



**QCMHR**  
Queensland Centre for  
Mental Health Research

# Mental Health-Hospital in the Home Evaluation

EVALUATION FRAMEWORK | JANUARY 2026



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# Acronyms

Acronym	Definition
ACT	Acute Care Team
AITU	Analytics, Improvement and Transformation Unit
AO	Administration Officer
AMHU	Adult Mental Health Unit
AWA	Absent Without Approval
CALD	Culturally and Linguistically Diverse
CCT	Community Continuing Care Team
CCU	Community Care Unit
CES	Carer Experience of Service
CIMHA	Consumer Integrated Mental Health and Application
C/L	Consultation Liaison
CNC	Clinical Nurse Consultant
ED	Emergency Department
EDC	Emergency Data Collection
FO	Forensic Order
FY	Financial Year
GP	General Practitioner
HBCIS	Hospital Based Corporate Information System
HHOT	Homeless Health Outreach Team
HHS(s)	Hospital and Health Service(s)
HITH	Hospital in the Home
HoNOS	Health of the Nation Outcome Scales
KEQ	Key Evaluation Questions
LCT	Limited Community Treatment
MH	Mental Health
MHA	Mental Health Act
MHAOD	Mental Health, Alcohol and Other Drugs
MHAODSPB	Mental Health, Alcohol and Other Drugs Strategy and Planning Branch
MHEC	Mental Health Establishments Collection
MH-HITH	Mental Health-Hospital in the Home
MIRT	Mobile Intensive Rehabilitation Team
MOS	Model of Service
NDIS	National Disability Insurance Scheme
NGO	Non-Governmental Organisation
NQEDS	North Queensland Eating Disorder Service
OPMHS	Outpatient Mental Health Service



Acronym	Definition
PEC	Psychiatric Emergency Centre
QCMHR	Queensland Centre for Mental Health Research
QHAPDC	Queensland Hospital Admitted Patient Data Collection
RE-AIM	Reach, Effectiveness, Adoption, Implementation and Maintenance
REACH	Risk Reduction by Engaging in Assertive Community Healthcare
RN	Registered Nurse
TA	Treatment Authority
TSO	Treatment Support Order
TRS	Transitional Recovery Service
YES	Your Experience Survey

## Glossary

Term	Definition
<b>Outcomes Evaluation</b>	An outcomes evaluation shows the extent to which the program is achieving the outcomes it is designed to achieve, and whether the program is effective and meeting its objectives.
<b>Process Evaluation</b>	A process evaluation shows how well a program is working, the extent to which the program is being implemented as intended, and whether the program is accessible and acceptable to its target population. A process evaluation also allows for monitoring of the activities and program plans and making improvements alongside implementation.
<b>Program Logic Model</b>	A program logic model articulates how a program is intended to work. It provides a visual representation of the relationships between the program's inputs, activities, outputs and expected outcomes. A program logic model can facilitate effective evaluation of programs by helping to establish what to evaluate, determine key evaluation questions and identify relevant information to address those questions. It also provides a simple, clear graph representation of how a program works that helps communicate the intent of a program to stakeholders, including program staff and funders.
<b>RE-AIM Framework</b>	The RE-AIM (Reach, Effectiveness, Adoption, Implementation, Maintenance) framework provides a practical means of evaluating health interventions. This framework was developed by Glasgow et al., (1999).
<b>Socioecological Model</b>	The Socioecological Model is a framework put in place to understand the multifaceted levels within a society and how individuals and the environment interact within a social system. This model was developed by Bronfenbrenner (1979).



# 1. Background

## 1.1. Mental Health - Hospital in the Home Services

A key initiative under *Better Care Together: A plan for Queensland's state-funded mental health, alcohol and other drugs services to 2027* funding is expanding Hospital in the Home model to support mental health, alcohol and other drugs (MHAOD) treatment and care. The Mental Health Hospital in the Home program (MH-HITH) provides clinically appropriate acute mental health treatment and care within the home setting, as a substitution to admission to a physical hospital bed. The service is for adult consumers who are acutely unwell, require an acute inpatient admission and whose risk formulation indicates that they can safely receive care within the home environment.

According to the state-wide model of service, the aims of Queensland Health's MH-HITH program are to: (a) resolve acute episode of care; (b) provide medication reconciliation; (c) improve consumers' well-being, self-efficacy, autonomy and management; and (d) improve mental health literacy for consumers and carers. More broadly speaking, HITH programs generally seek to alleviate pressure on the availability of inpatient beds.

The MH-HITH program will operate in seven Hospital and Health Services (HHSs), commenced with Wide Bay in 2020 and gradually rolling out across the other HHSs with Darling Downs being the final 'go live' site in 2026. At the time of writing, the program is currently in operation at five locations. An overview of the program sites and their operational status is summarised below in **Table 1**.

**Table 1. Overview of MH-HITH sites in Queensland.**

HHS	Physical location	Status
Cairns & Hinterland HHS	Cairns Central Business District	Planned to open in second half of 2025.
Gold Coast HHS	Gold Coast University Hospital	Commenced operations in July 2023.
Metro South HHS	Logan Central Adult Addiction and Mental Health Services	Commenced operations in March 2024.
Metro North HHS	Royal Brisbane Women's Hospital	Commenced operations in August 2024.
Darling Downs HHS	Toowoomba	Planned to open in July 2026.
Wide Bay HHS	Hervey Bay Hospital	Commenced operations in 2020/2021.
West Moreton HHS	Ipswich Hospital	Commenced operations in October 2023.



## 1.2. Project scope and aims

The Department of Health, Mental Health, Alcohol and Other Drug Strategy and Planning Branch (MHAODSPB) requested that the Queensland Centre for Mental Health Research (QCMHR) develop an evaluation framework for the MH-HITH services that will be operational across seven Queensland HHSs by FY26/27. This evaluation framework and implementation plan (methodology) can be used to conduct future MH-HITH service evaluations.

## 1.3. Purpose of this document

This document presents the evaluation framework that has been developed to guide a process and outcomes evaluation of the MH-HITH service in Queensland. It contains:

- An 'as is' service delivery summary of the MH-HITH services across the state, including inputs, activities and outputs of the services that have assisted in formulating the program logic model and key evaluation questions (see Section 2) (*this is an iterative document and subject to change with the evolution of the models of service*);
- The program logic model for the state-wide MH-HITH model of care (see Section 3) (*this is an iterative document and is subject to change with the evolution of the models of service*);
- The key evaluation questions (see Section 4) (*this is an iterative document and is subject to change with the evolution of the models of service*);
- The proposed data sources that can be used to answer the key evaluation questions (see Section 5); and
- The implementation plan (methodology) for conducting the evaluation, with the potential for ongoing collection of data to support the ongoing monitoring and evaluation of the services at an individual and state-wide level (see Section 6).

## 1.4 Development of the Evaluation Framework

The evaluation framework was theoretically framed by the Socioecological Model (Bronfenbrenner, 1979; World Health Organization, 2002) and the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation and Maintenance) (Glasgow et al., 2019).

### 1.4.1 Socioecological Model

QCMHR has used the Socioecological Model to describe MH-HITH services in Queensland. This model provides a useful framework to structure interventions and evaluations through understanding how the micro-, meso- and macro- levels of a system interact with each other and their environment to work effectively (Bronfenbrenner, 1979; World Health Organization, 2002). Queensland's MH-HITH forms one part of a complex mental health care system for individuals experiencing an acute mental health issue. The micro-level consists of individuals with lived experience of MH-HITH; the meso-level is comprised of the MH-HITH staff who deliver and manage the service; and the macro-level contains broader staff and stakeholders within the health system that interact with, and influence the delivery of, MH-HITH. The evaluation framework of the state-wide MH-HITH services was designed to consider the complex, bi-directional interactions between each of these socioecological levels.



## 1.4.2 RE-AIM framework

The RE-AIM framework is an empirically validated and widely used framework for planning and evaluating public health and community services (Glasgow et al., 2019). It provides structure and depth to evaluations by examining five key domains: Reach, Effectiveness, Adoption, Implementation and Maintenance. The RE-AIM framework maps closely to the consumer journey and so complements the Socioecological Model through assessing the RE-AIM domains at the micro, meso and macro levels (Holtrop et al., 2021).

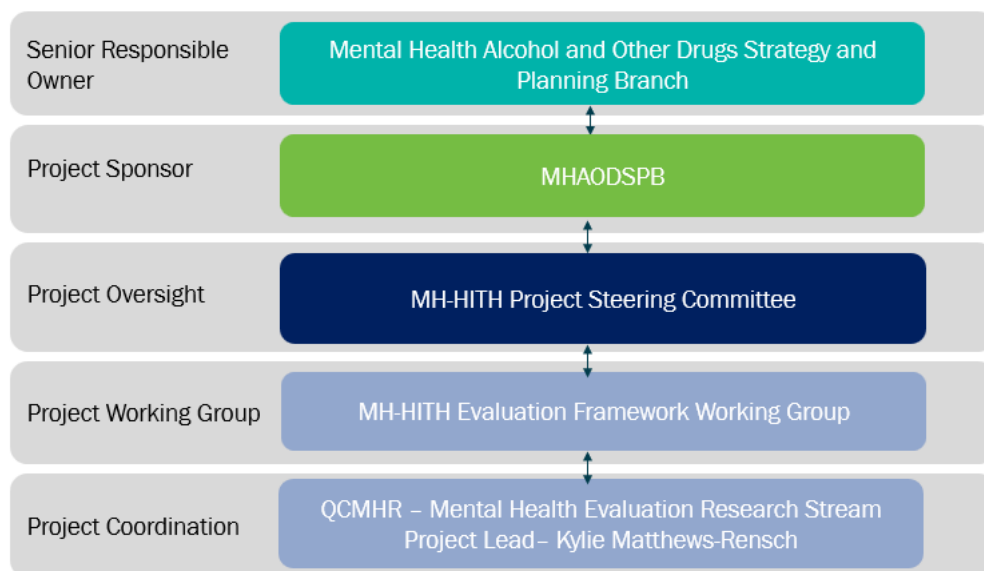


## 2. Methods

Before commencing the design of the evaluation framework, the governance of this project was endorsed by MHAODSPB (see **Section 2.1**). The MH-HITH evaluation framework was informed by five key methods, including review of state-wide and individual HHS service documentation (see **Section 2.2**), a literature review (see **Section 2.3**), individual consultation with service stakeholders, MHAODSPB and Analytics, Improvement and Transformation Unit (AITU) staff MHAOD Branch (see **Section 2.4**), consultation with MHAODSPB, service stakeholders, and AITU staff (see **Section 2.5**), and consultation with people with lived/living experience of MH-HITH services (see **Section 2.6**).

### 2.1 Governance structure

The governance structure for the creation of the MH-Evaluation Framework can be seen in Figure 1. The MH-HITH Evaluation Framework Working Group provided clinical, program and lived experience expertise to assist in the design of the evaluation framework and will be discussed further in **Sections 2.4 and 2.5**.



*Figure 1: MH-HITH evaluation framework project governance*

### 2.2 Documentation review

QCMHR were provided with the state-wide MH-HITH Model of Service. To enhance understanding of the implementation of each of the MH-HITH services, the key contacts for each site were requested to share their service documentation with QCMHR. For the majority, this included local HHS Models of Service. QCMHR examined the components of each service (see **Section 3**), to furnish the program logic model (see **Section 4**) and to create Key Evaluation Questions (see **Section 5**).



## 2.3 Literature review

QCMHR undertook a rapid review of the grey and peer-reviewed literature on MH-HITH programs which have been implemented both nationally and globally, with a view to understand the evidence-base for the effectiveness of these services. Within Australia, one Victorian based evaluation was found (Cube Group Management Consulting, 2022). Internationally, key research was located from Switzerland (Stulz, et al., 2020), Italy (van Asperen, 2022) and Germany (Baumgardt, 2021). A summary of the literature reviewed can be seen in **Appendix A**.

