Developing a new model of care for mental health services in the Bowen Basin

Phase 1: Full Project Report

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Wesley Medical Research

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Glossary of abbreviations

AODs – Alcohol and Other Drugs service

AusHSI – Australian Centre for Health Services Innovation

CBOs - Community Based Organisations

CTM Links - Capella Tieri Middlemount Community Support Network

EAP - Employee Assistance Programs

EPIS - Exploration, Preparation, Implementation, Sustainment

FIFO/DIDO – Fly in Fly Out/ Drive in Drive Out

GPs – General Practitioners

HHS – Hospital and Health Service

LGA – Local Government Area

MHHS - Mackay Hospital and Health Service

NDIS – National Disability Insurance Scheme

NGOs – Non-Government Organisations

NQ – North Queensland

PHN – Primary Health Network

SPCAP - Suicide Prevention Community Action Plan

WMR – Wesley Medical Research

Executive Summary

Background

The Bowen Basin stretches across rural and remote North and Central Queensland and is a region characterised by remoteness and a large non-resident workforce placing a strain on the delivery of services such as health, housing, education and infrastructure.

The Australian Centre for Health Services Innovation (AusHSI) partnered with Wesley Medical Research to undertake a three-phased research program that will lead to improved mental health services and outcomes for rural communities in the Bowen Basin.

This report presents the findings of Phase 1 of the project (Exploration Phase: Developing a new model of care for mental health services). Existing services and key providers and stakeholders were identified, then extensive online interviews were conducted, and written feedback elicited to understand the contextualised barriers and facilitators to service delivery and implementation. This has assisted development of recommendations for a new model of care for mental health services in the Bowen Basin.

Findings

The findings of the project describe the **services currently available**; the **key barriers and facilitators** to service delivery; and an assessment of **current gaps in care and recommendations for a pilot model** of mental health service delivery in the Bowen Basin.

Service identification

We identified a range of local mental health services, plus numerous nationally accessible phone and online suicide prevention and counselling services. However, the public-facing information was incomplete, outdated and inaccurate.

Barriers and Facilitators to service delivery

System-wide (outer context) elements identified:

- **Service environment:** economic insecurity, FIFO impacts, lack of services, access and workforce.
- **Funding processes:** under allocation, multiple agendas, short-term funding affects staff retention.
- **Inter-organisational networks and environment:** multiple networks, past success of collaboration.
- **Patient/client advocacy:** strong desire for a bottom-up approach to mental delivery in the region.
- **Patient demographics and characteristics:** complex social determinants, stigma, don't seek help.
- **Distance and geography:** travel times, attracting skilled providers, poor internet connectively.

Individual and organisation (inner context) elements identified:

- **Organisational culture and climate:** agile, collaborative, receptive to change.
- **Leadership:** Strong supportive team-based leadership.
- **Individual provider characteristics:** passionate, innovative, resilient, skilled and adaptable.
- **Staffing processes:** staff recruitment and retention, employing locally, telehealth, incentives.

Bridging factors

Organisations are not closed systems, rather there is a dynamic interconnectedness to the service system and other organisations within the system. These 'bridging factors' emerged as key to successful service delivery. The key themes identified were:

- **Interagency collaboration**
- **Bridging organisations** such as Northern Australia Primary Health Limited, and Whitsunday, Isaac and Mackay Suicide Prevention Community Action Planning Group
- **Physical spaces can support bridging** when there is co-location of multiple services
- **Funding and contracting arrangements** to either support or hinder service delivery
- **Boundary spanning positions** such as postal workers, agronomists and bank managers, may connect hard-to-reach populations (e.g. farmers) with mental health services.

Model of care characteristics

Stakeholders identified the importance of model flexibility and fit to the region; and that any new model of care should be designed with community consultation, local decisions, and local provider engagement.

Positive characteristics: bottom-up, community driven, destigmatising approach to mental health care, using a narrative of lived experience; localised services, run by local people; working collaboratively with existing services; services and support in a central, accessible location without attached stigma; the right balance of telehealth and face-to-face services; workforce incentives.

Negative Characteristics: A telehealth service without hands-on support for clients to access and use it; providing outreach services from distant locations such as Mackay or Rockhampton; services which have a perceived lack of privacy or stigma attached.

Identified service gaps

Stakeholders identified numerous service gaps for mental health care delivery in the Bowen Basin which could be addressed by a new model of care. Some included: lack of psychology and other services for children and youth; lack of awareness of services and access pathways; limited and inconsistent outreach services to Dysart and other more remote locations; lack of services that are face-to-face, affordable, and available out of hours; lack of general education around mental health awareness, stigma, and health literacy.

Recommendations

Town Halls

Given the very strong themes regarding community development, ownership and consultation, our chief recommendation is to engage local stakeholders and community members in the process of selecting and operationalising the new model of care. In order to do this, we propose to hold town hall meetings in the region that would facilitate discussion around recommended models of care; explore how these could be operationalised in practice; establish the resources or funding that would be needed; and identify potential partners and in-kind support for the pilot program.

Model of care options

Option 1: Care navigation

A model of service delivery which focuses on care navigation and connection would assist people to be directed to the right service at the right time and support them through their help seeking journey. This model of care could have several components including: a physical and virtual mental health and wellbeing information hub, with a recognised phone number and visible presence in the community; a dedicated person (care navigator) in an intake, referral and coordination role; update, promotion and

maintenance of service listings on My Community Directory or creation of a similar webpage. Additionally, this information could be used to develop a service decision making flowchart and/or mobile app.

Option 2: A consortium of services working together for holistic care

A jointly commissioned consortium of agencies and clinical providers working together in a case-management approach to individual patient care provides an attractive option to mental health stakeholders in the Bowen Basin. Two options to operationalise this may be:

> A: An interorganisational, multi-disciplinary case-management team with a mix of skills and experience who jointly support the holistic mental health needs of each patient. They would be based in a hub town such as Moranbah with either spoke sites or outreach travel to other areas.
>
> B: A co-located set of agencies and providers working out of one physical space to provide a holistic one-stop mental health hub including services such as employment, alcohol and drugs, and physical health. This option would require a dedicated physical space, service level agreements with providers, and a community steering committee.

Option 3: Education, training and support for the community and frontline providers

Developing the capacity of the community to take responsibility for improving mental health can be achieved by working with community members to share their own stories of lived experience and providing simple community psychoeducation around mental health and wellbeing, service access and available resources. This model of care should also encompass better training and support for frontline providers, and particularly GPs, to better understand and manage mental health in the community.

Option 4: Increase capacity of existing services to delivery care in the community

Rather than a new model of care, this option is about partnering with organisations and providers to recruit a larger mental health workforce and provide resources and/or funding to increase their capacity and reach. This may include working with universities to provide placements and bursaries for students, supporting workforce incentive schemes with the Northern Queensland PHN, providing incentives or resources for afterhours care and outreach from Emerald or Moranbah more frequently, or contributing to accommodation/rent for service providers and leases for commercial spaces.

Additionally, this option would establish one or more supported telehealth rooms to increase access to psychology services and specialised providers within a general practice or existing non-stigmatising community space such as the Moranbah Youth Centre.

Costs of models of care

There are varying costs to implement and sustain each of these models of care. Detailed estimates for these costs have been provided by the Northern Queensland PHN, a local commissioning agency. Town Hall meetings however would be required to choose a viable option to develop in more detail.

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Main Report

Introduction

Terms of reference and program of research

Wesley Medical Research (WMR) operates with the purpose of improving patient care through applied medical research. As part of its COVID-19 Rapid Response Research Centre, in collaboration with the Australian Centre for Health Services Innovation (AusHSI), Wesley Medical Research has completed Phase 1 of a three-phased research program that will lead to improved mental health services and outcomes for rural and remote communities in the Bowen Basin. The program of research involves three phases as outlined below.

Phase 1: Understand the context of service delivery in the Bowen Basin and associated barriers and facilitators. Identify existing mental health services, how they can be improved and potential gaps in care. Recommend a model of care designed to support individuals that complements existing services.

Phase 2: Develop and implement the chosen model of care in the Bowen Basin community in collaboration with community stakeholders and local organisations.

Phase 3: Provide a robust evaluation of the trialled model of care that will inform a continuing service delivery model to provide sustained, improved mental health in the Bowen Basin.

This report presents the findings of Phase 1 of the project (Exploration Phase: Developing a new model of care for mental health services), which has assisted in developing recommendations for a new model of care for mental health services in the Bowen Basin. Through an environmental scan, AusHSI has identified and mapped services, and stakeholders have been identified and consulted. Analysis of these findings has provided a context assessment to inform the selection of key recommendations and strategies for planning and implementing a new model of mental health care delivery in the region.

Background

The Bowen Basin stretches across rural and remote North and Central Queensland and holds one of Australia's largest coal reserves. The region comprises the local government areas (LGAs) of Banana, Central Highlands, Isaac and Whitsunday (Bowen only), as highlighted in Figure 1. It is serviced by a range of small mining and agricultural communities including Moranbah, Dysart, Clermont, Glenden, Middlemount, Emerald, and Tieri, with a resident population of around 76 500 people[1]. Mackay, Rockhampton, Bowen, and Gladstone act as larger coastal bases for the mining industry and many of its employees.

The Bowen Basin is a region characterised by remoteness and a large non-resident workforce due to the fly-in, fly-out (FIFO) and drive-in, drive-out (DIDO) nature of its resource industry. FIFO/DIDO workforce practices involve workers flying or driving temporarily to mining sites and being provided with food and accommodation within existing resource communities in a rostered 'on' and 'off' pattern[1]. Their families and usual place of residence are located elsewhere. In the Bowen Basin, there are currently 44 coal mining operations and two gold mines[2] using a large proportion of FIFO/DIDO workers, which significantly impacts the region's non-resident population. This non-resident workforce increases the region's population by 20% at any given time and is particularly felt in the Isaac and Central Highlands areas[1]. This influx of temporary residents places a strain on the delivery of services such as health, housing, education, and infrastructure. The capacity of health services to meet demand is being impacted, with as

many as one-third of all presentations to key local health services, including general practices and hospitals, attributed to non-residents[3].

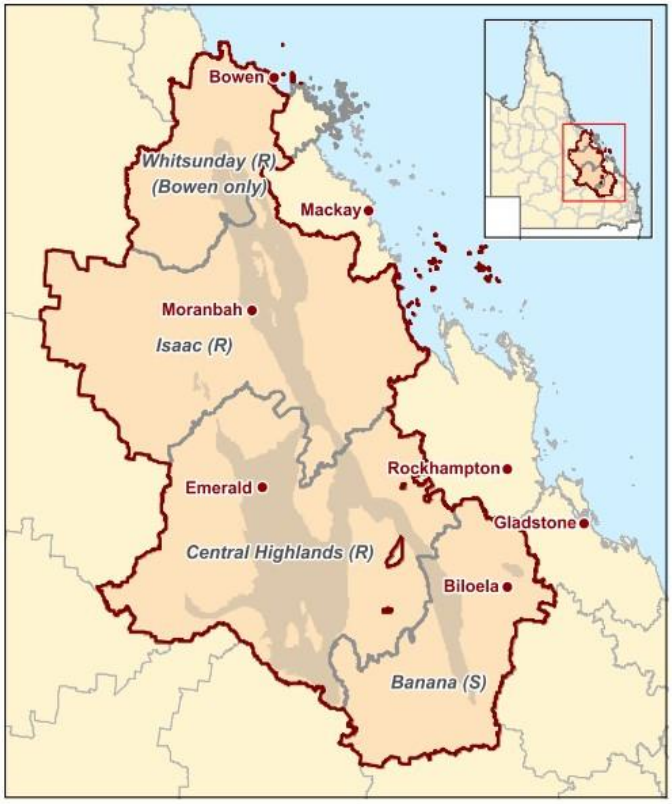

Figure 1. Map of the Bowen Basin region (reproduced from Bowen Basin population report, 2019[1])

In particular, recent years have seen an increase in demand for mental health services in the Bowen Basin region. This demand is driven by increasing needs of local community members, as well as non-resident FIFO workers who have a substantially higher likelihood of experiencing mental health problems than the general population[4]. Unfortunately, increasing demand for mental health care has not yet been met with a proportional increase in mental health services. This is largely due to the challenges of funding, delivering, and staffing mental health services in such rural and remote areas. In particular, an under-allocation of health workforce and workforce support negatively impacts the region. The numbers of mental health professionals including psychologists, general practitioners and other allied health practitioners decrease substantially with increased remoteness[5]. Many towns within the region have limited options for mental health care, and residents may not have access to appropriate providers or services in a timely manner, particularly for specialist or follow-up care. Consequently, community consultation has identified inadequate access to mental health services as a strong concern for Bowen Basin residents[6,7]. New ways of working are therefore needed to meet the needs of both permanent residents, and the FIFO/DIDO workers in the Bowen Basin region.

