSD), University of Wollongong, was engaged to evaluate the PCLI, with the following goals:

- To help consumers, carers, clinicians, managers and policy makers assess the impact of the PCLI and the extent to which it is meeting its objectives;
- To identify opportunities to refine the PCLI, and
- To inform future investment and practice (Masso et al., 2017).

2.1 Evaluation design

The design of the evaluation was guided by the PCLI Evaluation Framework developed by the NSW Ministry of Health and endorsed by the PCLI Steering Committee (Table 3).

Table 3: PCLI Evaluation Framework

Level	Activities (Implementation)	Outcomes (1-2 years)	Outcomes (3-5 years)
Consumers	Individualised engagement, screening and assessment. Transition to community living.	Improved experience (engagement, choice and control).	Improved wellbeing, quality of life, physical health, mental health and social participation.
Family / carer / guardian	Engagement with families and carers.	Improved experience (engagement, choice and control).	Engagement with care/ cared persons. Satisfaction with quality, security and safety of care.
Providers / partners / staff	Workforce redesign. Workforce development.	Improved expertise and skills.	Functional partnerships established. Improved availability of relevant expertise and skills.
System / service	Coordination, communication, cultural change. Enhanced services. Development of contemporary model of care.	Improved collaboration. Culture of recovery. Contemporary models of care established. Improved information sharing.	Improved collaboration. Culture of recovery. Sustainable continuous improvement of service.

Note: The term 'consumer' will predominantly be used to describe the individuals targeted by the PCLI.

The PCLI Evaluation Framework is based on the assumption that for an innovation to 'work', it has to do so at multiple levels: consumers, providers and the care delivery system. The care delivery system encompasses three elements:

- the 'social' aspect (e.g., the networks and relationships between providers);
- the 'organisational' aspect (e.g., management structures, resources, processes); and
- the broader system of health and aged care within which the PCLI exists.

2.1.1 Ethical approval

For the purposes of ethical approval, the evaluation was divided into three components. The evaluation of consumer outcomes component uses NSW Health datasets and involves data linkage and consequently was submitted to, and approved by, the NSW Population and Health Services Research Ethics Committee (PHSREC). The other components did not require approval by the NSW PHSREC (according to advice received in March 2017) as they did not require access to patient records. Instead they were submitted to, and approved by, the relevant University of Wollongong Human Research Ethics Committees (Table 4).

Table 4: Ethics applications – PCLI evaluation

No.	Name	Participants	Ethics committee	Timing of ethics application
1	Evaluation of provider/ system change	Staff working either in the health system or for organisations providing accommodation services in the community	University of Wollongong and Illawarra Shoalhaven Local Health District Health and Medical Human Research Ethics Committee	Approved in July 2017
2	Evaluation of consumer and carer experience	Consumers and carers	University of Wollongong and Illawarra Shoalhaven Local Health District Social Sciences Human Research Ethics Committee	Approved in May 2018
3	Evaluation of consumer outcomes	No participants – the study involves secondary analysis of data collected by NSW Health	NSW Population & Health Services Research Ethics Committee	Approved in June 2018

A fourth component – the economic evaluation – utilised summarised data from the evaluation of consumer outcomes and did not require separate ethical approval. Progress reports are submitted annually, as required, to renew the ethics approvals.

2.1.2 Evaluation questions

This report includes new data on evaluation components 1, 3 and 4[4] and addresses the evaluation questions associated with each of these components (Figure 2).

Figure 2: Evaluation components and evaluation questions

Component 1: Evaluation of consumer outcomes	
Question 1	How successful was the PCLI in transitioning people from hospital into the community?
Component 2: Evaluation of consumer and carer experience	
Question 1	How successful was the PCLI in transitioning people from hospital into the community?
Question 3	What was the consumer/family/carer experience?
Component 3: Evaluation of provider/system change	
Question 2	What factors predicted success?
Question 4	Have high quality and responsive new services been established?
Question 5	Has practice in existing services been reformed?
Question 6	Was the model sustainable?
Component 4: Economic evaluation	
Question 7	Did the PCLI result in value for the money spent?
Question 8	How has the PCLI improved efficiency in systems/services/workforce? Includes consideration of benefits to individuals (e.g., quality of life, physical health, mental health and wellbeing).

4. Recruitment of consumers and carers was unsuccessful and therefore there were no new data for this component.

2.2 Quantitative methods

The primary consumer outcome measure was discharge from hospital. Secondary outcome measures included changes in consumer assessments from baseline to follow-up. For this report, the secondary outcome measures were the routinely collected Mental Health Outcome and Assessment Tools (MH-OAT) collections. Out of this suite of tools, five were selected to be included in this evaluation. The data extraction process required substantial resources in terms of time and effort from InforMH, PCLI stakeholders, and the evaluation team. Consequently, the number of assessment tools was consciously restricted to those expected to be most useful and more likely to be completed for this cohort at this stage of implementation, namely:

- Kessler Psychological Distress Scale (K10)
- Health of the Nation Outcome Scales (HoNOS, HoNOS65+)
- Life Skills Profile (LSP-16)
- Resource Utilisation Groups – Activities of Daily Living (RUG-ADL).

These tools have been used for many years as part of a national approach to standardised outcome measurement in mental health services and are supposed to be administered every three months to admitted patients. For consumers in the PCLI cohort, assessments are scheduled at six-monthly intervals after discharge.

2.2.1 Data sources

As a result of the decision to focus on the MH-OAT tools in this report, the consumer outcomes analysis is based primarily on data from the NSW Health Information Exchange (HIE) database which includes data for these routinely collected assessments along with data relating to the consumers, their stays in hospital, and other health service use. As a requirement, routine data collections go through more rigorous data quality checks than what may be expected to occur with the PCLI database. As such, the HIE is considered the 'primary' source of consumer-level data for the evaluation. The evaluation makes use of the definitions and concepts embedded in the HIE. This includes the concepts of 'stay', 'admission', 'discharge' and 'length of stay'. These data items (concepts) are consistently collected and reported across all hospitals in NSW.

Data extraction from the HIE was designed in consultation with and approved by the Ministry PCLI team. The HIE does not include PCLI-specific data items such as identification of PCLI Stage One consumers, initial cohort or second-wave cohort. Neither does it distinguish between different time points for the PCLI assessment data collection.[5] Identifying the **index stay** may also be complex because, for a number of legitimate reasons, a seemingly continuous period of hospitalisation may be reported as multiple stays in the HIE. In the context of the PCLI, this can result in situations where a consumer has effectively had a hospitalisation longer than 365 days but no such single stay has been recorded in the administrative data.[6] For the purposes of the consumer outcomes and economic evaluations it was essential to identify the index stay

5. Assessments in the PCLI are intended to occur at several time points: prior to discharge (Baseline Ax) and for a two-year follow-up period after transitioning to community living (at 6 months post discharge (T1), 12 months (T2), 18 months (T3) and 24 months (T4)). The time point T0 provided an optional opportunity to review the assessments prior to transition. Within the HIE the concept of Ax, T0, T1, and so on does not exist. Instead, we distinguished between assessments at baseline (during the long stay) and follow-up (after discharge from hospital).
6. In correspondence with members of InforMH the evaluation team learned that InforMH had investigated 'joined' stays. That is, combining all activity into one continuous stay. However, the research was put on hold because, due to the rules that would be required to extract and connect the data from the HIE, it was deemed too complex and laborious. Therefore, the evaluation team (as does InforMH) reports all stays separately and does not 'join' stays.

correctly, as this determined both the baseline before transition and health service use and health outcomes following transition to the community.

The evaluation team worked with the Ministry PCLI team, InforMH and the participating LHDs to define index stays for the Stage One consumers included in the analyses. The index stay was defined as the stay that ended in transition into the community. For consumers who had not yet transitioned, the index stay was the current stay. The discharge date from the index stay was used as the reference point for our analyses. All inpatient stays, ED presentations, community visits and outcomes assessments occurring after that date were regarded as belonging to the follow-up period and included accordingly in the economic evaluation and the outcomes analyses. The last assessment data before the reference point were considered as baseline health status.

A secondary data source for consumer outcomes and costs of care following discharge was available to the evaluation team for a sub-group of Stage One consumers. The partnership agreements between NSW Health and the MH-RAC providers requires quarterly reporting of selected resident characteristics to the Ministry PCLI team. The data obtained by the evaluation team contained de-identified consumer-level information for all consumers who had transitioned to a PCLI-funded MH-RAC facility. No such data were available for generalist RACFs. This information provided an additional perspective to the consumer journey after transition which was used to supplement the HIE data and informed the economic evaluation. Data from HIE and the MH-RAC reporting were completely separate and could not be linked.

2.2.2 Data preparation

The Ministry PCLI team in collaboration with InforMH and the LHDs generated a list of PCLI-specific data items that enabled identification of PCLI Stage One consumers, cohort and identification of the index stay. This list was provided to InforMH with identifying information such as: Hospital ID, LHD / SHN and PAS ID / Medical Record Number. Data extraction was performed by InforMH using this identifying information. Afterwards InforMH removed all identifying information and added a pseudo identifier which allows linking of unit records across all tables provided. This was performed to facilitate data analysis for the evaluation team and to adhere to requirements specified by NSW PHSREC.

The data from the HIE were first extracted in July 2020. Extensive data quality checks were employed to investigate the robustness of the data. Data queries were reported to InforMH and every effort was made to resolve issues found. Following this period of data checking over several weeks, the final data were extracted from the HIE by InforMH on 6 August 2020 and transferred to the evaluation team on 10 August 2020.

Datasets were supplied in SAS data format containing several tables, one for each routinely collected assessment tool and additional tables with consumer and activity information. The tables were combined using the provided pseudo identifier. In instances where more than one record was available for the same assessment tool (and time point) the most current completed assessment was used.

Length of stay was calculated as the total number of days between admission and discharge, if this occurred before the cut-off date of 31 December 2019. For those consumers who remained in hospital on **31 December 2019** the length of stay indicates the number of days between admission and that date.

2.2.2.1 Development of the analysis datasets

The data provided to the evaluation team by InforMH contained information on 194 PCLI Stage One consumers. The HIE inpatient dataset originally provided was an episode-level dataset where each row represented one episode. All episodes belonging to stays that ended on or after 1 January 2015 or were ongoing were included. In total, there were 3,272 episodes belonging to 2,964 stays. In the HIE ED dataset each row represented one presentation. In total, there were 50 records in the dataset. The HIE ambulatory care dataset originally included 61,121 rows and each row represented an activity of a provider. The dataset was converted to a service event level dataset.

A consumer-level dataset was derived from the inpatient dataset by retaining only the index stay information. The index stay discharge date was then used to identify whether hospital-based activity (inpatient stays, ED presentation, community care) belonged to a time period preceding baseline period, the baseline period or the follow-up period.

For the five routinely collected assessment tools (HoNOS, HoNOS 65+, K10, LSP-16 and RUG-ADL), only valid assessments were retained (i.e. where 'collection status' was 'Complete or partially complete'). Where multiple assessments were recorded on the same day, the last one was retained. Based on the admission and discharge dates of the index stay, assessments were deemed to belong to the 'baseline' or 'follow-up' time period. For the purpose of analyses, the last assessment prior to discharge was retained as the 'baseline' assessment and the first assessment after discharge was retained as the 'follow-up' assessment. This process was performed for each of the five assessment tools sourced from the HIE.

2.2.3 Data analysis: consumer outcomes

Statistical analyses were conducted using SAS 9.4 statistical software. Exploratory data analysis was performed in order to gain a sound understanding of the data collection, in particular, data completeness and quality and to identify potential errors / gaps, inconsistencies or other limitations.

Descriptive statistics and appropriate measures of central tendency and measures of spread were produced. As appropriate, paired t-tests and Wilcoxon Signed Rank tests (non-parametric equivalent), were used to examine differences in scores between the baseline and the follow-up measure. P-values smaller than 0.05 ($p < 0.05$) were considered statistically significant.

All differences have been calculated as 'follow-up score minus baseline score', so for some assessment tools a negative difference indicates an improvement (positive outcome) and for others a negative difference indicates deterioration (negative outcome).

In most cases, the findings are presented for the initial cohort, the second-wave cohort and all consumers. In situations where the reporting would potentially make the data identifiable, findings were withheld to protect privacy and confidentiality.

2.2.3.1 Standardisation of subscales

Where subscale scores have different ranges, the scales were standardised to represent a percentage score (i.e. range 0 to 100) to enable direct comparisons. The calculation of standardised scores is as follows:

Standardised score = (actual score – lowest possible score) / (highest possible score – lowest possible score) multiplied by 100.

For example, standardised scores for the HoNOS (and HoNOS 65+) subscales are calculated as follows:

Behaviour subscale: contains three individual items (items 1-3), where all items are rated on a five-point scale from 0 to 4, therefore the possible range is 0 to 12. If a consumer was rated '2' for item 1, '4' for item 2 and '1' for item 3, their total score for the 'behaviour' subscale would be 7 (2+4+1). The standardised score would be calculated as
(7-0) / (12-0) * 100 = 58.3.

Impairment subscale: contains two individual items (items 4 and 5), where all items are rated as above, therefore the possible range is 0 to 8. If a consumer was rated '3' for both items, their total score for the 'impairment' subscale would be 6 (3+3). The standardised score would be calculated as (6-0) / (8-0) * 100 = 75.0.

Symptom subscale: contains three individual items (items 6-8, scored as above), hence a possible range of 0 to 12. The standardised score would be calculated as: (actual score-0) / (12-0) * 100.

Social subscale: contains four individual items (items 9-12), hence a possible range of 0-16. The standardised score would be calculated as: (actual score-0) / (16-0) * 100.

Low scores for the HoNOS indicate better health status (i.e. less severity of problems). Hence if the unstandardized scores above were compared (7 for 'behaviour' and 6 for 'impairment'), one may conclude that the consumer had 'less' problems related to 'impairment' than 'behaviour'. However these scores are not directly comparable due to the different range of scores. The standardised scores reflect a 'direct' comparison (58.3 for 'behaviour' and 75.0 for 'impairment') resulting in a more accurate conclusion that the consumer had 'more' problems related to 'impairment' than 'behaviour'.

2.2.3.2 Logistic regression

The standard approach to identify and quantify consumers-level characteristics which predicted the likelihood of being discharged from hospital is to use a logistic regression model that is designed to predict a dichotomous variable (i.e. the stay has ended or is ongoing). The basic idea behind logistic regression is to model the logarithm of the odds for an event based on values of independent predictors, i.e. consumer-level characteristics at baseline. The model can be written as:

$$\log\left(\frac{p}{1-p}\right) = \boldsymbol{\beta X}$$

Here $\boldsymbol{p}$ represents the probability of the event ('discharged') and 1-p represents the probability of the non-event ('ongoing'). $\boldsymbol{X}$ represents the set of independent variables including an intercept. The estimates $\boldsymbol{\beta}$ of the predictor variables represent changes in odds. Results can easily be transformed into probabilities.

All consumer-level characteristics that were available for at least 50% of consumers were initially tested using univariate logistic regression for their impact on hospital discharge. Characteristics with statistically significant results ($p < 0.05$) were then included in a stepwise logistic regression. 'Stepwise' describes a method of fitting (logistic) regression models in which the selection of variables is carried out by an automatic procedure. In each step, variables are tested for inclusion to the model or removal from it. The process ends when a specified criterion is fulfilled and no more improvements can be achieved.

We use two means to assess the model fit. The pseudo R-square measure (Nagelkerke R-square) has values between zero and one (with higher values indicating better fit) and represents a generalized coefficient of determination. The Hosmer-Lemeshow test is a statistical test for goodness of fit for logistic regression models. It compares observed and expected event rates. Statistically significant differences between observed and expected event rates indicate a lack of fit.

For the analysis, all consumers whose reason for discharge was 'death' were excluded (n=26).

2.2.4 Data analysis: economic evaluation

The main goal of the economic evaluation was to provide an estimation of the cost associated with the care during the index stay and compare that to the cost of care incurred while living in the community. As access to actual expenditure data was very limited, the analysis used a 'cost to government' approach to determine funding levels associated with PCLI Stage One consumers.

Based on discussions with the Ministry PCLI team, the scope of the analysis was limited to the PCLI Stage One initial cohort who had been discharged from hospital as at 31 December 2019 and who had not died during their index stay (n=66). It was further defined to include four main types of costs:

- Hospital-based care including admitted care, ED presentations and community mental health services;
- Commonwealth funded residential aged care;
- Partnership agreements between NSW Health and aged care providers;
- National Disability Insurance Scheme.

The following types of costs were out of scope for the analysis:

- Primary health care
- Out of pocket contributions by consumers
- In-kind contributions by aged care providers
- Capital contribution funding provided through the partnership agreements between NSW Health and aged care providers
- PCLI program (including additional PCLI funding provided to LHDs)
- Downstream effects to the healthcare system

Information and documents provided by the Ministry PCLI team were used to estimate costs associated with supported accommodation in the MH-RAC facilities. The MHACPI units and SRACFs report regularly on the profile of their PCLI consumers, including their Aged Care Funding Instrument (ACFI) scores which inform the Commonwealth funding levels for residential aged care. Information about the funding agreements between NSW Health and organisations providing MH-RAC facilities was used to estimate additional costs associated with the transitions of highly complex, long stay PCLI Stage One consumers to MHACPI units or SRACFs.

2.2.4.1 Hospital-based care – Activity-Based Funding

The evaluation team did not have access to hospital cost data. Instead, cost estimates for hospital-based care were based on activity based funding (ABF) principles. The Independent Hospital Pricing Authority (IHPA) produces the annual National Efficient Price (NEP) which is used in combination with price weights and other adjustments to determine the price of an activity under ABF.[7] Price weights are produced for all admitted programs, non-admitted services and ED activity using the corresponding national classifications (IHPA, 2019a). Each inpatient episode for a PCLI Stage One consumer was associated with an Australian Refined Diagnosis Related Group (AR-DRG) which classifies episodes of care into clinically meaningful groups. Inpatient stays may consist of more than one episode.

For the index stays, the outlier *per diem* was used as a representation of the ongoing nature of the stays. For any hospital care which occurred after transition, the usual ABF methodology was used as it best represented the episodic nature of the care provided. Urgency Disposition Groups (UDGs) were used to classify ED activity. This classification is based on the patient's type of visit, end status

7. All relevant details (such as classifications, price weights, NEP and technical specifications) for the current financial year and all previous financial years can be found on the IHPA website (https://www.ihpa.gov.au/).

and triage category. Non-admitted community mental health care was categorised using the Tier 2 classification. Values were adjusted for inflation and converted to 2019-20 dollars, and an estimation for the annual cost was derived.

For example, the final episode of the PCLI Stage One index stay for one consumer was classified as 'Schizophrenia Disorders, Major Complexity' (U61A) and ended in the financial year 2016-17. The 'Long stay Outlier Per Diem' price weight in 2016-17 was 0.1855 and the NEP was $4,883. The daily price was calculated as the product of price weight and NEP (0.1855 * $4,883 = $906). For another consumer, readmitted to hospital in 2018-19, the readmission was classified as 'Respiratory Infections and Inflammations, Major Complexity' (E62A) and the inlier price weight was used (1.7311). The NEP was $5,012. Hence the episode cost was 1.7311 * $5,012 = $8,676.

2.2.4.2 Providing a basis for cost comparison

Some costs of care are recurrent (e.g., daily ACFI or NDIS funding) whereas other costs have an episodic or service-driven nature (e.g., all hospital-based activities). Further, some costs are incurred by all PCLI Stage One consumers (e.g., index stay) whereas others are only incurred by some (e.g., ED presentations). Therefore, all costs have been converted into average cost per PCLI Stage One consumer per year.

Depending on the nature of the cost, this needs to be done in different ways. For recurrent costs, the daily amount was multiplied by 365 days. For other costs, the total number of events was multiplied by the average cost of each activity to calculate the total cost of that type of activity for all PCLI Stage One consumers (n=66) over the whole post-discharge period (on average 800 days). By dividing the total cost by the total number of person days in the post-discharge period (66 * 800 = 52,800) the average cost per PCLI Stage One consumer day was calculated.

This was multiplied by 365 days to arrive at the average cost per consumer per year.

$$\frac{frequency\ of\ activity \times cost\ per\ activity}{66 \times 800} \times 365 = cost\ per\ consumer\ per\ year$$

For example, there were 10 ED presentations with an average cost of $1,971 recorded. Based on the formula above, the average cost of ED presentations per consumer per year can be calculated as follows:

$$\frac{10 \times \$1{,}971}{66 \times 800} \times 365 = \$136$$

2.2.4.3 Indexation

Unless stated otherwise, all amounts provided have been converted to 2019-20 dollars.

To improve comparability of prices from different sources over several financial years (nominal dollars) all amounts are converted to 2019-20 dollars (real dollars) using the General Government Final Consumption Expenditure (GGFCE) chain price index regularly published by the Australian Bureau of Statistics (ABS, 2020). This approach is commonly used, for example, by the Productivity Commission (Steering Committee for the Review of Government Service Provision, 2020). Table 5 shows the GGFCE chain price indexes as published by ABS along with our own calculations to convert the chain price indexes into 2019-20 dollars.

To convert nominal dollars into real dollars the nominal dollar amount is divided by the GGFCE chain price index for the corresponding financial year and multiplied by 100, e.g. to convert 2015-16 dollars to 2019-20 dollars, divide by 94.0 and multiply by 100; $1,000 (in 2015-16) / 94.0 * 100 = $1,064 (in 2019-20).

Table 5: GGFCE chain price index

Nominal dollars (year)	Chain price index (based on 2017-18)	Chain price index (re-based to 2019-20)*
2015-16	103.9	94.0
2016-17	102.2	94.8
2017-18	100.0	96.2
2018-19	98.5	98.4
2019-20	97.7	100.0

* Calculated conversion to 2019-20 dollars.

2.3 Qualitative methods

2.3.1 Data sources

To prepare this report, the evaluation team conducted 30 interviews involving 43 key informants including: PCLI project managers and Stage One peer workers and clinicians, PCLI executive leads, Older People's Mental Health (OPMH) service coordinators, representatives of aged care partner organisations, and other stakeholders. Interviews were guided by schedules designed around the evaluation questions.

This round of interviews built on three previous rounds in 2019, 2018 and 2017, providing rich, in-depth, longitudinal, qualitative data on which to base formative and summative conclusions.

There is comprehensive documentation about the history and development of OPMH services and the development of partnerships with residential aged care providers (Mental Health Branch, NSW Health 2019). Minutes of meetings from the MH-RAC Network and other governance forums such as the PCLI Steering Committee meetings, and PCLI program documents provided useful supplementary data sources.

In this report, quotes from **key informants** (KIs) are indented in blue italics. Numbering of the key informant quotes is independent of the numbering in previous reports to protect privacy and confidentiality of the interview participants.

2.3.2 Data preparation and analysis

Interviews were recorded (with permission) and professionally transcribed through a company that ensures security and confidentiality. Transcripts were entered into NVivo 12 Plus for data management.