## 2.4 Individual consultations with MH-HITH service stakeholders and AITU staff

QCMHR conducted individual consultations with key contacts from each of the MH-HITH services and with staff from AITU. These consultations enabled furnishing of the draft program logic model and key evaluation questions prior to meeting with the MH-HITH Evaluation Framework Working Groups.

## 2.5 Consultation with the MH-HITH Evaluation Framework Working Group (staff)

A range of MHAODSPB and AITU staff, MH-HITH staff including senior leadership staff, organisational management staff, clinical personnel, and lived experience workers volunteered to be part of the MH-HITH Evaluation Framework Working Group (see **Appendix B**). The group participated in a workshop to provide consultation on the drafted program logic model, the key evaluation questions and the potential data sources to be used in the evaluation. Members were given an additional two weeks to provide out-of-session feedback. The workshop and out-of-session feedback enabled refinement of these components of the evaluation framework.

## 2.6 Consultation with the MH-HITH Evaluation Framework Working Group (People with lived/living experience of MH-HITH)

One working session was then conducted with the lived/living experience members of the MH-HITH Evaluation Framework Working Group (see **Appendix B**). Participants provided feedback on the key evaluation questions through the lens of their own experiences. This feedback and stories of their lived experience enabled further refinement to both the key evaluation questions and the program logic model for the evaluation.



### 3. MH-HITH ‘as is’ service delivery summary

The following table, **Table 2**, details components included within the state-wide MH-HITH Model of Service document and the MH-HITH services at each Hospital and Health Service. These details were obtained from the service documentation, predominately local HHS Models of Service, provided to QCMHR by each site. QCMHR acknowledges that each service has tailored their Models of Service to meet the needs of their individual HHS populations and within their specific larger service system requirements.



**Table 2. Comparison of the state-wide MH-HITH model of service and the MH-HITH services at each Hospital and Health Service components detailed in their corresponding service documentation**

	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
<b>Service status</b>	N/A	Operating – MOS v2 published	Operating – MOS draft Feb 2024	Operating – MOS v3 draft	Operating – No MOS document, information obtained from 'Information handbook'	Operating – MOS v2 published	Planned 2025 – MOS draft May 2025	Planned 2026 – MOS v4 draft
<b>Service aims</b>	<p>To provide eligible consumers with an acute mental health issue or mental illness, individualised assessment, and treatment alongside a supportive framework for the family/carers in their own home.</p> <p>Resolve acute episode of care.</p> <p>Provide medication reconciliation.</p> <p>Improve consumers' well-being, self-efficacy, autonomy, and management.</p> <p>Improve mental health literacy for consumers and carers.</p>	<p>To provide individualised assessment and treatment alongside a supportive framework for the family/carers in their own home, for consumers who are experiencing acute mental health issues or mental illness and who present with low to moderate risk through the following principles:</p> <ul style="list-style-type: none"> <li>• Access to inpatient type care for consumers presenting to ED or the ACT with an alternative to acute inpatient ward admission.</li> <li>• Consumer centred.</li> <li>• Psychoeducation relating to signs/symptoms of a condition, monitoring of condition progression and medication.</li> <li>• Goals to overcome lifestyle barriers to treatment adherence.</li> <li>• Social emotional support by providing a safe, convenient and confidential service with flexible appointments.</li> <li>• Whole of system approach -management of consumer care needs is integrated with</li> </ul>	<p>Increase consumer agency and control by giving consumers and carers the choice to receive hospital-level care in their homes.</p> <p>Reduce the disruption caused by consumers having to leave their home environment to receive inpatient care.</p> <p>Reduce the possibility of distress and trauma that can be linked to acute MH admissions or close contact with other individuals experiencing acute distress.</p> <p>Provide holistic care with a recovery-orientated focus.</p> <p>Maintain more active family/ carer/ kinship involvement as an integral part of consumers' treatment.</p> <p>Provide access to peer workers and indigenous mental health workers to support the consumer's recovery journey.</p>	<p>To provide individualised and comprehensive care to consumers, their families and carers in their own home incorporating recovery-oriented principles.</p> <p>Consumers and carers have the choice to receive hospital-level care in their own home and acknowledges the role of a person's carers, home environment and regular activities as drivers for recovery.</p> <p>A collaborative medical, clinical and peer support model of care within the home environment for individuals and carers/family.</p> <p>A culturally appropriate and safe service for a diverse population.</p> <p>Assistance with intervention and</p>	Not documented	<p>Embed the core principles of Gold Coast Mental Health and Specialist Services care, contributing to positive consumer and carer experiences and outcomes.</p> <p>Deliver acute treatment of similar quality and efficacy as that provided in an inpatient setting and create a less restrictive alternative and allows for greater flexibility to meet consumer's needs through trauma-informed, least restrictive care provision, which incorporates recovery-oriented principles.</p> <p>Reduce reliance on hospitalisation, improving capacity and efficiency of GCMHSS to respond to increasing demands for hospital beds.</p> <p>Provide a choice to consumers and engage consumers and their carer/family members in their home environment, to ensure the safe</p>	<p>Choice to receive hospital-level care within their own home environment.</p> <p>Reduce disruption to consumers having to leave their home environment and supports to receive inpatient level care.</p> <p>Maintain more active family or carer involvement as an integral part of the consumers' treatment.</p> <p>Avoid the challenges and additional stress that can be associated with acute mental health admission.</p>	<p>Provide high-level multidisciplinary care in the consumers home or suitable accommodation for acute mental health conditions that would otherwise require inpatient hospitalisation.</p> <p>Resolve the acute episode of care.</p> <p>Provide medication reconciliation.</p> <p>Improve consumers' well-being, self-efficacy, autonomy, and management.</p> <p>Improve mental health literacy for consumers and carers.</p> <p>Provide access to peer support and indigenous mental health workers to support the consumers recovery.</p> <p>Maintain the consumers daily routine in a comfortable, familiar and safe environment.</p> <p>Support trauma informed care and least restrictive practice,</p>



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
		<p>seamless transitions between acute/sub-acute services and primary/community care. This approach should integrate physical, mental health and psychosocial support.</p> <ul style="list-style-type: none"> <li>Recovery orientated care – incorporating paradigms of hope, self-determination, self-management, empowerment, advocacy. Recognises a person's right to full inclusion and meaningful life free of stigma and discrimination.</li> </ul>		<p>prevention strategies to build capacity for wellbeing and recovery.</p> <p>Reduce the disruption of the consumer having to leave their home environment to receive inpatient care.</p> <p>Maintain more active family/carer involvement as an integral part of the consumers' treatment.</p> <p>Avoid the distress and trauma that can be associated with acute mental health admission.</p> <p>Psychoeducation</p> <p>Education and health coaching on modifying lifestyle behaviours to improve general health as part of recovery planning.</p> <p>Provide social emotional support through a safe, convenient and confidential environment.</p>		<p>delivery of care and a positive experience for consumers, carers and staff.</p>		<p>reducing the possibility of distress and trauma that can be associated with mental health units.</p> <p>Maintain active family / carer / kinship involvement as an integral part of consumers treatment.</p>
<b>Treatment goals</b>	Not documented	Not documented	Improvements in illness symptomology, psychosocial and physical functioning, related to a consumer's mental state where the	Not documented	Not documented	Improvements in the symptoms, psychosocial, and physical functioning related to a consumer's mental disorder where the severity of symptoms	Improvements in symptomatology, psychosocial and physical functioning related to a consumer's mental	Not documented



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
			severity of symptoms has worsened and warrants an admission, or the person requires an intensity of support not available in the community mental health setting.			has worsened and warrants an admission, or the person requires an intensity of support not available in a community mental health setting.	state where acuity has deteriorated to an extent that warrants admission or the person requires intensity of support not available in the community mental health setting.	
<b>Age eligibility</b>	≥18 years	≥18 years to end of life range  Consideration may be given to <18 years at the discretion of the treating Psychiatrist in consultation with the Clinical Director.	≥18 years	≥18 years	≥18 years	>18 years	≥18 years - <65 years	≥18 years
<b>Health status / characteristics inclusion</b>	Mental health consumers experiencing an acute mental illness who require acute inpatient admission and who meet appropriate clinical and environmental risk assessments.  Consumer/ guardian engagement, capacity, and willingness to participate in the program.  Consumer residence is within the defined MH-HITH catchment.  Consumers with existing services, funded or non-funded.	Low to moderate risk of self-harm, are acutely unwell and require and inpatient admission.  Acute presentation to ED or MH service requiring short term intensive intervention.  Engagement, capacity and mutual agreement to participate.  Consent to have assessment and treatment in home, awareness of confidentiality constraints.  Willing to have two visits per day initially.  Safe home environment.  Voluntarily engages with care provision in own home.  Comprehensive mental health and risk assessment.  Willingness to have GP as point of contact on discharge.	Experiencing an acute mental health illness requiring treatment that can be delivered safely and effectively in the home.  Voluntary consumers.  Consumers on a TA or FO compatible with MH-HITH.  Consumers requiring assertive medication support with increased frequency.  Consumers who require Clozapine commencement or re-titration.  Consumers receiving ECT.  Able to provide informed consent regarding their preference of treatment in their home environment.	Acute presentation that would otherwise require an inpatient admission.  Willing to participate in MH-HITH.  Stable accommodation.  Carers willing to and able to provide supervision, advocacy and support.  Stable medical co-morbidities that do not require an admission to a medical inpatient ward, or require high intensity input from other medical specialities.	Acute mental health issues.  Willing to participate and has capacity.  Stable accommodation.  Has a working phone.  Agrees to refrain from illicit substance and alcohol use during admission.	Acute presentation requiring specialist mental health clinical management that can only be facilitated by an inpatient unit or MH-HITH.  Stable accommodation for the next 14-21 days.  Agreeable to referral.  Stable reception for telephone and internet.  Mental health consumers with stable medical co-morbidities who can be managed within a community setting.  Consumers that can be transferred from hospital early but still require inpatient type care.  In the absence of a support person available 24-hour, the consumer needs to be capable and willing to engage in	Acute decline in mental illness requiring step up care similar to that requiring admission to a mental health inpatient unit.  Mental health consumers with stable medical comorbidities and medically fit to be managed in the community OR have acute intervention support if needed in the community setting.  Stable accommodation.  Stability of 24-hour support in their community setting.  Capacity to consent and willingness to engage.	Consumers experiencing an acute mental illness who require an acute inpatient admission and who meet appropriate clinical and environmental risk assessments.  Consumer/ guardian engagement, capacity and willingness to engage.  Consumers under the MHA are required to be under a community-category order.  Clozapine consumers who require once daily titration monitoring.  ECT consumers.