Scope

This project forms part of a larger mental health research program. The overarching research program aims to develop, implement, and evaluate a new model of care for delivering mental health services in the Bowen Basin. This process will be guided by the Exploration, Preparation, Implementation, Sustainment (EPIS) Framework[8], a widely used implementation science framework (Figure 2) developed for implementation of evidence-based psychosocial interventions in public sector settings.

This report presents the findings of the Exploration Phase of the project (red box, Figure 2), which has assisted in developing a new model of care for mental health services in the Bowen Basin. Through an environmental scan, AusHSI has identified and mapped services, and stakeholders have been identified and consulted. Analysis of these findings has provided a context assessment to inform the selection of key recommendations and strategies for planning and implementing a new model of mental health care delivery in the region.

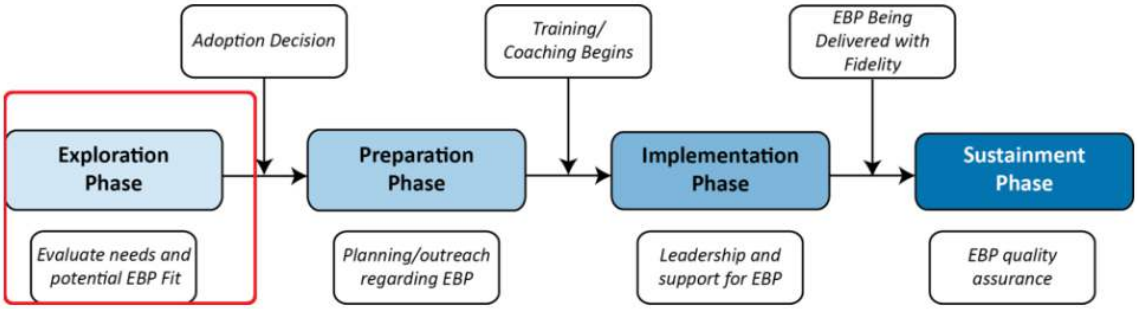

Figure 2. Phases of the Exploration, Preparation, Implementation, Sustainment (EPIS) Framework (reproduced from https://episframework.com/what-is-epis. *EBP*: Evidence-Based Practice, in this case a mental health service delivery model of care.

Aims & Objectives

The aim of this Exploration Phase of the project is to develop a new model of care for mental health services in the Bowen Basin. The objectives are to:

1. Identify current available mental health services and programs within the Bowen Basin
2. Identify barriers and facilitators to delivery, implementation, and access for mental health services in the Bowen Basin
3. Recommend potential options for a new model of care to support mental health service delivery in the Bowen Basin

Project design

Project setting

The geographical boundaries of the Bowen Basin considered in this project are displayed in Figure 1. Given that this represents an area of over 60,000 square kilometres, it would be challenging to perform this project across the entire region. The Isaac Local Government Area (LGA) (Figure 3) represents the most populous region of the Bowen Basin, and also the area with the largest proportion of non-resident population[1]. Consequently, this project focuses on the Isaac LGA including the towns of Moranbah, Dysart, Clermont, and Middlemount. It was also important to include Mackay in the project's scope as it acts as a base for many outreach services, and the Mackay Hospital and Health Service (MHHS) is a key stakeholder in the region. Central Highlands, another similarly large LGA in the region, was later included to broaden the scope of the project and provide an additional perspective.

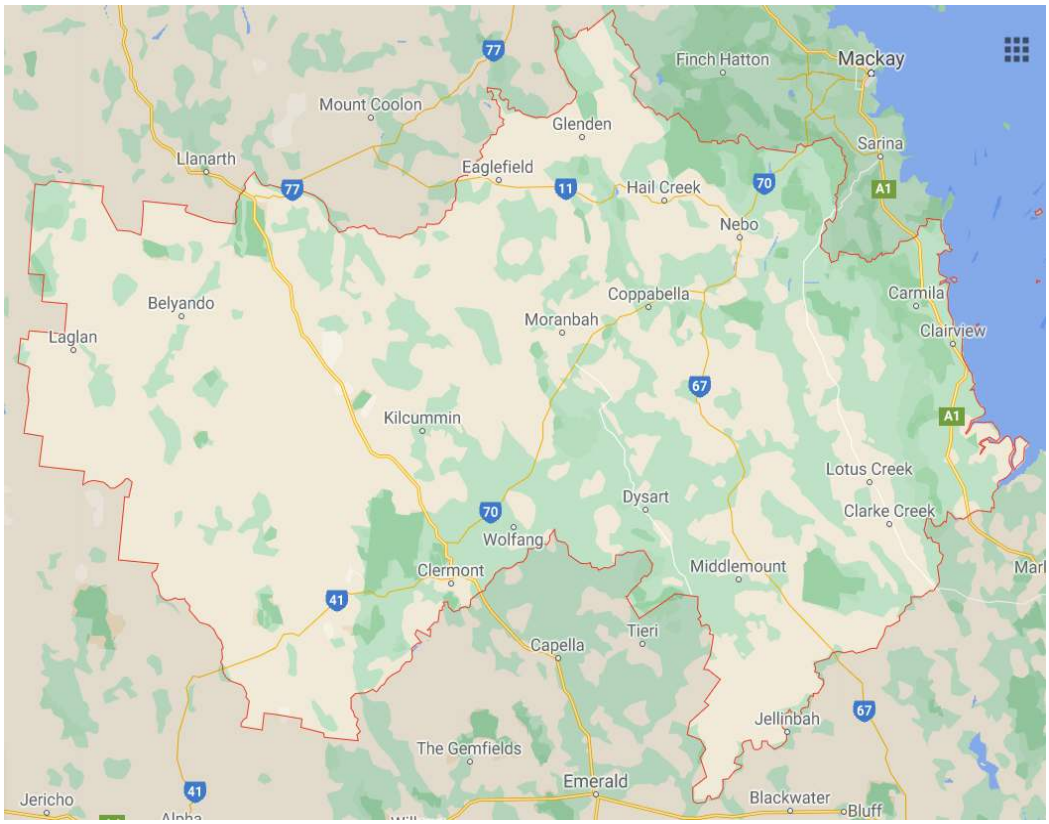

Figure 3. Map of the Isaac Local Government Area

Project population

Key mental health stakeholders in the Bowen Basin were defined to be any individual or group who could influence the implementation of a new model of care into policy and/or practice. This included health practitioners; the Hospital and Health Service; the Primary Health Network (PHN); Mental Health, Alcohol and Other Drugs (AODs) services; national phone/online mental health services (e.g. Lifeline); local government; Non-Government Organisations (NGOs); Community Based Organisations (CBOs); advocacy groups; social and economic development organisations; local businesses; mining and resource companies; and community members.

Methodology

Service mapping

This desktop map of mental health service providers and services was developed in June 2020 using sources publicly available on the internet. Services were included in the map if they explicitly stated on their website or on a community directory that they provided mental health or related services.

A list of populations and service needs was developed based on common mental health needs, and detailed searches were conducted for the Isaac regional towns of Moranbah and Dysart, as well as services which covered the entire region, along with state or national services such as online counselling.

Sources of information were:

- My Community Directory https://www.mycommunitydirectory.com.au/
- Health Direct https://www.healthdirect.gov.au/
- Queensland Mental Health Commission – regional community mental health and wellbeing hubs https://www.qmhc.qld.gov.au/awareness-promotion/mental-health-wellbeing/regional-wellbeing-hubs
- Centre for Rural and Remote Mental Health https://www.crrmh.com.au/
- Google https://www.google.com/
- Google Maps https://www.google.com.au/maps/
- Mackay Hospital and Health Service website https://www.mackay.health.qld.gov.au/
- Head to Health – Australian Government https://headtohealth.gov.au

Stakeholder consultation

Potential participants were initially identified through the service mapping and existing contacts of WMR, AusHSI and Mackay Hospital and Health Service (MHHS). Additional participants were identified by stakeholders during the consultation process using snowball sampling methodology. All potential participants were sent an email invitation or approached by phone and asked to participate. A participant information sheet was provided, and informed consent established from all participants.

Data was collected via a combination of semi-structured interviews and written responses. All interviews were conducted by videoconference, using either Zoom or Microsoft Teams. Both individual and group interviews were conducted, with the composition based on participant availability and preference. Interviews lasted between 30 and 60 minutes. These were recorded and transcribed verbatim using an automated online service (NVivo Transcription). Transcripts were then checked for correctness and clarity by AusHSI researchers. Written responses to questions were obtained via email from stakeholders who declined an interview due to time constraints or for personal reasons. Both the interview guide and written feedback template contained the same set of questions for participants.

Interview guide

A semi-structured interview guide (available in Appendix 1) was used to conduct interviews and provide a template for written responses. The purpose of the guide was to obtain a first-hand account of service provision in the Bowen Basin from the perspective of local stakeholders. This guide was based on the constructs of the EPIS framework (Figure 4) and asked about existing local mental health services, the stakeholder's role in delivering or supporting them, and barriers and facilitators that exist for the delivery and access to those services. Consistent with the constructs of the EPIS framework, questions targeted participants' perceptions of how inner context factors (e.g. organisational characteristics, individuals, knowledge, leadership), outer context factors (e.g. funding, policy, networking) and innovation factors (e.g. adaptability, characteristics and fit) might impact on service delivery. The interview guide was flexible such that the interviewer could follow up and explore relevant themes raised in the interviews.

Data analysis

Information derived from the environmental scan of current services was compiled in an Excel spreadsheet and represented in a data matrix. It was analysed and reported using descriptive statistics (e.g. frequency, proportion, sum).

For data obtained via stakeholder interviews and written feedback, two people experienced in qualitative research methods independently read and analysed the transcripts/text and applied a set of codes to condense text into organised and analysable units. These codes were largely informed by the EPIS constructs (outer setting, inner setting, bridging factors, and the innovation) however several themes also emerged from outside the framework. Codes and themes were revisited in an iterative process as data collection and analysis proceeded, and data saturation was achieved. Discrepancies in assignments of codes were discussed and resolved amongst the coding team. The final codes and themes provided an evidence and theory-based context assessment of the barriers and facilitators to mental health service provision in the Bowen Basin.