Four team members (KW, PO, TC, AW) worked together to code, index, analyse and write up the qualitative findings. Each has had extensive experience of qualitative analysis and lengthy exposure to the PCLI, creating deep understanding of the program and its context. A modified Framework Method of analysis was used, as this is highly suited to working with large datasets where the data are derived from semi-structured interviews, multiple researchers are working on the project, and the goal is a holistic descriptive overview (Gale et al., 2013). The Framework Method provides a systematic way to categorise and compare accounts and search for patterns in order to develop 'themes' which capture and express important concepts in the data.

Themes are broad, abstract categories which recur in the data and illustrate relations, actions, beliefs, narratives or arguments (Maxwell & Chmiel, 2014).

KW created a first draft of the coding structure based on the evaluation questions. Three members of the team (KW, PO, TC) then independently coded several transcripts to test the coding structure. The whole team then met to discuss and refine the structure, adding and rearranging nodes as required to establish consensus on the final analytical framework. Three team members (KW, PO, TC) completed the indexing of the transcripts, adapting the analytical framework to accommodate new codes, with ongoing discussion among team members as the work progressed. Thus, the analytical approach combined deductive, question-driven coding with inductive coding which allows freedom for discovery of unexpected ideas, issues and experiences in participants' accounts (Gale et al., 2013). To aid and document interpretation, each team member kept notes and/or created memos in NVivo. The team met several times to discuss and agree on the emerging concepts and themes and how these could be organised into a coherent account of the PCLI Stage One implementation and outcomes. Once all the data were indexed, sections of the report were assigned to team members for writing. Draft sections were submitted to KW, who was responsible for editing them into the report and bringing together the qualitative and quantitative findings.

3. Consumer outcomes

This is the third evaluation report to include consumer-level data. Exploratory and descriptive statistics are presented, along with health outcomes from baseline assessments to first follow-up after discharge and modelling of consumer characteristics that predict discharge from hospital. The data were also used for the economic evaluation (Chapter 5).

3.1 Data quality and completeness

The final analysis dataset included 194 PCLI Stage One consumers, with information on their inpatient episodes, emergency department presentations and non-admitted activity provided by hospitals as well as assessment data from the routinely collected MH-OAT tools: K10, HoNOS, HoNOS 65+, LSP-16 and RUG-ADL. Availability of data differs by assessment tool, partly because some tools are used for sub-sets of the PCLI population.

Of the 194 PCLI Stage One consumers, only one did not have any assessment data recorded. Data completeness varied by LHD (Table 6). The number of consumers who had assessments recorded at both baseline and at follow-up was quite low.

Table 6: Number of baseline assessments by LHD and assessment tool

Tool	LHD1 (N=52)		LHD2 (N=59)		LHD3 (N=10)		LHD4 (N=14)		LHD5 (N=31)		LHD6 (N=22)		Total (N=194)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
K10	7	13.5	51	86.4	9	90.0	9	64.3	21	67.7	19	86.4	121	62.4
HoNOS	9	17.3	36	61.0	10	100.0	6	42.9	26	83.9	18	81.8	109	56.2
HoNOS 65+	42	80.8	39	66.1	2	20.0	8	57.1	9	29.0	8	36.4	112	57.7
LSP-16	41	78.8	57	96.6	9	90.0	7	50.0	26	83.9	22	100.0	166	85.6
RUG-ADL	49	94.2	45	76.3	3	30.0	9	64.3	12	38.7	13	59.1	135	69.6

Note. The right-hand (totals) column includes consumers in other LHDs. The number of assessments has been determined by the 'total' score where appropriate. Some assessment tools are only applicable to consumers with issues of ageing. These consumers could not be identified in the dataset, hence the total number of consumers has been used to calculate the percentage completeness.

3.2 Description of the PCLI Stage One consumers

The size of the initial cohort was initially estimated at around 380 individuals[8], of whom 117 were present in the dataset for this report (Table 7). The remaining 77 individuals in the dataset were members of the second-wave cohort.

Table 7: Description of the PCLI Stage One consumers by cohort

Characteristic	Initial cohort (N=117)		Second-wave cohort (N=77)		All consumers (N=194)	
	n	%	n	%	n	%
Gender						
Male	72	61.5	47	61.0	119	61.3
Female	45	38.5	30	39.0	75	38.7
Age group						
Younger than 55	10	8.6	4	5.2	14	7.2
55-64	31	26.5	16	20.8	47	24.2
65-74	53	45.3	36	46.8	89	45.9
75-84	19	16.2	17	22.1	36	18.6
85 and older	4	3.4	4	5.2	8	4.1
Major Diagnostic Category						
Mental Diseases and Disorders	75	64.1	41	53.3	116	59.8
Diseases and Disordersof the Nervous System	18	15.4	23	29.9	41	21.1
All other MDCs	24	20.5	13	16.9	37	19.1
Principal diagnosis						
Schizophrenia	53	45.3	18	23.4	71	36.6
Schizoaffective disorders	17	14.5	11	14.3	28	14.4
Dementia in Alzheimer's disease	8	6.8	9	11.7	17	8.8
Bipolar affective disorder	4	3.4	7	9.1	11	5.7
Other medical care	3	2.6			3	1.6
All other diagnoses	32	27.4	32	41.6	64	33

8. Information provided by the Ministry PCLI team shows that as at 31 December 2014 when the business case was developed for NSW Treasury the number of long stay patients approximated 387.

Table 7: Description of the PCLI Stage One consumers by cohort (continued)

Characteristic	Initial cohort (N=117)		Second-wave cohort (N=77)		All consumers (N=194)	
	n	%	n	%	n	%
Total length of stay*						
Less than one year**	20	17.1	23	29.9	43	22.2
1 - 2 years	11	9.4	34	44.2	45	23.2
2 - 3 years	11	9.4	13	16.9	24	12.4
3 - 4 years	8	6.8	3	3.9	11	5.7
4 - 5 years	9	7.7	1	1.3	10	5.2
5 - 6 years	11	9.4	2	2.6	13	6.7
6 - 7 years	11	9.4			11	5.7
7 - 8 years	3	2.6			3	1.6
8 - 9 years	7	6.0			7	3.6
9 - 10 years	7	6.0			7	3.6
10 or more years	19	16.2	1	1.3	20	10.3
Local Health District						
Hunter New England	22	18.8	30	39.0	52	26.8
Northern Sydney	42	35.9	17	22.1	59	30.4
South Western Sydney	4	3.4	6	7.8	10	5.2
Sydney	3	2.6	11	14.3	14	7.2
Western NSW	29	24.8	2	2.6	31	16.0
Western Sydney	17	14.5	5	6.5	22	11.3
Other Local Health Districts	0	0.0	6	7.8	6	3.1

* Length of stay is reported as it is recorded in the HIE. This does not take into account any previous stays. Length of stay for PCLI Stage One consumers who remained in hospital was calculated as at 31 December 2019.

Three out of five PCLI Stage One consumers in both cohorts were male and almost half were aged between 65 and 74. Just over 30% were aged under 65 years. The majority (60%) were classified as being in the 'Mental Diseases & Disorders' MDC, of which 85% were classified within the 'Schizophrenia Disorders' DRGs.

The two cohorts had quite different profiles in terms of principal diagnoses: the initial cohort were more likely to have schizophrenia (45% vs 23%) whereas the second-wave cohort had a greater incidence of dementia, physical illness or disability. As would be expected, the initial cohort had had much longer stays: 50% had spent five years or more in hospital compared with 5% of the second-wave cohort. The total average length of stay for PCLI Stage One consumers in the initial cohort was 6.3 years (SD=6.1). In this group, 50% had a total length of stay greater than five years and 16% had a length of stay greater than ten years. The total average length of stay for PCLI Stage One consumers in the second-wave cohort was substantially lower (1.7 years, SD=2.3) and 91% had a total length of stay less than three years.

Long stay consumers with SPMI and issues of ageing are concentrated in a few LHDs. Most of those in the initial cohort were from Northern Sydney LHD (36%), Western NSW LHD (25%) and Hunter New England LHD (19%). Across both cohorts, around 85% of all PCLI Stage One consumers were from these three LHDs plus Western Sydney LHD.

3.3 Health status before discharge from hospital

This section presents the health status of PCLI Stage One consumers at baseline; that is, the last available assessment data before discharge from hospital during the index stay. Health status is measured by the routinely collected clinical assessment tools. The number of valid assessments available for analyses varies by tool, in part because not all tools are applicable to all consumers. Index stays for all PCLI Stage One consumers are included, even those who died prior to discharge and those whose index stay was ongoing at 31 December 2019 (i.e., they had not yet been discharged from hospital). Material presented here is a summary of differences between the cohorts, and more detail and data tables are available in the Appendix.

3.3.1 Kessler Psychological Distress Scale (K10)

The K10 (Kessler et al., 2002) is a 10-item consumer self-rated questionnaire intended to yield a global measure of non-specific psychosocial distress based on questions about the level of nervousness, agitation, psychological fatigue and depression in the relevant rating period (for the PCLI, this is 'the last month'). Scores under 20 indicate that the consumer is 'likely to be well', scores in the range 20-24 indicate the consumer is 'likely to have a mild disorder', scores in the range 25-29 indicate the consumer is 'likely to have a moderate disorder' and scores of 30 or more indicate the consumer is 'likely to have a severe disorder'.

More than half of PCLI Stage One consumers (53% of the initial cohort and 57% of the second-wave cohort) reported low levels of psychological distress at baseline. There was a higher incidence of moderate to severe psychological distress in the initial cohort (40%) compared with the second-wave cohort (24%).

3.3.2 Health of the Nation Outcome Scales (HoNOS)

The HoNOS (Wing, Curtis, & Beevor, 1996) was designed for use with people with a mental illness and is regarded as a general measure of symptom severity. It consists of 12 items that cover the sorts of problems that may be experienced by people with a significant mental illness. Each item is rated on a five-point scale: 0 = no problem, 1 = minor problem requiring no formal action, 2 = mild problem, 3 = problem of moderate severity, 4 = severe to very severe problem).

The HoNOS rating summarises the clinician's assessment. Ratings of 0 or 1 are not clinically significant. Ratings of 2, 3 or 4 are clinically significant, requiring active observation and intervention. Initial cohort consumers had a higher proportion of clinically significant ratings for 'problems associated with hallucinations and delusions', 'problems with activities of daily living' and 'problems with relationships'. Second-wave cohort consumers had a substantially higher proportion of clinically significant ratings for 'physical illness or disability problems' and 'problems with activities of daily living'. Both cohorts had a low proportion of significant ratings for 'problem drinking or drug taking' and 'non-accidental self-injury'. The latter is expected of a cohort with enduring illness who are not acutely distressed.

3.3.3 Health of the Nation Outcome Scales 65+ (HoNOS 65+)

The HoNOS 65+ (Shergill, Shankar, Seneviratna, & Orrell, 1999) is a variant of the general adult version of the HoNOS and was developed specifically for use with older people with a mental illness. As with the HoNOS, the HoNOS 65+ rating provides a summary of the clinician's assessment using the same scale as the parent tool: ratings of 0 or 1 are not clinically significant, ratings of 2, 3 or 4 are clinically significant and active observation and intervention is indicated (Burgess, Trauer, Coombs, McKay, & Pirkis, 2009).

The initial cohort had a high proportion of clinically significant ratings for 'problems with activities of daily living' and 'physical illness or disability problems' whereas the second-wave cohort had a high proportion of clinically significant ratings for 'cognitive problems' and 'problems with activities of daily living'. As with the HonOS, both cohorts had a low proportion of clinically significant ratings for 'problem drinking or drug taking' and 'non-accidental self-injury'.

3.3.4 Abbreviated Life Skills Profile (LSP-16)

The LSP (Rosen et al., 1989) assesses the basic life skills of people with mental illness, focusing on general functioning and disability rather than clinical symptoms. The abbreviated version has 16 items across four domains: withdrawal, self-care, compliance, and anti-social. High scores indicate greater disability.

On average, consumers in both cohorts had high scores for the 'self-care' subscale indicating they neglect their physical health and have difficulty attending to personal grooming and the cleanliness of their clothes. They had low scores for the 'anti-social' subscale indicating few problems with violence, offensive or irresponsible behaviour or problems with others.

3.3.5 Resource Utilisation Groups – Activities of Daily Living (RUG-ADL)

The RUG-ADL (Fries et al., 1994) measures ability with respect to what are called 'late loss' activities: those abilities that are likely to be lost last in life (e.g. eating, mobility). 'Early loss' activities (such as dressing and grooming) are included in the LSP-16. For this reason, this tool is generally only applicable to people aged 65 and over. To complete the tool, a clinician rates the consumer's needs for assistance in four activities of daily living: bed mobility, toileting, transfer, and eating.

Across both cohorts, most of the consumers assessed with this tool were independent or required only limited physical assistance with bed mobility, toileting, transfers and eating function. A minority required extensive assistance with toileting (22%), transfers (16%), bed mobility (13%) and/or eating (13%).

3.4 Discharge status and destination

In relation to discharge status (Table 8), approximately sixty percent of PCLI Stage One consumers had been discharged from hospital, and around a quarter remained in hospital, at 31 December 2019. Twenty-six long stay consumers had died in hospital.

Table 8: Discharge status by cohort

	Initial cohort (N=117)		Second-wave cohort (N=77)		All consumers (N=194)	
	n	%	n	%	n	%
Discharged from index stay	66	56.4	52	67.5	118	60.8
Index stay ongoing at 31/12/19	31	26.5	19	24.7	50	25.8
Died during index stay	20	17.1	6	7.8	26	13.4

Forty-three (36%) of the 118 PCLI Stage One consumers discharged from hospital had transitioned to MH-RAC facilities. According to MH-RAC reporting data, 70% of these transitions occurred within the referring LHD. The remaining 75 (64%) of Stage One transitions were to generalist aged care facilities.

For the initial cohort, the number of transitions accelerated rapidly in the first three years of the program and slowed in 2018 (Table 9). Second-wave transitions began in 2017 and increased every year. Across both cohorts the numbers of transitions were highest in 2017 and 2019.

Table 9: Number of transitions by year

Year of transition*	Initial cohort (N=66		Second-wave cohort (N=52)		All consumers (N=118)	
	n	%	n	%	n	%
2015**	3	4.5	0	0.0	3	2.5
2016	15	22.7	0	0.0	15	12.7
2017	24	36.4	14	26.9	38	32.2
2018	10	15.2	15	28.9	25	21.2
2019	14	21.2	23	44.2	37	31.4

* Calendar year.
** Six months only (between 1 July and 31 December 2015).

3.5 Health outcomes following discharge from hospital

The following analyses focus on the 118 (61%) PCLI Stage One consumers who had been discharged from hospital at 31 December 2019 and who had not died during their index stay. For these consumers we performed a detailed analysis of their health status before and after discharge, using the last baseline assessments and the first follow-up assessments. Where possible, statistical tests were used to examine whether any observed differences in paired assessments were significant. For some tools, statistical testing was precluded due to small numbers of paired assessments (see the Appendix for further information on the number of assessments available for analysis).

Four assessments tools had enough valid paired assessments to warrant statistical testing of pre- and post-discharge scores: K10, HoNOS 65+, LSP-16 and RUG-ADL. For the first three of these tools, paired t-tests were used to examine changes in scores from the baseline measure to the follow-up measure (Table 10). Where appropriate, subscale scores were standardised to represent a percentage score to enable direct comparisons. All differences have been calculated as 'follow-up score minus baseline score', so for some assessment tools a negative difference indicates an improvement (positive outcome) and for others a negative difference indicates deterioration (negative outcome). Where appropriate, analysis was performed by cohort. Some differences were observed but most were not statistically significant; hence we report results for all PCLI Stage One consumers here (see the Appendix for further information on cohort differences).

Table 10: Health outcomes for PCLI Stage One consumers after transition

Outcome tool	Subscale	PCLI Stage One consumers			
		Baseline	Follow-up	Difference (%)	
		mean % (SD)	mean % (SD)	n pairs	mean (p-value)
K10	n/a	20.9 (8.7)	18.0 (9.4)	30	-2.9 (0.182)
HoNOS 65+	Behaviour	11.0 (10.2)	10.5 (8.5)	62	-0.5 (0.700)
	Impairment	50.6 (28.6)	59.6 (25.8)	61	9.0 (0.001)
	Symptom	24.0 (15.6)	27.5 (17.5)	59	3.5 (0.129)
	Social	33.0 (19.5)	32.0 (15.5)	58	-1.0 (0.700)
	Total	**27.5 (14.0)**	**30.0 (11.6)**	**55**	**2.5 (0.108)**
LSP-16	Withdrawal	50.7 (25.7)	48.3 (24.2)	58	-2.4 (0.521)
	Self-care	56.8 (23.3)	49.9 (24.1)	58	-6.9 (0.035)
	Compliance	39.8 (29.1)	27.6 (22.2)	58	-12.3 (< 0.001)
	Antisocial	38.6 (27.1)	25.0 (21.9)	58	-13.6 (< 0.001)
	Total	**47.6 (21.8)**	**39.1 (18.3)**	**58**	**-8.5 (0.001)**

Note. Subscale scores have been standardised to represent a percentage (i.e. possible range of 0 to 100) to enable direct comparisons. Low scores indicate low severity of problems. Mean and standard deviation are not reported for RUG-ADL as this is scored on an ordinal scale; see text for results.

For the K10, mean scores at both baseline and follow-up indicate low levels of psychological distress. A slight improvement in scores was observed, but was not statistically significant, and should be interpreted with caution due to the small number of observations.

For the HoNOS 65+, total scores worsened slightly at follow-up, mainly due to the statistically significant deterioration in the 'impairment' subscale and a smaller increase in the 'symptoms' subscale. This finding indicates that PCLI Stage One consumers had increased functional impairment following discharge. They also experienced more problems with symptoms such as depressed mood, hallucinations and delusions, although this was not statistically significant.

For the LSP-16, scores improved from baseline to follow-up. These changes were significant for three of the four subscales and the total score.

The RUG-ADL is scored on an ordinal scale with different ratings across the items, so non-parametric statistics (Wilcoxon Signed Rank test) were used to test the differences between baseline and follow-up. The vast majority of consumers experienced no change in their dependency across the four items (range from 60% for 'toileting' of PCLI Stage One initial cohort to 87% for 'transfers' of PCLI Stage One second-wave cohort). For the consumers where a change was identified, a higher proportion became more dependent. The changes were statistically significant for 'bed mobility' and RUG-ADL total score of the PCLI Stage One initial cohort and all PCLI Stage One consumers.

3.6 Factors predicting discharge from hospital

Logistic regression was used to predict the likelihood of being discharged from hospital to identify the particular characteristics of the consumer and their hospital stay that precede, and may contribute to, this outcome. This statistical technique models the odds for an event – in this case, transition to the community – based on the values of independent predictors. The predictors included in the stepwise regression analyses (based on their statistical significance in preliminary, univariate analyses) were: age, gender, cohort (initial versus second wave), length of stay, and scores for certain subscales of the four routine mental health outcome tools (HoNOS 65+ 'impairment'; LSP-16 'self-care'; RUG-ADL all subscales and total score). Further information on the univariate analyses is available in the Appendix. The number of PCLI Stage One consumers was too low to calculate separate models for the initial and second-wave cohorts.

Table 11 shows the variables included in the final model; that is, those that predicted discharge status. The pseudo R-square (Nagelkerke R-square) was 0.16. It is a generalised version of the coefficient of determination for linear models. In linear models this can be interpreted as the proportion of variance in the dependent variable accounted for by the independent variables included a the model subscale. The Hosmer-Lemeshow test provided a p-value of 0.410, indicating no lack of fit.

Table 11: Predictors of discharge for PCLI Stage One consumers

Parameter	Log odds	Standard Error	p	Odds ratio
Intercept	0.70	0.53	0.19	2.007
Length of stay*	-0.08	0.02	< 0.001	0.925
LSP-16 'Self-care'	0.13	0.06	0.04	1.137

Note. Based on logistic regression analyses.
* Length of stay is reported in six-month increments.

Two statistically significant independent contributors to discharge status were identified: length of stay and the self-care scale of the LSP-16. The longer the stay in hospital, the lower the chance of eventual transition to the community. With every additional six months in hospital, the chance of discharge reduced by 7.5%, all other factors being equal. This means that two people with similar baseline scores for psychological distress, mental illness symptom severity, and functional capacity will have different recovery outcomes, depending on the length of time they have spent in a mental health inpatient unit. Consumers with the most severe self-care problems on the LSP-16 (including cognitive problems, physical illness or disability problems) were the most likely to be discharged from hospital.

3.7 Consumer journeys after transition

On average, PCLI Stage One consumers have had around one year and ten months (652 days, SD 416 days) since transitioning into the community, with the initial cohort having around 11 months longer since transition than the second-wave cohort. During this time, only seven PCLI Stage One consumers had any ED presentation and there were 16 ED presentations altogether. Most ED presentations were triaged as emergency or urgent and the principal diagnosis was in almost all cases not mental health related.

There were 47 PCLI Stage One consumers (initial cohort n=28, second-wave cohort n=19) who had at least one hospital inpatient stay subsequent to their transition and 650 readmissions recorded in total. Two PCLI Stage One consumers of the second-wave cohort accounted for more than 80% of these admissions because they were admitted for haemodialysis almost on a daily basis. For the other PCLI Stage One consumers, the average length of stay was 24 days (SD 70 days). Most readmissions (71%) were not mental health related; there were zero days in specialist mental health wards recorded.

A total of 3,129 community mental health service visits were recorded for PCLI Stage One consumers after discharge from the index stay in hospital. On average, PCLI Stage One consumers received a contact from the community mental health team every 25 days (initial cohort every 28 days and second-wave cohort every 19 days). However, 12% of the PCLI Stage One consumers in the initial cohort and 17% of PCLI Stage One consumers in the second-wave cohort did not have any community mental health follow-up contact recorded.

For those PCLI Stage One consumers who were in MH-RAC facilities, the Aged Care Funding Instrument (ACFI) score contains additional information about the domains of activities of daily living, behaviour and complex health care (Australian Government Department of Health, 2017). The majority of PCLI Stage One consumers require high (33%) or medium (42%) assistance in activities of daily living. In the behaviour domain, 70% of PCLI Stage One consumers have high needs and additional 16% have medium needs. Around 60% of PCLI Stage One consumers have low needs for complex health care. The average length of stay of PCLI Stage One consumers in MHACPIs was one year and three months (467 days, SD 311 days). This included PCLI Stage One consumers who had been discharged from the MHACPI and those whose stay was ongoing at 31 December 2019. In Specialist RACFs the average length of stay since transition from hospital was one year (367 days, SD 316 days), noting that this is a long-term accommodation model rather than a transitional model.