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
	For those treated under the mental health act, community-category treatment support orders only.	Stable medical comorbidities and are medically fit to be managed in the community.				known risk mitigating factors (including, the ability to contact MH-HITH, the ability to actively manage dynamic risk, and the ability to engage external support arrangements that are mutually agreed between MH-HITH, the referrer and the consumer).		
<b>Health status exclusion</b>	<p>Consumers whose clinical and environmental risk is assessed as not suitable for admission to the MH-HITH service.</p> <p>Acute mental health and acute diseases that cannot safely be managed within the home environment.</p> <p>Consumers with impaired or fluctuating capacity to engage in the program.</p>	<p>Severe acute psychotic episode with high-risk behaviours.</p> <p>Requiring intensive supervision/ monitored environment to manage any identified risk.</p> <p>Consumers flagged with unsuitable risk for home management.</p> <p>Significant drug and alcohol use.</p> <p>Under forensic or treatment support order or with impaired/ fluctuating capacity to engage.</p> <p>Unstable medical environments requiring inpatient unit or hospital-based care/management.</p> <p>No fixed abode.</p>	<p>Consumers presenting with acute high-risk behaviours requiring containment and support in an inpatient unit.</p> <p>Primary substance-use disorder or active substance disorder which impacts the ability to engage in treatment and impacts risk to self or others.</p> <p>Primary diagnosis of dementia.</p> <p>Consumers with impaired or fluctuating capacity which impacts their ability to engage.</p> <p>Unstable medical conditions.</p> <p>Consumers who do not have carers available to support them.</p> <p>Consumers who do not have access to a phone for telehealth interventions.</p>	Not documented	<p>Emergency or requirement for immediate intervention.</p> <p>Substance use and acute withdrawal.</p> <p>Acute behaviour disturbance.</p> <p>Physical deterioration in past 24 hours.</p> <p>Complex medical needs requiring general medical input.</p> <p>Resident in Continuing Care Unit.</p> <p>RACF resident.</p>	<p>Consumers requiring 24-hour close intensive nursing supervision to manage any identified risk.</p> <p>Primary substance-use disorder or active substance use disorder which impacts the ability to engage.</p> <p>Consumers with impaired or fluctuating capacity which impacts their ability to engage.</p> <p>Consumers that require restrictive practice to manage imminent risk.</p> <p>Consumers that can be managed by a community mental health team or GP.</p> <p>Consumers with medical conditions or at high risk of developing significant medical complications that cannot be managed in HITH.</p>	<p>Consumers requiring 24-hour close intensive nursing supervision to manage any identified risk.</p> <p>Primary substance-use disorder or active substance use disorder which impacts the ability to engage in treatment and impacts risk to self or others.</p> <p>Consumers requiring enactment of the MHA or restrictive practice to contain risk.</p> <p>Sub or non-acute presentations at the time of referral or over the course of the two weeks.</p>	<p>Consumers requiring intensive supervision or monitoring to manage identified risks.</p> <p>Severe acute psychotic episode with high-risk behaviours.</p> <p>Primary substance-use disorder or active substance use disorder which impacts the ability to engage.</p> <p>Unstable or current medical condition requiring assessment, treatment or care within a hospital setting.</p> <p>No fixed abode or reside in a boarding house.</p> <p>Primary diagnosis of dementia.</p>
<b>Who can refer?</b>	Service dependent	ACT/ED MH Inpatient Unit C/L service CCT (Adult and OPMHS)	PEC Inpatient mental health teams C/L service	ED Adult inpatient units Grevillea	Community mental health teams ACT/ED	Inpatient mental health teams C/L service	Acute Care Team Continuing Care Teams C/L service	AMHU inpatient ACT MIRT OPMHS



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
			CCT (CCT/ MIRT/ CCU/ HHOT/ OPMHS) ACT	Community teams	Mental health acute inpatient services	Continuing Care teams (CCT/MIRT/REACH/TRS) ACT	Perinatal Infant Mental Health Service NQEDS	C/L service Team 1/2
<b>Radius</b>	Service dependent	30km from home base	Within RBWH catchment	Within Metro South catchment	30 minute drive from home base	Northern Gold Coast geographical catchment area	Northern end – Ellis beach Southern end – Gordonvale (53km north to south) Western end – Stoney Creek Road Eastern end – Trinity Wharf (15km west to east)	30km from home base
<b>Beds</b>	Service dependent	6	10	12	8	12	6	8
<b>Initial length of approved admission</b>	Service dependent	Not documented	21 days	14 days with the potential of extended timeframe for older adults	Not documented	21 days	14 days	14 days
<b>Workforce</b>	Multidisciplinary	Consultant Psychiatrist Psychiatric Registrar NUM Clinical nurses RN Social worker (senior) Peer and carer workers AO <i>FTE breakdown not provided.</i>	Consultant Psychiatrist 0.5FTE Psychiatric Registrar 1.0FTE NUM 1.0FTE Nurse Practitioner 1.0FTE Clinical nurses 2.9FTE Health practitioner (senior) 0.8FTE Advanced carer and peer worker 1.4FTE Indigenous Mental Health Worker 0.6FTE Pharmacist 0.2FTE AO 0.5FTE	Consultant Psychiatrist Psychiatric Registrar Intern/RMO NUM Nursing staff Allied health staff Peer and carer support staff Pharmacist AO <i>FTE breakdown not provided.</i>	Consultant Psychiatrist 0.5FTE Psychiatric Registrar 1.0FTE CNC 1.0FTE Clinical nurse 3.0FTE Allied health clinician 1.0FTE Advanced carer and peer worker 2.8FTE AO 1.0FTE	Consultant Psychiatrist 0.5FTE Psychiatrist Registrar 1.0FTE NUM 1.0FTE CNC Clinical nurse 3.0FTE RN 2.0FTE Psychologist 0.5FTE Social Worker Occupational therapist Pharmacist 0.5FTE Advanced peer worker 0.8FTE Clinical educator and partnership lead AO 0.5FTE	Consultant Psychiatrist 0.6FTE Psychiatrist (no FTE listed) Psychiatric registrar 1.0FTE NUM 1.0 FTE Nurse Practitioner 0.5FTE Clinical nurse 2.3FTE RN 1.6FTE Social worker (senior) 0.8FTE Lived experience worker 1.6FTE AO 0.5FTE	Consultant Psychiatrist Psychiatric registrar NUM CNC RN Social worker Peer support worker Pharmacist AO <i>FTE breakdown not provided.</i>



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
						<i>Some FTE breakdown not provided.</i>		
<b>Hours of operation</b>	Minimum 14 hours per day	14 hours (7am – 9pm)	14 hours (7am – 9pm)	14 hours (7am – 9pm)	14.5 hours (630am – 10pm)	14.5 hours (7am – 9.30pm)	14 hours (8am – 10pm)	14 hours (7am – 9pm)
<b>Weekend or out of hours admissions</b>	Yes	Yes	Yes	No	Not documented	No	No	Not documented
<b>Pre-admission assessments</b>	Not documented	Aimed to be assessed within 4 hours of presentation to ED or within 24 hours of referral from the community.	<p>Ensuring currency of demographic details.</p> <p>Initial mental state assessment including substance use.</p> <p>MHA status including need for LCT.</p> <p>Risk screen including plan to mitigate risks whilst admitted to MH-HITH.</p> <p>Physical health screen including vital observations and weight.</p> <p>Falls risk assessment (if required).</p> <p>Pressure injury assessment (if required).</p>	<p>Suitability assessment will be scheduled within one business day of referral.</p> <p>Adult mental health assessment, including completion of demographics.</p> <p>MHA and legal status.</p> <p>Risk assessment and management plan.</p> <p>Safety planning and crisis plan.</p> <p>Physical health assessment and vital observations.</p> <p>Falls risk assessment (if required).</p> <p>Pressure injury assessment (if required).</p> <p>Screening for allied health assessment and/or interventions to date.</p> <p>Medication history.</p>	Not documented	<p>Suitability assessment will be scheduled within one business day of referral.</p> <p>Adult mental health assessment, including completion of demographics.</p> <p>Initial assessment and Mental state assessment.</p> <p>MHA and legal status.</p> <p>Risk assessment and management plan.</p> <p>Safety planning and crisis plan.</p> <p>Physical health screen including vital observations and weight.</p> <p>Falls risk assessment (if required).</p> <p>Pressure injury assessment (if required).</p> <p>Screening for allied health assessment and/or interventions to date.</p>	<p>Suitability assessment will be completed within 24 hours of referral.</p> <p>Up to date demographics.</p> <p>Review of MHA status.</p> <p>Initial mental state assessment inclusive of substance use.</p> <p>Risk screen.</p> <p>Physical health screen.</p>	<p>The same documentation as the inpatient unit with the exception of a Comprehensive Assessment (and risk screen) in place of a Triage Screen.</p> <p>Admission review completed by a registrar within 24 hours of admission, including:</p> <p>Assessment of consumers acute mental health concerns and establish the initial care / treatment regime.</p> <p>Provide education regarding any new medications.</p> <p>Review medication chart, consider NRT.</p> <p>Provide script for dispensing from pharmacy, determine most appropriate means of dispensing with hospital pharmacist where available.</p> <p>Consider if pathology and/or imaging is clinically indicated and complete forms.</p>



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
								Plan in response to deterioration.  Consideration and decision of activities undertaken whilst in the MH-HITH program need to be discussed and documented.
<b>Risk assessment factors</b>	Not documented	Not documented	The specific consumer risk to themselves and others, the risk to reputation, the risk of AWA, and environmental risks will be considered.  A highly elevated risk to others or a rapidly changeable risk profile will be challenging to manage safely and will likely preclude admission.  Elevated risk to self, if using restriction of access to lethal means and support provided by the nominated support person with active participation by the consumer, can be managed in MH-HITH.  Environmental risks such as active substance use in the home, presence of aggressive pets or an unhygienic environment will be explored.	The specific consumer risk to themselves and others, the risk to reputation, the risk of AWA, and environmental risks will be considered.  High risk to others or rapidly changeable / unstable risk profile likely to preclude admission.  Risk to self can be managed only with the support of the consumer's carer and active participation of the carer.  Environmental risks such as active substance use in the home, presence of aggressive pets or an unhygienic environment will be explored.	Not documented	The specific consumer risk to themselves and others, the risk to reputation, the risk of AWA, and environmental risks will be considered.  High risk to others or rapidly changeable / unstable risk profile likely to preclude admission.  Risk to self, if using restriction of access to lethal means and support provided by the nominated support person with active participation by the consumer, can be managed in MH-HITH.  Environmental risks such as active substance use in the home, presence of aggressive pets or an unhygienic environment will be explored.	Higher risk state of harm to self.	Elevated risk to self, if using restriction of access to lethal means and support provided by the nominated support person with active participation by the consumer, consider management with approval.  Environmental risks such as active substance use in the home, presence of aggressive pets or an unhygienic environment will be explored.  Consumers will be strongly encouraged to refrain from substance use (both licit and illicit) while admitted to the service.
<b>Medical assessment</b>	To be completed within 48 hours of admission by a Consultant Psychiatrist or Registrar.	Completed within 24-48 hours by a Psychiatrist.	Completed within 48 hours by Consultant Psychiatrist, including: <ul style="list-style-type: none"> <li>Assessment and diagnosis,</li> </ul>	Not documented	Not documented	Completed within 48 hours of admission by the Consultant Psychiatrist, including: <ul style="list-style-type: none"> <li>Assessment and diagnosis,</li> </ul>	Assessment and diagnosis.  Establishing treatment, support and discharge plan.	Full initial medical assessment by Consultant Psychiatrist within 24 hours, including:



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
	All consumers should be seen by a Registrar within 24 hours of admission.		<ul style="list-style-type: none"> <li>Establishment or amendment of a treatment, support or discharge plan,</li> <li>Notification to the consumer's GP advising of the admission.</li> </ul>			<ul style="list-style-type: none"> <li>Establishment or amendment of a treatment, support or discharge plan,</li> <li>Feedback to the consumer's GP advising of the admission to MH-HITH.</li> </ul>	<p>Psychoeducation to consumer and family.</p> <p>Notification to GP advising of GP.</p> <p>Case discussion at MDT.</p>	<ul style="list-style-type: none"> <li>Assessment, formulation and diagnosis,</li> <li>Establishment or amendment of current treatment plan,</li> <li>Reconcile medications and provide updated script, where indicated,</li> <li>Expected length of stay and follow-up.</li> </ul>
<b>Other assessments</b>	Not documented	Not documented	<p>Alcohol, Tobacco and Drug if necessary.</p> <p>People with CALD needs will be assessed and supported.</p> <p>Psychological, social work and occupational therapy assessment if indicated.</p>	Not documented	Not documented	<p>Cultural support will be offered to those who identify as Aboriginal and/or Torres Strait Islander.</p> <p>People who are CALD will be offered support.</p> <p>Psychological, social work and occupational therapy assessment if indicated.</p> <p>Alcohol, Tobacco and Drug if necessary.</p>	<p>Alcohol and other drugs if necessary.</p> <p>People with CALD needs will be assessed and supported.</p> <p>Peer workers will orchestrate access to community peer services if indicated.</p> <p>Discipline specific assessments.</p>	<p>Nursing / social work assessment and interventions to be completed within 24 hours, including:</p> <ul style="list-style-type: none"> <li>Admission pathway,</li> <li>Falls assessment and plan,</li> <li>Pressure injury risk assessment,</li> <li>Metabolic monitoring,</li> <li>Q-ADDS Hospital in the Home,</li> <li>HoNOs and phase of care,</li> <li>Risk screening tool,</li> <li>Care plan draft,</li> <li>My recovery plan,</li> <li>Mental health safety plan,</li> <li>Mental health child protection form.</li> </ul>
<b>Medication</b>	Consumers are to be provided a medication supply of at least 48 hours on	Review and adjust as required.	Medication reconciliation completed within 48 hours of admission, including the provision of an adequate supply of	Interventions	Not documented	Medication reconciliation completed within 48 hours of admission, including the provision of an adequate	Medication reconciliation post admission including the provision of an	Discussion regarding the most appropriate means to supply medication with team.