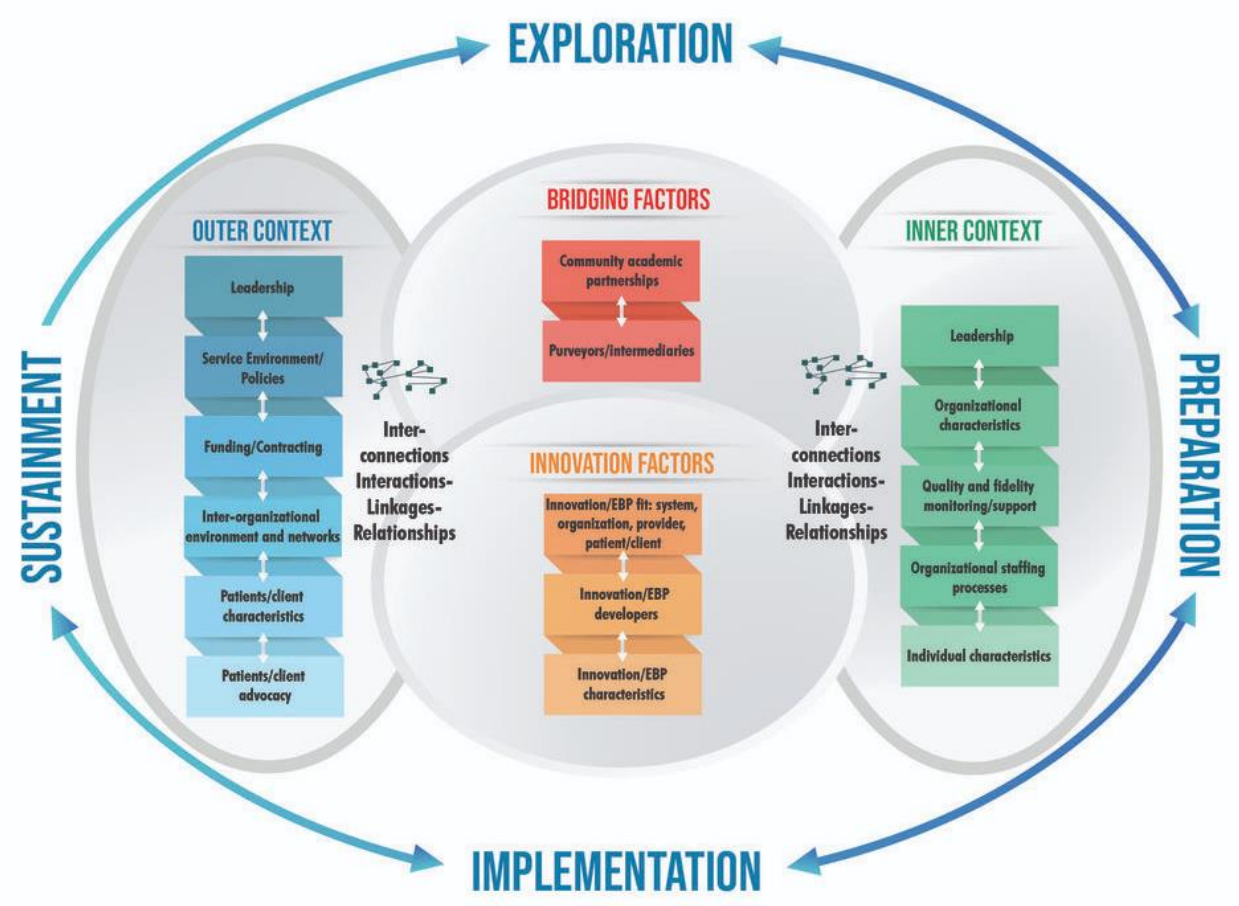

Figure 4. EPIS Framework Constructs (reproduced without changes from Moullin JC et al[9]).

Results: Mental health service mapping

Services identified

Desktop service mapping identified a range of mental health services and supports in the region including:

- acute crisis care in hospital emergency departments
- outpatient and outreach services delivered by Hospital and Health Services
- mental health care plans in general practice
- care under the National Disability Insurance Scheme (NDIS)
- Employee Assistance Programs (EAPs), critical response and fitness for work
- private psychology providers
- occupational therapy, social work and other allied health providers
- alcohol and other drugs services
- community, family and social support services
- counselling services
- community development officers
- suicide prevention projects and activities
- community mental health training
- bespoke mental health programs for the mining community
- support for local businesses
- community centres and community groups
- numerous nationally accessible phone and online suicide prevention and counselling services

The services available differed across the Isaac region, however all communities had access to certain services, e.g. a Queensland Health mental health service, and a drug and alcohol service. No specialist early intervention services were identified, however it is likely that some providers such as employee assistance providers would offer early intervention as part of their practice. A large number of free or low-cost phone, internet and email counselling services were found which are available to people living in the Bowen Basin region. These tended to be state-wide or national resources with few (except Mates in Mining and Rural Health Connect) which have a specific focus on supporting people in rural and remote areas.

A detailed description of all services, their target population and location are provided in Appendix 2. However, a review of this information and subsequent discussion with key stakeholders confirmed that there were substantial gaps in this publicly available information, as well as discrepancies between sources. For example, according to the government Health Direct site there is a Royal Flying Doctors Service general practice located in Moranbah, however on the Royal Flying Doctors Service website Moranbah is not listed as a general practice site.

It was unclear what services were available at various providers, and many, including the Queensland Health sites, did not give information about fees and eligibility criteria. Some information was out of date, and some of the available services which were identified in the stakeholder interviews were not found in

the online mapping. For example, NQ Connect was listed as an online and phone-based counselling service available for people in the Northern Queensland Primary Health Network, however it had ceased operations. No information could be found online about waiting lists for the various services.

Therefore, the service information provided in the appendix is for reporting purposes only and should not be considered a current representation of actively available services in the Bowen Basin region. More work needs to be done to establish and maintain a useful public facing directory of mental health services.

Results: Stakeholder identification

Stakeholders

In total, the project team attempted to contact 66 individual and group stakeholders identified from across the region. This included those found during initial service mapping as well as other key peripheral groups identified in interviews such as local council, schools, police, and mining companies. A complete list of these stakeholders, groups and roles is in provided in the tables of Appendix 3.

Nineteen of these stakeholders agreed to be interviewed for the project and a further 3 provided written feedback, for a total of 22 participants (Figure 5). Another eighteen stakeholders felt the project was out of their scope but assisted with data, general information or further contacts. Nineteen stakeholders did not respond to requests via multiple emails or phone calls. The remaining stakeholders had missing contact details or were difficult to access due to challenges obtaining ethical approvals (e.g. police force, schools).

Figure 5. Stakeholders identified and contribution to project

Stakeholder demographics

While the project focused largely on the Isaac and Central Highlands areas of the Bowen Basin, Figure 6 displays the geographic spread of the 22 participating stakeholders and the regions of their associated service delivery. Stakeholders held various roles in mental health care including frontline care providers, community development officers, project officers, advocacy leads, service planners, service commissioners, and service managers. Numerous types of organisations were represented including Hospital and Health Services, primary care, private practice, allied health, community development and social care, not-for-profit, NGOs, and a range of health and non-health government departments. Figures 7 and 8 provide a visual representation of these stakeholder characteristics.

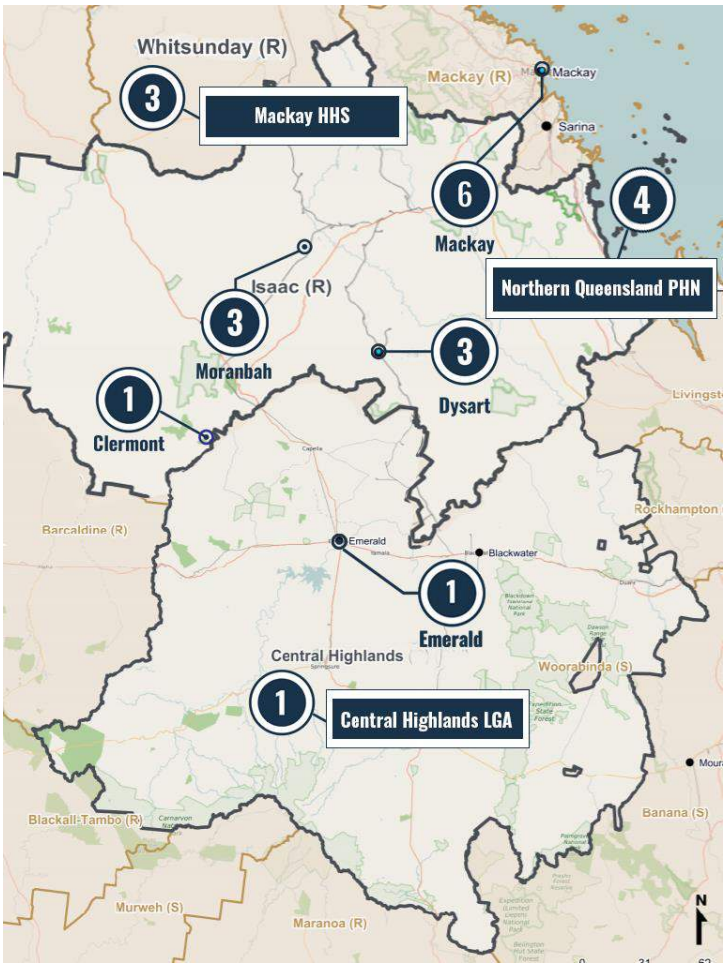

Figure 6. Geographical locations of participating stakeholders

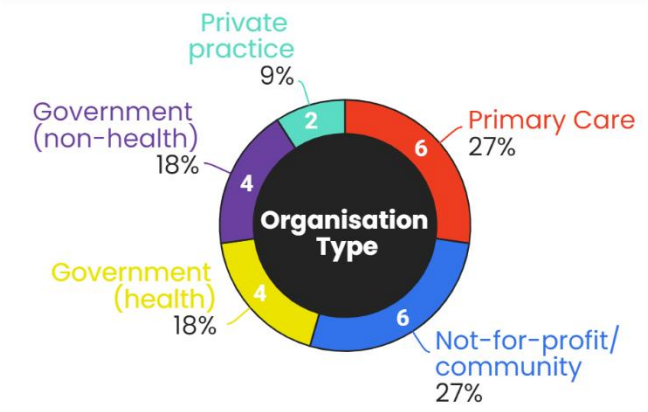

Figure 7. Organisation types represented by participating stakeholders

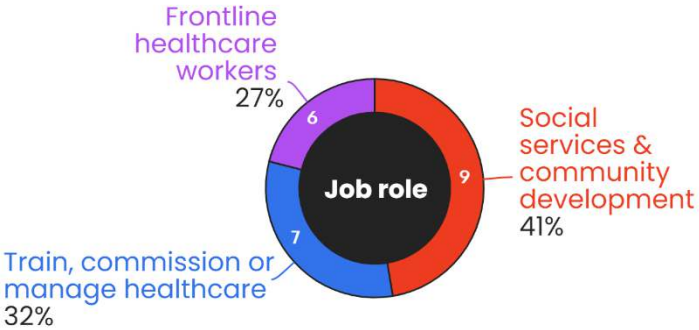

Figure 8. Job roles of participating stakeholders

Results: Context assessment

Region-wide Bowen Basin characteristics which impact mental health service delivery

When implementing a new innovation, it is important to consider factors at a system-wide level which may act in a dynamic way to influence implementation, adoption and sustainability of change. In the EPIS framework this is termed the 'outer context' for service delivery. The outer context includes socio-political and economic factors, the service environment and funding, interorganisational relationships between stakeholders, characteristics of the population served, and the impact of advocacy and consumer groups. An examination of how these factors relate to mental healthcare seeking behaviour and service delivery in the Bowen Basin is provided below.

Funding

Funding processes for mental health service delivery in the region were highlighted as a key barrier by stakeholders. Currently, there are multiple funding sources and agendas for mental health care delivery in the region including various state and federal departments, mining organisations, local councils, unions, the Northern Queensland PHN and community members. This piecemeal approach lacks transparency, accountability and connection, and often creates overlaps and gaps. Furthermore, the competition between mental health service providers for limited funding pools within this model means they may be less likely to share and collaborate.