3.8 Summary: consumer outcomes

The PCLI Stage One analysis dataset comprised index stay and post-discharge data for 194 consumers: 117 initial cohort and 77 second-wave cohort. Three out of five consumers were male, and approximately 30% were younger than 65 years. As would be expected, the initial cohort had had much longer stays: 50% had spent five years or more in hospital compared with 5% of the second-wave cohort.

The initial and second-wave cohorts had quite different profiles in terms of principal diagnoses with a greater incidence of psychotic illness in the initial cohort, whereas the second-wave cohort had a greater incidence of dementia, physical illness or disability. These differences were reflected somewhat in the baseline health status findings. There was a higher incidence of moderate to severe psychological distress in the initial cohort (K10) and more cognitive problems in the second-wave cohort (HoNOS 65+).

The cohorts had similar baseline scores on the two measures of function. Average scores on the LSP-16 indicated that PCLI Stage One consumers in both cohorts typically demonstrated poor self-care skills, but few problems with anti-social behaviours. Most of the consumers assessed with the RUG-ADL were independent or required only limited physical assistance with bed mobility, toileting, transfers and eating function.

As at 31 December 2019, 118/194 PCLI Stage One consumers had transitioned to residential aged care: 43 to Mental Health-Residential Aged Care (MH-RAC) partners, and 75 to generalist facilities. When health outcomes data was available, health outcomes following transition were generally positive, with a small (not statistically significant) average reduction in psychological distress and significantly improved life skills, particularly self-care, compliance, and anti-social behaviours.

Functional declines were also noted, as on average people became more dependent on others for assistance with activities of daily living. Older consumers (those assessed with the HoNOS 65+) had increased impairment related to cognition, physical illness, and disability.

Logistic regression was used to model predictors of discharge from hospital. Two independent predictors were identified – length of stay and the self-care subscale of the LSP-16 – together accounting for 16% of the variance in discharge status. The longer the stay in hospital, the lower the chance of eventual transition to the community. For every additional six-month period spent in hospital, the chance of being discharged in the next six months decreased by 7.5%, all other factors being equal. PCLI Stage One consumers with fewer self-care problems are the least likely to be discharged. This finding seems counterintuitive; however, it is possible that available aged care environments tended to be more suitable for consumers who required more assistance with self-care, whereas those

with more intact self-care capabilities may require a different type of living environment in the community.

Readmissions to hospital occurred for around 40% of consumers; however most were not due to mental illness (that is, no days in specialist mental health wards were recorded for these admissions). There were only 16 presentations (by seven consumers) to hospital emergency departments; again, almost all were not related to mental illness but were triaged as emergency or urgent.

In summary, three in five PCLI Stage One consumers have transitioned to community living. On average, life skills improved following transition and there were no adverse impacts on psychological distress. Findings on health service use demonstrate that mental health crises following transition were rare.

4. Provider and system change

This chapter provides a summative assessment of the extent to which the PCLI Stage One has achieved transformational change in mental health services (inpatient and OPMH community services) and the broader mental health care system.

The chapter is structured around the five 'simple rules' for large-system transformation in health care which we have used as a guiding framework in previous evaluation reports for summarising our formative findings and making recommendations. These 'simple rules' are:

1. Engage individuals at all levels in leading the change;
2. Establish feedback loops;
3. Attend to history;
4. Engage physicians;
5. Involve patients and families (Best et al., 2012)

Each 'simple rule' defines a domain of action, and successful implementation of a large-system transformational change relies on effective action within each of these domains: leadership; collaborative monitoring and measurement; history and context; clinical engagement and co-design; and person-centred care. In this chapter, findings from the qualitative data collection have been organised around these domains. Within each domain a number of themes have been identified which shed light on the mechanisms of change and the effectiveness of the PCLI Stage One processes in promoting change.

4.1 Leadership

A commitment to local leadership has been articulated from the early days of the PCLI in the program's documentation and was acknowledged at an event hosted by the NSW Mental Health Commission:

> *While the NSW Ministry of Health has provided high-level leadership and governance for the PCLI across NSW, its local implementation has been achieved via the collective effort and distributed responsibility of project managers, mental health executives and clinicians.*
> (Mental Health Commission of NSW, 2018)

In the language of implementation science, the Ministry PCLI team provides 'designated' leadership to support the 'distributed' leadership by staff at LHDs; when these align, sustained commitment to transformational change is more likely to occur (Best et al., 2012). While the NSW Ministry of Health provides the necessary resources, strategy, and governance structures, the local teams act as 'champions' for the PCLI to drive change in inpatient mental health services. Their efforts are likely to be most effective when aligned with other local stakeholders, especially the community OPMH services. In this section, we present findings on the effectiveness of each of these stakeholder groups in promoting mental health service and system change through the PCLI Stage One.

4.1.1 PCLI champions

Although staff members not directly involved in the PCLI have played influential roles, the three major groups of PCLI champions within inpatient settings are the Stage One clinicians, the PCLI program managers, and the executive leads. (OPMH service managers have also played a vital role, which is discussed in the following section.)

At most implementation sites, the **PCLI Stage One clinicians** have a regular presence on the long stay wards. When a consumer is referred to begin the transition process, they gather as much information as possible from the treating team and from written medical records about the consumer's history and needs.

I think the first and the foremost is when the client is referred, we get to know the client from our different perspectives and work very closely with the treating team … because they'll actually know the client quite well. (KI-21)

Based on observations across the life of the evaluation, it appears that collaboration between PCLI and non-PCLI clinicians has strengthened and there is now greater clarity around the respective roles in transition. They are supporting practice improvement in various ways, including modelling; less experienced clinicians have benefitted from working alongside and learning from more experienced senior colleagues in the OPMH-based Stage One teams. One of the great benefits of the PCLI clinicians, from the perspective of inpatient teams, is their unique position at the interface between inpatient, community and providers external to health, particularly aged care but also disability services providers. The Stage One clinicians provide continuous capacity building and upskilling of staff in aged care facilities, helping to mitigate the risks posed by high staff turnover and a lack of specialist mental health training in the sector.

So the PCLI being across inpatient and community, I think, has brought some teams together that might not have spoken as they have in the last 6-12 months, I would think. (KI-01)

The PCLI role has been described as 'tough' but desirable for senior clinicians who are driven to create change. It is acknowledged as extraordinarily demanding. In the early days of the PCLI Stage One, some clinicians resigned because they did not feel a sense of belonging or fitting in anywhere, due to the unique position of the team straddling different settings and sectors. In later years, however, it was evident from numerous KI accounts that the individual clinicians were highly valued by other stakeholders.

There's a lot of push back from a lot of areas … And sometimes there's more of that than at other times. So it can be difficult, but I think the rewards far outweigh what the negatives are. (KI-23)

The PCLI presence on the long stay units is essential for promoting change in culture and practice. They bring in expertise to environments where there previously was an 'entrenched culture with not much hope or optimism about people moving on. And a culture where it was thought that this was the person's home.' (KI-23). The PCLI Stage One team members add value to discharge processes by working collaboratively with the treating teams and offering help and information to busy mental health staff. This places them in a credible position to have opportunistic conversations about change, to be assertive about the possibilities for recovery, and to meet resistance with information about the goals of transition and the options available. This persistent, consistent messaging has been necessary to reset the focus of the units and to nudge expectations towards the position that 'where possible, people should be in the community and the hospital doesn't provide effective long-term options' (KI-02).

The **PCLI program managers** are the lynchpin in the PCLI's distributed leadership model; as one KI stated: 'we all feel like leaders who are being led supportively'. The leadership role of the program managers varies across sites and across time, depending on the context, the individual's experience, and the implementation tasks at hand. Based on the observations of the evaluation team and numerous comments by KIs, the following qualities appear to be valuable in a program manager:

- Communication and advocacy skills, to help others understand the purpose of the PCLI and drive progress;
- Broad experience and transferable expertise from previous clinical and project management roles;
- A strong grasp of governance principles and processes, as program managers are involved in reviewing and monitoring service level agreements, participating in clinical advisory committees, and negotiating with senior management of aged care organisations;
- An ability to work across care settings within mental health and across sectors with disability and aged care providers;
- Commitment and resilience, exemplified by the following comment: 'I think there's a long way to go with it but it's exciting work …'

PCLI program managers liaise with colleagues in other districts to support transitions across LHD boundaries. The formation of state-wide networks has been well supported by efforts by the Ministry PCLI team, including facilitating regular teleconferences and opportunities for face-to-face workshops and meetings.

At five of the primary implementation sites, the program manager is supported by an executive lead. At the remaining site, the executive lead performs the tasks of the program manager.

The **executive leads** play a strategic role, having a broader view across both Stages of the PCLI, ensuring consistent approaches, understanding where the gaps in resources are, and seeing how the PCLI fits into the bigger picture. They are able to connect the PCLI clinicians and program managers with senior decision makers in the LHD and to influence governance processes and policies to promote change. During the early implementation period when 'significant cultural change' was required and it was 'tough going', the executive lead at one site linked with mental health executive 'to try and get that moving' (KI-10).

Across the primary implementation sites, the executive leads have provided remarkable stability and continuity to the PCLI program: according to one KI, they have 'been able to watch this grow and develop and be able to tell the story'. One executive lead told the evaluation team that they had made sure that new PCLI staff members had sufficient information about the program's background and history, its early implementation, the problems encountered, and the reasons for certain ways of implementing things. They hoped this would avoid situations where people tried to 'reinvent the wheel', wasting time and energy going back and trying solutions that had previously been tried unsuccessfully.

4.1.2 OPMH services

State and local leadership of the OPMH community services has been crucial to the success of Stage One. OPMH service coordinators have the power to support the frontline clinicians, connect them with senior managers in medicine and nursing, help them navigate the ACAT processes, and champion the PCLI within the LHD. Those interviewed by the evaluation team were aware of the opportunities offered by the PCLI and keen to have strategic input in shaping the way the PCLI teams interface with the broader OPMH services.

It was noted that as the PCLI program continued to evolve, the way it related to the OPMH would change, and there was the potential for considerable crossover and contribution to the broader service:

> *So having that team, supporting those transitions to, hopefully, set the person up for a more successful discharge and prevention of readmission is so – is such a valuable service, I think, to our consumers. And highly valued by our community team.* (KI-20)

While the basic service model for the MHACPI units was already established within OPMH services, the advent of the PCLI provided an opportunity to refresh, renew, and strengthen the model and to build additional MH-RAC partnerships.

> *So I think the wraparound care has already been instilled within models of care for Older People's Mental Health and PCLI was a nice addition to that, [with] additional resources to really provide intense deep diving into those long stay consumers to help unravel why they're still here and who do we need to deal with to unlock the pieces to eventual transition?* (KI-13)

OPMH service coordinators provide line management and supervision for the Stage One clinicians at most of the implementation sites. At some sites there is one, cohesive Stage One clinical team; at others the individual Stage One clinicians are positioned within different community teams across the district, and rarely have the opportunity to work together. Especially in this case, the PCLI program managers play an important role in establishing regular team meetings for mutual support, and individual meetings to discuss progress and work plans. At several sites there has been a conscious decision that the PCLI program manager will not have operational management of the PCLI Stage One team. This arrangement has some advantages (for example, it enables greater integration into the community teams) but also creates some difficulties for the program managers (for example, they may have to negotiate with the various managers of individual clinicians for their time to attend team meetings). One program manager described this as a 'tricky' situation because they were held accountable for outcomes yet had little control over inputs in terms of work allocations. Again, this emphasises the importance of having a supportive OPMH leadership committed to the PCLI processes and goals.

4.2 Collaborative monitoring and measurement

The importance of collaborative monitoring and measurement was recognised in the design and planning of the PCLI from early days with the development of a set of assessment tools and processes for using these (Thompson et al., 2019). These assessments serve multiple purposes which span and connect the quadrants of the PCLI Implementation Framework (Figure 1). According to the *Planning, Assessment and Follow Up Guide* (NSW Health, 2018, p.7), which supports clinicians in using the PCLI tools, the planning and assessment process 'is an important part of 'Getting to Know You'' (that is, understanding a consumer's capacities and care needs), as well as informing collaborative decision making and

care planning, allowing monitoring of the consumer's well-being and any changes in health status, and building capacity for sharing of information among LHDs and reporting of PCLI outcomes. In addition, the follow-up process after transition enables monitoring of care quality in the community and informs quality improvement and service development activities (NSW Health, 2018). Given the central role of the tools and assessment processes, it is natural that these have been a major focus for the evaluation and a topic of considerable interest to stakeholders wishing to share their observations with the evaluation team.

4.2.1 PCLI tools and assessment processes

Since 2017, the evaluation has documented the views of LHD staff regarding the PCLI tools and assessment processes. Because they were one of the first activities of the PCLI at many of the implementation sites, and the first round of data collection was rushed due to external pressures, the assessment processes came to represent 'the PCLI' in the minds of some stakeholders, at least in the early days. By Evaluation Report 4, things were changing. The assessments were 'no longer the first thing that comes to mind' when stakeholders were asked to define the PCLI, although they remained:

> *… a lightning rod for criticism of the program, and a focus for active or passive resistance by some staff in the inpatient mental health services* (Williams et al., 2020, p. 154).

In the interviews for the current report, KIs again identified that the pressures associated with initial implementation of the PCLI assessment processes had a lasting negative impact on staff attitudes despite consistent messaging around the clinical utility of the tools. Other constraints on staff uptake of the assessments were also identified, primarily staff shortages and workload burdens in long stay units. Staff may worry that if they start administering the PCLI tools, others will come to rely on them or expect them to continue this task: 'if they do one, they might have to do all of them, kind of thing' (KI-18). Ironically, one KI observed that the success of the PCLI may have hampered the uptake of the assessments when treating teams see transitions occurring without the use of the PCLI assessments. Difficulties in extracting data from the PCLI database, and a lack of feedback mechanisms to make best use of the data, were also identified as barriers.

Some KIs had been told that consumers did not want to engage with the PCLI assessments, particularly at follow-up after transition. In response, the PCLI clinicians were promoting the assessments to community teams and educating them about the benefits for consumers:

> *… so that if the clinicians are explaining it properly to the consumers, then they understand what's being done, and why it's being done, and what benefit it is to them, then they'll be engaged with them more.* (KI-30)

Despite these challenges, there was emerging evidence that the PCLI assessments were being used to support practice and engage the clinical workforce. The assessments have been found especially useful at the level of the individual consumer – that is, the 'Getting to Know You' quadrant of the PCLI Framework - in identifying care needs, informing decisions about the support required for community living, and generally in supporting evidence-based decision making. Information derived from the tools has been used to improve treatment during the current admission as well as in planning discharge, determining the best supported accommodation match for the consumer's assessed capacities and needs.

So it sort of prompts, are you even – do you think you've been having enough social activities while you're on the ward? And if they want some more, then it can lead to the NDIS supports being increased for that person or providing more activities on the ward. (KI-18)

… they'll actually be very good around doing the assessments and then saying, look, these assessments will indicate what sort of accommodation this person will need in the future … (KI-39)

Some KIs believe that the PCLI assessments are becoming part of the natural discourse in services with teams increasingly considering the results of the assessments in care planning. At the aggregated level, summaries of assessment data have been shared with senior managers, and implementation sites are also exploring the use of the data for strategic planning.

4.3 History and context

The third 'simple rule' emphasises the importance of learning from previous change efforts while avoiding a deterministic view: 'lessons from the past should not be seen as predictions of how things will unfold in the future' (Best et al., 2012, p. 439). This is especially relevant in mental health care reform, where a series of reviews and reports going back several decades have revealed weaknesses and highlighted opportunities for improvement (Mental Health Commission of NSW, 2018). Despite this long history of reform attempts in NSW, people with SPMI continued to be hospitalised for much longer periods of time than recommended in national and state policies (NSW Mental Health Commission, 2014; NSW Ombudsman, 2012). This history inevitably shaped the context into which the PCLI was launched.

Learning from history, the PCLI Stage One has addressed several of the major issues that in the past had led to breakdowns in community living for consumers with SPMI. Two of these – the transition planning process, and continuity of care following discharge – are discussed here. A third, very important, difference was the cross-sector collaboration with aged care providers, which is discussed below (Section 4.6).

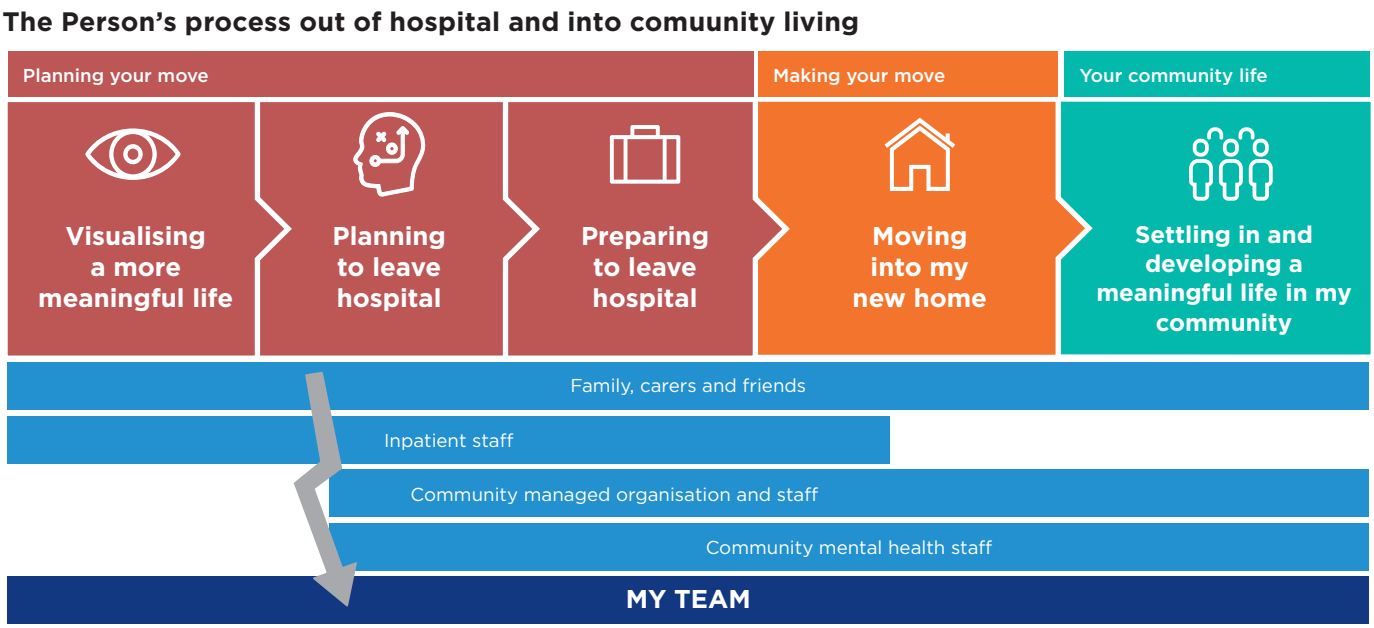
4.3.1 Transition planning and preparation

Our most recent round of interviews found promising signs that the PCLI is changing discharge practices as participating LHDs have redefined what a long stay means and when discharge planning should begin. Some PCLI strategies are becoming part of 'business as usual'; for example, the involvement of the Stage One teams in transition planning and assisting with the transition processes.

A recurring theme within the PCLI program has been the importance of ensuring the best 'fit' for consumers. For the individual, this includes an overall assessment of their clinical and behavioural needs as well as personal preferences, while for the aged care partner considerations will include the physical environment, staff capacity and expertise, as well as co-resident population.

Underpinning the concept of mental health recovery is the recognition that each person has their own goals and aspirations. Consistent with the recovery philosophy, the PCLI *Planning, Assessment and Follow-up Guide* (Version 2; NSW Health, 2018) begins with the consumer perspective, conceptualising the journey out of hospital in five steps, which are not necessarily consecutive or linear (Figure 3), and advising PCLI clinicians on how to engage the person in reflecting on their wishes and preferences. The Guide explains how the PCLI assessments support the person's process and the steps required to facilitate the journey both before and after transition.

Figure 3: Transition processes from the PCLI consumer perspective



Source: NSW Health (2015) My Choice: Pathways to Community Living Initiative, Getting to Know You, Planning and Assessment Booklet, April 2015.

Thus, the PCLI transition processes begin with clinicians working with long stay consumers to better understand their personal stories, including their family background, interests and hobbies, hopes for the future, as well as linkages they may have with local communities, families and friends. Together with the clinical assessments this process provides a roadmap for transition to community.

'Finding the right fit' is not an exact science. It relies, primarily, on the availability of accommodation options, and this availability varies greatly across NSW depending on where people choose to live. Further, the complexity of the long stay consumers in the PCLI Stage One should not be under-estimated, so there are many factors to take into account in securing appropriate support in the community.

It can be difficult to find the right fit for consumers who are more mobile and social but have high care needs; KIs told the evaluation team there were not enough facilities available for this group. If there is conflict between social needs and care requirements, the consumer may end up with less freedom than they had in hospital. To complicate matters further, a person's functional capacity and care needs may change depending on their environment.

> *You get people who are very easily engaged but have significant disability, and then you get those people who are just very difficult to engage and some of them have significant disabilities, some of them are actually high-functioning when they're in care.* (KI-02)

Consumers who have behavioural and psychological symptoms of dementia can also be difficult to place. One KI expressed concern that they were seeing an increasing number of people with chronic, dementia-related behavioural problems and there was a risk of them becoming stuck in mental health long stay or acute units (KI-20).

Transition to aged care facilities can be affected by the considerable stigma associated with complex, long-standing mental illness, and by legal or forensic matters in the person's past. This is not just an issue for generalist providers, but is also encountered when making referrals to MH-RAC partners. Providers need to be realistic about their ability to provide care for consumers with challenging behaviours, and the MH-RAC contractual arrangements allow flexibility to decline a referral if the facility manager feels the person is not a good fit for the environment, other residents, and the available supports. Drug and alcohol use – including smoking – is a barrier to acceptance into some facilities within the MH-RAC Network.

The PCLI Stage One teams work through 'case by case' (KI-04) to get the right support for individuals. Openness about the person's presentation is crucial to building and sustaining good working relationships with providers; experience has shown that one early problematic transition can sour the relationship with that provider for years to come. Therefore the teams are cautious and considered in their referrals.

Once the destination is settled upon, the transition to community begins. Ideally, the timing is determined by the consumer's ability to adjust. Sometimes this is not feasible due to the financial constraints on aged care providers. When ACAT funding is approved, facility managers are often keen to fill the place as quickly as possible, which can create pressure to transition the consumer quite suddenly with little time to prepare. Preferably, however, clinical considerations and consumer preferences determine the speed of the transitions. In most cases they happen gradually to ease the consumer into their new life.

Procedures for transitioning to generalist facilities are more variable because there are no partnership arrangements to shape them. Nevertheless, one KI commented that the PCLI Stage One clinical teams 'have added a great deal of value to the discharge process' for generalist aged care. Once transitioned to generalist aged care, follow-up in the community is the responsibility of the OPMH community teams. This means the person may be discharged sooner and the follow-up period may be shorter than the two years indicated under PCLI guidelines, unless the person is under a Community Treatment Order.