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
	admission. Review / reconciliation of medication is required within 48 hours of admission.		prn medications if needed.			supply of prn medications if needed.  The consumer support person will be in charge of medications initially.  As treatment progresses, it is foreseeable that the consumer will take over control of the medications.	adequate supply of prn medications if needed.	Provision of an adequate supply of regular and prn medications.
<b>Care planning / delivery</b>	Not documented	Comprehensive mental health assessment including risk assessment.  Individual biopsychosocial recovery plan with targeted brief psychological interventions.  Care coordination.  Psychoeducation.  Medication management.  Referral to NGOs and community support.	Comprehensive care plan is made within 72 hours admission. Minimum required documentation is: <ul style="list-style-type: none"> <li>• Risk screen form</li> <li>• Physical health screen</li> <li>• Physical assessment</li> <li>• Care plan</li> <li>• Transfer of care form</li> <li>• Smoking pathway</li> <li>• Recovery and relapse prevention plans will also be made.</li> </ul>	Not documented	Not documented	Care review.  Care plan.  Risk screen form.  Physical health screen.  Physical assessment.  Substance use and addictive behaviour screen and longitudinal summary.  Transfer of care form.  Smoking pathway.  Psychoeducation.  Recovery and relapse prevention plans will also be made.	Comprehensive care plan is made within 72 hours admission. Minimum required documentation is: <ul style="list-style-type: none"> <li>• Risk screen form</li> <li>• Physical health screen</li> <li>• Physical assessment</li> <li>• Care plan</li> <li>• Transfer of care form</li> <li>• Smoking pathway</li> <li>• Recovery and relapse prevention plans will also be made.</li> </ul>	A Care Plan draft must be commenced within 48 hours admission and published on CIMHA within one week of admission and prior to discharge.
<b>Levels of care model utilised</b>	Yes	Mentioned but not detailed	Yes	Not documented	Not documented	Not documented	Yes	Yes
<b>Clinical interventions</b>	Evidenced-based clinical interventions to address the needs identified collaboratively between the consumer and the treating team.	Intensive support via home visits and support calls.  Ongoing clinical risk assessment and management.  Biopsychosocial assessment of needs.	Physical health.  Psychological.  Psychosocial.  Mental Health Literacy and education.	Biopsychosocial assessment of needs.  Clinical risk assessment and management.  Psychological and behavioural interventions.	Not documented	Physical health.  Psychological.  Psychosocial rehabilitation.  Mental Health Literacy and education.	Clinical assessment, management and monitoring.  Recovery focused methods.  Medication rationalisation / optimisation.	Physical health.  Psychological interventions.  Psychosocial rehabilitation.  Mental Health Literacy and education.



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
		<p>Medication / pharmacological interventions and response monitoring.</p> <p>Psychological and behavioural interventions.</p> <p>Family/carer support.</p> <p>Education.</p> <p>Structured problem solving.</p> <p>Stress management.</p> <p>Relapse prevention, early warning sign recognition.</p> <p>Crisis planning.</p> <p>Referral to other agencies.</p> <p>Drug and alcohol assessment and referral if necessary.</p>		<p>Intensive support.</p> <p>Medication / pharmacological interventions.</p> <p>Physical health monitoring.</p> <p>Family/carer support.</p> <p>Education.</p> <p>Cultural support.</p> <p>Crisis planning.</p> <p>Relapse prevention planning.</p>			<p>Psychoeducation.</p> <p>Allied health and peer worker input.</p> <p>Involvement of family members and support persons.</p> <p>Enhancing community-based supports.</p>	
<b>After hours management</b>	Service dependent	To call 1300 MH CALL; MH-HITH phone service diverts to Fraser Coast Mental Health Inpatient Unit.	To call 000.	To call 1300 MH CALL – escalation will occur as required (i.e. MS Psychiatric registrar).	To call Clinical Nurse MH phone.	To call the inpatient nominated nurse.  Imminent risk to call 000.	To call 1300 MH CALL; MH-HITH phone service diverts to Cairns Hospital Mental Health ED.  Imminent risk to call 000.	To call the Acute Care Team.
<b>Discharge</b>	Discharge is at the discretion of the medical delegate.	<p>Discharge is at the discretion of the Consultant Psychiatrist.</p> <p>Planning will incorporate strategies for relapse prevention, crisis management and clearly articulated service re-entry processes.</p>	<p>Post-discharge follow-up will be assigned to the most appropriate clinicians (minimum 2) following MDT unless transferred to another community team.</p> <p>Clinical assessment within seven days of discharge, aiming to either return the consumer to Primary/Private supports or consideration for referrals to Community teams.</p>	<p>Discharge is at the discretion of the Consultant Psychiatrist.</p> <p>Planning will incorporate strategies for relapse prevention, crisis management and clearly articulated service re-entry processes.</p>	Not documented	<p>Post-discharge follow-up will be assigned to the most appropriate clinicians (minimum 2) following MDT unless transferred to another MHSS community team.</p> <p>Clinical assessment within seven days of discharge, aiming to either closure to Primary/Private supports or consideration for referrals if appropriate to MHSS teams.</p>	Consumers will have a 7 day follow up after discharge.	Discharge is at the discretion of the Consultant Psychiatrist.



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
<b>Staff training</b>	Not documented	<p>Conducting mental health assessments in people with complex physical and psychological problems.</p> <p>Working with adult consumers and older persons.</p> <p>Risk assessments, including assessment and response to suicidal consumers.</p> <p>Legal frameworks.</p> <p>CIMHA.</p> <p>Detecting and managing drug and alcohol misuse.</p> <p>Recognising and managing medically unexplained symptoms, organic mental health disorders, and emotional responses to trauma.</p> <p>Psychotherapeutic approaches in treatment.</p> <p>Occupational Violence Prevention Training.</p> <p>Aboriginal and Torres Strait Islander cultural capability training.</p> <p>Routine outcome measurement training.</p>	<p>Continuing education opportunities.</p> <p>Mandatory training.</p> <p>Clinical supervision.</p> <p>Other support mechanisms to ensure clinical and operational competence.</p>	Not documented	Not documented	<p>Continuing education opportunities.</p> <p>Mandatory training.</p> <p>Clinical supervision.</p> <p>Other support mechanisms to ensure clinical and operational competence.</p>	Not documented	Not documented
<b>Evaluation</b>	Not documented	Not documented	<p>Consumer and carer outcomes (using routine care data).</p> <p>Consumer and Care Experience (using YES surveys).</p> <p>Service Provider Experience (using 'Have Your Say' Staff survey).</p>	Not documented	Not documented	<p>Consumer and carer outcomes (using routine care data).</p> <p>Consumer and Care Experience (using YES and CES surveys).</p> <p>Service Provider Experience (using the</p>	<p>Data and Key Performance Indicators will be monitored, analysed and reported.</p> <p>Consideration of publishing a Proof of Concept.</p>	Not documented



	State-wide	Wide Bay	Metro North	Metro South	West Moreton	Gold Coast	Cairns	Darling Downs
			Value for Money (using metrics to be developed).			Gold Coast Staff survey. Value for Money (using metrics to be developed). Consideration of publishing a Proof of Concept.		



## 4. Program logic model

A program logic model articulates how a program is intended to work. It provides a visual representation of the relationships between the program's inputs, activities, outputs and expected outcomes. An overview of the typical elements of a program logic model are summarized below in **Table 3**.

**Table 3. Definition of program logic model elements**

Model element	Definition
<b>Needs statement</b>	Short description of the issue or problem that the program is designed to address and identifies why the program is needed.
<b>Aims</b>	These are the overarching goals of the program and identifies what you want to achieve through service delivery.
<b>Inputs</b>	The resources that have been deployed and/or are needed to establish and implement a program.
<b>Activities</b>	The specific actions, interventions and processes that are delivered through the service.
<b>Outputs</b>	Measurements about who receives the services, and what services and activities have been delivered. These are needed to achieve the short-term outcomes.
<b>Short-term outcomes</b>	The changes that you would expect to see at the completion of the activities (service).
<b>Medium-term outcomes</b>	The changes you would expect to follow on from the short-term outcomes.
<b>Longer-term impacts</b>	The long-term outcomes you would expect to follow from the medium-term outcomes, and which should resolve the issue identified in your needs statement.
<b>External factors</b>	External factors are examples of events, conditions, or circumstances outside the program's control that have potential to influence its intended outcome.
<b>Assumptions</b>	The conditions surrounding a program that need to be in place for the program to work as intended.

A program logic model can facilitate effective evaluation of programs by helping to establish what to evaluate, determine key evaluation questions and identify relevant information to address those questions. It also provides a simple, clear graphical representation of how a program 'works', that helps communicate the intent of a program to stakeholders, including program staff and funders. The program logic model for the MH-HITH services can be seen in Figure 2.



**Figure 2. Program logic model for MH-HITH services evaluation.**

<b>Needs statement:</b>					
<p>HITH was introduced in 1993 in Australia to meet the needs of the community for home-based care whilst reducing the number of utilised physical beds (Ritchie et al., 1994). HITH is defined as the delivery of acute care in the patient's home, that would otherwise require an inpatient admission (Montalto, 1998). Different models of service have arisen over the last three decades, with MH-HITH being one of the recent speciality services rolled out to assist with meeting the needs of an increasing number of patients requiring admission for mental health care (Singh et al., 2010).</p>					
<b>Aim/s:</b>					
<p>According to the state-wide model of service, the aims of Queensland Health's MH-HITH program are to: (a) resolve acute episode of care; (b) provide medication reconciliation; (c) improve consumers' well-being, self-efficacy, autonomy and management; and (d) improve mental health literacy for consumers and carers. More broadly speaking, HITH programs generally seek to alleviate pressure on the availability of inpatient beds.</p>					
<b>INPUTS</b>	<b>ACTIVITIES</b>	<b>OUTPUTS</b>	<b>SHORT-TERM OUTCOMES</b>	<b>MEDIUM-TERM OUTCOMES</b>	<b>LONGER-TERM IMPACTS</b>
<p>Funding.</p> <p>Evidence base.</p> <p>Governance.</p> <p>MH-HITH Model of Service (state-wide guidance and district level).</p> <p>Multidisciplinary team inclusive of the lived experience workforce.</p> <p>Staff training and professional development.</p> <p>Infrastructure for treating teams.</p> <p>Resources for treating team.</p> <p>Partnerships (i.e. inpatient and outpatient teams, consumers and carers).</p>	<p><b>Consumers and carers:</b></p> <p>Engage and participate.</p> <p><b>MH- HITH services:</b></p> <p>Offer extended hours for clinical monitoring and support, with a minimum of one in-person visit per day.</p> <p>Provide clear referral pathways and identified entry points.</p> <p>Capacity to admit consumers across seven days.</p> <p>All consumers to be seen within 24 hours of admission by a Registrar.</p> <p>Provision for consumers to be provided with an initial medical assessment by a Consultant Psychiatrist or</p>	<p><b>Consumers:</b></p> <p>Consumers feel that they have a choice regarding their place of treatment.</p> <p>Number and characteristics (i.e. demographics, diagnoses) of patients accepting a MH-HITH referral.</p> <p>Number and characteristics of patients with a MH-HITH admission/episode of care.</p> <p>Number and characteristics of patients referral onwards/relevant services.</p> <p><b>Carers:</b></p> <p>Number of carer/family members engaged in consumers' care in their home environment.</p>	<p><b>Consumers:</b></p> <p>Resolved acute episode of care.</p> <p>Increased accessibility and flexibility for consumers.</p> <p>Improved well-being, self-efficacy, autonomy and management.</p> <p>Improved mental health literacy.</p> <p>Fewer disruptions to consumer's life with admission in the home environment.</p> <p>Increased knowledge of support services within community.</p> <p>Medication is appropriately managed.</p>	<p><b>Consumers:</b></p> <p>Recovery goals progressed.</p> <p>Increased use of self-management skills.</p> <p>Consumers presenting for mental health admissions have better experiences of mental healthcare.</p> <p>Mental health services feel person-centred and family inclusive.</p> <p><b>Carers:</b></p> <p>Feelings of inclusion in mental health care.</p> <p>Increased use of carer support skills.</p> <p><b>Service system:</b></p> <p>Reduced use of acute physical bed services / MH-</p>	<p><b>Consumers:</b></p> <p>Recovery goals achieved.</p> <p>Improved mental health.</p> <p>Consumers are able to live meaningful lives and live well within the community</p> <p>Consumers feel supported and confident in self-management skills for managing mental health conditions.</p> <p><b>Carers:</b></p> <p>Sustainable family relationships.</p> <p><b>Service system:</b></p> <p>Enhanced, patient-centred mental health service system options.</p>