> *"If the sector brings all of their resources together, I think we'd be better off. It's the piecemeal. You know, if public, private, the PHN, HHSs, mining, all came together and, you know…but while we're all still sort of bits and bobs everywhere, it's a bit hard."*
> (healthcare management/support stakeholder)

> *"You know, I think the problem that we have is that there's no coordination of where the money is, not coordination between what Queensland Health spends, what Department of Community spends, what PHN spends. They all just do their own thing."*
> (community development stakeholder)

> *"And when you deal with funding, sometimes people don't like to share what they're doing because they're terrified they're going to lose that funding."*
> (healthcare management/support stakeholder)

This situation is compounded by short-term, non-recurrent funding cycles that make it difficult to attract and retain staff, and often lead to service gaps, particularly for non-government organisations (NGOs). Prior successful initiatives, such as the Mental Health Nurse Incentive Program, have also been severely impacted or ceased due to changes in funding process and political parties. Funding programs and contracts for more than 3 years would help with workforce sustainability and continuity of care.

The large non-resident FIFO/DIDO workforce also significantly impacts funding for mental health service delivery in the Bowen Basin. Current government funding models for services and infrastructure are based on the 'usual' resident population of the region, however the 'service' population is actually much greater once the non-resident workforce is included. Consequently, there is significant shortfall in allocation of government funding to meet the actual needs of the community.

There is, however, good financial support provided to mental health delivery in the region by both council and local mining stakeholders. Council performs regular charity fundraising, provides rooms for community groups and service providers, and contributes funds directly to service delivery and community action planning. Mining companies have directly provided funds for service delivery and staff, subsidised rents for residential, office and clinical space, and even established a workforce incentivisation program with a general practice in Clermont.

> *"They've [Clermont] gone to the mining company and said, you know, we need you to stump up and we need you to…these are all the reasons why. And, you know, they put a great case together and they've got some funding."*
> (community development stakeholder)

However, there were perceptions that this money from mining partners often came with an attached agenda rather than being based on community consultation and need.

> *"The money sometimes can be quite large, but it is for a sole purpose and there's not really very much stretch where their agenda is set really by them. Whereas our agenda is a lot of community consultation as well."*
> (healthcare management/support stakeholder)

Consequently, many stakeholders reiterated the importance of spending money wisely for the right purpose, and investing in people and place-based models, rather than building more infrastructure.

> *"Look, we can always throw more money at it, but I sometimes wonder whether the money shouldn't be used differently or that you know, there's a different way to do it."*
> (community development stakeholder)

Service co-location and service co-commissioning (between the Northern Queensland PHN and mining stakeholders) were both proposed as models of care which may help to overcome some of the funding barriers.

> *"And it's all locked into service level agreements and we can keep them responsible for that. And the steering committee can keep them responsible for that as well, because to take a part in that at that table, you need to bring with you a service."*
> (healthcare management/support stakeholder)

Service environment

Multiple local, state and federal socio-political and economic factors influence the delivery of mental health care in the Bowen Basin region. One of the strongest themes that emerged out of assessment of the Bowen Basin service environment was its lack of services, lack of access to services, and poor consistency of care, particularly for NGOs and private psychology. In particular, the limited and transient mental health workforce impacts sustainability and consistency of care.

> *"I just thought, hell, you know, why aren't more services, you know, interacting with this town [Moranbah]? It's a major regional centre. It services a lot of areas."*
> (community/social services stakeholder)

"When it comes to services, there's bugger all for the amount of money that goes out of this town [Moranbah]."
(community/social services stakeholder)

"We know when we've reached the limit of being able to provide a service to these people. And we know that they need to be moved on, but when there's no other services to move them on to. And you know that the capacity for them to be able to reach out to something that's not there."
(community/social services stakeholder)

While this is often the case in regional areas, many stakeholders felt this situation was compounded by the FIFO/DIDO characteristics of the Bowen Basin. The large non-resident workforce is placing existing health services under increased pressure, and current government funding allocations do not account for this higher level of demand.

"Lots of issues around the number of people who fly in, fly out and are not counted as residents of that region, but use local services. You know, the hospital services can be overwhelmed. Some of the other services can be overwhelmed. But they can't count those people because they don't live there, so they can't get additional funding. Because they're technically servicing people they're not meant."
(community development stakeholder)

There is also economic instability linked to surge and downturn periods in the mining industry and how that impacts the community and people who live and work there. From a demographic perspective, there are high rates of homelessness, drug and alcohol use, and domestic violence in these communities. Most of the region suffers from poor housing affordability, limited accommodation, and a high cost of living. This impacts not only on the mental health of the community but also on the ability of visiting providers to perform outreach, and organisations to recruit and retain skilled staff to the region. High commercial rents and property prices also make it difficult to afford clinical and office space. There is also the perception that this economic instability has been exacerbated by prolonged exposure to crises such as drought, bushfire, and the COVID-19 pandemic.

"And so, given that in certain contexts that [they] might have been living with drought the last four years, five years and now COVID's come along, has that compounded the concerns?"
(community development stakeholder)

While the community was generally perceived to be welcoming to new members, new clinical providers were often viewed with suspicion and only gained community trust when they could prove they were prepared to stay in the region for the long haul. This was particularly the case with outreach services, who many thought should maintain a regular presence in a community, whether or not there are regular clients to see there.

"There's this understanding that, yes, the community is really warm and welcoming, but when they take the time to make relationships and working relationships and friendships and stuff, then 'oh, but you're leaving', then they kind of get tired of putting that effort into new people. So, everyone I spoke to has just wanted me to confirm, 'so you're here for the long run, right?'."
(clinical service provider)

"That was the first thing I found that I came up against, was I'd go to the local community meeting and it was almost like, 'well, how long are you sticking around?'."
(clinical service provider)

"And once you've got that trust, you know, and they know that you're going to be there, like you've got them forever. Basically, because you know, they just love that, to know that that service is going to be there."
(community/social services stakeholder)

Working within inflexible national regulatory and funding frameworks in a remote/regional setting was also perceived to be challenging. This included meeting client needs within time limited Employee Assistance Programs (EAP), accessing and delivering care under mental health care plans and the National Disability Insurance Scheme (NDIS), having to charge clients for travel time, the high cost of private care, and lack of bulk billing in general practice.

Finally, providers expressed frustration about the narrow criteria for accessing many mental health services in the region, resulting in a limited ability to treat and engage a broader range of patients at an early stage in their illness. There appears to be a mismatch between the service delivery model and the need for early intervention in the region.

"…a lot of criteria to access their service which makes it fairly tricky."
(healthcare management/support stakeholder)

"I just think that there's a huge disconnect with community and the mental health system. I think that, you know, that they should be a lot more open to more clients rather than having that strict crisis criteria, because it's just way too strict to, you know, to allow people to engage with them."
(community/social services stakeholder)

Inter-organisational environment and networks

How individual organisations connect to, partner with, and compete with one another plays an important role in the adoption and implementation of innovations. Within the Bowen Basin many diverse groups already work successfully together in a large number of broad and specialised inter-organisational mental health networks, in community training, on project partnerships, and on steering committees. These groups go beyond mental health providers to council, social and community services, schools, police, and mining companies, as mental health is perceived to cut across a lot of different networks.

Networks in the region have displayed elements of competition and territorialism in the past regarding service funding and branding, and because of differing interpersonal values. It was felt that some of the more remote towns also had to fight to have their voice heard at the table. Concerns were expressed about the capacity of service providers to take time off to attend network events, and the negative impact that staff turnover has on network composition and continuity. Generally, however, most groups valued collaboration and saw its benefit. A team approach with collegial collaboration was perceived to facilitate successful mental health service delivery as it helps fill gaps, minimises service duplication, promotes holistic care, shares financial burden and provides a learning environment.

"Sometimes not one alone could do it, but bring people together they can do it."
(community development stakeholder)

"It's been a really good learning for them to understand that groups don't have to work in isolation, that if they were to work together, they're probably going to get a much better outcome anyway."
(community development stakeholder)

"When I observed a community group and I was involved in it and they were all sharing their individual ideas and successes, they really loved it and really cheered each other on, which was really wonderful."

(clinical service provider)

"All of the services came on board, and then their services flourished after that because they built those relationships from that safe platform. So, initiatives like that come up from all being a part of a collective group and having a safe area where they can share their ideas about their funding. And, you know, no one wants to have to recreate the wheel again."

(healthcare management/support stakeholder)

"So, if that organisation is doing that component really well, then we don't want to be recreating that. We want to be filling the gap beside them so for those groups in those areas that was really important to get that safe playing field."

(healthcare management/support stakeholder)

A large interdisciplinary network of government, industry, not-for-profit and community members was responsible for the development and implementation of the Whitsunday, Isaac and Mackay Suicide Prevention Community Action Plan (SPCAP) in 2017. Similarly, The Central Queensland Suicide Prevention Plan, led by Central Queensland Rural Health, also involved co-design and collaboration across multiple health services and communities. Currently there are also plans for the HHS and PHN to work on a joint regional plan for mental health and suicide prevention for all North Queensland which will map service delivery, fill gaps and avoid duplication

The interorganisational environment in the Bowen Basin is also strengthened by the presence of several not-for-profit groups and organisations who act as intermediaries connecting the community and service providers together. These include the Suicide Prevention Community Action Planning Group, Capella Tieri Middlemount Community Support Network (CTM Links) and the Regional Social Development Coalition. These are considered a key facilitator to service delivery and are discussed further in the section about Bridging Factors.

"But we have established a good reputation in the community and created lots of networks between services and supported services to work together because we do see the gaps and, and we see that a lot of the gaps are caused by services not working together as well as they could."

(community development stakeholder)

Despite the presence of so many mental health and support networks in the region, there is no longer a specific mental health providers network, and GPs appear to be poorly linked into existing groups. Consequently, awareness of individual services, their eligibility criteria, methods of access and operating hours is generally poor among both community members and frontline providers. In particular, it was perceived to be difficult to maintain networks and relationships when outreaching to smaller towns. The My Community Directory website is intended to assist in showcasing the service network by providing a central contact point for access and referral. However, it does not have full buy-in from providers in the region and is therefore currently incomplete. Efforts to improve service awareness and networks are being made via flowcharts, online directories and travelling roadshows.

Patient or client advocacy

There is strong support for improving mental health in the Bowen Basin region from the community, council, schools, providers and enterprise.

> *"So, I think the community really does kind of band together. And you can see that they really want legitimate change and positivity and all those. All good stuff."*
> (clinical service provider)

> *"I just got hammered. I've just been to three of the rural areas and we did community consultation there last year in March and October. One was Moranbah and one was Dysart. And it's just across the board. It was mental health, suicide prevention and AODs [Alcohol and Other Drugs] were just across the board, everywhere I went."*
> (healthcare management/support stakeholder)

Those interviewed expressed a strong desire for a bottom-up approach to mental health delivery in the region, to drive change and build capacity from within the community. This includes supporting the community to be their own advocates for change, performing community development activities, having community representatives on working groups and steering committees, and the importance of local suicide prevention groups and plans.

> *"I think the learning is that community wants to hold that decision making and make the best decisions for their own communities."*
> (community development stakeholder)

> *"So now our youth reference group in Whitsundays is made up of 17 young people from Collinsville, Bowen, Cannonvale, Proserpine, Airlie, Strathdickey, Hamilton Island and everywhere in between. And we meet fortnightly and those young kids are the ones that actually make all the decisions about what their service looks like, what they need, what staff we hire. They're on the board for the design. They help pick out the furniture. And that's a really key component into making something successful for those young people."*
> (healthcare management/support stakeholder)

Listening to the community and performing a needs assessment to drive service change was considered paramount to success in this region. Many organisations in this region take this approach already including the Primary Health Network, Headspace, and community development groups.