4.3.2 Supporting consumers in the community

Early in the PCLI, a commissioned literature review identified a number of elements that needed to be in place, including access to the post-discharge services likely to be required by people with complex needs, namely:

> *… ongoing psychosocial rehabilitation that is consistent with a recovery model, and disability support that aims to equip patients with living skills and promote independence*
> (Matheson & Carr, 2015, p.22)

Also required was 'a well-articulated model of care' incorporating formal partnership agreements with specified roles and responsibilities 'to facilitate integration of services' (Matheson & Carr, 2015, p.22). A second commissioned literature review provided additional evidence to shape this model of care, with findings emphasising the critical importance of effective care coordination by a case manager or case management team (Kakuma et al., 2017).

Based on this evidence, the PCLI processes involve bridging the gap between inpatient and community mental health services to ensure continuity of care following transition. The PCLI Stage One teams take the case management role at some of the primary implementation sites, and at others care coordination is handed over to the OPMH services. Regular follow-up visits are expected to occur for a minimum of two years with the goal of monitoring the mental and physical health of consumers and preventing readmissions and further long stays through timely intervention.

KIs reported that there had been fewer readmissions to hospital than expected and less reason for many of the previous inpatients to require health intervention. When readmissions did occur, the consumer was usually discharged much faster than they had been in the past. Several KIs observed that the consumers were less likely to need PRN medication than they had previously, which they attributed to a 'more calming, relaxing environment' in aged care compared with hospital (KI-18).

However, even with the greatest care, caution, and preparation, it is not always possible to predict the outcomes of discharge to the community. Any change in circumstances, even a positive change, can provoke anxiety which may temporarily divert the person's recovery journey. Symptoms of mental illness may be exacerbated by medication changes or noncompliance; challenging behaviours may arise in response to physical illness. Some consumers are elderly and frail; many have become institutionalised by long hospital stays. All these situations have been encountered in the PCLI Stage One.

One complication still to be resolved at some implementation sites is how to deal with consumers who require ongoing ECT to control symptoms. These consumers either need to come to hospital regularly for treatment or transition to an alternative (drug) therapy. Decisions need to be made about whether to keep these consumers 'on the books' as inpatients, albeit on extended leave, or to discharge them. A recent discussion during a PCLI Collaborative Group meeting explored the complex issues around this decision and the implications for data reporting and monitoring outcomes. (For example, the need for InforMH to manually reconcile maintenance ECT with each LHD when completing the PCLI quarterly census reports.)

The increasing pace and number of community transitions has added to the workload for community teams:

> *But our community mental health teams haven't increased their capacity, and they're feeling a little overwhelmed in regards to the complexity of the clientele that the PCLI are transitioning to the community for them to look after.* (KI-19)

KIs argued that dealing with emerging problems proactively was far preferable to letting them become acute, pressured, emergency situations. However, early intervention was beyond the capacity of most aged care homes due to the staffing profile. With limited capacity and full books, community mental health tends to be mainly reactive, responding to consumers only when they become acutely unwell. Therefore, improving the capacity of community mental health will be critical to supporting long stay consumers with complex needs who are living in the community.

4.4 Clinical engagement and co-direction

Best and colleagues (2012, p. 440) specifically highlighted the role of medical leaders, who have 'a great deal of power and autonomy when responding to transformative efforts' including the power of veto over initiatives that may be undertaken or endorsed by other staff groups. While acknowledging the key importance of engaging doctors in the PCLI, the evaluation has identified that engaging a broader range of clinicians has been essential.

4.4.1 Engaging doctors

At some sites, medical staff for Stage One teams were among those funded by PCLI supplementations as a recognition of their importance. KIs agreed that it was vital to have medical leaders across the broader service also engaged in the PCLI, promoting flexible, person-centred care and contributing to clinical governance mechanisms to ensure safe, collaborative care. Broad and deep medical engagement was also crucial to encouraging routine use of the PCLI assessment tools; this was more likely if doctors regarded allied health and nursing approaches to assessment as having value in discharge planning.

Conversely, a lack of support at the top can filter down, creating barriers to the multidisciplinary team approach central to the PCLI: 'the doctor is still that pinnacle and makes those often unilateral decisions' (KI-09). Clinical directors who felt they 'own the FTE' of certain staff members tended to block collaboration across units within a mental health service, whereas those with a broader view encouraged 'cross-fertilisation' and 'shared knowledge across spaces' (KI-20). This more open attitude helped to promote understanding and consistency at each point in the consumer's journey of treatment and transition to community living:

> *And because they're involved in multiple spaces within our service, it does help with that whole idea that we're all one.* (KI-20)

At some sites, psychiatrists were regarded as a scarce resource, with limited time available to assist with PCLI processes. PCLI funding for psychiatry input was best utilised where there was clarity around expectations for the allocation and use of psychiatrist hours. KIs acknowledged that the psychiatrists did their best with the time available and that buy-in from the wider medical staff was improving.

One noted that the PCLI had created additional work in another way: as flow-through on the non-acute units had increased, demand for medical input also increased, but staffing had not kept up. Ideally, there would also be sufficient medical resources in the OPMH services to cover leave and other absences, but this is not always the case.

KIs were highly positive about the input of the PCLI-funded psychiatrists into continued monitoring of consumers' mental health and medication after transition to the MH-RAC facilities. Initially, the regular involvement of the psychiatrist helps alleviate fears (of the consumers' families and aged care staff) about how and whether the transition will work. Their knowledge of the person's medical history and medication requirements is respected and valued; having the psychiatrist available 'to consent on any mental-health related issues, the medications, liaison with the GP, or talking to the family members or guardian' provided a new, greater level of support in aged care (KI-06).

General practitioners working in aged care may be reluctant to prescribe psychotropic medications in case they are perceived as restrictive practice; however, for the PCLI consumers they are essential to manage symptoms of complex mental illness. For these reasons it is essential that psychiatrists supporting the PCLI build good relationships and shared understandings with the GPs who work in the MH-RAC facilities.

One KI noted that it was difficult to recruit into old-age psychiatry positions due to the lack of specialists. Another hoped that rehabilitation psychiatry would start to attract young people who wanted to make a change; for this to occur, it would need 'to be seen as a speciality that requires energy and enthusiasm' (KI-02).

The combined efforts of the Ministry PCLI team and the Royal Australian and New Zealand College of Psychiatrists (RANZCP) to build interest in rehabilitation psychiatry as a distinct area of practice are likely to contribute to this outcome. In July 2019 a Special Interest Group

was announced, making the first step towards recognising rehabilitation psychiatry as a sub-speciality. It was a significant achievement for the Ministry PCLI team which will have far-reaching effects on the care of people with SPMI in Australia.

4.4.2 Engaging staff of long stay units

One significant sign of culture change in mental health services has been the improvement in attitudes towards the PCLI program over the course of the evaluation. Compared with earlier rounds of data collection, this time KIs were better able to provide positive examples of the cooperation and active involvement of treating teams in the long stay units, demonstrating a general acceptance that the PCLI was here to stay. They also reported changes in how staff of these services think about long-term hospital stays and the idea of people with SPMI being able to live in the community. Inpatient staff are now less likely to see hospital as a person's long-term home and there is a growing realisation that people can receive the care and support they require and lead a more fulfilled life out of hospital.

Staff of long stay units who have had the opportunity to see former patients in their community homes have been surprised and reassured by how well-adjusted and settled they are, and often happier or at least more content. These staff have acknowledged that consumers discharged with PCLI support were much less likely to be readmitted than those discharged in the past. The value of providing positive feedback or success stories to the long stay staff should not be underestimated. KIs reported that many staff do not have an opportunity to see previous consumers in their new home unless they do so in their own time.

KIs also stated that it was important to acknowledge that transitions to community were occurring, and had previously occurred, without the intervention of the PCLI. However, the PCLI had provided structure, resources, and impetus to accelerate discharge processes that may already have been in train.

A person being discharged from one of our long stay inpatient units, I don't really see that necessarily as being a PCLI initiative, I think that's just what we do, and PCLI [teams] are engineering that better than we used to do it. That's marvellous news, but I don't see the PCLI actually engineers it, but it probably does and maybe it's a success for them not to stand out, that … it is just becoming part of normal business. (KI-38)

PCLI created a structure, they had the money there, they had the resource, they gathered a group of clinicians together to … look at evidence-based practice and put together some manuals. And then, therefore, supported change in the way some clinicians have viewed long stay, and things have changed over time. (KI-19)

KIs observed benefits of transition for PCLI consumers and carers. These included the opportunity for consumers to engage in community activities and live fuller and more meaningful lives, and for carers to engage with their loved ones in a more homelike environment where they are more engaged, generally happier and well cared for. It was clear from the interviews that PCLI has also had a role in reducing stigma, discrimination and misunderstandings about mental illness (in the aged care sector) and about aging (in the mental health sector).

I think they're just being able to have the choice and control over what they want to do each week rather than, often, on the ward, it's just, okay, we're all having a group walk, we're all doing this as a group, whereas they might want to do something different as an individual. And I think a less restrictive environment, they're often able to come and go a lot easier. … I think if you're in an aged care home in the community, you're just a bit more part of the community than just being in a hospital ward. (KI-18)

I know for me, usually when I approach someone, they already – they know who I am because they've seen me, and they may have already asked a long time down the track what do you do and what are you here for? So they've got a bit of a general idea. (KI-23)

4.5 Consumer and carer engagement

Involving service users in change efforts generally contributes to better outcomes; in the context of health care, this is often referred to as 'patient-centred' care which incorporates four core constructs: dignity and respect, information sharing, participation and collaboration (Best et al., 2012). These authors also note that specific processes are needed to involve patients and families in decision making (Best et al., 2012). Analysis of the PCLI Stage One interviews highlighted the importance of processes around connection with consumers and carers, and around shared decision making for transitions to the community. Another important contextual factor that affected consumer and carer engagement in 2020 was the COVID-19 pandemic.

4.5.1 Connecting with consumers and carers

Engagement with consumers has been fostered by the regular presence of the PCLI Stage One teams on the long stay wards. This enables the clinicians and the consumers to get to know each other, so that when transition conversations are initiated they do not come as a surprise.

Peer workers are an important part of the PCLI team and are widely recognised for their valuable role in facilitating transitions to the community by undertaking discussions with consumers, supporting consumers to make informed decisions, and helping to make sure that the consumer voice is heard and considered. They conduct person-centred assessments and promote their use in discharge planning. Peer workers have also provided ongoing support post transition and their regular visits have been welcomed by consumers, according to some MH-RAC partners.

KIs described a growing workforce and increasing support for the peer workforce. Peer workers specific to PCLI and other peers have supported transitions. More targeted support is achievable where peer worker is PCLI specific. There are still issues in terms of the number of, and limited FTE hours for, PCLI peer workers.

4.5.2 Shared decision making

Most KIs described strategies designed to build trusting relationships with consumers and carers. At some sites, consumers and carers were invited to participate in existing decision making structures such as case reviews. Other sites described innovative, less formal ways to assist consumer and carers to participate in decision making such as informal get-togethers and one-on-one meetings. Decision making processes were often staged to include site visits and sleepovers and extended leave (rather than immediate discharge) to ensure that final decisions could be made at the pace set by consumers and carers. Person-centred

assessment processes, finding things that interest consumers and focusing on the functional (rather than the clinical) also helped engage consumers and carers.

The weight of consumer views in comparison with the views of treating staff and carers varied between sites and between practitioners within sites. Consumer choice of transition destination was also contingent on the consumer's perceived capacity and interest or inclination to participate in decision making. Sometimes, to protect the person from unnecessary anxiety, the initial conversation would have to take place with the person's guardian instead; others could ride the sometimes rocky road to transition with greater ease: 'even though, sometimes, there's no set dates in place and it can be confusing and unpredictable, they've been able to join that journey' (KI-19). An individual's ability or willingness to focus on long-term goals could also change rapidly over time, for various reasons.

Clinicians work with consumers to help them make informed choices by investigating appropriate options based on their assessed needs and presenting this more limited array to consumers and carers to avoid disappointment. If this is not acceptable, they continue to present other options which have some elements of the consumer's first choice. Where appropriate, they discuss with consumers about the transitional nature of the first step out of hospital into supported aged care accommodation.

> *We work really hard to make sure that there's not just one option when we're considering transitional accommodation. That we are looking at everything that is available and actually going and visiting it physically with the client.* (KI-25)

> *… most of the time, even if people don't get their first preferences, the PCLI team do find – they may not find it straightaway or it might not be their first suggestion, but they find an alternative option which the person is reasonably okay with or happy with.* (KI-30)

Sometimes there is only one exit option available with the other choice being staying in hospital. KIs said that in these cases the consumer most often opts to leave hospital.

Carers were more likely than consumers to resist discharge or wait for a better option. This has been problematic when carers knew about what they might consider as better options that are not available or not appropriate for PCLI consumers. KIs said that some carers were also cautious of transition if they have been let down by the system in the past. There were some examples when a consumer was not moved out of hospital because a close family member was not ready to support the move.

4.5.3 Impacts of the COVID-19 pandemic

COVID-19 has brought a number of additional challenges to the PCLI, for those who have transitioned into aged care settings, and those awaiting transition. Aged care homes have been found to be particularly exposed to the impacts of COVID-19 due to the congregate living arrangements, highly casualised workforce, and limited clinical capacity of staff and access to personal protective equipment (PPE).

To date, no Stage One consumer or their care homes have had direct exposure to COVID-19. All, however, have experienced the consequences of restrictions in terms of visitors and movement within and outside of the care home, as well as changes to routines and activities. Additionally, the requirement of staff to wear PPE has affected some consumers, particularly in terms of communication and for those with cognitive impairment.

4.5.3.1 Consumers awaiting transition to community

The lockdowns imposed on aged care have presented a number of challenges for PCLI Stage One consumers who remain in hospital, limiting options and scope for transitions to occur, particularly for those expecting to move out of area to a LHD which may not have existing PCLI support. Several KIs spoke of transitions being delayed due to the inability to visit and assess prospective aged care homes in terms of their capacity to support PCLI consumers and their 'fit' in terms of consumers' goals and aspirations (KI-16, KI-20, KI-04). Some have commenced 'virtual tours' of facilities via Skype and Zoom in order to continue to progress transition planning (KI-25). However, as one KI noted:

> *A worldwide pandemic where aged older people are really high risk is not the greatest time to start a partnership with an aged care facility. Like, it doesn't make people willing to take risks, you know, and doesn't increase people's flexibility about taking in your consumers.* (KI-36)

The Ministry of Health has provided additional resourcing to LHDs to assist with the extra demands associated with managing COVID-19. The fifth tranche of this funding was directed to support PCLI consumers, enabling PCLI clinicians to continue to progress elements of the transition process that might be required such as ACAT assessments and navigating NDIS supports in conjunction with NDIA managers. Transitions continued to occur throughout this period, which illustrates the commitment of the MH-RAC partners. Nevertheless, it has been a challenging time. Despite commitments that PCLI consumers would 'receive a priority with escalation in terms of [transitioning]' (KI-09), this has not always been possible. In some cases, opportunities to finalise transition processes have been impacted as aged care 'beds' are re-allocated for other purposes.

> *We have another person going to (other LHD) as soon as the COVID pandemic [restrictions] are relaxed. So the issue they have there is, there's a bed confirmed as available, but due to COVID restrictions they've had to — anyone who was in a twin room … has now had to be relocated to single rooms.* (KI-32)

4.5.3.2 Consumers in residential aged care

The lockdowns have also proven difficult for those consumers who have successfully transitioned to aged care homes, particularly those used to receiving visitors such as family members and friends, peer support workers, and freely moving around in the community. Strategies devised to reduce isolation include the use of Skype to communicate with families. However, the need for staff to wear PPE, in particular face masks, has presented a number of challenges for those with hearing and/or cognitive impairments (KI-14). One care home has introduced discrete visiting rooms, to enable peer workers to engage with residents individually for short periods of time (KI-09).

Consumers have experienced a heightened sense of containment, particularly those in smaller settings, due to their inability to move around within the care home and/or the broader community. This has resulted in 'everyone climbing the walls' (KI-36) and an escalation in behaviours for those 'who have no other outlets available' (KI-10). Changes introduced to minimise cross-infection or transmission include restricting cigarette use and type, from hand-rolled tobacco and tobacco papers to pre-rolled cigarettes, and restrictions on sharing cigarettes, particularly impacting on those for whom smoking is a social activity.

Care home staff have been proactive in supporting consumers throughout this time, introducing additional resources (purchasing additional television sets, board games) and reframed activities to reduce risk of infection (personalised foot baths) and 'scenic bus trips' where consumers remain on board for the duration (KI-28).

MH-RAC partnerships and the MH-RAC network continued to support people who had transitioned to the partner facilities through the 2020 lockdown and beyond, and strategies were discussed and shared at network meetings. Attendance at virtual MH-RAC network meetings remained high, despite all the demands on services, and members indicated that they valued the communication, information sharing and mutual support provided.

In the main, clinical oversight activities have continued as usual, with regular Clinical Advisory Committee (CAC) meetings being conducted on-site or over Skype or Zoom. However, in the small number of cases where tensions were experienced between the LHD and an aged care partner, COVID-19 has placed further strain on the relationship.

> *And it has, more recently as well, with COVID fuelled more angst within that relationship, as well, as they're trying to institute an effective COVID response to their residence, whilst we're still trying to deliver a mental health service.* (KI-32)

4.6 Cross-sector collaboration

Best and colleagues acknowledge that their literature review and consultations may not have identified all the requirements for large-system transformation in health care; their five 'simple rules' may be necessary but not sufficient. Other elements could be missing:

> *... not because they are unimportant, but because there is not yet a research literature on them.* (Best et al., 2012, p. 445)

One element that has emerged relatively recently from the literature on rehabilitation of people with SPMI is the importance of collaboration between health, social care and aged care community providers (e.g., Davis et al., 2012). Such cross-sector collaboration is an intrinsic part of the PCLI. The targets for this collaboration have been the aged care sector and, to a lesser extent (for Stage One) the disability sector.

4.6.1 Aged care providers

The success of Stage One transitions has been dependent on the development of sound working relationships between LHDs and MH-RAC partners. The systems and processes of the PCLI (standardised assessments, clinical advisory committees, additional funding, specialist education and support, etc.) have provided a sound framework to guide the partnership arrangements. Through the PCLI, MH-RAC partners received additional resources to support their residents, and LHDs gained access to a wider range of appropriate services for their older consumers in the community. It is reasonable to assume that these relationships and supporting processes have contributed to the positive outcomes for consumers seen in Chapter 3, namely sustained transitions with low risk of mental health readmissions or ED presentations.

4.6.1.1 Partnership facilitators

The MH-RAC partnerships have been facilitated by three key elements: a receptive aged care context, policy and clinical leadership, and program infrastructure and resourcing.

The facilities involved in the MH-RAC partnerships generally specialise in clients with high levels of complex care and mental health needs. As such, they are highly attuned to delivering person-centred care and managing risks that may be associated with mental illness.

They're very open, transparent and quite reflective. They're understandably willing to learn, they're open about things that go wrong. (KI-09)

Prior to the PCLI, these facilities often had working relationships with the OPMH service teams but limited experience working directly with inpatient services in a systematic or partnership manner. In a practical sense, PCLI Stage One clinicians have operated as a 'bridge' between aged care, OPMH and inpatient services. The policy and clinical leadership of the PCLI has also provided considerable impetus to the development and success of the partnership model.

Traditional aged care services have long been known to present serious challenges to the care and security of tenure of older people with complex mental health needs, due to the inadequacies of the funding model and the resultant staffing profile, as well as regulatory and cultural differences. The pilot MHACPI models and the in-reach services to aged care that had developed within a number of LHDs provided valuable lessons for the extension of the partnership arrangements under the PCLI.

The evidence-based and collaborative approach to developing the MH-RAC services under the leadership of the OPMH policy team has provided a robust program framework that articulates the various roles and responsibilities associated with implementing Stage One transitions. A partnership approach has been in evidence since the outset of the program. At the broader program level, the Ministry has worked closely with representatives of aged care partners in the development, funding and implementation of new and/or refurbished services to support Stage One consumers. It also convenes the MH-RAC Network meetings that serve as an information sharing, capacity building and benchmarking function for the wider OPMH service network.

At the service level, formal Memoranda of Understanding (MOUs) have been developed between LHDs and MH-RAC partners, setting out a framework for the routine data collection processes, Clinical Advisory Committee meeting timeframes and processes, and the nature of clinical and operational support that will be provided to the care home, such as education and training of staff, development of clinical pathways and models of care. In the main, aged care partners have found these processes to be highly valuable in terms of equipping staff with the skills and strategies to identify and address any potential emerging issues that have the potential to escalate and lead to readmission to hospital (KI-24, KI-32, KI-28).

4.6.1.2 Partnership challenges

All the MH-RAC partnerships have experienced periods of stress and adjustment, either initially or as a result of changes within the partner organisations. These challenges, and efforts to overcome them, have been well documented in previous evaluation reports. For example, Evaluation Report 3 noted that some LHD staff had struggled to 'let go' of consumers whom they had known for many years, and to trust that the facilities could care for them appropriately. However, 'letting go' was essential because extended engagement could make it more difficult for consumers to settle in to their new homes. This report also noted that contrasting views of how best to manage 'risk' could be a source of tension between the mental health and aged care sectors. By E*valuation Report 4*, we were able to report that most MH-RAC partnerships were operating smoothly. This had been achieved within a relatively short period of time:

> *… through dialogue, relationship building, negotiation, and evidence of improved outcomes for clients … those involved are often engaged in an intense and prolonged 'dance' as different expectations, cultures, systems, operating contexts and personalities are worked through to arrive at a shared understanding of, respect for and ultimately trust in each other's capabilities.* (Williams et al., 2019, p. 136)

More recently, challenges have included delays in transitions into the MH-RAC partner due to building works; changes to anticipated/ contracted living arrangements of consumers; tension between Mental Health Standards and Aged Care Quality and Safety Commission requirements, which one KI described as 'being a square peg in a round hole' (KI-24); and the ongoing challenge of delivering a recovery-oriented approach in a home-like environment (KI-10, KI-30, KI-32).

Where challenges have created difficulties in the partnership, the primary issue appears to be a lack of trust based on previous poor experiences (KI-29, KI-01, KI-14, KI-26). These include:

- Transitions that were unsuccessful due to being the wrong 'fit' for the care home, either in terms of the complexity of care needs of the client, or the environmental and staffing limitations of the care home;
- Disconnect between the participating care home and its broader organisational leadership, including decisions regarding participation in the PCLI in general, and attendance in CAC and/or MHRAC Network meetings;
- Lack of transparency regarding resourcing to support clinical oversight and consumer engagement.