	<p>Registrar within 48 hours of admission.</p> <p>A medication supply of at least 48 hours on admission.</p> <p>Review/reconciliation of medication within 48 hours of admission.</p> <p>Procedures for the management of acute and deteriorating consumers.</p> <p>Discharge documentation and integration with a consumer's community service providers.</p>	<p><b><u>Service System:</u></b></p> <p>Referrers aware and accepting of the service and eligibility criteria.</p> <p>Number of beds utilised / admissions.</p> <p>Number and types of supports delivered.</p> <p>Number of initial medical assessments, care plans, recovery plans, care reviews and discharge summaries completed within allotted timeframes.</p> <p>Number of episodes involving the community team for continuity of care (where applicable).</p> <p>Number of quality improvement activities undertaken.</p> <p>Number and types of training sessions delivered.</p>	<p>Post-discharge care coordination and support is available.</p> <p><b><u>Carers:</u></b></p> <p>Reduced stress in supporting their loved one.</p> <p>Awareness of and connection to support services.</p> <p>Positive consumer and carer experience.</p> <p><b><u>Service System:</u></b></p> <p>Service Providers value and buy in to the model.</p> <p>Staff are equipped to support consumers effectively.</p> <p>Carer support is provided by the MH-HiTH team.</p> <p>Reduced reliance on hospitalisation and alleviated bed pressure.</p> <p>Continuity of care is provided to consumers.</p> <p>Equity of service provision is matched to consumer need.</p> <p>Equity of acute treatment is delivered.</p> <p>Program is aligned with model of service.</p>	<p>HITH is an alternative to an acute physical bed.</p> <p>Enhanced service development, evaluation and research.</p> <p>Staff are satisfied with the service and work environment.</p>	<p>Reduced demand on acute, mental health services.</p> <p>Increased evidence base for MH-HiTH.</p> <p>Confident and competent acute MH-HiTH workforce.</p> <p>Sustainable staffing and workforce capacity.</p>
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			Improved service development, evaluation and review.		
<b>External Factors</b> <ul style="list-style-type: none"><li>• Environmental context (Meso: e.g. hospital capacity and geographical spread of population; Macro: regional differences across the HHSs).</li><li>• Severe weather events impacting telecommunications and home visits.</li><li>• Staffing and workforce capacity.</li><li>• Consumer and carer/s level of engagement in the service.</li><li>• Homelessness.</li></ul>					
<b>Assumptions</b> <ul style="list-style-type: none"><li>• Operational and clinical governance arrangements are in place, with clear roles and responsibilities defined.</li><li>• Potential referrers are aware and supportive of the model and referral pathways are in place for each service.</li><li>• Staff working within MH-HITH receive adequate training and have access to ongoing professional development opportunities/educational opportunities, reflective supervision, and support mechanisms.</li><li>• The consumer is not homeless and has a family member or person to oversee their care in a capacity deemed acceptable by each service.</li><li>• Monitoring and evaluation data are collected for each consumer.</li></ul>					



# 5. Key evaluation questions

Key evaluation questions (KEQs) specify the high-level questions that the evaluation is designed to answer. The final set of KEQs that should guide this evaluation are presented below in **Table 4**.



**Table 4. Key evaluation questions for the MH-HITH evaluation**

Note: Additional detail for data sources is included in Section 6. Quantitative variables required to answer specific questions are shown in Table 5.

RE-AIM Evaluation domains	Evaluation questions	Data source	Data notes
Reach (Micro)	<b>Does MH-HITH reach the eligible population? If so, how and why? If not, why not?</b>		
		<i>Quantitative</i>	<i>Qualitative</i>
	<b>Who are the MH-HITH services treating?</b>		
	<ul style="list-style-type: none"> <li>• What are the demographic characteristics of the people accessing the MH-HITH service?</li> </ul>	<input checked="" type="checkbox"/>	QHAPDC CIMHA
	<ul style="list-style-type: none"> <li>• Which diagnostic conditions are being referred to, and treated by, MH-HITH?               <ul style="list-style-type: none"> <li>○ Primary and secondary</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	QHAPDC CIMHA
	<ul style="list-style-type: none"> <li>• Are consumers known to the health service before being referred to MH-HITH?               <ul style="list-style-type: none"> <li>○ How many consumers have had previous inpatient mental health admissions (physical beds and MH-HITH beds)?</li> <li>○ Are consumers being treated by the HHS mental health community team/s at the time of referral?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	QHAPDC CIMHA
	<ul style="list-style-type: none"> <li>• Are there demographic and diagnostic differences in consumers treated under MH-HITH at each HHS?               <ul style="list-style-type: none"> <li>○ If yes, what are the reasons for this? (e.g. availability of other services that are better suited for a particular consumer group, demographic differences within the HHS)</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	QHAPDC CIMHA
	<ul style="list-style-type: none"> <li>• How many referrals were made to MH-HITH?</li> </ul>	<input checked="" type="checkbox"/>	CIMHA
	<ul style="list-style-type: none"> <li>• How many referrals made to MH-HITH were accepted?</li> </ul>	<input checked="" type="checkbox"/>	CIMHA
	<ul style="list-style-type: none"> <li>• How many accepted referrals progress to a MH-HITH admission?</li> </ul>	<input checked="" type="checkbox"/>	CIMHA
<ul style="list-style-type: none"> <li>• How many patients treated under MH-HITH are treated solely under MH-HITH treatment for inpatient care?               <ul style="list-style-type: none"> <li>○ How many consumers transfer to acute mental health wards during their admission?</li> <li>○ How many consumers transfer to acute medical or surgical wards?</li> <li>○ How many consumers transfer into MH-HITH from an acute mental health ward?</li> <li>○ How many consumers transfer into MH-HITH from an acute medical or surgical ward?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	QHAPDC CIMHA	



	<ul style="list-style-type: none"> <li>○ How many consumers transfer between general HITH and MH-HITH?</li> </ul>			
	<ul style="list-style-type: none"> <li>● How many patients were referred to MH-HITH from community mental health services?</li> </ul>	☑		CIMHA
<b>Reach</b> (Meso/Macro)	<b>Does MH-HITH reach the intended population? If so, how and why? If not, why not?</b>			
		<i>Quantitative</i>	<i>Qualitative</i>	
	<ul style="list-style-type: none"> <li>● What does the population who could be referred look like?               <ul style="list-style-type: none"> <li>○ Who is not being referred?</li> <li>○ What are the barriers and facilitators to a referral?</li> </ul> </li> </ul>		☑	Interviews (staff, referrers)
	<ul style="list-style-type: none"> <li>● Where do referrals come from?</li> </ul>	☑		CIMHA
	<ul style="list-style-type: none"> <li>● What is the distribution of referrals across the seven days?</li> </ul>	☑		CIMHA
	<ul style="list-style-type: none"> <li>● What factors impact on reach? (e.g. governance, relationships with the broader sector)</li> </ul>		☑	Interviews (staff, referrers, stakeholders)
	<ul style="list-style-type: none"> <li>● Are the broader system and potential referrers aware of the service?               <ul style="list-style-type: none"> <li>○ If so, is their understanding of eligibility criteria and referral process accurate?</li> </ul> </li> </ul>		☑	Interviews (referrers, stakeholders)
<b>Effectiveness</b> (Micro)	<b>What is the effectiveness of MH-HITH on consumer outcomes and experience?</b>			
		<i>Quantitative</i>	<i>Qualitative</i>	
	<ul style="list-style-type: none"> <li>● What do consumers/families/carers consider to be an effective outcome from treatment under MH-HITH?               <ul style="list-style-type: none"> <li>○ Were these expectations met?</li> <li>○ Why/why not?</li> </ul> </li> </ul>		☑	Interviews (consumers, family/carers)
	<ul style="list-style-type: none"> <li>● What are the acute versus long term outcomes for consumers treated under MH-HITH?               <ul style="list-style-type: none"> <li>○ What factors impact the effectiveness of the service on consumer outcomes?                   <ul style="list-style-type: none"> <li>▪ Diagnostic presentation</li> <li>▪ Family/carer level of engagement and physical/virtual presence of supports</li> <li>▪ Quality of relationships with staff</li> <li>▪ Interventions</li> </ul> </li> </ul> </li> </ul>	☑	☑	Interviews (consumers, family/carers)  CIMHA
	<ul style="list-style-type: none"> <li>● Were consumers and carers satisfied with treatment under MH-HITH?               <ul style="list-style-type: none"> <li>○ How does a consumer's/carer's experience with MH-HITH compare with acute mental health ward care?</li> </ul> </li> </ul>	☑	☑	Interviews (consumers, family/carers)  YES/CES



	<ul style="list-style-type: none"> <li>○ How did consumers and carers feel about the number of interactions with the treating team throughout the admission?</li> <li>○ How did consumers and carers feel about the timing or planning of visits from the MH-HITH service?</li> <li>○ Were consumers required to attend appointments or services outside of the home (i.e. pathology testing)? Was this a challenge to orchestrate?</li> </ul>			
	<ul style="list-style-type: none"> <li>● Has MH-HITH produced any unintended consequences – positive or negative?</li> </ul>		<input checked="" type="checkbox"/>	Interviews (consumers, family/carers)
	<ul style="list-style-type: none"> <li>● How many consumers could not continue with MH-HITH? (i.e. were recommended to/self-requested/carer-requested to transfer to an acute mental health hospital setting for mental health treatment during their treatment with MH-HITH)               <ul style="list-style-type: none"> <li>○ Are there any barriers or facilitators in transferring between MH-HITH and the acute mental health hospital setting and MH-HITH?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Additional data collection required (see recommendations in Section 6)
	<ul style="list-style-type: none"> <li>● How many consumers have a TA, TSO or FO at the start of admission with MH-HITH?               <ul style="list-style-type: none"> <li>○ How many consumers have a TA, TSO or FO at the end of their admission with MH-HITH?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>		CIMHA
	<ul style="list-style-type: none"> <li>● Is there an increased number of adverse events (e.g. pertaining to staff, consumer and carer safety, medication misuse) using the MH-HITH services?</li> </ul>	<input checked="" type="checkbox"/>		RiskMan
<b>Effectiveness (Meso/Macro)</b>	<b>How does the effectiveness of MH-HITH impact more broadly across the health system?</b>			
		<i>Quantitative</i>	<i>Qualitative</i>	
	<ul style="list-style-type: none"> <li>● Is there a reduction in the number of readmissions (28 days and 12 months post discharge) and length of stay at acute services and presentations to emergency departments for consumers treated under MH-HITH?               <ul style="list-style-type: none"> <li>○ How does this compare to the acute inpatient mental health wards?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>		EDC QHAPDC
	<ul style="list-style-type: none"> <li>● What do staff consider to be an effective outcome from treatment under MH-HITH?               <ul style="list-style-type: none"> <li>○ Are these outcomes currently measured?</li> <li>○ Does this differ depending on the consumers' presentations?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Interviews (staff)  CIMHA
	<ul style="list-style-type: none"> <li>● What is the perceived impact of Lived Experience input on care outcomes and service satisfaction?</li> </ul>		<input checked="" type="checkbox"/>	Interviews (staff, consumers)