> *"So before we setup in the Whitsundays, for example, we had a look, like I did a little research into locations, distances, barriers, youth trends, what the needs were, what the kids were highlighting themselves, what the service providers were feeling, and then we matched that model to best suit that community."*
> (healthcare management/support stakeholder)

> *"That's being done with consultation of the community as well to verify what the community wants and what the community needs in each of the regions as well."*
> (healthcare management/support stakeholder)

> *"I think what they want is to be able to feel their voice is heard at their individual level and local like community level and have some level of connection. You know, they're tired of being told this is how it's going to be."*
> (community development stakeholder)

"They also would really like some community-based consultation about these new services coming into town and prior knowledge. We've got examples of the decisions about service[s] has been made in Sydney. Someone turns up in Moranbah and nobody knew they were coming here. You know that's not what communities want or expect."
(community development stakeholder)

Advocacy in the past has often been related to major events or situations in the region which impact social emotional wellbeing (e.g. cluster of suicides) but has led to strong community engagement and successful service change e.g. Headspace and increased services in Whitsundays; Headspace and improved youth services in Emerald; Doctors for Clermont.

"If you could see where our community has come to in the past two years with youth. Obviously, we had a high cluster of youth deaths back in 2018. The community has rallied behind youth really well. There is communities, Facebook pages, there are events that are happening, ...and the schools have rallied together very, very well. And obviously, getting the Headspace it is a great sign of that."
(healthcare management/support stakeholder)

"But I'm saying the events of all of the suicides and issues that we had a couple of years ago had definitely forced the community to strengthen their ties within organisations. And then there's been a bit of an uproar from the community to support and so now I feel like everybody is working on the same page and working together."
(healthcare management/support stakeholder)

Population characteristics and demographics

Despite being perceived as a wealthy mining community there is actually a large proportion of individuals and families with lower socioeconomic status and complex social determinants still in the region after relocating there during the mining downturn. This group may not have money to afford phones or data required for online platforms, or to be able to access healthcare or assessment.

"Departments of Housing, Departments of Community shipped in a lot of families into Dysart, Moranbah ...while there was a downturn and really cheap housing. So, people with already complex social determinants to their wellbeing were bought into an area with really low resources. Now we've got mining surging...housing's gone up- housing is extremely hard to get out there. These people already had issues. They might have had social issues. They might have had mental health issues. They might have had complex chronic disease issues. So, they're still in situ in these regions and it's becoming quite complex."
(healthcare management/support stakeholder)

Those who do work in the mines often have a large amount of disposal income which can lead to issues with drugs and alcohol. The presence of the mines also makes the community quite transient- and compounded with the nature and demands of shift work- there is a perceived lack of community connection in this demographic. While many people living in this region are perceived to be resilient, the impact of isolation from extended family, in particular for rural farmers and the culturally diverse community in the Mackay region, is often overlooked.

"It's difficult to maintain the same connection and ownership as a community member, which impacts on how the community functions."
(community development stakeholder)

Due to the nature of FIFO and shift work in the region, children are not always supervised and supported by family. The ever-changing dynamics of these families and lack of engagement in the community is negatively affecting many children's behaviours and development. Additionally, youth in the Isaac region appear to be disengaging from school and suffering from a disproportionate amount of bullying and mental health concerns, including suicide ideation.

The region has also seen an increase in clients with complex mental health issues. The majority of patients now have complex, pervasive, chronic presentations. While there has been somewhat of a recent shift in the idea that 'it's okay to ask for help', there is still a stigma related to mental illness in the region. Locals are concerned about being identified as attending mental health services, particularly if these services are in highly visible locations in the community. This may go hand-in-hand with decreased health-seeking behaviour in this population and a tendency to dismiss serious mental health issues. This is particularly perceived to be a problem in men aged 30-50 years old as women are seen as more connected within their own communities.

Multiple stakeholders also reported that a large proportion of patients across the region are reluctant to use telehealth and have a strong preference for face-to-face care even if it means delaying treatment. This has not significantly changed since COVID-19.

> *"But we've also got definitely a group that are refusing to go to online and are willing to wait and therefore not, not having services provided to them"*
> (healthcare management/support stakeholder)

Distance and geography

The negative impact of distance and geographical location on service delivery was a strong theme across all stakeholder consultations. This was a theme which emerged from outside of the EPIS constructs due to the unique setting of the Bowen Basin. The remote nature of the region was perceived to be a significant barrier to adequate organisational staffing, particularly in attracting and retaining skilled, qualified providers. Skilled professionals are just not moving to the region in the numbers required and new models of working (such as FIFO clinical providers from Brisbane) are needed to service more distant towns. This issue is discussed further in Organisational Staffing Processes.

> *"Just getting people in general is just so difficult. Even in regional areas like Mackay and Rockhampton. So that would be our next point of call is, is just try and increase our recruitment there and they can visit Moranbah, and we can't even get that."*
> (clinical service provider)

> *"It's hard to find I guess you know, people who want to move to that region [Bowen Basin] and then I guess, is it a long-term career goal to be in that region?"*
> (community/social services stakeholder)

Most strongly, stakeholders expressed a lack of appreciation for distance and how long it takes to get from place to place for both patients and providers.

> *"The location and locality of how far it is to get to from place to place is something that we never talk about"*
> (healthcare management/support stakeholder)

Some patients in the region don't have transport, and those that do often have to drive 2 to 3 hours one-way to seek specialised care. Finding care outside of working hours in the local community is similarly

challenging. Transfer to hospitals such as Mackay and Rockhampton for acute crisis care can also be costly and traumatic, and the impact on patients and their families is not often considered.

> *"That's [transferring to Rockhampton] a whole messy situation that you don't get to hear - a lot of people that don't speak up enough about it."*
> (healthcare management/support stakeholder)

For providers, delivering services outside of places such as Emerald and Mackay is difficult. Consequently, outreach services are infrequent and irregular and often stop visiting if clients fail to attend.

> *"The Isaac region, they'd have someone come up who would probably be meant to come once a fortnight, but they turn up, they'd sit there for three or four hours, that young person wouldn't turn up. Then the following fortnight they probably wouldn't come back. And then after a period of time, they just stopped coming."*
> (healthcare management/support stakeholder)

It is also impractical and inefficient for outreach services to travel to towns like Moranbah and Dysart from Mackay, particularly for a small number of clients. Therefore, while outreach services are crucial in this environment, a more regional 'home base' like Moranbah must be chosen to minimise the impact and cost of provider travel.

> *"But the problem with outreach is you could have someone that lives in say Mackay, they drive and get out to Moranabah, Dysart, somewhere two, three, four hours, wherever it is, half the day's gone. So, you might see with clinical note taking time, two maybe three patients that afternoon. So, you need to stay out for the next day and start maybe see three or four the next day and then with notes and everything, then get in the car, drive back for the safety stuff. So, it becomes very costly, a lot of travel time."*
> (healthcare management/support stakeholder)

> *"Drive in and drive out is not good value for money because by the time you spend five hours driving to get to Moranbah, that leaves about one, one and a half hours for actually doing any work of substance. It's not good value, it's not the money at all. And community has been saying it now for a while."*
> (community development stakeholder)

> *"So, if I was working in Moranbah and being a service provider, I would still have to check in here [Mackay] at eight thirty in the morning, pick up the car. By the time I would grab a coffee and drive out to Moranbah it would probably be ten thirty, eleven before I could start seeing patients. And then I would need to be back in the car again by two thirty to come back and check back in at 5:00. That is proven not to be working. It's okay for a little while, but it ends up just dwindling down and down and down."*
> (healthcare management/support stakeholder)

It is also important to understand that because of its size and span across multiple HHS and PHN boundaries, there are differences in services and access even within the Bowen Basin region. This may be felt more acutely by those living near boundaries of PHNs, LGAs and HHSs. Rural and remote areas of the Bowen Basin struggle more to secure specialised and ongoing mental health care and rely on neighbouring hub towns like Moranbah or Emerald for services. In terms of population, youth mental health has been dealt with quite successfully in the Central Highlands but is still a significant issue in

Isaac. Consequently, it was emphasised that individual regions are all unique, and should be treated as such when planning and implementing mental health care.

> *"You know if you live in Collinsville, it's very different to if you live in Clermont, or very different if you live in Nebo because the same services aren't available."*
> (community development stakeholder)

> *"Each region has its own unique struggles, and that one size does not fit all. The delivery of the service must be tailored to this, and that our rural/remote demographics are as important as our metro counterparts."*
> (community/social services stakeholder)

Finally, there also needs to be a greater understanding of issues unique to rural and remote towns which may impact on delivery of care such as poor internet connectively, a lack of phone reception, the 'fishbowl' nature of the community, and the differing mindsets of community members compared to those in more urban areas.

> *"And that's probably something about these small areas all around the Isaac- it's left, right, black, white. They get very linear in their approach to the GP's good and the hospital's bad, or the hospital is good, and the GP is bad. And they choose a side, and they all go to that corner. It's very interesting and they can get very invested in their providers as well."*
> (healthcare management/support stakeholder)

Characteristics of organisations in the Bowen Basin which impact mental health service delivery

When implementing a new innovation, it is important to consider factors within the individual organisations involved which may act in a dynamic way to influence implementation, adoption and sustainability of change. In the EPIS framework this is termed the 'inner context' for service delivery. The inner context includes characteristics within an organisation such as leadership, resources and structures, staffing processes, readiness for change, pre-existing knowledge and skills, culture, capacity, and the individual characteristics of its members. An examination of how these factors relate to mental health service delivery in the Bowen Basin is provided below.

Organisational culture, climate and receptivity

Organisations and groups which have a positive culture, with willingness, capacity, and mechanisms to support innovation are more likely to embrace and implement change. Within the Bowen Basin region, key stakeholder organisations demonstrated an overwhelmingly positive and strong culture, climate and receptively. This is likely to assist in positively influencing implementation efforts.

> *"I am not willing to look at other organisations because I just enjoy the organisation and the philosophy of what they stand for, for our community."*
> (healthcare management/support stakeholder)

Mental health was a strong priority for all these groups, even those not directly involved in service delivery. Rather, these stakeholders, such as council, community development organisations and advocacy groups, recognised the importance of mental health from a broader perspective and the role

they could play in providing holistic support and 'connecting the dots' between services. In fact, many expressed an interest in becoming more involved in the delivery of wrap-around mental health care. This willingness to be agile and adapt the organisation to the needs of the community, environment and staff members was a key characteristic of almost all stakeholder groups interviewed for this project.

> *"So, one of our core values is agility, and we talk constantly about it, and I think actually it's one of those things that because the nature of the work that we do… because we have that really adaptive service delivery model. It's about really changing to meet the needs of our clients and what they're saying and experiencing and what's new."*
> (clinical service provider)

It was clear that many groups supported staff in development, job flexibility and role requirements. Additionally, a high value was placed on internal and external collaboration, communication and community engagement.

> *"Our organisation believes in that collaboration between all the organisation[s] foremost. Building that relationship and having good, strong connections within all the stakeholders in the community is probably our biggest thing that we work towards"*
> (healthcare management/support stakeholder)

> *"I guess for me the biggest things for us is that community and being part of the community and connected. And listening, not assuming. And that's very cliched. But if we can listen to the stories that are being told to us, that helps shape where we're going as a future organisation as well."*
> (community/social services stakeholder)

Finally, it appeared as though these stakeholder groups would be generally receptive to change that benefited the community, as they too are driven towards this goal. However, co-commissioning and partnerships were perceived as necessary to minimise some of the risk around change. This was particularly important for organisations such as Queensland Health and the PHN who had a long-term footprint in the region, and who might be left 'holding the baby' if other services folded.

> *"But I think that any kind of innovation that's going to make the world a better place, our service a better service, us as better people is a good thing. Yeah. I never see change as a bad thing, I think. But yeah I would embrace anything that would bring about some sort of good to our community."*
> (community/social services stakeholder)

Leadership

The support and behaviours of key decision makers can have considerable influence on the implementation process and uptake of new innovations within an organisation. Fortunately, strong, supportive leadership, with an emphasis on a team approach was demonstrated at multiple levels across almost all stakeholder organisations in the Bowen Basin region. Participants spoke about proactive, flexible and needs based leadership, and the importance of including community members in leadership roles such as on steering communities or consortiums. Many of those in leadership roles also had previous clinical backgrounds in mental health which enabled a greater understanding of service delivery. Mayors of both Isaac and Central Highlands regional councils were described as passionate leaders in mental health advocacy, policy and fundraising.