4.6.2 Aged care assessments and entry requirements

Accessing aged care services remains a complex process, involving significant input from PCLI clinicians to support consumers complete the necessary assessment and entry procedures. These include navigating the 'MyAgedCare gateway' (Australian Government, 2020), obtaining approvals from relevant authorities, and organisation of finances; in the case of Centrelink, this can involve a wait of up to six weeks to receive a response.

A key issue for those aged under 65 years with issues of ageing has been the increasingly tight regulation of ACAT approvals, stemming from Younger People in Residential Aged Care Action Plan (Australian Government Department of Social Services, 2019) and the recommendations of the Royal Commission into Aged Care Quality and Safety in its 2019 Interim Report (Royal Commission into Aged Care Quality and Safety, 2019). ACAT assessments have been facilitated through the dissemination of an Aged Care Assessment Team (ACAT) Fact Sheet developed for the PCLI by OPMH and aged care policy staff in the Ministry. This document provides a guide for ACATs and mental health service providers to understand roles and responsibilities in assisting the transitions of long stay consumers in NSW public hospitals to community living. Additionally, pre-existing relationships with ACATs and local aged care providers have helped younger Stage One consumers access ACAT assessments. One KI commented that the restrictions were challenging but understandable because there was a need to be 'diligent' in ensuring people were going to live in suitable environments.

The ACAT assessment paperwork provides much of the information that aged care providers require to decide whether they can offer a place to PCLI Stage One consumers. Details on clinical issues, medication, mobility, functional dependencies and so on enable the facility managers to consider the strategies and interventions that may be needed to support the consumer. If they believe their facility will be

able to offer appropriate supports, the transition process can be initiated.

4.6.3 Disability supports

Additional requirements for this group have included the need to register and organise supports through National Disability Insurance Scheme (NDIS) that can support their continued rehabilitation once living in the care home. At several of the primary implementation sites, the PCLI program managers are acting as intermediaries in the complicated procedures for obtaining disability support for PCLI consumers via the NDIS. As indicated in previous evaluation reports, the timing of the NDIS has been serendipitous for the PCLI, facilitating wrap-around disability supports to enable community living. Equally, the availability and willingness of PCLI-funded staff members to perform the role of NDIS expert gatekeeper has allowed mental health services to make the best use of this funding pathway.

The workload associated with engaging in the NDIS assessment and application process was identified as significant. The way that assessments were documented could have a significant impact on the type of package made available. There were concerns raised about the complexity of the NDIS escalation and resolution processes that created barriers to its smooth uptake. Thus, the relationship between the PCLI and the NDIS was described by KIs as both an opportunity and a challenge.

The NDIS presents an opportunity to provide the consumer with greater access to community activities. Many of these opportunities did not previously exist. They include going to the movies, going shopping with support or simply getting a coffee at a local cafe. Through disability supports, the consumer has more choice than that provided by the aged care facility alone. There was the observation that by gaining these opportunities consumers are staying younger and more socially engaged.

> *NDIS is such a crucial part of the work we're doing over there though. I think the consumers that we have at [facility] wouldn't be doing nearly as well if they didn't have access to that NDIS support.* (KI-14)

> *No, I think getting people into the NDIS earlier so that they can have their aged care funding alongside the NDIS funding that means that they can have more community access and that, actually, if they're going into residential aged care, they don't just go in and be in residential aged care. They can be in residential aged care and still be accessing the community with extra supports.* (KI-10)

It also provided consumers with rehabilitation and learning opportunities by engaging in community activities prior to transition.

> *So that's an outlet for our clients to do something outside this hospital. It's their connection. Even before they transition into the community it's a bit of an exposure, what does it really mean to go for a drive, or do simple things outside and keep connected.* (KI-21)

Knowing that access to NDIS services was available meant that preparation for transitions could begin. Indeed, the availability of these services can put pressure on the treating team to begin the transition process. The NDIS is not available to people who have already turned 65, so there has been work in identifying the younger Stage One consumers – those approaching the age of 65 – to ensure that they have access to the packages before the opportunity is lost. By ensuring that these

consumers have obtained NDIS packages, the PCLI teams have sometimes succeeded in securing supported independent living (SIL) group homes as an alternative to residential aged care where appropriate, and enabled consumers who live in these types of services to access additional support.

There are however both barriers and risks associated with the NDIS. Sometimes, although a younger Stage One consumer was eligible for an NDIS-funded SIL group home placement, this might not fit their needs best:

> *… sitting with the treating team and discussing that person's presentations and all their psychiatric medical history, they might recommend that these people go into an aged care facility, where registered nurses are [available]. So this is how we work out who goes where …* (KI-21)

One KI noted that it is difficult for community managed organisations to find appropriately qualified staff for mental health SIL group homes, especially in rural areas. This, combined with the number of consumers with 'too many challenging combinations of issues' (KI-02), made some KIs cautious about this option for the Stage One cohort.

The work required to access NDIS packages, and the complications that may arise with the application process, can cause lengthy delays in discharging consumers who are otherwise ready to move into community living. This workload also takes PCLI program managers away from tasks directly related to the implementation of the program and may place them under undue pressure. Several KIs referred to the changes within the 'tranches of escalation' that had been introduced since the beginning of COVID-19 which had impacted on ACAT assessments needed to facilitate transitions to aged care (KI-09) and 'blockages and delays' in getting NDIS packages for consumers (KI-38). Another talked about perceived 'push back' from the Ministry PCLI team regarding the focus on NDIS versus PCLI-related tasks. There is clearly a need to resolve inconsistencies in NDIS processes across different LHDs; however, this is beyond the scope and power of the PCLI alone to achieve.

A different type of concern was raised by some aged care providers. This related to the entry of NDIS workers into facilities to collect consumers for outings and activities. Although consumers were free to leave most of the facilities (with the exception of locked units), KIs were worried about their duty of care, particularly as some disability workers appeared to have little relevant training or experience. Consumers with complex mental illness may be placed at risk if not supported appropriately during such excursions. However, aged care facilities were reluctant to intervene, not wishing to attract unwanted attention in relation to restrictive practices.

4.7 Summary: provider and system outcomes

This chapter has presented summative findings on provider and system outcomes, structured around the 'five simple rules' for large-system transformation in health care (Best et al., 2012) that we have applied as an organising framework throughout the evaluation of the PCLI. These rules specify the necessary conditions for achieving transformational change. Analysis of the qualitative data from a series of key informant interviews over three years indicates that the PCLI Stage One has succeeded in creating the conditions to foster improvements in service provision at primary implementation sites. The impacts of the PCLI have extended beyond those sites, promoting broader, positive change in mental health care and aged care systems for patients with SPMI and issues of ageing.

Committed and able local leadership is available at each implementation site. Senior clinicians employed within PCLI Stage One are valued for the experience that they bring into the long stay units. Their input into transition planning has enhanced what was already happening on the wards to facilitate discharge, added value by building capacity among treating teams to improve standards of care, linked treating teams with community teams and vice versa, increased liaison with stakeholders in the community (particularly disability service providers), and supported partnerships with aged care. They are well supported within LHDs by the PCLI project managers and executive leads and the OPMH service coordinators, and at state level by the PCLI Ministry team, which includes the OPMH policy team. They also derive much mutual support through regular opportunities for networking and mutual learning.

There are promising, positive signs of greater acceptance and valuing of the PCLI assessment processes as a component of Stage One transitions to community. Thus the requirement for collaborative monitoring and measurement has been at least partially achieved. There have been targeted, successful efforts to engage with medical leaders through the PCLI Practice Network and the RANZCP. Seeing successful transitions – especially for people whose needs were considered too complex to leave hospital – has been by far the number one instigator of culture change within mental health services. Success stories have challenged previously held assumptions that the only place for good care for people with severe mental illness and other complex presentations is hospital.

The PCLI has actively fostered the involvement of consumers in shared decision making and care planning. KIs said that the PCLI has made it easier to talk about discharge planning in recovery oriented ways, focusing on the person and their strengths and ensuring that person and, where applicable, family carers are involved in decision-making processes. The PCLI has also had a role in changing culture towards recovery, building on other change efforts in mental health services.

The evaluation of the PCLI Stage One has identified a sixth 'simple rule' relating to the importance of cross-sector collaboration in transforming mental health care for people with SPMI and issues of ageing. The MH-RAC partnerships have been facilitated by three key elements: a receptive aged care context, program infrastructure and resourcing, and policy and clinical leadership. In the aged care sector, the PCLI has contributed to a greater understanding of SPMI, challenging assumptions about the capacity of aged care providers to cater to this group of consumers.

The PCLI Stage One teams have capitalised on the advent of the NDIS to ensure that disability support has been part of the transition process for some Stage One consumers. Regardless of NDIS eligibility, the individual needs and wishes of the consumer and their families were the overriding consideration when making decisions about transition from long-term hospital care.

5. Economic evaluation

This chapter presents findings on the costs of care for PCLI Stage One consumers in the initial cohort who had been discharged from hospital at 31 December 2019 and had not died during the index stay (n=66). Detailed information on the methods for calculating these costs can be found in Section 2.2.4. In summary, four main types of costs were considered within the scope of the analysis: publicly funded health care in hospital and community settings; residential aged care funding from the Commonwealth; funding provided by NSW Health to MH-RAC partners; and funding for disability supports through the NDIS. Each of these costs are estimated below, and the chapter concludes with a comparison of costs during the inpatient stay with costs following discharge into community living through the PCLI.

5.1 Costs of hospital-based care

The cost of care estimation was limited to those PCLI Stage One consumers in the initial cohort who had been discharged from hospital as at 31 December 2019 and who had not died during their index stay (n=66). This enabled a comparison of the same group of persons. The main reason behind excluding PCLI Stage One consumers in the initial cohort with ongoing stays was that no cost information for their current episode was available. This is mainly due to diagnosis coding which is essential for ABF being finalised only after inpatient episodes have concluded.

5.1.1 Index stays

The best available estimate of the ongoing cost for the index stays was to use the long stay outliers *per diem* values of the index stay's last episode. For the 66 PCLI Stage One consumers it was calculated that the average *per diem* was $967 (SD $54). Consequently, the annual average cost of the index stay was $352,955 (SD $19,710).

5.1.2 Readmissions to hospital

There were 28 PCLI Stage One consumers who had at least one hospital inpatient stay subsequent to their transition. In total there were 61 readmissions recorded. The average cost per stay was cost $29,450 (SD $85,395) and lasted on average 29 days (SD 95). The majority of readmissions (75%) were not mental health related; there were zero days in specialist mental health wards recorded.

By using the calculation steps described above the annual cost for readmissions to hospital per PCLI Stage One consumer were calculated to be $12,419.

$$\frac{61 \times \$29{,}450}{66 \times 800} \times 365 = \$12{,}419$$

5.1.3 Emergency department presentations and patient transport

Three PCLI Stage One consumers had any ED presentation. In total, there were 10 ED presentations and all PCLI Stage One consumers arrived by ambulance.

ED presentation records had to be manually grouped using UDGs. In this way, each ED presentation was assigned a price according to ABF. The average cost per ED presentation was $1,047 (SD $204).

Unfortunately, the additional cost of patient transport by the Ambulance Service was not available. As done in previous evaluations, external sources were used to estimate these costs (Access Economics, 2010; Thompson et al., 2014). For this analysis, the cost to government is best approximated with the amount of government grants/contributions received by NSW Ambulance. The annual Report on Government Services (ROGS) provided information about activity and revenue of ambulance services around Australia in recent years (Steering Committee for the Review of Government Service Provision, 2020).

Table 12 contains an excerpt of that report showing the total number of patients and government grants/contributions in each financial year. For the analysis it had to be assumed that the costs associated with an ambulance transport to ED was the ratio between government grants / contributions and total number of patients, as shown in Table 12.

Table 12: Ambulance service activity and expenditure in 2012-13

Financial year	Government grants / contributions	Total patients	Average per Patient (2019-20 $)
2015-16	691,184,760	839,909	837
2016-17	748,288,820	842,947	902
2017-18	818,826,884	866,688	960
2018-19	831,365,000	904,278	935

Unfortunately, no data was yet available for the 2019-20 financial year. Therefore it was assumed that the average government revenue per patient was the same as in 2018-19 ($935). The average cost per emergency department presentation (including ambulance transport) was $1,971 (SD $187).

By using the calculation steps described above the annual cost for emergency department presentation (including ambulance transport) per PCLI Stage One consumer were calculated to be $136.

$$\frac{10 \times \$1{,}971}{66 \times 800} \times 365 = \$136$$

5.1.4 Costs of community-based mental health care

Using each community mental health team's service unit code the activity could be grouped according to the Tier 2 classification. All teams grouped to 'Specialist Mental Health' (40.34). This Tier 2 class is block funded and not included in ABF. Therefore, no price weight was available.

However, 'Specialist Mental Health' (40.34) is included in the National Hospital Cost Data Collection Report, Public Sector, Round 22 (Financial year 2017-18) (IHPA, 2020). In this report, it is stated that nationally, the cost per service event for 'Specialist Mental Health' (40.34) were $167 in 205-16, $300 in 2016-17 and $396 in 2017-18, after adjustment for inflation. Data for more recent financial years was unavailable. Therefore it was assumed that the average cost per service event was same as in 2016-17 ($396).

In total, there were 4,519 community mental health services contacts recorded, which costed on average $384. PCLI Stage One consumers had on average 68 (SD 90) services. In around 41% of those the PCLI Stage One consumer was present in person. Six persons were not seen at all by the community mental health team.

By using the calculation steps described above the annual cost for community mental health care per PCLI Stage One consumer were calculated to be $11,996.

$$\frac{4{,}519 \times \$384}{66 \times 800} \times 365 = \$11{,}996$$

5.2 Costs of care in residential aged care facilities

5.2.1 Commonwealth Aged Care Funding Instrument funding

The Commonwealth provides funding ('basic care subsidy') for permanent residents in residential aged care facilities to support the costs of providing personal and nursing services. The amount of the subsidy is based on the assessed need using the Aged Care Funding Instrument (ACFI) (Aged Care Financing Authority, 2020).

The ACFI covers the domains activities of daily living, behaviour and complex health care. Based on the cumulative result of the 12 ACFI questions, each domain is scored as nil, low, medium or high (Australian Government Department of Health, 2017). The amount of the basic care subsidy is the sum of the three domains, as shown in Table 13 (Australian Government Department of Health, 2020a).

Table 13: Daily ACFI subsidy

Level	Activities of daily living	Behaviour	Complex Health Care
Nil	$0.00	$0.00	$0.00
Low	$37.68	$8.61	$16.71
Medium	$82.05	$17.85	$47.61
High	$113.67	$37.21	$68.74

Note: These rates were applicable from 1 July 2019 to 30 June 2020 (https://www.health.gov.au/resources/publications/schedule-of-subsidies-and-supplements-for-aged-care).

Consequently, daily ACFI funding can range from $0 for residents with nil, nil, nil to $220 for residents with high, high, high. The national average was $178 in December 2019 (Australian Government Department of Health, 2020b).

Nursing homes that PCLI Stage One consumers were transitioned to can be grouped into three types based on their contractual arrangements with NSW Health; MHACPI, Specialist RACF or Generalist RACF. No ACFI data specific to the initial cohort was available. However, ACFI scores for all PCLI Stage One consumers (initial cohort and second-wave cohort) are available from MHACPIs and Specialist RACFs reporting. Across these services the average daily ACFI subsidy was $140, with MHACPIs receiving higher subsidies ($159) than Specialist RACFs ($79). No such data was available for Generalist RACFs.

For the purposes of this analysis it will be assumed that the average daily ACFI funding provided by the Commonwealth was $140 for all PCLI Stage One consumers, $51,100 per annum.

5.2.2 Partnership agreements between NSW Health and aged care providers

To facilitate the transition of PCLI Stage One consumers to residential aged care partnership agreement were signed between NSW Health and six residential aged care services.

These were put in place to formalise the relationship between the LHDs and the services and to provide additional funding with the aim of improving staffing levels and preparedness for the needs of PCLI Stage One consumers. Two types of services were contracted, MHACPIs and Specialist residential aged care facilities. Table 14 provides an aggregated view over the funding provided through the partnership agreements.

Table 14: Overview of partnership agreements

	MHACPIs	Specialist RACFs
Number of services	3	3
Number of funded places	30	50
Recurrent funding for 2019-20	$945,561	$1,071,971
Annual funding per place	$31,519	$21,439
Daily funding per place	$86	$59

The annual funding per place was calculated as total funding divided by number of funded places. The corresponding daily funding amount is one 365th of the annual amount.

It should be noted that since the commencement of the PCLI, 33 PCLI Stage One consumers have been transitioned to MHACPI units and ten were transitioned to specialist RACFs.

For the purposes of this analysis it will be assumed that transitions to MHACPI units have annualised cost of $31,519 and transitions to specialist RACFs cost $21,439.

5.3 Costs of disability-related support

The full NDIS began in July 2016 and is managed by the National Disability Insurance Agency (NDIA). NDIS provides funding for supports and services for persons who have a permanent and significant disability. One of the eligibility criteria is that the person is aged less than 65. NDIS funding levels are based on individually assessed needs.

Information on NDIS status and funding is limited for PCLI Stage One consumers. Based on conversations with the Ministry PCLI team and residential aged care providers it is assumed that all PCLI Stage One consumers aged less than 65 would be eligible for NDIS and all of those would have a primary psychosocial disability. Individual funding levels are unknown.

The NDIA provides national snapshot on people with psychosocial disability in the NDIS. It is reported that the average annualised committed supports for participants with a primary psychosocial disability in 2018-19 was $62,899 with around two thirds of participants receiving between $20,000 and $100,000 (National Disability Insurance Agency, 2019; 2020).

Based on the HIE data it was estimated that there were 27 PCLI Stage One consumers aged younger than 65 on the discharge date from their index stay. For the purposes of this analysis it will be assumed that all of those are eligible for $62,899 of annualised NDIS supports.

5.4 Total costs

Having estimated in-scope costs for this analysis the different components can now be brought together. Table 15 provides an overview over the cost of care for the individual components. It can be seen that the highest cost are for NDIS for PCLI Stage One consumers who are aged less than 65. The next highest cost are associated to ACFI funding for residential aged care. The lowest costs were recorded for emergency department presentations.

Table 15: Overview over cost of care by type

	Unit	Cost per unit	Cost per year
Index stay	additional day	$967	$352,955
ACFI funding for residential aged care (per place)	day	$140	$51,100
Additional funding MHACPI (per place)	year		$31,519
Additional funding Specialist RACF (per place)	year		$21,439
National Disability Insurance Scheme	year		$62,899
Readmission to hospital	inpatient stay	$29,450	$12,419
Emergency department presentation	ED presentation	$1,971	$136
Community mental health service	service event	$384	$11,996

Table 16 shows the total estimated cost of care per PCLI Stage One consumer. It can be seen that transition to community living led to large reduction in average costs regardless of discharge destination and age, ranging between 52% and 79%. The cost was lowest for PCLI Stage One consumers who have transitioned to a generalist RACF and was highest for PCLI Stage One consumers who transitioned to a MHACPI and had NDIS support.

Table 16: Cost of index stay compared to living in community

	Cost per year	Cost reduction versus index stay (%)
Index stay	$352,955	
PCLI Stage One consumer in Generalist RACF	$75,651	78.6
PCLI Stage One consumer in MHACPI	$107,170	69.6
PCLI Stage One consumer in Specialist RACF	$97,090	72.5
PCLI Stage One consumer in Generalist RACF with NDIS	$138,550	60.7
PCLI Stage One consumer in MHACPI with NDIS	$170,069	51.8
PCLI Stage One consumer in Specialist RACF with NDIS	$159,989	54.7

Univariate sensitivity analyses were undertaken to test the robustness of results to changes in input parameters. The estimated price of all parameters was varied by ±10%. This can be interpreted as a change in price or utilisation, or a combination of both. None of the variations led to cost being higher than the index stay cost. The largest difference was seen when the cost of the index stay was increased or decreased. This changed the cost reduction by up to 5 percentage points. Changes in ACFI or the NDIS funding led to a change in cost reduction of between 1.4 and 1.8 percentage points. Changes in all other parameters had very minor impact.

5.5 Limitations

Several limitations with the analysis must be acknowledged. The analyses were based on the most feasible approach given the data available and the agreed scope. With the focus being on 'cost to government' for the care provided in hospital and in the community, there may be other costs to the healthcare system, the aged care system or the social care system that were excluded and that might have substantially changed the results. Further, the cost of the PCLI program itself and the potential flow-on effects from the PCLI such as any potential changes in efficiencies in service delivery in mental health (e.g. average length of stay, average cost per acute admitted patient day, and redeployment of metal health beds) were not considered.

By using ABF principles to estimate the cost of hospital-based care instead of routinely collected cost data from NSW Health Activity Based Management it is assumed that national prices appropriately reflect costs in NSW, an assumption that cannot be verified for the particular group of consumers and hospitals involved in PCLI. Further, the cost of ongoing hospital-based care would be underestimated because the price of ongoing inpatient stays is unavailable until after the inpatient episode has concluded.

Funding and staffing levels in residential aged care are generally too low (Eagar, Westera and Kobel, 2020; Comans, et al., 2020) and the current ACFI funding mechanism insufficiently captures the care needs of residents (Eagar, McNamee, Gordon, et al., 2019). Therefore, the funding levels estimated for the PCLI Stage One consumers may understate the true cost of providing adequate care. This may still be true for the MH-RAC facilities that receive additional funding from NSW Health to maintain better staffing levels and skill mix than mainstream residential aged care services. Qualitative feedback received from some of those providers suggests that substantial in-kind contributions are made (or would be required) to supplement the funding received.

Further, it should be noted that NSW Health funding provided to MH-RAC partners was estimated based on the agreed number of funded places. However, occupancy rates are low. Therefore, the real cost per PCLI Stage One consumer may currently be a multiple of that, at least until occupancy rates increase.

No quantitative quality of life data were available. It remains therefore unknown whether the transition from long stay hospitalisation to community living had any effect (positive or negative) on the PCLI Stage One consumers' quality of life.

5.6 Summary: economic evaluation

The main aim of the analysis was to provide an estimation of the cost associated with the care during the index stay and compare them to the cost of care incurred while living in the community. In the absence of consumer-level cost data a 'cost to government' approach was adopted and funding levels were used to estimate costs. The scope of the analysis was limited to:

- Hospital-based care: admitted care, ED presentations, community mental health services;
- Commonwealth funded residential aged care;
- Partnership agreements between NSW Health and aged care providers;
- National Disability Insurance Scheme.

The analysis was limited to those PCLI Stage One consumers in the initial cohort who had been discharged from hospital as at 31 December 2019 and who had not died during their index stay (n=66) to provide a comparison between inpatient stays and community living.

For all hospital-based care costs were estimated based on activity based funding (ABF) principles. For the index long stays the outlier per diem was used as a representation of the of the ongoing nature of the stays. For all hospital-based care provided after transition the usual ABF methodology was used as it best represented the episodic nature of the care provided. For costs associated with residential aged and NDIS information and documents provided by the Ministry PCLI team or publicly available were used.