	<ul style="list-style-type: none"> <li>What is the cost-effectiveness of MH-HITH compared to acute inpatient care and intensive community services?</li> </ul>	☑	Additional data collection required (see recommendations in Section 6)
	<ul style="list-style-type: none"> <li>What are the direct and indirect costs associated with MH-HITH episodes of care?</li> </ul>	☑	Additional data collection required (see recommendations in Section 6)
	<ul style="list-style-type: none"> <li>What is the cost per avoided acute inpatient admission?</li> </ul>	☑	Additional data collection required (see recommendations in Section 6)
Adoption (Micro)	<b>What proportion of referred consumers are engaging with the service, and why do/don't they decide to take up the offer?</b>		
		<i>Quantitative</i>	<i>Qualitative</i>
	<ul style="list-style-type: none"> <li>What proportion of consumers take up the service when referred and accepted?</li> </ul>	☑	CIMHA Additional data collection required (see recommendations in Section 6)
	<ul style="list-style-type: none"> <li>What are the barriers and facilitators to consumers accepting a referral? Are there barriers and facilitators for the carer being able to support an admission with MH-HITH?</li> </ul>		☑ Interviews (consumers, family/carers, staff)
	<ul style="list-style-type: none"> <li>Are there any differences in key characteristics between those consumers who accept a referral compared with those who decline?</li> </ul>	☑	CIMHA Additional data collection required (see recommendations in Section 6)
	<ul style="list-style-type: none"> <li>What are the barriers and facilitators to a consumer in pre-admission progressing to admission?</li> </ul>		☑ Interviews (consumers, family/carers, staff)
	<ul style="list-style-type: none"> <li>How many eligible patients remain on the inpatient ward due to missed referrals or no occupancy within MH-HITH services?</li> </ul>	☑	Additional data collection required (see recommendations in Section 6)
Adoption (Meso/Macro)	<b>To what extent has the service model been adopted by staff and broader/referring services across Queensland?</b>		
		<i>Quantitative</i>	<i>Qualitative</i>
	<ul style="list-style-type: none"> <li>Has there been a change in referral acceptance over time?               <ul style="list-style-type: none"> <li>Why/why not?</li> </ul> </li> </ul>	☑	☑ QHAPDC Interviews (staff)
	<ul style="list-style-type: none"> <li>Are there patterns of service usage? (bed occupancy, reasons for admission, repeat presentations, separations, duration)</li> </ul>	☑	QHAPDC



	<ul style="list-style-type: none"> <li>○ Are there fluctuations in the individual services related to recency of commencement of the service?</li> <li>○ Are the patterns changing over time?</li> </ul>		
	<ul style="list-style-type: none"> <li>● To what extent have clinicians and staff adopted the model of service?               <ul style="list-style-type: none"> <li>○ What factors impact adoption (e.g. knowledge, training, resources)</li> </ul> </li> </ul>	☑	Interviews (staff)
	<ul style="list-style-type: none"> <li>● Are there any barriers or facilitators to data collection for the MH-HITH services?</li> </ul>	☑	Interviews (staff)
Implementation (Micro)	<b>How does each of the MH-HITH services function in practice compared to the state-wide model of service?</b>		
		<i>Quantitative</i>	<i>Qualitative</i>
	<ul style="list-style-type: none"> <li>● What were the consumer's expectations of care under MH-HITH before admission?               <ul style="list-style-type: none"> <li>○ Were these expectations met?</li> </ul> </li> </ul>	☑	Interviews (consumers)
	<ul style="list-style-type: none"> <li>● What was involved in the referral process from the consumer's perspective?               <ul style="list-style-type: none"> <li>○ What worked well? What could be improved?</li> </ul> </li> </ul>	☑	Interviews (consumers)
	<ul style="list-style-type: none"> <li>● What was involved in the pre-admission process?               <ul style="list-style-type: none"> <li>○ What worked well? What could be improved? (e.g. repetition with assessments)                   <ul style="list-style-type: none"> <li>▪ Details regarding the process of risk assessments, care-planning and physical assessments?</li> </ul> </li> </ul> </li> </ul>	☑	Interviews (consumers)
	<ul style="list-style-type: none"> <li>● To what extent do consumers feel involved in the decision making about their care and treatment planning?               <ul style="list-style-type: none"> <li>○ Barriers/facilitators</li> </ul> </li> </ul>	☑	Interviews (consumers)
	<ul style="list-style-type: none"> <li>● To what extent was the consumer's family/carers involved in treatment?               <ul style="list-style-type: none"> <li>○ Barriers/facilitators</li> </ul> </li> </ul>	☑	Interviews (consumers, family/carers)
	<ul style="list-style-type: none"> <li>● What interventions/therapy did the consumer's family/carers participate in?               <ul style="list-style-type: none"> <li>○ What was the acceptability/effectiveness of these?</li> </ul> </li> </ul>	☑	Interviews (consumers, family/carers)
	<ul style="list-style-type: none"> <li>● Are there any additional health programs/support that would be useful to integrate into the service?</li> </ul>	☑	Interviews (consumers, family/carers)
	<ul style="list-style-type: none"> <li>● What factors affect levels of participation in interventions/therapy? (e.g. staff support, peer workers, readiness, homelife distractions)</li> </ul>	☑	Interviews (consumers, carers/family)
	<ul style="list-style-type: none"> <li>● Did the support provided to family/carers meet their needs?</li> </ul>	☑	Interviews (carers/family)
<ul style="list-style-type: none"> <li>● Were there health professionals that were more beneficial than others throughout the admission? Were there any health</li> </ul>	☑	Interviews (consumers, carers/family)	



	professionals not included in the team that you think could improve care?			
	<ul style="list-style-type: none"> <li>What proportion of consumers do not have live in carers/support people?               <ul style="list-style-type: none"> <li>Does this influence outcomes?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>		CIMHA
	<ul style="list-style-type: none"> <li>What is involved in discharge planning?</li> </ul>		<input checked="" type="checkbox"/>	Interviews (consumers, carers/family)
	<ul style="list-style-type: none"> <li>What is the handover process when a consumer discharges from the service?               <ul style="list-style-type: none"> <li>What are the challenges/facilitators of the transition process?</li> </ul> </li> </ul>		<input checked="" type="checkbox"/>	Interviews (consumers, carers/family)
	<ul style="list-style-type: none"> <li>What services do consumers and carers get referred to for support after discharge?               <ul style="list-style-type: none"> <li>Alternatively, were there no services that met the consumer or carer's specific needs?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Interviews (consumers, carers/family)
Implementation (Meso/Macro)	<b>How does each of the MH-HITH services function in practice, and compared to the state-wide model of service?</b>			
		<i>Quantitative</i>	<i>Qualitative</i>	
	<i>State-wide model:</i>			
	<ul style="list-style-type: none"> <li>Have there been any changes to the state-wide model of service? If so, what are they?               <ul style="list-style-type: none"> <li>When were the changes made?</li> <li>What has driven these changes?</li> <li>What are the observed outcomes from these changes?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Service documentation  Interviews (staff, stakeholders)
	<i>Hospital and Health Service models:</i>			
	<ul style="list-style-type: none"> <li>To what extent has the MH-HITH services at each HHS been delivered as intended and in-line with the minimum required characteristics? Is it consistent across HHSs?</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Service documentation  Interviews (staff, stakeholders)
	<ul style="list-style-type: none"> <li>How do local governance and leadership structures influence service implementation and fidelity to the model?</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Service documentation  Interviews (staff, stakeholders)
	<ul style="list-style-type: none"> <li>Have there been any changes to the individual HHS models of service? If so, what are they?               <ul style="list-style-type: none"> <li>When were the changes made?</li> <li>What has driven these changes?</li> <li>What are the observed outcomes from these changes?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Local service documentation  Interviews (staff)
<ul style="list-style-type: none"> <li>Has the referral process changed over time?               <ul style="list-style-type: none"> <li>If so, has this impacted referral reach and sustainability?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Local service documentation	



				Interviews (staff)
	• How is the decision made to make a referral to MH-HITH?	<input checked="" type="checkbox"/>		Interviews (staff)
	• How is the decision made to accept a referral to MH-HITH? <ul style="list-style-type: none"> <li>○ What conditions/characteristics lead to the treating psychiatrist or NUM not accepting a referral? Are there reasons not listed in the exclusion criteria?</li> <li>○ What circumstances lead to the acceptance of a referral that doesn't meet the inclusion criteria?</li> </ul>	<input checked="" type="checkbox"/>		Interviews (staff)
	• What is the average length of time from referral to acceptance?	<input checked="" type="checkbox"/>		CIMHA
	• What is the average length of stay for consumers? <ul style="list-style-type: none"> <li>○ What/who determines the length of stay?</li> <li>○ Has the length of stay changed over time?</li> <li>○ Does this differ across sites?</li> <li>○ How many consumers have approval granted for a longer length of stay than the timeframe pitched in the model of service?</li> <li>○ What has led to a length of stay being shorter than expected?</li> <li>○ Is the average length of stay comparable to an acute mental health ward admission?</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CIMHA QHAPDC  Interviews (staff)
	• How many consumers continue taking part in paid employment whilst being cared for under MH-HITH? Caring for children? Continuing to drive? Are they recommended to continue taking part in these activities or do they do so without approval?	<input checked="" type="checkbox"/>		Interviews (staff)
	• What therapies/treatments/supports are available at each of the services? <ul style="list-style-type: none"> <li>○ Is this influenced by the staff profile incorporated into each service?</li> </ul>	<input checked="" type="checkbox"/>		Interviews (staff)
	• Is there capacity to add-in health programs/supports that consumers or family/carers feel would be useful to integrate into the service?	<input checked="" type="checkbox"/>		Interviews (staff)
	• How is continuity of care managed within and external to MH-HITH? <ul style="list-style-type: none"> <li>○ Within HHS teams and with Primary Care networks</li> <li>○ Are there any barriers to continuity of care within the service?</li> <li>○ How effective are the multidisciplinary reviews in supporting care?</li> </ul>	<input checked="" type="checkbox"/>		Interviews (staff, stakeholders)