"Our mayor is very, very, very passionate about, would be very passionate about implementing things around mental health. And I can say that without a thought as well, because I know."
(community/social services stakeholder)

"Having that connection from Kerry Hayes [Mayor] right down and having his involvement. The council has just supported Headspace with thirty-five thousand dollars per year and having that type of contribution from the council is it just shows that commitment. And when they, when the community sees a commitment like that, they know that they're actually getting supported I think."
(healthcare management/support stakeholder)

Individual characteristics

The characteristics of service providers working within organisations and their readiness to enact change are important dynamics to consider in implementing a new model of care. The attitudes, values, skills, qualifications, adaptability, and backgrounds of individuals who will need to explore and adopt the new model of care are crucial for its success. In respect to the Bowen Basin region, many individuals considered themselves to be innovative, resilient and adaptable ("*a jack of all trades*") which would positively aid in implementation efforts. Many expressed a passion for mental health and community care which often stemmed from a personal connection or experience. They felt a real sense of ownership and pride in the roles they played within the community.

"Our workers are the type of workers that do above and beyond the call of their positions and are very caring and very client focused. We're all very passionate about what we do and the services that we bring to the people that we work with."
(community/social services stakeholder)

Despite the often-transient nature of the region, a large number had lived and worked in the community for a long time. Not unexpectedly, many service providers and stakeholders were partners of people working in the mining industry and the availability of skilled service providers was equated to a *"…luck of the draw job. You know, who happens to be a wife of miner" (clinical service provider).*

Skills and qualifications

The skills and qualifications of people working in the mental health space in the Bowen Basin varied greatly. Volunteers, part-time staff and community members also played a significant role in many of these organisations. In fact, many organisations in the region with an interest in mental health employed very few staff with specific therapeutic mental health training (e.g. psychologists, mental health nurses, occupation therapists, social workers, or GPs). Consequently, the scope and level of service provided by many organisations was very much limited by the number of therapeutically trained providers it employed. It was acknowledged that the best approach was therefore for an organisation to employ a mix of providers with varying levels of training and skill, including a proportion with Medicare provider numbers in order to claim rebates for care. In particular, a need was highlighted for skilled and specialised GPs and mental health staff with additional social work capability who could manage diverse levels of mental illness in the community. Skilled GPs are crucial as they are seen as central to the patient's journey from the initial stage.

Staffing processes

Overwhelmingly, stakeholders cited the challenges in attracting and retaining skilled, qualified mental health providers as one of the key barriers to service delivery in the region. Many providers with the required skills just do not want to work in rural locations and have been offered little in the way of incentive by employers to do so. Even finding staff to fill roles in Mackay and Rockhampton has become challenging in recent years. Despite having funding and infrastructure to support them, positions often sit open for months, job advertisements are extended, and people with the required skills are just not moving to the region anymore. Consequently, there is a limited workforce pool of skilled providers, contributing to limited access, long waiting lists and reduced outreach services.

> *"So, I think that's pretty major that there's never really a full team in some organisations, which is just really sad, but no one wants to come out here."*
> (clinical service provider)

> *"I think it's across the board in regional areas where there's workforce issues, especially for skilled workers. And I can tell you for one of the roles I've been looking for six months to get someone in with the, that would be competent in that role and it's not easy, but it's not even a major role, and I- when I'm doing networking, I can hear how the people are talking as well."*
> (community/social services stakeholder)

Multiple stakeholders believed that incentives were important to help address the issue of staff recruitment in the region- and have seen them work successfully in the past. These could be in the form of salary, accommodation or training packages. Engaging local enterprises, such as mining organisations, may be key in providing such incentives.

> *"When you're looking at areas where it's remote and it's isolated and it might not be as attractive as a city posting, you've really got to think outside the box and be able to offer more incentives and better deals for those people to be there."*
> (healthcare management/support stakeholder)

Coupled with this difficulty in recruiting providers is the high turnover rate of those who do begin working in the region. This transient mental health workforce leads to a lack in consistency of care for patients and is at odds with the community's need for long-term commitment in the region to build trust. However, taking a team approach to care across organisations was suggested as a way to decrease the impact of these transitions and also provide junior and less experienced providers with necessary mentoring.

Almost all organisations felt understaffed to meet increasing service demands, and frontline providers and managers reported current staff being stretched to capacity. Getting the referral rate to each clinician right, was seen as crucial to avoid burnout.

> *"So, it's - it [staffing] is a constant stress for us, to be honest. And it I guess it's this double-edged sword in that we want to keep the staff that we have, but they're more at risk of leaving because there's so much pressure on them... We're always trying to - we feel like we're sort of always at that level where we've got enough but we never have fat, so that just gives our current people a bit of a break. And so, we're kind of in this cycle, I think of, yeah, you know, people just go, 'it's too much'. I know there's not enough people to share the load. So then that person leaves and then you replace them, and it just feels like we kind of just keep on that- we're just teetering on that just enough capacity. Just can't keep on top of it seems."*
> (clinical service provider)

> *"So, they have two full time youth and child counsellors basically for their hospital system. When I spoke to them a couple of weeks ago, they said they could easily hire another three full time workers and still not have enough to meet demand."*
> (healthcare management/support stakeholder)

A key theme was providers working outside of their scope and skill set- and going above and beyond to provide care in the community, even when it resulted in significant emotional burden.

> *"And I've thought, you know, the kind of the emotional burden on my part of, well, how many hours do I give a day when there's going to be problems tomorrow and the next day and the next day?"*
> (clinical service provider)

Several organisations had staffing processes which appeared to favourably impact reach or scope of service delivery and which could potentially be used to facilitate implementation of the new model of care. These included:

- Prioritising employing locally, at least in part
- Using additional staff based in larger urban centres to virtually support the work of remote clinical providers in situ in Emerald and Moranbah via telehealth: *"And my organisation's been really great saying that, you know, even though you're the only therapist there, you're not alone. We've always got therapists who can pick up and there's never going to be, you know, there's never not someone to turn to. Which is really good"* (clinical service provider).
- Delivering a proportion of services, particularly to smaller centres, as outreach via DIDO or FIFO providers from Moranbah, Mackay, Rockhampton or Brisbane
- Offering flexible, part-time, contracted or sub-contracted roles to providers
- Providing accommodation, support and scholarships for students to undertake rural placements and stay on in the community
- Seeking provisional psychologists to fill required roles, despite their restrictions in practice
- Delivering workforce incentivisation and optimisation programs to recruit and retain allied health workers and GPs.

In particular, the workforce incentivisation program led in partnership between Health Workforce Queensland and the PHN appears to be demonstrating success. This model combines support, training and incentives for providers to move to the region, with capacity building and specialised upskilling of providers currently in the region to expand their scope of practice.

> *"So, this has worked. So, this is still in its trial, but this incentivisation, and it used to work years ago. And place-based models looking at how you can build the capacity in situ of people there."*
> (healthcare management/support stakeholder)

Bridging factors

Organisations are not closed systems, rather there is a dynamic interconnectedness to the service system and other organisations within the system. Context assessment must therefore account for the interdependence and bi-directional influences between the inner and outer contexts, termed 'bridging factors'. Within the context of mental health service delivery in the Bowen Basin, bridging factors

emerged as key enablers to successful service delivery. Designing a model of care that acknowledges and leverages these bi-directional influences will aid in implementation and sustainability.

Bridging via interagency collaboration

Inner and outer context bridging via interagency collaboration in the region occurs frequently and is highly valued, as described in inter-organisational environment and networks.

> *"Small communities, we seem to really rally around to try and help each other. So that in the past, I guess, you know, rallying to help each other. And that's what you do in a small community. Whereas you've got a big community that often doesn't happen. But everyone trying to, same with COVID, you know, all working together to assist each other… Industry stakeholders, everyone does pull together for that one thing, and that would be mental health as well. So that would be what I would say in the past. Working together, as organisations, stakeholders for the better of our communities, whether that's mental health or other issues."*
>
> (community/social services stakeholder)

> *"I've been to a number of community meetings where all stakeholders from different organisations get together and share what they've been doing and things. And I think that is just such a phenomenal thing that I've never seen happen anywhere else that I'm sure would probably be specific only to small towns."*
>
> (clinical service provider)

Bridging organisations and groups

Several stakeholders within the region such as the Regional Social Development Coalition, Northern Australia Primary Health Limited, and Whitsunday, Isaac and Mackay Suicide Prevention Community Action Planning Group act as bridging organisations. These groups act as connectors who create and maintain interagency networks, identify system-level gaps, provide support and resourcing, and facilitate individual groups, providers, and community to advocate for and deliver better mental health care. They are continuously scouting for opportunities to find funding, space, and resources in the outer context to support to work of individual organisations.

> *"And that's the role that our organisation plays. You know, we are connecting the dots, the facilitating group."*
>
> (community development stakeholder)

> *"It's that connector, which is what's important. And I think that's where our role has fitted in beautifully in those regions, because we're not going to town telling people what they need and how we can do this better. We're just the central person in the middle that's connecting everyone together, having a look what you've got to play with in that field already, having a look who's meant to be in that field and then just connecting the dots."*
>
> (healthcare management/support stakeholder)

By sitting outside and above the domain of individual service providers, they can also act as an intermediary to broker knowledge and build trust between groups who may otherwise not work together.

> *"If individuals or organisations come to us and raise some issues and there's a thread across the conversations, we would bring those people with those issues and concerns together and support them to decide what they wanted to do about that."*
>
> (community development stakeholder)

"And we see that crossover of information between the group that they trust. Because we did get that tiny volunteer organisation. The hospital was like, we don't trust them, they don't have policies and procedures, who knows what they're telling people. And the tiny volunteer organisation saying the hospital takes too bloody long, they keep turning people away. And, you know, and eventually we got them to talk to each other. So, you know, that kind of when we can do that, then all kinds of things, other work can happen."
(community development stakeholder)

Bridging places

Local physical spaces such as youth centres and community halls often have a strong presence in regional contexts. Within the Bowen Basin it was clear that these physical spaces are being used to support bridging by connecting individual service providers with the local community. In particular, Council owned spaces and community halls were regularly used by service providers to deliver mental health care to clients. The potential of physical bridging spaces is also being recognised by co-location of multiple mental health and community services in a single building.

"So, we've actually got a developer on board. He is building us a 400 square metre building. Yes, we will lease 200 square metres of that and set that up as our satellite…And we will sublet the other 200 square metres until such a time as we can prove we need all of the space…we're going to be able to offer allied health services and other mental health services and things like that from that other subletted section."
(healthcare management/support stakeholder)

Bridging via funding and contracting

Funding and contracting arrangements placed on organisations by the external service setting are bridging factors which can either support or hinder service delivery. As already discussed in the Funding section, contracting schedules and eligibility criteria for treatment and reimbursement may negatively impact the scope of service delivery for an organisation.

"So, yeah, there's finite money and we're quite, you know, with a lot of mental health, we're quite, the department's quite didactic about how we can apply those investments and funds."
(healthcare management/support stakeholder)

On the other hand, funding arrangements may be positively leveraged if service delivery models can be co-commissioned with partners such as industry. Within the Bowen Basin, mining stakeholders in the external context are perceived to be a key way of helping individual organisations deliver services. They have provided support for accommodation and staffing, and helped establish Moranbah and District Support Services.