The average annual cost of care per PCLI Stage One consumer during index stays was $352,995. After transition to community living the average annual care cost included hospital-based cost of $24,551, including $12,419 for readmissions, $136 for ED presentations and $11,996 for community mental health care). Annual residential aged care cost ranged from $51,100 for generalist residential aged care and $72,539 for specialist residential aged care to $82,619 for MHACPIs. For PCLI Stage One consumers under 65 years of age the annual NDIS support was $62,899.

In summary, during their long stays in hospital, the average annual cost of care per PCLI Stage One consumer was $352,995. After the transition into residential aged care the average annual cost of care was between $75,651 (PCLI Stage One consumers in generalist RAC) and $170,069 (PCLI Stage One consumer in MHACPI with NDIS), which was a reduction by 52% to 79%. Outcomes data showed improved scores for life skills (LSP-16 subscores for 'compliance' and 'antisocial') and a deterioration in function (RUG-ADL 'bed mobility' and total scores). These findings should be treated with caution as baseline and follow-up assessment data were available only for a small proportion of the cohort.

Taken together for the 66 PCLI Stage One consumers who have transitioned to residential aged care this amounts to a reduction in cost for their care of between $12.1M and $18.3M annually.

6. The future of the PCLI Stage One

As might be expected with any large-scale initiative, after several years of implementation the PCLI continues to evolve. This chapter presents formative findings which aim to contribute to the future development of the PCLI. In the first section, we explore issues that the Ministry PCLI team may wish to consider in attempting to move the PCLI towards being part of 'business as usual' within mental health services. In the second section, we focus on ways in which the Ministry might seek to maximise the effectiveness and value of the MH-RAC partnerships.

6.1 Moving towards 'business as usual'

6.1.1 The PCLI 'brand' and fidelity to the model

There have clearly been particular benefits from using the PCLI label; for example, the ability to focus resources and attention on the long stay cohorts. As LHDs work to embed key program components and sustain changes in practice, the value of retaining the brand is being challenged with a contrasting view that the 'PCLI is everyone's business' (KI-09).

> *I really don't want that [separate PCLI brand]. I want everyone to own the idea of letting people live in the community.* (KI-36)

There is recognition that at some point the PCLI will need to become part of 'business as usual' and at that point a separate identity will no longer be needed. There is, however, no certainty around determining when that point has been reached. The current weight of KI opinion suggests that this has not occurred yet; the PCLI is 'still early in the journey' (KI-20).

> *When I think about how it's going to survive … you know, there is a long time before things change, the practice becomes embedded in what people do and it's still going to be very easy for people to just get lost in another service. So there still needs to be that overarching, kind of, [monitoring] what's happening, where people are going …* (KI-01)

There are differing views about the level of implementation fidelity that has occurred in Stage One as unexpected events and contextual differences between LHDs have resulted in local adaptation. The evolving nature of the PCLI is a strong and consistent message and as this frequently occurs quietly or in a nuanced way it can be difficult to capture changes in the model.

For some LHDs, change is driven by external factors or by the characteristics of the staff in the PCLI roles. For example, resource pressures in other parts of the LHD create temptations to use the skills of senior PCLI clinicians in different ways. How people and resources are organised is important and there have been variations in how LHDs have structured their teams and reporting lines. PCLI clinical staff tend to be drawn from within other units, leaving them under-staffed, but the issue is broader than just staffing. There are tensions between the value of having a distinct team and the needs of other units which are not as well resourced. The PCLI is sometimes perceived as 'one of those peripheral enhancements at the expense of central services' (KI-02).

The PCLI teams are perceived to attract high performing individuals that have much to offer other parts of the mental health service. The experience of working with PCLI staff was mostly positive because of the collaborative, open, respectful and empowering approach to working with consumers demonstrated.

Working alongside the treating teams and community teams, these senior clinicians perform a valuable service in supervision, modelling, and mentoring other staff members. In considering the future role of the PCLI Stage One team, one KI posed and answered some rhetorical questions:

> *'What is the special stuff that we bring, or what is the stuff that we bring that other teams don't? What's the point of difference?' And we're looking at things like team-based care, the fact that we sit across settings. Other teams don't do that, other teams are stuck within their geographical team or their inpatient team. Our team can transcend that so that's a point of difference. The fact that there's a team of senior people is a point of difference. The focus on consultation liaison and capacity building is a point of difference as well.* (KI-26)

6.1.2 The changing role of Stage One teams

The imminent or current shift in the role of the Stage One teams is generating concern and reflection and providing an impetus to plan for the future. One of the most frequently raised issues is the separation between Stage One and Stage Two cohorts and teams. As the establishment of these consumer cohorts has been fundamental to how the PCLI has been staffed and implemented, any change in this structure has significant flow-on effects for future resourcing as well as for monitoring and evaluation. Inevitably there are tensions balancing servic e gaps and limited resources and this flows on to perceptions of the different funding arrangements for Stage One and Stage Two. In general, the Stage One clinicians have permanent appointments, but some of the Stage Two clinicians are on short-term contracts. There is strong awareness of the challenges in transitioning the Stage Two consumers and the importance of appropriate resourcing for their care.

> *Stage Two is a different kettle of fish. It's bigger, it's uglier, we've got less resources, and they're temporarily funded, and we've got a very large cohort.* (KI-13)

The potential to engage Stage One personnel in the care of Stage Two consumers and greater flexibility in moving positions between Stage One and Stage Two teams is likely to be an ongoing issue. There are contrasting views on the transferability of skills between the Stage One and Stage Two clinical teams, with some KIs maintaining that specialist older people's mental health expertise is required to support Stage One transitions and others arguing that the skills are transferrable across teams.

> *I think the skills are transferable across both, because you are capacity building, you're driving education, you're driving process change, you're ensuring everybody's on the right page and the right course. You're keeping the focus on the patient and advocating for the patient along the way. I think those skills are probably transferable too.* (KI-09)

Other options are emerging. Some teams are looking at expanding their focus from consumers with a length of stay >365 days to consumers in the 6 – 12 month length of stay band, or concentrating on consumers identified at 'high-risk' of becoming long stay patients. These 'high-risk' patients are identified by their case complexity and frequent readmission and may be found within various parts of the mental health system and even in community settings. This is seen as a logical extension of the original aim of the PCLI to prevent future long stays and enable consumers to live in the community.

Some KIs spoke about whether the PCLI should evolve into a complex care rehabilitation program. This possibility appears to be consistent with recent language, used by the Ministry PCLI team at meetings and workshops, around developing a complex care model for NSW. According to KIs, such a program could include active roles in reducing length of stay and readmission, and/or in providing rapid and responsive mental health support to aged care facilities as needed to increase the available residential options for mental health consumers. One advantage of broadening the scope is that it would offer increased access to these skilled clinicians for a larger cohort of consumers. However, there is as yet no common view about what a complex care program means and how it would work in practice.

> *As we start addressing the needs of that broader cohort, there's a lot of grey, fuzzy edges around PCLI now that we didn't have before in relation to who we're providing services to.* (KI-26)
>
> *So they have to have some level of complexity, whether that's around their mental health presentation or mental health and physical. You know, if they've had a lot of placement breakdowns or if they're going back to a facility that requires more intensive support than what our general community teams can provide.* (KI-20)

The potential for closer integration within OPMH teams in a more formal and structured way was raised, and would contribute to the sustainability of the PCLI Stage One. Nevertheless, the point of difference of the PCLI Stage One clinical team is clearly important. The risks of shifting focus are the challenges of defining the consumer cohort and what this means for staff permanently employed in Stage One positions as well as issues relating to data collection, monitoring and evaluation.

6.1.3 Embedding the PCLI assessment tools in routine practice

The PCLI teams have worked hard to encourage the use of the PCLI assessment tools. They have used educational opportunities to increase staff engagement with the assessments, developing an understanding of the value of the assessments, how the assessments can be integrated into care planning, the consumer centred nature of the assessments and the value that the consumer's voice brings to the assessment and transition decision making process.

However, while the PCLI Stage One clinicians may have embraced the use of the assessments, the challenge has been the uptake by other staff in long stay units. While a data protocol exists, the completion of assessments is often either explicitly or implicitly based on clinical judgement, which gives members of treating teams the right to 'opt out' of using particular tools. In previous evaluation reports, we found that sometimes this option was exercised on the basis of misunderstandings, such as the stakeholder who wrongly believed that the PCLI protocol required repeated measures of intelligence testing. As we have previously discussed, it is difficult for us to judge whether these kinds of perceptions are due to communication issues or are indicative of resistance to the change processes associated with the PCLI.

During the most recent round of data collection, one KI had discovered that many long stay unit staff remained unaware of the assessments or of their importance to the PCLI transition processes. Another wondered whether treating teams realised the significance of the PCLI toolkit to the program overall.

6.2 MH-RAC partnerships: maximising value and enhancing outcomes

The first PCLI MH-RAC partnerships were formalised over three years ago. Since then, new partnerships have been established. As the PCLI moves towards procurement for the Stage Two services, it is worth reviewing what has been learned so far about the challenge of finding homes for the most complex consumers, and the factors that add value to partnerships. The evaluation findings presented in the following sections may contribute to the ongoing development of Stage One services and help inform future cross-sector partnerships designed to support people with complex mental illness.

6.2.1 Utilising the MH-RAC beds

MH-RAC partners are not obliged to accept PCLI consumers, and referrals may be declined for various reasons. Although such refusals may be justified, they create a source of frustration among Stage One clinical teams.

> *Well, where to from here when we have facilities that have been funded, specifically, for these issues of risk? And yet they're the very facilities that are refusing to accommodate the person on the basis of risk.* (KI-32)

At one LHD, KIs believed the designated facility was not 'fit for purpose' and did not have the required capacity or skillset and therefore was no longer considering it as an option for consumers. At another, there were concerns about whether PCLI consumers were 'compatible' with the way the MHACPI was set up and the mix of existing residents.

KIs reported that the processes to get consumers accepted into aged care – even into PCLI-funded MH-RAC partner facilities – can be 'phenomenally hard and a challenge on every single level'. Some had been told, 'We weren't expecting clients of this complexity', suggesting a problem with communication at the start of the contractual relationship. There were questions about the partners' freedom to select consumers with less challenging behaviours and more physical disability, who attract more aged care funding ('it makes good business sense, and it's within the rules') versus their commitments to provide options for PCLI consumers.

Regular clinical reviews are an expected part of partnership arrangements. Some aged care managers welcome this regular input, whereas others believe it is not necessary to discuss consumers unless something has changed or advice is required. Some LHDs have been flexible in adapting to the partner's preferred meeting frequency, taking into account the different 'meeting cultures' of health and aged care and trusting that the partner will use the scheduled meetings or contact the PCLI Stage One team at any time when the need arises. Other LHDs regard the meetings as essential for clinical governance and would only vary the frequency if the contract was renegotiated. The level of flexibility appears to relate directly to the level of trust in the relationship, which in turn depends on diverse factors on both sides of the relationship.

In one case, from the LHD's point of view, the aged care partner appeared to be unwilling to modify the standard model of aged care to cater for PCLI consumers' mental health needs. In theory, a well-developed service agreement or MOU should provide the basis for resolving any disputes among parties but in practice it appears that this document cannot compensate for what appear to be fundamental differences in expectations.

The intervention of the Ministry PCLI team has been invaluable in providing some LHDs with the contractual information they needed to negotiate with MH-RAC partners. Given that relationships are generally good, despite differences of opinion, the Ministry PCLI team remains committed to finding ways through these issues, starting from a position of 'believing in the partnership' as a long-term investment.

Differences of opinion were noted between some LHDs and MH-RAC partners regarding the necessity of continuing clinical input, with some partners appearing to be less committed to providing high-level management representation at the regular clinical advisory committee meetings that form a key governance component of the partnership contractual arrangements.

It is important to acknowledge that these services have been developed in the midst of the Aged Care Royal Commission (and a pandemic), which has made them more vigilant about risk, managing people with 'challenging behaviours', and regulation, while undermining their workforce and their ability to maintain strong leadership and management and skilled staff.

6.2.2 Moving through to mainstream

The MHACPI units are designed as transitional care spaces to allow consumers with complex needs to continue their rehabilitation and build their skills and independence in the community before moving through to less restrictive settings such as generalist aged care. To date, eight of the 33 PCLI Stage One consumers transitioned to MHACPI units have subsequently moved on to mainstream aged care or to other settings suited to their care needs, such as specialist dementia units.

KIs noted that consumers may stay longer in the MHACPI unit for a variety of reasons, not just clinical ones. For example, they may have family members who are reluctant to see them move, or who are currently unable to participate in or consent to such a move due to ill health. Alternative accommodation may be difficult to find, or LHD staff may be not be confident that other organisations are capable of managing that consumer's care.

With each transition from hospital, the PCLI Stage One team and the MH-RAC provider together make a huge investment in capacity building. This is not just learning about mental illness or drug and alcohol issues in general, but learning about that person and their specific history, preferences, and care needs. When the person is thriving in the MHACPI unit, the question arises whether this is only because of this investment and whether another facility would be able to meet their needs.

> *I think what it's demonstrated to us is that the person with the mental illness is only one part of the equation. The environment and the people surrounding them are really what provides the stability and makes it work and so it almost becomes a unit, those three things, and to transition someone out, certainly for some of our really complex people, it's a bigger move than the move from hospital.* (KI-14)

Indeed, any move subsequent to the original transition requires careful thought and handling, which places additional pressure to get the first move right. At one MH-RAC facility, the availability of PCLI-funded places has been delayed by planned capital works. Although this will ultimately result in an improved aged care environment, it has temporarily halted transitions from hospital for consumers who are clinically ready to leave but have nowhere else to go. The PCLI team at this implementation site has been negotiating productively with the aged care provider for access to alternative places in other facilities within the organisation. However, the desire to move consumers out as soon as possible must be balanced against the

risk of disappointment if they do not go where they were expecting to go, and the risk of disruption if they are subsequently moved to the PCLI-funded facility. The Stage One team has found that some consumers will be too upset by the change in plans, but others are 'quite resilient' and happy to consider alternatives.

6.2.3 Factors associated with successful partnerships

By the time of *PCLI Evaluation Report 4*, four years into the program, the evaluation team was able to report that most of the aged care partnerships were operating smoothly, and that proactive engagement by the Ministry PCLI team had helped to stabilise and foster the remaining partnerships. Several factors associated with successful partnerships were identified, namely:

- A shared commitment to the overall program goals;
- Person-centred philosophy of care/support;
- Program infrastructure with appropriate staffing capacity;
- Agreed processes for oversight and ongoing support;
- Trust between individuals and organisations.

To this list, we would now add **sustained and effective leadership in LHDs and aged care facilities** and **willingness to learn from experience** and to change practice to improve the functioning of partnerships and the sustainability of transitions. The evaluation team has been able to observe the impact of effective leadership and willingness to learn and change, both in site visits across LHDs and in the discussions among PCLI program managers, executive leads, clinicians, and Ministry PCLI team members at various meetings, teleconferences, and workshops over the past four years. A commitment to quality improvement is apparent among individuals and within the fabric of the PCLI processes.

Another factor, specific to the MHACPI units, is **fidelity to the model** of service delivery. Where the MHACPI most closely resembles the original piloted model – a separate unit, with a designated space for mental health consumers, and consistent staff members who have additional mental health training – it appears to work best. This has been the observation of the evaluation team and comments from stakeholders uniformly confirm this view. Physical containment allows entry for people who would not fit well into a general facility, although it can also create its own problems if the space is small.

Any variation which involves placing PCLI Stage One consumers intermingled with other residents reduces the usability of the MHACPI unit for its intended purpose of housing people with SPMI and complex needs. For example, if the MHACPI is within a locked dementia unit, care needs may be met at the expense of social needs. If integrated into a larger facility, this severely restricts the type of consumer who can be catered for in that environment, and the MHACPI unit may be under-utilised.

For the SRACFs, a broader role for the PCLI clinicians may be advantageous to both parties in the partnership. By providing advice and assistance with other residents who have SPMI and could benefit from their expertise, the Stage One clinical teams add considerable value to the partnership. This also benefits the health system:

> *Because every conversation, regardless of whether it was a PCLI person or not, will be informing effective utilisation of health resources, whether or not someone's going to be presenting to ED, or whether they can be supported better within [aged care].* (KI-32)

6.2.4 Resources for rehabilitation

Under current aged care funding rules, there is a disincentive to accept consumers with behavioural issues rather than physical dependency. If the aged care home works with a PCLI consumer to improve behaviours, this results in further decreases in funding despite the investment of time and expertise required. And because PCLI consumers are generally more mobile and less physically dependent than the average aged care resident, they are more in need of activities and social engagement, yet the aged care funding system appears to work against recovery and rehabilitation goals.

One of the ways that funding shortages in aged care affects mental health rehabilitation is through the availability of aged care staff with mental health experience. KIs said people with this expertise were difficult to find and recruit; it was more reliable to upskill existing staff. Nevertheless, it was still vital to have staff with certain aptitudes: a relationship-oriented approach, an observant nature to be able to pick up signs of clinical deterioration, patience to understand that diplomacy may be better than a direct approach when seeking a consumer's cooperation.

> *The clients, the nature, the needs of the clients are very challenging and some of the staff have been able to adapt to that, but others, it is just completely outside of their experience and their expectations of general aged care work.* (KI-14)

In addition, KIs would like to see more registered nurses with mental health expertise available within aged care facilities, and greater access to allied health practitioners particularly around occupational and social needs and family interactions. RNs would provide support around clinical decision making, supervision, oversight and planning, for instance structuring the day and coordination across days. People with this level of training may be better able to notice and interpret links between events on one day and perhaps incidents on another day and thus intervene to de-escalate problems.

Finally, several KIs felt the MH-RAC partners would benefit from additional funding to provide leisure and lifestyle activities that would promote mental health recovery. According to one KI, with 'just a little more money', a wish-list of activities would be within reach: more outings, therapy animals, 'inventive and innovative' approaches involving technology, activities at weekends as well as during the week. Such opportunities were regarded as particularly important for consumers because 'they don't want to stay inside all the time'. Another KI said that for rehabilitation activities that are meaningful:

> *You need ideas. You need enthusiasm. You need energy, for the people that are running or leading these groups, but, yeah, you need money.* (KI-30)

These views are consistent with those expressed by consumers and carers during interviews that were conducted and reported for *PCLI Evaluation Report 4*. One of the conclusions from that report is highly relevant to the current finding:

> *One thing consumers seem to lack is meaningful occupation. There is not a lot for them to do … Among a significant proportion of the consumers, there is clearly a longing for greater social inclusion, autonomy, and purpose. … By helping them leave hospital with the supports they need, the PCLI has set them on a hopeful path, but they will require continued high levels of support as they work towards their goals.* (Williams et al., 2019b)

6.3 Summary: formative findings

In many LHDs the PCLI has a clear brand identity and this has added value. This identity is closely entwined with the PCLI Stage One OPMH service development and responding to consumers with issues of ageing as this has been the early focus of the PCLI. With the experience of successful transitions, the decrease in the Stage One cohort and the integration of other LHDs into the program this brand identity is shifting. However, KIs agree that the time has not yet arrived to discard the PCLI label as it is still serving important purposes by providing a clear focus for strategic planning, coordination of activities, and funding.

The role of Stage One teams is changing as the initial cohort of long stay consumers with issues of ageing gradually transition into more appropriate care settings and is not being replaced. This is a positive development and it is likely that the PCLI processes and service models are contributing to the reduction in the Stage One consumer numbers. As the PCLI has evolved, the executive leads and program managers increasingly are working with Stage One clinical teams to help redefine their roles and articulate a model of care for the future.

While there is still some evidence of resistance, most KIs noted positive changes in mental health service culture over time with a significant increase in support for the PCLI. This change has also been apparent over the timeline of the evaluation.

The support and/or the environment on offer within the MH-RAC facilities does not always match the needs of those waiting to transition. Differences of opinion were also noted between some LHDs and MH-RAC partners regarding the necessity of continuing clinical input.

Several factors associated with successful partnerships have been previously identified by the evaluation, namely:

- A shared commitment to the overall program goals;
- Person-centred philosophy of care/support;
- Program infrastructure with appropriate staffing capacity;
- Agreed processes for oversight and ongoing support;
- Trust between individuals and organisations.

To this list, we would now add sustained and effective leadership in LHDs and aged care facilities, and willingness to learn from experience and to change practice to improve the functioning of partnerships and the sustainability of transitions. Another vital factor in the optimal functioning of these partnerships is fidelity to the MHACPI model.

By providing advice and assistance with other (non-PCLI) residents who have SPMI and could benefit from their expertise, the Stage One clinical teams may add considerable value to the MH-RAC partnerships, with potential flow-on benefits for the broader health system.

7. Discussion

7.1 Achievements and remaining challenges

At the time of writing this report, the PCLI Stage One was in its sixth year of operation and the evaluation was in its fourth year. It is therefore reasonable to use the findings in this report to draw some conclusions as to the effectiveness of the PCLI. The findings are discussed below, arranged against each of the evaluation questions.

7.1.1 Transitions to community living

Evaluation Question 1:
How successful was the PCLI program in transitioning people from hospital to the community?

The discharge of long stay consumers with very complex needs is regarded by many KIs as the major achievement of the PCLI Stage One. Many expressed pride in what they and their colleagues or organisation had achieved under the PCLI banner.

Three in five (118/194) PCLI Stage One consumers have transitioned to community living. On average, life skills improved following transition and there were no adverse impacts on psychological distress. Findings on health service use demonstrate that mental health crises following transition were rare. These are highly positive outcomes for the consumers concerned and for the program as a whole.

This study was reliant on the routine outcomes data from the MH-OAT tools submitted by community mental health or OPMH teams responsible for follow-up of PCLI Stage One consumers. Data incompleteness remains an ongoing challenge for the PCLI and its evaluation (see Table 10). Ideally there would be valid assessments for baseline and follow-up assessments for all PCLI Stage One consumers who were discharged, bearing in mind that some assessment tools may only be applicable to certain subgroups. However, assessment scores at baseline and follow-up were not available for many of the PCLI Stage One consumers; and even among those with scores, some assessments were done more than 12 months before or after transition. This could be because the assessments were not completed or not entered into the HIE. Hence the analyses of the MH-OAT tools should be interpreted with great caution as the results may be influenced by the particular types of consumers for whom complete baseline and follow-up assessments are available, who may not be representative of all PCLI Stage One consumers.

The extent to which these outcomes can be attributed to the PCLI program is also of interest. The program has been rolled out in a complex environment, across multiple sites, each with routine processes for discharge and perhaps also concurrent quality improvement activities which are likely to have influenced the number and quality of transitions. Outcomes will also have been influenced by the overarching, State-wide context of resources and policies. In this situation, where the multiple influences cannot be disentangled, it is more realistic to talk about contribution than attribution (CDC, 1999). Robust assessments of contribution can be made where there is a pre-existing program logic and evaluation framework, with pre-defined short-term and medium-term outcomes that can be linked in sequential order with the program inputs and activities (Almquist, 2011).