	<ul style="list-style-type: none"> <li>• What does communication with other services involved with a consumer's care look like?</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Interviews (staff, stakeholders)
	<ul style="list-style-type: none"> <li>• Is the cost of the model sustainable compared with acute mental health inpatient beds?</li> </ul>	<input checked="" type="checkbox"/>		Additional data collection required (see recommendations in Section 6)
	<b>What skills and experience are utilised to support consumers in their homes?</b>			
		<i>Quantitative</i>	<i>Qualitative</i>	
	<ul style="list-style-type: none"> <li>• What is the staff profile required to meet the case-mix at each service?</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MHEC Service documentation Interviews (staff)
	<ul style="list-style-type: none"> <li>• What is the staff profile at each of the services?               <ul style="list-style-type: none"> <li>○ Weekend staff profile? After-hours staff profile?</li> <li>○ Who provides support outside of the extended hours provided by MH-HITH?</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Service documentation Interviews (staff)
	<ul style="list-style-type: none"> <li>• What unique skills do staff need for this service?               <ul style="list-style-type: none"> <li>○ Are there any additional training needs?</li> <li>○ What training is provided to staff?</li> <li>○ What qualifications are required?</li> <li>○ What supervision or peer support is provided?</li> </ul> </li> </ul>		<input checked="" type="checkbox"/>	Interviews (staff)
	<ul style="list-style-type: none"> <li>• How do the Occasions of Service compare between MH-HITH and the inpatient ward?</li> </ul>	<input checked="" type="checkbox"/>		Additional data collection required (see recommendations in Section 6)
	<ul style="list-style-type: none"> <li>• How is the Lived Experience Workforce (consumers and carers) used within the service?               <ul style="list-style-type: none"> <li>○ Has this changed over time?</li> <li>○ Is this impacted by the staffing mix?</li> <li>○ At which stage of service provision is a Lived Experience Worker introduced to the consumer? (i.e. first visit, recovery planning)</li> <li>○ How is Lived Experience support provided to the consumer and/or their family/carer? (i.e. telehealth, face-to-face)</li> <li>○ Are consumers and carers provided with referral pathways to relevant Lived Experience support in preparation for discharge from the MH-HITH service?</li> </ul> </li> </ul>		<input checked="" type="checkbox"/>	Interviews (staff)
	<b>Are the resources adequate to support clients being treated under MH-HITH?</b>			



	<i>Quantitative</i>	<i>Qualitative</i>		
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MHEC	
			Interviews (staff)	
		<input checked="" type="checkbox"/>	Interviews (staff)	
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MHEC	
			Interviews (staff)	
		<input checked="" type="checkbox"/>	Interviews (staff)	
		<input checked="" type="checkbox"/>	Interviews (staff)	
		<input checked="" type="checkbox"/>	Interviews (staff)	
		<input checked="" type="checkbox"/>	Interviews (staff)	
		<input checked="" type="checkbox"/>	Interviews (staff)	
	<input checked="" type="checkbox"/>		RiskMan	
	<b>The extent to which the service has had a sustainable impact on individuals</b>			
		<i>Quantitative</i>	<i>Qualitative</i>	
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Additional data collection required (see recommendations in Section 6)
				Interviews (consumers, carers/family, staff)
			<input checked="" type="checkbox"/>	Interviews (consumers, carers/family)



	<ul style="list-style-type: none"> <li>○ Do consumers apply the knowledge/skills/abilities they learn outside of the MH-HITH admission?</li> <li>○ If so, which treatment components promoted the sustainability of these behaviours?</li> </ul>				
	<ul style="list-style-type: none"> <li>● Do consumers and carers have an improved understanding of the factors that contribute to their mental health and wellbeing?</li> </ul>	☑		Interviews (consumers, carers/family)	
	<ul style="list-style-type: none"> <li>● Do consumers increase their engagement with the community (MH and broader community) after admission?</li> </ul>	☑		Interviews (consumers, carers/family)	
Maintenance (Meso/Macro)	<b>What factors impact the ongoing sustainability of MH-HITH?</b>				
		<i>Quantitative</i>	<i>Qualitative</i>		
	<ul style="list-style-type: none"> <li>● To what extent is MH-HITH becoming part of ongoing operations?</li> </ul>		☑		Interviews (staff, stakeholders)
	<ul style="list-style-type: none"> <li>● What are the risks to maintaining/the sustainability of the service going forward?               <ul style="list-style-type: none"> <li>○ What is the recruitment, retention, and consistency in staff employed in MH-HITH services?</li> <li>○ What aspects contribute to staff satisfaction, culture and performance?</li> </ul> </li> </ul>	☑	☑		MHEC  Interviews (staff, stakeholders)
	<ul style="list-style-type: none"> <li>● What, if any, refinements need to be made?</li> </ul>			☑	Interviews (staff, stakeholders)
	<ul style="list-style-type: none"> <li>● What quality improvement activities are undertaken at the MH-HITH services?               <ul style="list-style-type: none"> <li>○ How often is data reviewed? (i.e. monitoring and evaluation, monitoring service usage)</li> <li>○ What actions have been taken following these activities (i.e. changes to Model of Service)</li> </ul> </li> </ul>			☑	Interviews (staff, stakeholders)
	<ul style="list-style-type: none"> <li>● Are there any safety concerns for the staff and/or consumers within the MH-HITH model that require further consideration?</li> </ul>			☑	Interviews (staff, consumers) or Additional data collection tool required (see recommendations in Section 6)
	<ul style="list-style-type: none"> <li>● Have any changes in the broader service landscape impacted the MH-HITH services (e.g. roll out of older persons-specific models)?</li> </ul>			☑	Interviews (staff, stakeholders)



## 6. Data sources

A series of existing data sources have been identified that can be used to measure each of the KEQs for this evaluation. Identification of these relevant data sources was informed by discussions with MHAODSPB, AITU and MH-HITH staff, alongside a review of standard measures and data that MH-HITH routinely collect through implementation to determine what could be used for this program of work. A description of each of these data sources are presented in further detail below.

At present, there are no routinely collected data to answer the following questions:

- Sub-questions under: What is the effectiveness of MH-HITH on consumer outcomes and experience?
- How many consumers could not continue with MH-HITH? (i.e. were recommended to/self-requested/carer-requested to transfer to an acute mental health hospital setting for mental health treatment during their treatment with MH-HITH)
- What is the cost-effectiveness of MH-HITH compared to acute inpatient care and intensive community services?
- What are the direct and indirect costs associated with MH-HITH episodes of care?
- What is the cost per avoided acute inpatient admission?
- What proportion of consumers take up the service when referred and accepted?
- Are there any differences in key characteristics between those consumers who accept a referral compared with those who decline?
- How many eligible patients remain on the inpatient ward due to missed referrals or no occupancy within MH-HITH services?
- Is the cost of the model sustainable compared with acute mental health inpatient beds?
- How do the Occasions of Service compare between MH-HITH and the inpatient ward?
- Are the services adequately staffed to service the case-mix?
- Are there any staffing profiles that are difficult to fill across the MH-HITH services?
- How often are community teams having input into case reviews?
- What is the recruitment, retention, and consistency in staff employed in MH-HITH services?
- Are there any safety concerns for the staff and/or consumers within the MH-HITH model that require further consideration?

Therefore, our recommendation is to consider the creation of a REDCap data collection tool to collect these additional data variables to ensure these KEQs are answered. Further consideration is required about how to administer this tool and its custodian.

### 6.1 MH-HITH service documentation

A review of program documentation relevant to the implementation of the MH-HITH services should be undertaken to assess for any changes made over time. This should include (but not be limited to) key documents such as the overarching state-wide model of service and local models of service or similar documentation. Periodically, the research team should check-in with the MH-HITH Team Leaders to see if there are updated versions of documents available to ensure that the most up-to-date content is included and analysed for the evaluation.

### 6.2 Queensland Health data

To answer the quantitative related KEQs, the evaluation should access quantitative data from Queensland Health's Consumer Integrated Mental Health and Addiction (CIMHA), Emergency Data Collection (EDC), Queensland Health Admitted Patient Data Collection (QHAPDC), the Mental Health Establishments Collection (MHEC) and RiskMan for each of the seven sites. In addition, data should be obtained from the Your Experience of Service (YES) survey and the Carer Experience Survey (CES). A description of these datasets is provided below:



- CIMHA is a consumer-central clinical information system designed to support Queensland mental health, alcohol, and other drug services in the provision of safe and quality health services; and is the primary source of data for the activity of community and residential MHAOD services, clinical and consumer rated mental health outcome measures and Queensland’s Mental Health Act 2016.
- The EDC is a dataset of patients who have had an emergency stay at an ED in one of Queensland’s public hospitals; and collects demographic, service provision and performance information required to meet national reporting requirements.
- The QHAPDC collects demographic data and clinical information on all admitted patients separated from both public and licensed private hospitals and private day surgeries in Queensland.
- The MHEC collects consistent information on the activity of specialised mental health services at the service level, which aim to provide reliable data to better inform policy, practice, and planning of specialised mental health service activities at a state and national level. Organisations are required to report against the MHE NMDS data elements to meet their contractual agreements. MHEC captures a range of aggregate service data including number of clients, number of attendances, number of individuals by length of treatment and full time equivalent (FTE) paid staff.
- RiskMan is Queensland Health’s statewide system for managing and reporting clinical incidents, workplace incidents, consumer feedback, and risks. It’s a central platform for collecting, integrating, and analysing data related to these areas.
- The YES and CES surveys collect information about the experiences of care received by consumers and carers when engaged with Queensland public mental health services. The YES and CES surveys produce an overall experience and outcome score and scores for seven domains including Respect, Safety and Fairness, Participation, Valuing Individuality, Information and Support, and Making a Difference (Australian Government Department of Health, 2017). Completion of the experience surveys is voluntary.

A description of the data items that should be accessed through the CIMHA, EDC, QHAPDC, MHEC, and YES/CES are summarised below in Table 5. As these suggested data sources have not been accessed as a trial, an assessment of the quality of these data sources is not included in this document. As MHAODSPB accesses most of the data on a quarterly basis (CIMHA, EDC, QHAPDC, MHEC, YES/CES), QCMHR suggests also retrieving extended data from CIMHA and RiskMan at the same frequency to allow for regular monitoring and reporting.

**Table 5. Overview of state-wide quantitative data to be accessed and analysed through the evaluation.**

Data source	Data items
CIMHA	For each category request: <ul style="list-style-type: none"> <li>• Study ID</li> <li>• Episode ID</li> </ul> Consumer demographics at service episode start date: <ul style="list-style-type: none"> <li>• Date of birth</li> <li>• Sex</li> <li>• Gender</li> </ul>



	<ul style="list-style-type: none"> <li>• Indigenous status</li> <li>• Ethnicity</li> <li>• Country of Birth</li> <li>• Preferred language</li> <li>• Interpreter Required</li> </ul> <p>Diagnosis profile</p> <ul style="list-style-type: none"> <li>• Primary diagnosis</li> <li>• Secondary diagnosis</li> </ul> <p>Consumer geographical information</p> <ul style="list-style-type: none"> <li>• Postcode</li> <li>• Accommodation type</li> <li>• Living with</li> <li>• Address type</li> <li>• Statistical Area 2 (SA2)</li> </ul> <p>Service episode</p> <ul style="list-style-type: none"> <li>• Service episode Id</li> <li>• Service episode start date – time</li> <li>• Service episode end date – time</li> <li>• Transfer to MH-HITH Treating Unit start date – time</li> <li>• Transfer to MH-HITH Treating Unit end date – time</li> <li>• Referral to Treating Unit</li> <li>• Referred to Type</li> <li>• Referral source (derived)</li> <li>• MHA status</li> </ul> <p>Clinical note during stay:</p> <ul style="list-style-type: none"> <li>• Clinical note date</li> <li>• Clinical note category (admission, assessment/investigation, care plans, referral/triage, other)</li> <li>• Provision of service date</li> <li>• Provision of service – intervention type</li> </ul> <p>Outcome file during MH-HITH admission:</p> <ul style="list-style-type: none"> <li>• Collection date</li> <li>• Collection occasion</li> <li>• Reason for collection</li> <li>• Scores from the following outcome measures <ul style="list-style-type: none"> <li>○ HoNOS (sub scale and total scores)</li> <li>○ Phase of care</li> </ul> </li> <li>• Discharge destination</li> </ul> <p>Referrals and service episodes in the 12-months post MH-HITH service episode:</p> <ul style="list-style-type: none"> <li>• Start date</li> <li>• End date (if available)</li> <li>• Presenting problem</li> <li>• HHS</li> </ul>
<b>EDC</b>	ED encounter details: <ul style="list-style-type: none"> <li>• Presentation date</li> <li>• Length of stay</li> <li>• Presenting problem</li> </ul>
<b>QHAPDC</b>	Consumer demographics at service episode start date: <ul style="list-style-type: none"> <li>• Age</li> </ul>



	<ul style="list-style-type: none"> <li>• Sex</li> </ul> <p>Geographic information file at service episode start date:</p> <ul style="list-style-type: none"> <li>• HHS</li> <li>• Socio-Economic Indexes for Areas (SEIFA)</li> <li>• The Accessibility/Remoteness Index of Australia (ARIA)</li> </ul> <p>Clinical information file during admission:</p> <ul style="list-style-type: none"> <li>• Principal and other diagnosis</li> </ul> <p>Episode information details file:</p> <ul style="list-style-type: none"> <li>• Start date</li> <li>• End date</li> <li>• Mode of separation</li> <li>• Source of referral</li> <li>• Facility transferred from/to</li> <li>• Length of stay</li> </ul> <p>Average length of stay in MH-HITH</p> <p>Rates of readmission at 28 and 365 days</p>
<b>MHEC</b>	<ul style="list-style-type: none"> <li>• Staff FTE</li> <li>• Occupancy <ul style="list-style-type: none"> <li>◦ Average available beds for overnight-stay MH-HITH patients</li> </ul> </li> <li>• Accrued mental health care days</li> </ul>
<b>RiskMan</b>	<ul style="list-style-type: none"> <li>• Episodes of clinical incidents for each MH-HITH service</li> </ul>
<b>YES/CES</b>	<ul style="list-style-type: none"> <li>• Treating unit</li> <li>• Year</li> <li>• YES/CES survey item responses</li> </ul>

The data collected should be analysed in the correct way to answer each of the key evaluation questions. Descriptive statistics should be used, ANOVAs to examine change over time, and t-tests to examine relationships. Further analytical tests may be utilised depending on the quality and quantity of the data.