"But yeah, you know, if you could and even, you know, co-commissioning, like working with some of the mining companies and receiving funds that we can then, because we're really good at what we do, say this is where we need to go."
(healthcare management/support stakeholder)

"So those little ideas might not be a huge imposition to large mining companies, it might mean the difference of having really good staff doing a community service…here previously we've had BHP pay for two traineeships or two full time staff, and that just helps with our budgeting and things like that. But also helps retain good quality staff."
(healthcare management/support stakeholder)

Boundary spanning roles

The role that "*incidental counsellors*" could play in spanning the boundaries between rural and remote areas of the Bowen Basin and health services was raised by several stakeholders. It was felt that people working in specific professions within the Bowen Basin, such as postal workers, agronomists, hairdressers, and bank managers, have unique access to harder to reach populations. Identification and support of these boundary spanners could be a key enabler for better mental health service access and delivery.

> *"People become accidental counsellors because, you know, whether it's a hairdresser or the local person at the post office, because they're hearing the same things again and again and again. How do we capture that data and what are we doing with it? Are we providing support for those people who do fall into accidental counselling roles because we know what happens."*
> (community/social services stakeholder)

> *"But talking to who our people are who have access to people in rural and remote properties, because that's really one of the areas that we've spoken about as being a gap. And training our bank managers, your agronomists, your stock and station agent and your postie. They're four people who have immediate access to lots of these people and access to the wives and the husbands. And it's usually the wife saying, you know, to the stock and station agent, you know, he's not in a good place we're really struggling financially and then passes the phone over there. You know, they potentially could have the ability to make some change or seek some help for those people. So, we are looking at trying to start and how we'd go about training those people to be incidental counsellors."*
> (healthcare management/support stakeholder)

Model of care characteristics

When enacting service change it is important to consider the characteristics of the innovations or interventions that already exist, and how these may impact design and implementation of a new model of care. In the EPIS framework these are termed the 'innovation factors'. This includes characteristics of interventions delivered, gaps in interventions currently delivered, characteristics of the developers or providers of the intervention, and how easily interventions can be adapted for the specific setting, provider or consumer. This concept is important as a model of care with better fit to values, systems and settings is more likely to succeed in implementation and generate positive outcomes. This section provides an outline of key characteristics of mental health interventions relevant to the Bowen Basin region.

Importance of model flexibility and fit to region

Many service providers have had to adapt their standard model of care, or that used in more urban areas, because of the specific population needs and/or the regional service environment of the Bowen Basin. For example, the PHN has adapted their commissioning model within the region to focus less on immediate service delivery and more on service establishment, community engagement and network building. Other providers spoke about working flexibly around the contracted scope, location, and timeframe of services they would normally provide to better fulfil client needs or bridge a gap before transitioning to other services.

"That's I guess what sets us apart from other providers in that private space is that we will adapt and be agile in that space. Rather than saying, 'oh no domestic violence doesn't fit within an EAP space', we don't do that, it's 'alright well that's a problem or concern that you have. How can we actually help and assist you with that?'."

(clinical service provider)

"So I think the way that service is delivered, I think there's, there's a definite flexibility on my part to meet them wherever they are and if that means collecting history over five sessions, then that's what we do and that's how information is collated."

(clinical service provider)

"I think the good thing is are we are flexible. Like I can go to a home, school, office, you know, wherever the client wants to go, I'm good to be there and I'm good to drive within an hour radius."

(clinical service provider)

Other adaptions to service delivery included:

- using FIFO providers from Brisbane to provide some elements of care and follow-up
- using providers in other locations to virtually support providers in situ in the Bowen Basin
- having a needs-based/responsive outreach service
- adapting successful models of care to be implemented in the local environment with reduced resourcing (e.g. satellite vs full Headspace services, North Queensland suicide prevention plan)

Consequently, place-based mental health delivery which understands the service context and meets the needs of the community was considered to have the best chance of success. For example, mental health events need to be adapted into more general health events to be better accepted and attended by the community. Hand-in-hand with this, is the need to consider mental health stigma when delivering services and avoid making attendance there highly visible (e.g. a mental health service building with the parking lot on the main road).

"Instead of saying okay, we're going to give you some mental health education today, you won't get anyone. You know, but if you say, okay, well, let's get Allan Langer or whatever from the footy to come up and we put that perspective on as well, so it's not right in their faces. Because, as I say, rural people too, especially, they step back from that. They're tough. And they- but if you put a different flavour around it."

(community/social services stakeholder)

"We're going to do a little meet and greet, but we're going to invite SPCAP to come along and have some of the resources there and to have somebody there to talk about Safe Talk. So, you know, yes, like things are layered together. So, yeah, it's not as if you just want a mental health event and someone goes they're immediately identified."

(community development stakeholder)

It is crucial that new models of care are flexible and designed to meet the needs of each local community as every regional town, while sharing similarities, is unique. For example, it may be important to offer different services, mental health training programs, alcohol and drugs programs, or types of messaging based on the existing services, industries and people who live there. In order to meet this place-based need, it is imperative to engage with, and consult, local stakeholders and consumers. Many service

providers such as the PHN and Headspace have already successfully employed this method of service design.

> *"So, before we up set in the Whitsundays, for example,…I did a little research into locations, distances, barriers, youth trends, what the needs were, what the kids were highlighting themselves, what the service providers were feeling. And then we matched that model to best suit that community."*
> (healthcare management/support stakeholder)

> *"We're very much on the - every training offers different features that are appealing for a different person, whether that's time or how it's delivered in the modality. So, we're very conscious of making sure that all training forms are offered so that we're not -so we meet everyone's criteria."*
> (healthcare management/support stakeholder)

> *"It's all about trying to just get the right person into the right service at the right time. And then we look at contextualising those things for the different areas based on consultation from community and health needs assessments."*
> (healthcare management/support stakeholder)

> *"So, it needs to come from the community, be customised and take in cultural aspects of that community."*
> (community development stakeholder)

COVID-19 and telehealth adaptions to care

In 2020, the COVID-19 pandemic added another layer of adaption to service delivery, with expanded online platforms and information hubs, and rapid transitions to virtual care. These transitions however were met with mixed success and telehealth has been appreciated more by some consumers than others. Some stakeholders reported good acceptance of phone and video consultations among clients and staff, especially FIFO mining workers, youth, and EAP clients. Uptake of telehealth in these groups has continued even with resumption of face-to-face options. Virtual technologies have expanded reach and allowed providers to deliver elements of care out of hours and previously beyond the scope of their practice.

> *"I think it's been difficult getting people confident, actually just jumping to that and reassuring them that it actually can be, especially the video, that it can actually be just as beneficial as that face-to-face... once people had done that, they've been really confident in how it's been working."*
> (clinical service provider)

> *"COVID is very bad, but it brought some good things forward as well. And it highlighted that these other options out there [virtual care] that we can be creative and actually reach people far away. If I just have the basic electronical equipment and good reception. So that's been good."*
> (community/social services stakeholder)

> *"We're seeing a bit like, 'oh, it's so much easier. I don't have to go anywhere. I don't have to drive anywhere-I just log on. I did it from my work desk'."*
> (healthcare management/support stakeholder)

Several providers have had such as successful experience with telehealth that they are planning on setting up consulting rooms within practices and community spaces for clients to have virtual

appointments with providers in Brisbane and other locations. This will both improve access and decrease stigma for consumers.

> *"Well, I'm looking at the fourth room in Moranbah. Let's set it up in terms of that telehealth, and really encourage people and coach people through that process that this can be an option. So yes, instead of saying 'it's a three week wait to see someone face-to-face, you can get in tomorrow. You still go to the Moranbah office and talk to someone, but it's just via a computer', and that's really doable for us."*
>
> (clinical service provider)

> *"If that young person is comfortable at our Headspace centre instead of making them uncomfortable by bringing them down to the doctor's surgery, you go into a comfortable room and you whack them on the telehealth and you can talk to them and be assessed that way. So definitely telehealth is a great initiative."*
>
> (healthcare management/support stakeholder)

On the other hand, many stakeholders made it clear that a lot of people in the region are still more comfortable with face-to-face services, and didn't like the adaption to virtual, or even phone-based care. There are also inherent difficulties for certain cohorts in the population including those without adequate technology or skills, the elderly, and those with disability.

> *"We're finding that people are wanting that face-to-face still, or they don't have the technology to be able to do electronically is the other side of it you know…Many people that we see in our services don't have the inclination or are unable to utilise this technology side of things, it's incredibly confronting for some people."*
>
> (clinical service provider)

> *"I think the thing is with these areas, people are starved for socialisation. So that, you know, when they visit, when you visit them, it's more than just a like as a session. It's more of a like a social interaction as well."*
>
> (community/social services stakeholder)

What was highlighted, was that even traditional telehealth models may need adaption to fit the unique characteristics of the region and a delicate balance is needed between face-to-face and virtual service availability. For example, clients may not feel comfortable connecting with a stranger via telehealth, so initial assessments should be done face-to-face if possible. In fact, many providers felt that face-to-face service delivery should be prioritised where possible, with telehealth used more for follow-up care or in a mixed model alternating regularly with face-to-face locally based or outreach services.

> *"So, it's about being mindful of the client's needs and how we can do best for them. If they prefer Zoom or phone, we will help him with that. But if not, we will try and accommodate them face-to-face."*
>
> (community/social services stakeholder)

> *"I think we still have to be able to provide face to face and I still prioritise face-to-face appointments if I can"*
>
> (clinical service provider)

> *"Especially in our service, in our region, you need connection, you need that face-to-face"*
>
> (clinical service provider)

Consumers may also need to be supported to use telehealth to overcome technical difficulties, or connect at a location away from their home which has more stable and consistent internet access. However, the increased use and acceptance of telehealth during COVID was perceived to be a positive step forward in improving service delivery in the Bowen Basin.

The increased use of social media and move to virtual education and training has also been varied, with some organisations finding low uptake (e.g. ConNetica- Conversations for life®) and others experiencing overwhelming demand and greater reach (e.g. The Neighbourhood Hub). Several stakeholders did however feel that it was difficult to deliver mental health training in a virtual format.

> *"There was that demand [for online education], because we see our likes or our followers increased, you know that naturopath session, that was crazy. ... So for us, it's really changed our landscape in terms of how we deliver our programs, and I know you don't have a crystal ball so we don't know what the next coming months or years are going to look like, but in terms of client engagement, I think we've been able to reach further than what we were doing, like pre COVID days."*
>
> (community/social services stakeholder)

During this time there was also an increase in referral to specialised online line psychology services for rural patients (such as https://www.ruralhealthconnect.com.au/). Among the cohort of patients who used this option, there was positive feedback about these services which offer a choice of psychologist, mental health care plans and bulk billing options.

Model of care developers and providers

One of the clearest messages to come out of stakeholder consultation was that new models of care should not be designed and imposed on the region by external entities, particularly without community consultation. The importance of localised decision-making and local provider engagement was emphasised by almost all stakeholders. New models of care should therefore engage the community in consultation, steering committees, and local reference groups.

> *"Anything that gets planned needs to include people from that region [Moranbah] and not from Mackay...people who live there. And whatever solutions are developed have to be localised. As I said, they need to be local people doing the work and planning it. And because people are used to someone flying in, developing something and going again, you know, there's not the trust of those kinds of setups."*
>
> (community development stakeholder)

> *"But if we were to go into the Whitsunday community and tell those service providers and professionals that the Mackay people know better than what they do for their own centre, you can imagine I wouldn't be getting out of there alive any time soon."*
>
> (healthcare management/support stakeholder)

> *"I think if like there was a new person coming in, 'right I'm dictating how mental health is in the region, this is how I've got to do stuff now', I think there'd be real, real resistance there."*
>
> (clinical service provider)

This was complemented by the idea that the community can design their own solutions to some mental health issues or lead their own projects with the right resourcing, up-skilling, and support. Training and

education models which include capacity building components such as 'train the trainer' would be well accepted.