In the case of the PCLI, the qualitative findings from a series of semi-structured interviews with key informants have highlighted the contributing factors and how they are linked in a logical sequence. First, key informants were able to identify and elucidate the crucial program inputs, namely PCLI program managers, PCLI Stage One clinicians, State-wide networks, and aged care funding supplementation. They also described in detail the essential program activities: capacity building in mental health services and MH-RAC facilities, visibility and priority setting, consumer/carer engagement.

Finally, it was clear how these related to desired outputs: improved multi-disciplinary care planning; stronger links between different parts of the mental health system; well-established cross-sector partnerships. It is logical to conclude that these resources, activities and outputs contributed significantly to the observed outcomes in terms of successful, sustained transitions to community.

The analysis of the HIE data for this report has shown a total of 118 PCLI Stage One consumers transitioned to the community between the program commencement and 31 December 2019. InforMH had earlier advised the evaluation team that the size of the cohort of long stay consumers was previously fairly stable over time, albeit with a number of individuals being discharged annually and a similar number becoming long stay consumers. It is therefore difficult to quantify how many of the transitions observed since July 2015 would have occurred if the PCLI had not been in place.

It is worth noting that the majority of those transitioned have gone to mainstream aged care facilities (75/118) rather than MH-RAC partner facilities (43/118). Mainstream aged care providers do not receive the intensive, sustained support from the PCLI Stage One clinicians and do not report to the Ministry PCLI team on outcomes for their residents. Although the evaluation team has spoken to some of these providers, a comprehensive assessment of the quality of mental health care provided was beyond the scope of the evaluation.

Two in five of the PCLI Stage One consumers remained in hospital at 31 December 2019, or had died during their long stay. The evaluation identified two statistically significant predictors of discharge: length of the index stay, and scores on the self-care scale of the LSP-16. Those with longer stays were less likely to be discharged, regardless of their mental health symptoms, function or other factors, illustrating the pernicious effects of institutionalisation. Further, those with fewer problems with cognitive impairment, physical illness or disability were less likely to be discharged from hospital, perhaps indicating a gap in the availability of suitable services for those with more intact self-care functions.

7.1.2 Success factors

Evaluation Question 2: What factors predicted success?

The qualitative interviews allowed the evaluation to identify a range of factors associated with successful transitions. These included:

- the regular presence of the PCLI Stage One teams on the long stay wards;
- the depth and breadth of expertise available from the PCLI Stage One multidisciplinary teams;
- the continuity of staffing in these teams;
- the involvement of peer workers;
- strong engagement with consumers' families.

Sustained community living was supported by the availability of ongoing clinical mental health expertise and input to aged care facilities, especially MH-RAC partners; a supportive organisational environment for aged care staff to develop knowledge and strategies and prevent exhaustion and burnout; and the building and maintenance of trusting, mutually beneficial relationships between health and aged care providers.

7.1.3 Consumer and carer experiences

Evaluation Question 3: What was the consumer/family/carer experience?

Based on our interviews with key informants over the past four years, the level of consumer participation in decision making has increased over the course of the program implementation. What was striking in numerous KI accounts was the commitment from everyone associated with the PCLI to put themselves in the consumers' shoes, to see things from their perspective, and to focus on capacities and wishes as well as care needs.

The attention given to follow-up care in the community most clearly distinguishes the PCLI from previous efforts at deinstitutionalisation in the NSW mental health system. The program's design and processes are built around evidence on what works to support sustainable transitions to community living for consumers with SPMI.

The COVID-19 pandemic and associated restrictions on entry into and exit from aged care facilities has delayed some transitions and also had an impact on PCLI Stage One consumers living in the community. Those who had been accustomed to receiving visits from friends and family or having regular excursions into the neighbouring area have found the experience of lockdown isolating and frustrating. MH-RAC facilities have introduced various strategies to address the challenge, including separate visiting rooms for peer workers, and bus tours where consumers remain on board. Clinical oversight has continued through face-to-face visits and care wherever possible, supplemented by virtual meetings.

An acknowledged limitation of this study is the lack of first-hand consumer and carer accounts of their experiences. For privacy reasons (associated with ethical approval for the project), the evaluation team was unable to make direct contact with potential interviewees, instead relying on staff of the LHDs and aged care facilities to identify those willing to be interviewed. This assistance was not provided during the data collection period for this report, quite likely due to increased workloads and strains for health care and aged care workers during the COVID-19 pandemic. First-hand accounts from consumers and carers have been provided in two previous evaluation reports, and will be included (if possible) in the final evaluation report.

7.1.4 Service development

Evaluation Question 4: Have high quality and responsive new services been established?

In the context of Stage One, the 'new services' referred to in this question are the MH-RAC partnerships between the NSW Ministry of Health and aged care providers, which are supported by the PCLI Stage One clinicians and the project managers within participating LHDs. The service models delivered through these partnerships were designed around the assessed needs of the cohort, shaped by key planning and policy documents (e.g., the *NSW Older People's Mental Health Services Plan 2017-2027*), and based on evidence from previous evaluations of the MHACPI models (Health Outcomes International, 2011; Health Policy Analysis, 2013). Under the PCLI, funding has been provided for 80 places across six facilities, with distinctive environments, evidence-based design features, and models of care that align with the principles of recovery orientation and person-centred care. The top-up funding from NSW Health contributes to improved access to mental health expertise and has assisted some facilities with capital works.

In most cases, the partnership arrangements have been highly successful. A recurring theme in the stakeholder interviews has been the central role of trusting, respectful and responsive relationships that is required to sustain consumers and prevent inappropriate readmissions to hospital. Additional factors that facilitate successful partnerships were identified by this study, including willingness to learn from experience, and fidelity to the MHACPI model.

The evaluation has shown that the support and/or the environment on offer within the MH-RAC facilities does not always match the needs of those waiting to transition within that LHD. For example, the MHACPI places at one facility are situated within a locked dementia unit, making it less suitable for people with a primary diagnosis of mental illness, particularly those who are still relatively mobile and 'young old' individuals.

When such a person is placed in this type of environment, there is by necessity a trade-off between their care needs and their social needs. The MH-RAC partners are not always willing or able to take on care of people with serious behavioural issues, needing to balance their obligations to the PCLI with managing risks to other residents, particularly frail aged people. In response to these identified issues, the MH-RAC services increasingly operate as a network of available facilities, each with particular strengths and opportunities to offer consumers. This arrangement is designed to promote more efficient and effective use of the MH-RAC resources by matching consumers with places that suit them best, whether they are within or outside of the original LHD.

The success of Stage One transitions has been dependent on the development of sound working relationships between LHDs and MH-RAC partners. The contractual arrangements, systems and processes of the PCLI (e.g., standardised assessments, clinical advisory committees, additional funding, specialist education and support) have provided an essential foundation. Most of the participating aged care providers have demonstrated their ongoing commitment to meeting contractual obligations and to implementing the PCLI systems and processes. The LHDs – through the Stage One teams and the OPMH services – have expended considerable energy in nurturing these relationships. Through the PCLI, MH-RAC partners received additional resources to support their residents, and LHDs gained access to a wider range of appropriate services for their older consumers in the community. It is reasonable to assume that these relationships and supporting processes have contributed to the positive outcomes for consumers seen in Chapter 3, namely sustained transitions with low risk of mental health readmissions or ED presentations.

7.1.5 Reform of mental health services

Evaluation Question 5:
Has practice in existing services been reformed?

One goal of the PCLI was to establish a culture of recovery orientation in mental health services. Recovery orientation describes a pattern of behaviour by clinicians in their dealings with consumers, which include focusing on consumers' goals, abilities and skills, involving families and carers, facilitating participation in care planning, and promoting hope and self-determination (Waldemar et al., 2016). It is consistent with contemporary approaches in mental health care and with national and state policies, for example:

> *Rehabilitation services that are shaped by the goals of promoting hope, healing and empowerment foster an underlying attitude that recovery is possible, offer opportunities for people to maximise their own experience of recovery and create a service environment that is flexible, responsive and accessible*. (SA Health 2012, cited in Commonwealth of Australia 2013, p. 25)

In late 2017, during the earliest round of interviews, KIs described a protective, custodial, risk-averse culture in the non-acute wards where many of the long stay consumers were housed. This appeared to stem from staff members' genuine concern that the 'mistakes' of the past would be repeated, and consumers would go into the community without adequate support. As one KI explained, this culture was a source of resistance to the PCLI:

> *There's a large number of staff who are convinced that there is still no other alternative for these people other than to stay in hospital. … A lot of staff in the long-term site hospitals are older staff who remember the Richmond Report, lived through it, and saw the debacle that occurred … a large number of them were very distressed, angry and upset that this [PCLI] was proceeding.* (KI quote in Thompson et al., 2018, p. 61)

By late 2018, many of the service elements to facilitate more recovery-oriented practice were in place at the implementation sites, and it was clear that the PCLI was the major contributor to this change. Change agents or champions were present, in the form of the PCLI teams; the change was endorsed by management, via the PCLI executive leads, who had also assisted with ensuring that policies and processes were supportive of the change efforts; and collaborative, multi-disciplinary care planning processes had been implemented. In this way, the PCLI processes addressed many of the mechanisms for achieving change in recovery orientation identified in the academic literature (Gee et al., 2016). Nevertheless, most KIs acknowledged that culture change remained a significant challenge.

> *I think it takes a good 10 years to change the culture of a place. This place felt abandoned. The staff were very disillusioned.* (KI quote in Williams et al., 2018, p. 120)

A year later, the next round of interviews with KIs showed that the PCLI was starting to make inroads into culture change (Williams et al., 2019). Several contributing factors were identified, particularly the PCLI transition processes, the supportive role of the PCLI champions, and demonstrating successful transitions to the community of very complex consumers who had had long hospital stays. Tailored approaches to communication were required as each unit or ward had its own existing culture, with differences in management style, decision-making structures, and medical engagement. Acceptance of the PCLI and the changes it had brought was widespread, although not universal.

Success stories, in particular, have proved extremely important throughout the evaluation. In the early days of the program, success stories demonstrated what was possible when consumers had the right level and type of supports, and energised and inspired continued efforts by those committed to these outcomes.

The current report has demonstrated that the PCLI has challenged long-standing beliefs among some staff members, carers, and even consumers in mental health services that it is acceptable to spend years in hospital. Its mantra of 'a hospital is not a home' is now taken for granted. The task of confronting entrenched institutional cultures within implementation sites has not been comfortable or easy, but was necessary. Not only has the PCLI contributed to the transition to community living for a large proportion of the initial Stage One consumers, it has helped to influence the way staff in these services work and think about their roles. Such change is needed to prevent a renewed build-up of long stay consumers.

Despite significant shifts in attitudes and culture there is still some way to go, according to many KIs. Resistance has been fuelled by concerns about loss of employment, the closing down of long stay units for older people, and risk to consumers with complex needs. 'Ownership' or feelings of personal responsibility for consumers has also fed resistance, as have concerns that the PCLI approach implicitly criticises previous work practices of inpatient staff members.

Some KIs suggested that more accessible promotion and training of staff about the PCLI would assist in 'buy-in', with current training and promotion activities often not being accessible to clinical staff on busy wards due to workload or other priorities. The impact of the COVID-19 pandemic and associated lockdowns on the program has been far-reaching and should not be underestimated, but mental health services and aged care facilities have had access to ongoing support through the PCLI, particularly through the Stage One teams and the MH-RAC network.

7.1.6 Sustainability

Evaluation Question 6: Was the model sustainable?

For the purposes of this report, the 'model' is interpreted as the combination of PCLI resources and activities designed for the Stage One consumers, plus the MH-RAC partnerships. Sustainability is most usually defined as continuation of the benefits, activities and capacity generated by a health program (Stirman et al., 2012).

At some point in the future, a separate PCLI identity will no longer be needed; however this point has not yet been reached. This issue of branding should not be confused with the role of the Ministry. There remains support for oversight of the program with the Ministry having an important contribution in strategic direction, state-wide communication about service development and availability, monitoring of patient flow and length of stay in relation to the various models being implemented. Several KIs discussed the relationship between branding and sustainability. There is a need to maintain momentum and to continue to drive the PCLI, and it may be that it is necessary to retain the identity of the program to facilitate this central work in strategic planning, coordination of activities, and funding.

Sustainability of the activities and benefits of the PCLI will rely on continued resourcing for dedicated PCLI clinical staff, and perhaps also for project managers. Stage One teams and project managers have been at the forefront of change in the implementation of the PCLI and this has undoubtedly required a certain level of resilience and ability to reflect on the implementation of respective professional roles. As implementation progresses, teams need to stay true to the underlying principles of the PCLI as articulated in the original funding specifications for these positions. Any proposed changes in the roles of the Stage One clinicians must align with service needs and changes in the patient population, and integrated with the broader OPMH services in which the Stage One clinicians are located. The program's strategic alignment with the NSW OPMH service plan and model of care is likely to assist with establishing and maintaining role clarity, helping teams to understand their focus and fostering consistent implementation of the PCLI. Nevertheless, at this point in the program there is need for additional policy direction at the Ministry level about the continued role of Stage One teams. LHDs do not want to compromise their funding agreements and are committed to effectively managing the Stage One cohort in an integrated manner involving the PCLI staff, community mental health teams and residential aged care providers. They are looking for discussion and direction as to where to next.

Sustainability will also rely on embedding PCLI processes. Surprisingly, after more than five years of implementation, there are still reports that some staff of long stay units are unaware of the PCLI assessment toolkit and its significance to transition planning. It may be worthwhile to investigate how widespread this experience has been across the implementation sites, and possibly to invest in additional education as several years have passed since the initial, concerted effort to train mental health staff in the use of the PCLI tools.

In addition, the capacity of the MH-RAC partners to continue providing specialised support for Stage One consumers can be maintained through ongoing, regular input of support, mentoring and training by the PCLI Stage One teams, and through a commitment to move consumers through to mainstream facilities when this becomes possible. Feedback from KIs indicates clearly that the thought and care required for onward transitions should not be underestimated; indeed, these can be as complex and time-consuming as the initial transition from hospital to the MHACPI or SRACF.

More generally, the under-resourcing of community mental health services is a risk to the sustainability of PCLI consumers in the community because it limits the ability of these services to provide routine follow-up or to

respond to their needs proactively. Continuity of care in the community is a key element of the PCLI model. A significant, ongoing investment will therefore be needed to maintain consumers' health and well-being in the community regardless of whether they reside in an MH-RAC facility or in mainstream aged care.

7.1.7 Value for money

Evaluation Question 7:
Did the PCLI result in value for the money spent?

The PCLI Stage One has resulted in a substantial reduction in the cost of care for PCLI Stage One consumers. Analysis of costs of care for the 66 PCLI Stage One initial cohort consumers who have transitioned to residential aged care showed that costs were reduced by between $12.1M and $18.3M annually. Based on limited consumer outcomes data, following transition, consumers' functional abilities declined somewhat in aged care, as shown by average scores for the total RUG-ADL and the 'bed mobility' subscale. However, LSP-16 'compliance', 'anti-social' and total average scores improved, indicating less disability associated with their mental illness.

7.1.8 System efficiency

Evaluation Question 8:
How has the PCLI improved efficiency in systems/ services/workforce?

The design of the PCLI has directly addressed contextual issues that historically prevented the discharge of some consumers with SPMI from long stay hospital wards. PCLI structures and resources have improved discharge processes within MH services. KIs attributed this change to the clearer, well-documented processes around transition planning combined with the PCLI's strong focus on discharge which is changing culture and attitudes towards discharge of long stay consumers. The PCLI has played a part in upskilling LHD staff in navigating the NDIS and enabling LHD staff to take advantage of the opportunities the NDIS provides consumers.

The administrative data presented in Chapter 3 (Table 7) of this report show that the second-wave cohort is a distinct group, with more incidence of dementia, physical illness or disability, and lower levels of impairment due to symptoms of mental illness. These characteristics suggest the second-wave cohort have different needs compared with the initial cohort. Around half stay in hospital for between one and three years, after which the proportion remaining in hospital drops away sharply. A task for Stage One teams in the future will be to help treating teams facilitate transitions to community supports that address these distinctive needs, to reduce the risk of institutionalisation that led to such long stays among the initial cohort.

7.2 Conclusion

Overall, the findings from the evaluation of PCLI Stage One consumer outcomes support the conclusion that long stay patients with SPMI and issues of ageing can be managed successfully in community settings. The qualitative data on provider/system change allows a rigorous assessment of the mechanisms by which the outcomes have been achieved, which enables us to conclude with confidence that the PCLI has made a significant contribution to improved quality of transitions to community for PCLI Stage One consumers. The economic evaluation demonstrated a substantial reduction in cost of care for the 66 initial cohort Stage One consumers who have transitioned into aged care.

In *PCLI Evaluation Report 2*, we noted that an intervention or change in practice needed to fulfil three criteria in order to be considered successful and sustainable.

1. First and foremost the initiative or intervention must be acceptable to consumers and carers through its potential to improve their experience and care outcomes;
2. Second, it needs to needs to be acceptable to the various service providers engaged in its delivery; and
3. Third, it has to generate 'returns' for the health system, however that may be defined, for example, perhaps through reduced clinical variation, improved productivity or more efficient service delivery models.

The findings of this study have demonstrated that each of these criteria are now being met, to a large extent, by the PCLI Stage One. One limitation of the current report is the lack of new, first-hand data on consumer and carer experiences; however previous evaluation reports containing this information have demonstrated the acceptability of the PCLI transition processes and outcomes to the Stage One cohort and their families.

The PCLI Stage One is underpinned by the concept of partnership, with health services working in partnership with aged care providers and consumers to identify appropriate and sustainable accommodation and care solutions. These arrangements have been facilitated by dedicated investments by the Ministry of Health and LHDs in funding highly experienced senior clinicians to support transition planning, and resourcing to support aged care partners in their redesign of services and staffing profiles.

Evidence from the evaluation shows the PCLI Stage One is contributing to good outcomes, including significantly reduced costs of care for those transitioned to aged care homes, without detrimental effects on consumers' health and wellbeing, on average. The program has provided the opportunity for consumers to experience new horizons, health services to embed new practices and pathways, and aged care services to be resourced to provide a viable and sustainable network of accommodation and care services for older people with long-term mental health issues.

References

ABS (2020) Australian National Accounts: National Income, Expenditure and Product, June 2020, Cat. no. 5206.0, Series ID: A2304687R. Canberra: Australian Bureau of Statistics.

Access Economics (2010) Extended Care Paramedic Program – updated economic evaluation. Unpublished report.

Aged Care Financing Authority (2020) Eighth report on the Funding and Financing of the Aged Care Industry. Australian Government Department of Health: Canberra.

Australian Government (2020) My Aged Care (https://www.myagedcare.gov.au/).

Australian Government Department of Health (2017) Aged Care Funding Instrument (ACFI) User Guide. Retrieved from: https://www.health.gov.au/resources/publications/aged-care-funding-instrument-acfi-user-guide.

Australian Government Department of Health (2020a) Schedule of Subsidies and Supplements for Aged Care. Retrieved from: https://www.health.gov.au/resources/publications/schedule-of-subsidies-and-supplements-for-aged-care.

Australian Government Department of Health (2020b) Aged Care Funding Instrument (ACFI) Monthly Reports. Retrieved from https://www.health.gov.au/resources/publications/aged-care-funding-instrument-acfi-monthly-reports.

Burgess, P., Trauer, T., Coombs, T., McKay, R., & Pirkis, J. (2009). What does 'clinical significance' mean in the context of the Health of the Nation Outcome Scales? Australasian Psychiatry, 17(2), 141-148. doi:10.1080/10398560802460453

Australian Government Department of Health (2020c) Aged Care Financing Authority (ACFA). Retrieved from: https://www.health.gov.au/committees-and-groups/aged-care-financing-authority-acfa.

Australian Government Department of Social Services (2019) Younger People in Residential Aged Care – Action Plan. Retrieved from: https://www.dss.gov.au/disability-and-carers/programmes-services/for-people-with-disability/younger-people-with-disability-in-residential-aged-care-initiative.

Best A, Greenhalgh T, Lewis S, Saul JE, Carroll S and Bitz J (2012) Large-system transformation in health care: a realist review. Milbank Quarterly, 90(3), 421-456.

Comans T, et al. (2020) Research Paper 9 - Cost of residential aged care. University of Queensland. Retrieved from: https://agedcare.royalcommission.gov.au/publications/research-paper-9-cost-residential-aged-care.

Commonwealth of Australia (2013). A national framework for recovery-oriented mental health services: Guide for practitioners and providers.

Davis L, Fulginiti A and Kriegel L (2012). Deinstitutionalization? Where have all the people gone? Current Psychiatry Reports, 14, 259-269.

Eagar K, McNamee J, Gordon R, et al. (2019) The Australian National Aged Care Classification (AN-ACC). The Resource Utilisation and Classification Study: Report 1. Australian Health Services Research Institute, University of Wollongong. ISBN: 978-1-74128-295-5.

Eagar K, Westera A and Kobel C (2020) Australian residential aged care is understaffed. Medical Journal of Australia, 212: 507-508.e1.

Faculty of Psychiatry of Old Age (2004) The management and accommodation of older people with severe and persistent challenging behaviours in residential care. Sydney, NSW: The Royal Australian and New Zealand College of Psychiatrists, New South Wales.

Fries BE, Schneider DP, Foley WJ, Gavazzi M, Burke R and Cornelius E (1994) Refining a case-mix measure for nursing homes: Resource Utilization Groups (RUG-III) Medical Care, 32(7), 668-85.

Gale NK, Heath G, Camero, E, Rashid, S and Redwood S (2013) Using the framework method for the analysis of qualitative data in multi-disciplinary health research. BMC Medical Research Methodology, 13,117-125.

Health Policy Analysis (2013) Economic evaluation of the Mental Health Aged-Care Partnership Initiative – Final evaluation report. Sydney: NSW Ministry of Health.

Health Outcomes International (2011) Evaluation of the Mental Health Aged Care Partnership Initiative (MHACPI) (Unpublished).

IHPA (2019a) National Efficient Price Determination 2019-20. Sydney: Independent Hospital Pricing Authority.

IHPA (2019b) Technical Specifications 2019-20 National Pricing Model. Sydney: Independent Hospital Pricing Authority.

IHPA (2020) National Hospital Cost Data Collection Report: Public Sector, Round 22 (Financial Year 2017-18). Sydney: Independent Hospital Pricing Authority. Retrieved from: https://www.ihpa.gov.au/sites/default/files/round_22_nhcdc_report_public_sector_round_22_2017-18_-_pdf_version.pdf.

Kakuma R, Hamilton B, Brophy L, Minas H and Harvey C (2017) Models of care for people with severe and enduring mental illness – Evidence Check Review prepared for the NSW Ministry of Health. University of Melbourne.

Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand SLT, Zaslavsky AM (2002) Short screening scales to monitor population prevalences and trends in non-specific psychological distress. Psychological Medicine, 32(6), 959-976.

Masso M, Coombs T, Williams K, Bird S, Westera A, Kobel C, Moxham L, Fildes D, Gordon R (2017) Pathways to Community Living Initiative Evaluation Plan. Wollongong, NSW: Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

Matheson SL and Carr VJ (2015) Transitioning long stay psychiatric inpatients to the community. Sydney, Schizophrenia Research Institute; Research Unit for Schizophrenia Epidemiology, School of Psychiatry, University of New South Wales.

NSW Health, Mental Health Branch (2019) Older People's Mental Health (OPMH) services. Retrieved from: https://www.health.nsw.gov.au/mentalhealth/Pages/services-opmh.aspx.

Mental Health Commission of NSW (2018) Paving the way home: lessons from My Choice: Pathways to Community Living Initiative – Spotlight on Reform. Sydney: Mental Health Commission of NSW.

National Disability Insurance Agency (2019) People with a psychosocial disability in the NDIS 30 June 2019. Retrieved from: https://data.ndis.gov.au/media/1683/download.

National Disability Insurance Agency (2020) Data and insights (https://data.ndis.gov.au/reports-and-analyses/people-psychosocial-disability).

NSW Health (2006) NSW Service Plan for Specialist Mental Health Services for Older People (SMHSOP) 2005–2015. NSW: A new direction for Mental Health. NSW Department of Health: North Sydney. Retrieved from https://www.health.nsw.gov.au/mentalhealth/resources/Pages/nswsmhsop-serviceplan-2005-2015.aspx.

NSW Health (2014) Strengthening mental health care in NSW. Ministry of Health, Sydney.

NSW Health (2015) My Choice: Pathways to Community Living Initiative, Getting to Know You, Planning and Assessment Booklet, April 2015.

NSW Health (2017) NSW Older People's Mental Health Services Service Plan 2017-2027. Retrieved from: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2017_022.pdf?utm_source=newsletter_1817&utm_medium=email&utm_campaign=communitynet-sector-resources-publications-e-news-19-january-2018

NSW Health (2018) Planning, Assessment and Follow Up Guide.

Rosen A, Hadzi-Pavlovic D and Parker F (1989) The life skills profile: a measure assessing function and disability in schizophrenia. Schizophrenia Bulletin, 15(2), 325-37.

Royal Commission into Aged Care Quality and Safety (2019) Interim Report: Neglect. Retrieved from: https://agedcare.royalcommission.gov.au/publications/interim-report.

Shergill SS, Shankar KK, Seneviratna K and Orrell MW (1999) The validity and reliability of the Health of the Nation Outcome Scales (HoNOS) in the elderly. Journal of Mental Health, 8(5), 511-521.

Steering Committee for the Review of Government Service Provision (2020) Report on Government Services 2020. Canberra: Productivity Commission.

Stirman SW, Kimberley J, Cook N, Calloway A, Castro F and Charns M (2012) The sustainability of new programs and innovations: a review of the empirical literature and recommendations for future research. Implementation Science, 7, 17-36.

Thompson C, Williams K and Masso M (2018a) Pathways to Community Living Initiative – Evaluation Report 1: Building the foundation for transformational change. Wollongong: Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

Thompson C, Williams K, Masso M, O'Shea P and Coombs T (2018b) Pathways to Community Living Initiative – Evaluation Report 2: Demonstrating progress and learning as we go. Wollongong: Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

Thompson C, Williams K, Morris D, Lago L, Kobel C, Quinsey K, Eckermann S, Andersen P and Masso M (2014) HWA Expanded Scopes of Practice Program Evaluation: Extending the Role of Paramedics Sub-Project Final Report. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

Waldemar AK, Arnfred SM, Petersen L, and Korskbek L (2016) Recovery-oriented practice in mental health inpatient settings: a literature review. Psychiatric Services, 67, 596-602.

Wing J, Curtis R and Beevor A (1996) HoNOS: Health of the nation outcome scales. Report on Research and Development. London: Royal College of Psychiatrists.

Williams K, Thompson C, Westera A, O'Shea P, Morris D, Kobel C and Coombs T (2019a) Pathways to Community Living Initiative – Evaluation Report 3: Presenting evidence of practice change. Retrieved from Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong. Wollongong.

Williams K, Kobel C, Bird S, Westera A, Thompson C, O'Shea P, Coombs T and Grootemaat P (2019b) Pathways to Community Living Initiative – Evaluation Report 4: Strengthening Partnerships Through Collaboration. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong, Wollongong.

Appendix: Additional tables of results

Consumer health status before discharge

The following figures and tables supplement the results presented in Section 3.3.

Figure 4: PCLI Stage One cohorts compared on K10 total score

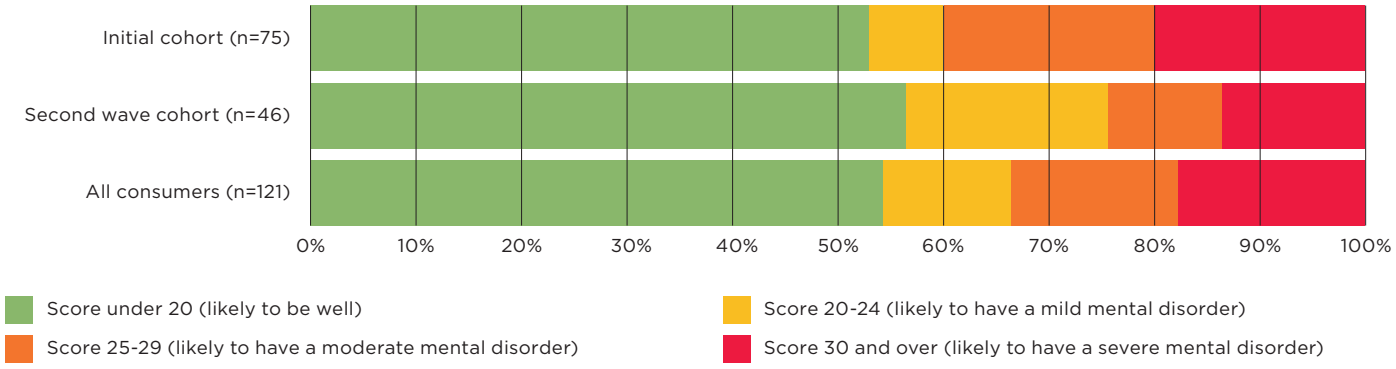


Table 17: PCLI Stage One cohorts compared on the HoNOS subscales

Subscale	Initial cohort			Second-wave cohort			All consumers		
	n	mean %	SD	n	mean %	SD	n	mean %	SD
Behaviour	78	10.0	10.9	42	8.5	12.0	120	9.5	11.2
Impairment	78	36.7	22.2	42	41.7	24.6	120	38.4	23.1
Symptom	75	31.4	17.3	40	23.3	16.3	115	28.6	17.3
Social	72	32.3	21.3	40	29.7	23.5	112	31.4	22.0
Total	**70**	**27.0**	**12.8**	**39**	**25.3**	**13.8**	**109**	**26.4**	**13.1**

Note. Mean % is the average of the standardised scores.

Table 18: Clinician rated HoNOS assessments by PCLI Stage One cohort

HoNOS item	Initial cohort %				Second-wave cohort (%)				All consumers (%)			
	0-1		2-4		0-1		2-4		0-1		2-4	
	n	%	n	%	n	%	n	%	n	%	n	%
Overactive, aggressive, disruptive or agitated behaviour	58	74.4	20	25.6	37	88.1	5	11.9	95	79.2	25	20.8
Non-accidental self-injury	74	94.9	4	5.1	39	92.9	3	7.1	113	94.2	7	5.8
Problem drinking or drug taking	78	100.0	0	0.0	40	95.2	2	4.8	118	98.3	2	1.7
Cognitive problems	49	62.8	29	37.2	29	69.0	13	31.0	78	65.0	42	35.0
Physical illness or disability problems	47	60.3	31	39.7	16	38.1	26	61.9	63	52.5	57	47.5
Problems associated with hallucinations and delusions	31	40.3	46	59.7	26	63.4	15	36.6	57	48.3	61	51.7
Problem with depressed mood	62	80.5	15	19.5	33	78.6	9	21.4	95	79.8	24	20.2
Other mental and behavioural problems	44	57.9	32	42.1	31	77.5	9	22.5	75	64.7	41	35.3
Problems with relationships	35	46.1	41	53.9	28	68.3	13	31.7	63	53.8	54	46.2
Problems with activities of daily living	33	42.9	44	57.1	22	52.4	20	47.6	55	46.2	64	53.8
Problems with living conditions	64	84.2	12	15.8	32	78.0	9	22.0	96	82.1	21	17.9
Problems with occupation and activities	51	67.1	25	32.9	27	67.5	13	32.5	78	67.2	38	32.8

Note. 0-1 rating is not clinically significant; 2-4 rating is clinically significant.

Table 19: PCLI Stage One cohorts compared on HoNOS 65+

Subscale	Initial cohort			Second-wave cohort			All consumers		
	n	mean %	SD	n	mean %	SD	n	mean %	SD
Behaviour	74	12.5	10.9	55	12.0	10.1	129	12.3	10.5
Impairment	74	55.4	28.6	55	48.4	30.6	129	52.4	29.6
Symptom	70	31.5	18.7	51	23.9	17.6	121	28.3	18.6
Social	68	35.0	19.6	51	31.1	23.5	119	33.4	21.3
Total	**64**	**31.8**	**14.5**	**48**	**26.2**	**15.0**	**112**	**29.4**	**14.9**

Note. Mean and SD are based on standardised scores to enable direct comparisons between subscales.

Table 20: Clinician-rated HoNOS 65+ assessments by PCLI Stage One cohort

HoNOS 65+ item	Initial cohort %				Second-wave cohort (%)				All consumers (%)			
	0-1		2-4		0-1		2-4		0-1		2-4	
	n	%	n	%	n	%	n	%	n	%	n	%
Overactive, aggressive, disruptive or agitated behaviour	46	62.2	28	37.8	32	58.2	23	41.8	78	60.5	51	39.5
Non-accidental self-injury	73	98.6	1	1.4	53	96.4	2	3.6	126	97.7	3	2.3
Problem drinking or drug taking	74	100.0	0	0.0	55	100.0	0	0.0	129	100.0	0	0.0
Cognitive problems	32	43.2	42	56.8	21	38.2	34	61.8	53	41.1	76	58.9
Physical illness or disability problems	22	29.7	52	70.3	26	47.3	29	52.7	48	37.2	81	62.8
Problems associated with hallucinations and delusions	31	43.7	40	56.3	34	63.0	20	37.0	65	52.0	60	48.0
Problem with depressed mood	60	83.3	12	16.7	38	71.7	15	28.3	98	78.4	27	21.6
Other mental and behavioural problems	39	52.7	35	47.3	36	67.9	17	32.1	75	59.1	52	40.9
Problems with relationships	33	45.8	39	54.2	30	55.6	24	44.4	63	50.0	63	50.0
Problems with activities of daily living	19	25.7	55	74.3	21	38.9	33	61.1	40	31.3	88	68.8
Problems with living conditions	61	83.6	12	16.4	44	84.6	8	15.4	105	84.0	20	16.0
Problems with occupation and activities	48	69.6	21	30.4	40	78.4	11	21.6	88	73.3	32	26.7

Note. 0-1 rating is not clinically significant; 2-4 rating is clinically significant.

Table 21: PCLI Stage One cohorts compared on LSP-16

Subscale	Initial cohort			Second-wave cohort			All consumers		
	n	mean %	SD	n	mean %	SD	n	mean %	SD
Withdrawal	109	50.9	24.7	57	44.2	30.3	166	48.6	26.9
Self-care	109	55.2	23.8	57	55.7	30.2	166	55.3	26.1
Compliance	109	40.6	30.3	57	40.4	33.0	166	40.5	31.2
Antisocial	109	39.4	27.7	57	35.4	32.9	166	38.1	29.6
Total	**109**	**47.4**	**22.5**	**57**	**44.8**	**28.4**	**166**	**46.5**	**24.7**

Note. Mean and SD are based on standardised scores to enable direct comparisons between subscales.

Table 22: PCLI Stage One cohorts compared on the RUG-ADL items

RUG-ADL Score		Initial cohort		Second-wave cohort		All consumers	
		n	%	n	%	n	%
Bed mobility	Independent or supervision only (1)	51	64.6	44	78.6	95	70.4
	Limited physical assistance (3)	14	17.7	6	10.7	20	14.8
	Other than two person physical assist (4)	2	2.5	0	0.0	2	1.5
	Two or more person physical assist (5)	12	15.2	6	10.7	18	13.3
Toileting	Independent or supervision only (1)	40	50.6	31	55.4	71	52.6
	Limited physical assistance (3)	19	24.1	10	17.9	29	21.5
	Other than two person physical assist (4)	3	3.8	3	5.4	6	4.4
	Two or more person physical assist (5)	17	21.5	12	21.4	29	21.5
Transfers	Independent or supervision only (1)	48	60.8	38	67.9	86	63.7
	Limited physical assistance (3)	16	20.3	10	17.9	26	19.3
	Other than two person physical assist (4)	1	1.3	1	1.8	2	1.5
	Two or more person physical assist (5)	14	17.7	7	12.5	21	15.6
Eating	Independent or supervision only (1)	50	63.3	39	69.6	89	65.9
	Limited physical assistance (2)	17	21.5	11	19.6	28	20.7
	Extensive assistance/total dependence/ tube fed (3)	12	15.2	6	10.7	18	13.3

Health outcomes following discharge from hospital

Tables below supplement results presented in Section 3.5.

Table 23: HoNOS 65+ – paired assessments by cohort

Subscale	Initial cohort			Second-wave cohort			All consumers					
	Baseline	Follow-up	Difference (%)	Baseline	Follow-up	Difference (%)	Baseline	Follow-up	Difference (%)	Baseline	Follow-up	Difference (%)
	mean % (SD)	mean % (SD)	n pairs	mean (p-value)	mean % (SD)	mean % (SD)	n pairs	mean (p-value)	mean % (SD)	mean % (SD)	n pairs	mean (p-value)
Behaviour	10.3 (11.5)	11.1 (8.8)	30	0.8 (0.676)	11.7 (8.9)	9.9 (8.3)	32	-1.8 (0.256)	11.0 (10.2)	10.5 (8.5)	62	-0.5 (0.700)
Impairment					47.7 (30.7)	59.0 (25.6)	32	11.3 (0.009)	50.6 (28.6)	59.6 (25.8)	61	9.0 (0.001)
Symptom					22.3 (15.7)	23.9 (17.3)	31	1.6 (0.645)	24.0 (15.6)	27.5 (17.5)	59	3.5 (0.129)
Social					30.4 (20.8)	29.8 (14.2)	31	-0.6 (0.866)	33.0 (19.5)	32.0 (15.5)	58	-1.0 (0.700)
Total					**25.6 (14.1)**	**27.8 (8.9)**	**30**	**2.2 (0.314)**	**27.5 (14.0)**	**30.0 (11.6)**	**55**	**2.5 (0.108)**

Note. Subscale scores have been standardised to represent a percentage (i.e. possible range of 0 to 100) to enable direct comparisons. Low scores indicate low severity of problems.

Table 24: LSP-16 – paired assessments by cohort

Subscale	Initial cohort[1]			Second-wave cohort[2]			All consumers[3]		
	Baseline	Follow-up	Difference (%)	Baseline	Follow-up	Difference (%)	Baseline	Follow-up	Difference (%)
	mean % (SD)	mean % (SD)	mean (p-value)	mean % (SD)	mean % (SD)	mean (p-value)	mean % (SD)	mean % (SD)	mean (p-value)
Withdrawal	49.3 (22.0)	45.8 (19.4)	-3.4 (0.435)				50.7 (25.7)	48.3 (24.2)	-2.4 (0.521)
Self-care	50.6 (18.1)	47.1 (21.1)	-3.5 (0.247)				56.8 (23.3)	49.9 (24.1)	-6.9 (0.035)
Compliance	32.0 (27.6)	24.2 (23.3)	-7.8 (0.024)				39.8 (29.1)	27.6 (22.2)	-12.3 (< 0.001)
Antisocial	35.8 (24.1)	22.3 (21.2)	-13.5 (< 0.001)				38.6 (27.1)	25.0 (21.9)	-13.6 (< 0.001)
Total	**43.1 (18.0)**	**36.3 (16.7)**	**-6.8 (0.007)**				**47.6 (21.8)**	**39.1 (18.3)**	**-8.5 (0.001)**

Note. Subscale scores have been standardised to represent a percentage (i.e. possible range of 0 to 100) to enable direct comparisons. Low scores indicate better levels of functioning.
1There were 34 paired assessments available for analysis for all subscales.
2There were 24 paired assessments available for analysis for all subscales.
3There were 58 paired assessments available for analysis for all subscales.

Table 25: RUG-ADL – paired assessments by cohort

Item	Initial cohort[1]							Second-wave cohort[2]							All consumers[3]						
	More dependent		No change		Less dependent		Difference	More dependent		No change		Less dependent		Difference	More dependent		No change		Less dependent		Difference
	n	%	n	%	n	%	mean (p-value)	n	%	n	%	n	%	mean (p-value)	n	%	n	%	n	%	mean (p-value)
Bed mobility	8	26.7	21	70.0	1	3.3	0.5 (0.031)	3	10.0	25	83.3	2	6.7	0.1 (1.000)	11	18.3	46	76.7	3	5.0	0.3 (0.041)
Toileting	8	26.7	18	60.0	4	13.3	0.3 (0.327)	3	10.0	25	83.3	2	6.7	0.1 (0.813)	11	18.3	43	71.7	6	10.0	0.2 (0.278)
Transfers	5	16.7	24	80.0	1	3.3	0.3 (0.156)	3	10.0	26	86.7	1	3.3	0.1 (0.625)	8	13.3	50	83.3	2	3.3	0.2 (0.072)
Eating	6	20.0	22	73.3	2	6.7	0.2 (0.172)	5	16.7	23	76.7	2	6.7	0.1 (0.453)	11	18.3	45	75.0	4	6.7	0.2 (0.068)
Total	**11**	**36.7**	**12**	**40.0**	**7**	**23.3**	**1.4 (0.036)**	**9**	**30.0**	**19**	**63.3**	**2**	**6.7**	**0.4 (0.265)**	**20**	**33.3**	**31**	**51.7**	**9**	**15.0**	**0.9 (0.016)**

Note. Low scores indicate better levels of functioning.
1 There were 30 paired assessments available for analysis for all subscales.
2 There were 30 paired assessments available for analysis for all subscales.
3 There were 60 paired assessments available for analysis for all subscales.

Predictors of discharge from hospital

Tables below supplement the results presented in Section 3.6.

Table 26: Baseline variables by discharge status – numerical data

Variable	All PCLI Stage One consumers (N=168)[1]						
	Discharged (N=118)			Ongoing (N=50)			p[2]
	n	mean %	SD	n	mean %	SD	
Age	118	67	10	50	67.5	6.5	0.785
Length of stay[3]	118	7.4	6.6	50	11.3	9.8	0.004
HoNOS							
Behaviour	76	1.1	1.3	38	1.3	1.5	0.530
Impairment	76	3.3	1.9	38	2.6	1.6	0.065
Social	72	4.8	3.4	34	5.4	4	0.404
Symptom	73	3.3	1.9	36	3.8	2.5	0.266
Total	70	12.3	6.2	33	13.3	6.9	0.458
HoNOS 65+							
Behaviour	80	1.4	1.2	27	1.3	1.2	0.704
Impairment	80	4	2.3	27	2.9	2	0.022
Social	74	5	3.2	24	4.2	3.4	0.269
Symptom	77	2.9	2	26	3.4	1.9	0.278
Total	71	13.1	6.9	24	12.1	6.3	0.548
LSP-16							
Anti-social	99	4.4	3.5	42	3.6	3	0.206
Compliance	99	3.3	2.7	42	2.9	1.8	0.328
Self-care	99	8.2	3.7	42	6.8	3	0.034
Withdrawal	99	5.5	3.3	42	5.4	2.7	0.816
Total	99	21.4	11.4	42	18.7	8.4	0.161
K10 Total	74	21.3	9.3	39	18.6	8.6	0.132
RUG-ADL	**n**	**median**	**IQR**	**n**	**median**	**IQR**	
Bed mobility	84	1	2	29	1	0	0.021
Eating	84	1	1	29	1	0	0.025
Toileting	84	1	2	29	1	0	0.019
Transfers	84	1	2	29	1	0	0.011
Total	84	5.5	5	29	4	2	0.008

1 26 consumers were excluded from the analysis because they had died in hospital during their index stay.
2 These p-values refer to the log odds of being discharged in a univariate logistic regression.
3 Length of stay is reported in six-month increments and as it is recorded in the HIE. This does not take into account any previous stays. Length of stay for PCLI Stage One consumers who remained in hospital was calculated as at 31 December 2019.

Table 27: Baseline variables by discharge status – categorical data

Variable	Initial cohort (N=168)[1]				
	Discharged (N=118)		Ongoing (N=50)		p[2]
	n	%	n	%	
Gender					**0.089**
Male	66	55.9	35	70.0	0.530
Female	52	44.1	15	30.0	0.065
Cohort					**0.467**
Initial cohort	66	55.9	31	62.0	0.704
Second-wave cohort	52	44.1	19	38.0	0.022

1 26 consumers were excluded from the analysis because they had died in hospital during their index stay.
2 These p-values refer to the log odds of being discharged in a univariate logistic regression.

Consumer journeys after transition

The table below supplements results presented in Section 3.7.

Table 28: Characteristics of the cohort in MHACPIs and Specialist RACFs

Characteristic	MHACPI (N=33)		Specialist RACF (N=10)	
	n	%	n	%
Gender				
Male	18	54.5	5	50.0
Female	15	45.5	5	50.0
Age group				
Younger than 65	7	21.2		
65-74	15	45.5		
75-84	8	24.2		
85 and older	3	9.1		
Primary mental health diagnosis				
Schizophrenia	15	45.5	8	80.0
Dementia (includes all types)	8	24.2	0	0.0
Depression	4	12.1	0	0.0
All other diagnoses	6	18.2	2	20.0
Secondary mental health diagnosis				
Depression	10	30.3	2	20.0
Dementia (includes all types)	6	18.2	0	0.0
All other diagnoses	17	51.5	8	80.0
Location				
Within referring LHD	24	72.7	7	70.0
Outside referring LHD	7	21.2	0	0.0
Information missing	2	6.1	3	30.0
Discharge status				
Not discharged	22	66.7	10	100.0
Death	1	3.0		
Discharged to hospital (mental health unit)	2	6.1		
Discharged to generalist RACF	8	24.2		

Note: Age was not reported for most PCLI Stage One consumers in Specialist RACFs.

Notes