## 6.3 Semi-structured interviews and focus groups

The evaluation should include semi-structured interviews and focus groups with people that may have informed perspectives on lived experiences of mental health, mental health services and service need in the community, mental health service provision, and health service data and/or models. This qualitative data would capture complex and nuanced information pertaining to each site and will provide contextual understanding to the quantitative data retrieved. These participants should include:

- MH-HITH patients and their families or carers, who have accessed the MH-HITH services (n ~ 70 [10 each site])
- Patients referred into MH-HITH who chose not to use the service (n~7 [1 each site])
- MH-HITH staff working in MH-HITH services (n ~ 35 [5 from each site])
- MH-HITH referrers (n~7, 1 from each site) and broader stakeholders (TBC) (n = 5)

Over the evaluation period participants should be identified and approached by the evaluator or MH-HITH staff to assess their interest and potential for involvement in the research. Participation would be voluntary; informed consent would be obtained by participants before their involvement.

Both focus-groups and individual semi-structured interviews should be offered as methods of data collection and should be utilised based on participant preference. Semi-structured interviews or focus groups should be conducted in person where feasible, or via videoconferencing. Interviews or focus groups should be expected to take around 1



hour and should be facilitated and moderated by the project lead and associate investigators. Participants should be asked to consent to the semi-structured interviews/focus groups being audio recorded to support note taking. Audio recordings should be destroyed once minutes are checked for accuracy and completeness.

Qualitative, aggregated responses recorded as above in semi-structured interviews/focus groups notes should be collated into key themes, e.g. using thematic analysis. Thematic analysis enables the researchers flexibility and can enhance their depth of understanding with uncovering nuances that may otherwise be overlooked.

Participants with lived/living experience of MH-HITH should be remunerated for their time in line with recommendations from Health Consumers Queensland.

## 6.4 Ethics and Governance

Multi-site ethics approval would be required for the evaluation of the MH-HITH services. Governance approvals would be required at each HHS where a MH-HITH service is operating. A Public Health Act approval and Health Translation Queensland Research Passport Agreement would also be required before the evaluation can commence. This has been incorporated into the project timeline, detailed in Section 7.



# 7. Implementation plan

The suggested timeline for completing the evaluation is presented below in **Figure 3**, with the project concluding following the delivery of the final evaluation report.

**Figure 3. Project timeline for MH-HITH evaluation**

Date/Activity	Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<b>Phase one: Prepare for the evaluation</b>																				
Human Research Ethics Applications																				
Research Governance, PHA Applications, HTQ Research Passport Agreement																				
<b>Phase two: Collect and analyse data</b>																				
Recruitment and qualitative data collection																				
Request quantitative data																				
Data Analysis (qualitative and quantitative)																				
<b>Phase three: Reporting and presentation of findings</b>																				
Writing of report																				
Presentation of findings to MHAODSPB																				
Presentation of findings to Project Advisory & LEx Group																				
Receive Feedback from MHAODB																				
Feedback from Project Advisory & LEx Group																				
Submission of Final Report to MHAODB																				
Dissemination of findings to participants																				

\*Additional time may be required depending on the speed of ethics and governance approvals.

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# Appendix A: Findings from the literature review

A rapid review of the literature examining MH-HITH services was undertaken. There were several different terms used for MH-HITH including Inpatient Equivalent Home Treatment, Home Treatment, Community-based Intensive Home Treatment, and Intensive Home Treatment.

The most relevant publication for this evaluation framework was the Program Evaluation of the MH-HITH pilot in Victoria. The research team utilised the RE-AIM framework for their evaluation and found that the program design was aligned with evidence and supported mental health treatment and care in a setting that is less restrictive and potentially more responsive, more trauma-informed and is more supportive of consumer and carer decision-making compared to inpatient units. Key barriers that were identified in implementation included staff recruitment, a lack of evidence regarding to what extent consumers rights are explained and implemented in MH-HITH, challenges between the Lived Experience Workforces and clinicians, the experience of care for families and carers not being well understood, challenges in infrastructure and in navigating travel time to provide treatment (Cube Consultancy Group, 2022).

Baumgardt, et al. (2021) published their study protocol for a pre-test post-test methodology of MH-HITH services. The protocol indicated plans to examine implementation processes, treatment processes, clinical efficacy, costs, and subjective experiences of a MH-HITH service. Several papers have been published from this protocol, all of which included 400 patients, including 200 case-matched controls, across 10 different services:

- The first study focused on decision-making, patient satisfaction, and drop-out rates. Evaluation of shared-decision making was performed using the 9-item Shared Decision-Making Questionnaire (validated) and found that patients felt significantly more involved in their treatment if treated at home rather than as an inpatient ( $p < 0.001$ ). Patients were significantly happier with MH-HITH when compared with inpatient treatment ( $p < 0.001$ ), measured using a specially designed 18-item Likert scale. There were no significant differences seen in drop-out rates ( $p = 0.551$ ) and reasons for doing so were similar, including external factors (i.e. moving out of catchment, acute medical issues arising, death), dropping out against medical advice, and treatment failure (defined as severe noncompliance resulting in discharge for inpatient treatment or as requiring a transfer to inpatient care if receiving MH-HITH) (Weinmann et al. 2023).
- The second study assessed the association of MH-HITH compared with inpatient treatment regarding readmission rates, social outcomes, and clinical outcomes. Patients treated with MH-HITH were less likely to require an inpatient admission within the 12 months following discharge than those treated in hospital (31% versus 50%,  $p < 0.001$ ). Similarly, there was a lower rate of readmission to either inpatient, day clinics, or MH-HITH (mean difference: -13%,  $p < 0.001$ ) and there were fewer inpatient treatment days (mean difference: -6.82 days,  $p < 0.001$ ). There were no significant differences in job integration, quality of life, psychosocial functioning, symptom severity, or recovery at 12 month follow up (Bechdorf et al., 2024).
- The third study has evaluated cost-effectiveness of implementing MH-HITH. This study found that there was a shift of psychiatric treatment costs from inpatient to outpatient care which the authors deemed consistent with health economic evaluations of other community-based acute psychiatric treatment approaches (including assertive community treatment for patients with schizophrenia, integrated care for patients with severe psychosis, crisis resolution services). There were no significant differences in total societal costs or in costs covered by health insurance (Waldmann et al., 2025).

Cost effectiveness has also been evaluated by a team from The Netherlands. Their study found that MH-HITH was slightly more attractive in terms of cost-utility and cost-effectiveness compared with inpatient treatment (Barakat et al., 2023).

A randomized controlled trial in Switzerland aimed to test whether and to what degree MH-HITH services would enable a reduction of hospital use. The study found that the mean number of hospital days per patient within 24 months was reduced by 30.4% (41.3 versus 59.3 days,  $p < 0.001$ ) when a MH-HITH admission was available.

However, differing from other studies, overall treatment duration and mean number of hospital admissions per patient did not differ significantly. There were no significant differences in clinical and social outcomes or patient satisfaction, and they also found that MH-HITH only prevented an inpatient admission for 4.6% patients as most were recruited after already being admitted to an inpatient ward (Stulz, 2020).

There was limited evidence regarding staffing and related outcomes. One scoping review examined the role of nurses in MH-HITH. Across the five eligible studies, five key dimensions in nursing in MH-HITH services were identified, including satisfaction, care models, the therapeutic relationship, the care environments, and the organisation of care. These interconnected dimensions were deemed to influence the quality of care provided (Soares, 2025).

There were several smaller studies that examined which ‘type of’ patients were best suited for MH-HITH. One study found that patients with previous police or judiciary encounters, agitation, schizophrenia spectrum and other psychotic disorders, and who were unemployed were less likely to benefit from MH-HITH (Barakat et al., 2021). Similarly, van Asperen et al., (2022) found that patients that were motivated to engage in treatment, had social support, and were not currently in outpatient treatment were more suitable for MH-HITH. Klunder, et al. (2025) conducted an exploratory prospective naturalistic study to elucidate which variables predicted the course of crisis severity for patients receiving MH-HITH. The Symptom Questionnaire-48 was used to measure crisis severity; no variable was identified that could predict changes in crisis severity.

Finally, there were several studies examining experiences of MH-HITH. A study conducted in the UK examined the perspectives of staff, patients and carers regarding MH-HITH. Findings from 21 participants identified challenges with the staffing model and effective care provision, the organisation of work, the fit between skills and training and the needs of patients, and disappointment that the service design that did not feel co-produced. Care plans, when used appropriately, were seen as a positive aspect to the model (Clibbens et al., 2024). A study conducted in Switzerland examined the perspectives of 159 patients, finding that those who received MH-HITH were generally more satisfied with treatment, however challenges were voiced around their health condition not being solved and not finding all members of the MH-HITH team helpful to them (Motteli et al., 2020). A research group from Germany examined the perspectives of nine patients receiving MH-HITH. The findings indicate that the function of fellow patients, the setting of treatment, the conditions in place, and the relationship of relatives are pivotal to patient satisfaction. The quality of the therapy provided can also have an impact (Adam et al., 2023).

## Appendix B: List of stakeholders engaged to develop evaluation framework

Name	Role
Kristen Breed	Director, MHAODSPB
Bernadette Klopp	Manager, MHAODSPB
Helena Rawlins	Senior Data Collection Officer,
Chevonne Prior	Nurse Unit Manager, MH-HITH, West Moreton HHS
Stacey Cooper	Program Manager, Mental Health Specialised Services, Wide Bay HHS
Kylie Hall	Nurse Unit Manager, MH-HITH, Metro North HHS
Daniel Aldons	Nursing Director Acute Mental Health, Darling Downs HHS
Anthea Lam	Psychiatrist, MH-HITH, Cairns and Hinterland HHS
Sandra Powell	Nursing Director, Acute Mental Health Services, Metro South HHS
Darina Monks	Nursing Director, Acute Mental Health Services, Metro South HHS
Vandhna Nand	Nurse Unit Manager, MH-HITH, Metro South HHS
Jacob Christensen	Nurse Unit Manager, MH-HITH, Gold Coast HHS
Nicola Hughes	Nursing Director, Mental Health Specialised Services, Gold Coast HHS
Cate White	Advanced Peer Worker, MH-HITH, Gold Coast HHS
D*** A*****	MH-HITH user, Metro South HHS
A***** S*****	MH-HITH family member of user, Metro South HHS
M***** M****	MH-HITH user and family member of user, Metro North HHS