> *"Sometimes what they need rather than more service delivery, is someone like a community development worker who can go in and the community's got the ideas and they've got the connections and the plan. They can put the plan together. They just need sometimes arms, legs to help them get what they want to be."*
>
> (community development stakeholder)

> *"…directly asking the community about their experience with mental health issues and concerns and suicide. And then what were some things they might recommend for addressing those issues with some actions that they might want to take themselves and how could they be supported in that?"*
>
> (community development stakeholder)

> *"I think, our thing is about giving individual communities, be they geographically based, be they interest based. Is giving them skills to be able to make their own decisions and to hold the power to make the decisions"*
>
> (community development stakeholder)

Finally, the importance of intervention providers being visible and local to the community in a long-term capacity was considered key to building trust and acceptability. The region has become disillusioned by too many outreach providers who fail to service towns adequately. Consequently, these regional communities have a strong preference for a locally-based models of care with providers in situ, and are critical of models delivered wholly with visiting providers or via telehealth. While they may understand in some circumstances (e.g. to avoid a long waiting list, or for follow-up care) it is crucial to have local people on the ground delivering care for consistency and sustainability. This may also increase the number of local people willing to seek out and access mental health care services.

> *"We can't fully move to that model of just bringing people in and out of Brisbane because you need that person on the ground as well. And that's been a really important part of our service delivery and trust of the services as well - is that people know that they're a local person."*
>
> (clinical service provider)

> *"So that they're [providers] able to accept timely referrals early and people then will ask for that referral because they know they can see somebody locally. Whereas if they know there's no local provider, they don't mention that."*
>
> (healthcare management/support stakeholder)

> *"I don't think you can be based in Mackay and travel out there because you need to be able to build rapport with those communities and in order to do that you kind of need to be in the community. You can't be in Mackay and just driving in and out."*
>
> (community/social services stakeholder)

> *"I think that it needs to sit with somebody local rather than, you know, somebody coming into that region and trying to establish themselves, because then you go back to basics of rapport and relationship building and trust and all of that. And to be honest, it's probably like oh, I've been there done that type of approach."*
>
> (healthcare management/support stakeholder)

"If you're going to service this region, you need to be a face that's seen day in day out. Because people are so used to services saying, 'we'll be, we'll service, we'll do this, we'll do that', and then you never see them again."
(healthcare management/support stakeholder)

Model of care characteristics that would positively impact implementation

Consequently, consideration of this context assessment highlighted several intervention characteristics which would be most likely to have a positive impact on implementation, success and sustainability of a new model of care.

1. **A bottom-up, community driven, destigmatising approach to mental health care, using a narrative of local lived experience**

Maintaining a connected community with grassroots programs to engage and support local residents and develop resilience would work well as an early intervention strategy. Tapping into community development groups and processes would provide a positive base for service development to meet local needs, and attract community buy-in. Many local mental health community training models such as Conversations for Life, have succeeded in encouraging locals with lived experience of mental illness to share their stories. These types of educational models also use 'train the trainer' techniques to build capacity within the community. Education and awareness campaigns which have used local people (such as 'Better Off With You' by SANE Australia) have also appeared to have greater success in destigmatising mental health. Non-stigmatised local events which are not solely focussed on mental health allow for connection with the community and may help to raise awareness and promote visibility of services, but their reach has been questioned.

"I have found that involving the community with events engineered the start of conversations around mental health and reduced some of the stigma that is generally attached to it. By gathering strong supporters who are passionate advocates means that the 'Ripple Effect' starts the process."
(community/social services stakeholder)

"That's probably your best chance of getting them to talk is to have somebody that they know and trust, rather than somebody they've never seen before."
(community/social services stakeholder)

2. **Localised services, run by local people with consistency of care**

It was very clear that mental health services should be designed to be place-based and provided within the local community as much as possible. This also means being based at a regional hub such as Moranbah and performing outreach to other local towns from there rather than Mackay.

"I think you need to have something based in one of those regions, whether it be Moranbah or whatever, then service out of there because it's you know, it's an hour on the back road to get to Glenden. If you needed to, you could set up all your appointments on the one day. Yeah, I think you have to be out there before you can deliver services further afield"
(community/social services stakeholder)

"Being rural and remote, I suppose a lot of community members are more willing to see and speak to a person from our community rather than outsiders flying in and out."
(community/social services stakeholder)

Engaging local community members to establish trust is paramount to delivering mental health services in the region. It is not simply enough just to show up, you need to do the groundwork and retain a presence in the community.

> *"People do not want to attend a service that doesn't show commitment to establishing a regular relationship with that community. The current model is that a therapist will go there if there are clients to see but clients become cynical of the ability of the provider to stick around and as such incoming services are viewed with suspicion such as 'how long will you be coming here'."*
> (clinical service provider)

A focus on local delivery and capacity building also aims to provide consistency of care for consumers. Having a single point of contact in each service for a consumer was considered to be a positive addition to a new model of care.

> *"And place-based models looking at how you can build the capacity in situ of people there. So, if there's a counsellor or an AODs person or a youth worker, how can you fund them to get more skills, you know, to meet more of the needs of the community."*
> (healthcare management/support stakeholder)

> *"One point of contact [with a service] makes a big difference for a person's journey and feelings."*
> (clinical service provider)

3. Working collaboratively with existing services

New models of care should focus on collaborative work with existing providers and avoid service duplication or silos of care. The notion of providing flexibility and a 'no wrong door' service model was raised by several stakeholders. This approach represents a philosophy that service providers will aim to get the *"right service at the right time for that person"* (clinical service provider) regardless of their entry point into the system[10]. In other words, every door in the service system should be the right door. This requires a high level of interagency networking and coordination with warm referrals to appropriate services. Having a number of services co-located in a physical or virtual space can assist this process.

> *"You don't really want a nationwide organisation to go out there, you know, set up shop for want of a better phrase, and then start delivering without working in conjunction with what's already out there. It can't be a siloed approach, it needs to be an understanding of that community and working out where that community is and where it needs to go. And I think when you're looking at a service delivery model, the local players obviously play a large part in that."*
> (community/social services stakeholder)

> *"I think it's about also not reinventing the wheel and duplicating. You know, we might have services already perfectly adequate here, that all they need is up resourcing."*
> (community development stakeholder)

> *"It's that connector, which is what's important. We're just the central person in the middle that's connecting everyone together, having a look what you've got to play with in that field already, having a look who's meant to be in that field and then just connecting the dots and providing that central location for them to all be together."*
> (healthcare management/support stakeholder)

4. **Services and support in a central, accessible location without attached stigma**

While there is a clear need for services to be as accessible to consumers as possible, this can be problematic as mental health stigma is still prevalent in the Bowen Basin. Models of service delivery need to take this into account and provide care that is *"something that people feel comfortable with in a context in their community where they are not necessarily identified as standing out and being different"* (community development stakeholder). Central and accessible non-stigmatised hubs could be located in places such as council buildings, youth centres, and community hubs.

5. **The right balance of telehealth and face-to-face services**

As already highlighted, telehealth can be a positive component of a model of care if the right balance with face-to-face care is achieved. Selection of modality should meet clients' preferences and needs.

> *"People won't engage or are reluctant to engage if the means that's being offered [are not right], and because nothing is done they do bounce back to us later on in crisis."*
> (clinical service provider)

6. **Workforce incentives and the Mental Health Nurse scheme**

Models of care which have included workforce incentivisation for GPs, allied health professionals and psychologists have all been successful in overcoming some of the challenges associated with the outer context of service delivery in the Bowen Basin. Partnering with other stakeholders in the field who already deliver such initiatives to expand their scope would be a positive intervention to improve service delivery in the region. Additionally, other workforce programs such as the Mental Health Nurse scheme (with a skilled mental health nurse embedded in General Practice) were spoken about favourably: *"She was brilliant for the community…and because she was working in general practice, she was able to reduce that stigma about seeing a mental health practitioner"* (healthcare management/support stakeholder).

Model of care characteristics that would negatively impact implementation

Consequently, consideration of this context assessment also highlighted several intervention characteristics which would be most likely to have a negative impact on implementation, success and sustainability of a new model of care. These include:

1. A telehealth service without wrap-around hands-on support for clients to access and use it
2. Providing outreach services from distant locations such as Mackay or Rockhampton
3. Services which have a perceived lack of privacy or stigma attached. These include EAP and online psychology services, as well as those which easily identify that a person is attending a mental health appointment or event.

Results: Service gaps

Identified service gaps

Stakeholder consultation and context analysis presented numerous service gaps for mental health care delivery in the Bowen Basin which could be addressed by a new model of care. While the demographics of who might be targeted varied slightly by region, common gaps were still observed.

One of the most dominant gaps to emerge in consultations is the **lack of psychology and other services for children and youth**, particularly in the Isaac region. Many families cannot have children assessed for behavioural and developmental issues, and schools are really struggling to keep youth engaged. There is a strong need for child and youth mental health services in the Isaac region. On the contrary, Emerald appears to have successfully improved youth mental health in recent years and stakeholders there could be engaged to help Isaac with their issues.

> *"I think the kids are the ones missing out. Yeah. I guess you sort of see a lot of the kids, there's just a huge gap in that area. There's not the services to support them. The nature of the families work they're not always supervised, or they don't have that support and with the lack of services, there's no real kids' services here as well."*
>
> (community/social services stakeholder)

> *"The other gap I think is around that child. The specific child psychology piece as well. So, for children that have been diagnosed but need some ongoing therapy, there's really nowhere that can assist with that either."*
>
> (clinical service provider)

> *"The communities are screaming for it now [help with youth]. You know, I've had a few conversations with school principals and deputies and head of curriculum out in that Isaac region. And they are like …we just have nowhere to refer these kids. The problems are getting bigger and we just we don't know what to do."*
>
> (healthcare management/support stakeholder)

The challenges of the Bowen Basin service environment, and its remoteness and geography give rise to another key service gap. That is, a **general lack of service providers and services**, but particularly those which are face-to-face, affordable, available out of hours, and maintain a consistent presence in the community.

> *"We know that they [patients] need to be moved on, but when there's no other services to move them on to, and you know that the capacity for them to be able to reach out to something that's not there. Yeah. So, yeah, it makes you think, well nine times out of ten it makes me angry. And then I feel sort of like stressed out. And like hopeless that there is nothing to -. That's one of the things that struck me as a worker…was the lack of services that you could refer to."*
>
> (community/social services stakeholder)

> *"I would also say there is definitely gaps in our community in regards to qualified professionals being able to help."*
>
> (healthcare management/support stakeholder)

"But I suppose we have lots of people that come in and start seeing patients and then leave. So the consistency of care that we have for our clients is pretty limited."
(healthcare management/support stakeholder)

"Face-to-face options - many people don't want to do telehealth, they want to see someone face-to-face. We're seeing families that are waiting months to get help because they're waiting for that face to face clinician availability."
(clinical service provider)

The **lack of general psychology appointments** and **long waiting lists** was highlighted as the most pressing service need within this scope.

"You know most of the people that come in here could do with psychological services, but we don't have anybody to refer to if they can't travel out of town. There's no local psychological services here."
(community/social services stakeholder)

"But I also found as well…with clients who have come on my caseload, …they've said that to see another psychologist is, you know, six to eight month wait."
(clinical service provider)

Another dominant theme was the **lack of service awareness, referral processes, and access pathways** in both the community and providers. This is particularly problematic for towns relying on outreach services.

"There is no real communication about who's in town, what services they provide, when they're going to be there."
(clinical service provider)

"So, we saw this already, but it became a bit more obvious during COVID … when something goes wrong, people don't know where to start looking."
(community development stakeholder)

"How to navigate healthcare [is a gap]. Navigate mental health, navigate through the system, directories of services, not just for the consumer, but for the providers. A lot of times we found the further out you go they don't know who's coming and going. Sometimes services are coming out and not being utilised because nobody knows they're there. And you think your 4 streets wide and 6 streets long, how could you not know someone's in town?!"
(healthcare management/support stakeholder)

"So, to find out there's still services [that no one knows about]… Yeah, it's just upsetting that you have services and then you've got people crying out to get to a service and they were here all along. So, I do think sometimes people's promotion of their organisation is lacking."
(healthcare management/support stakeholder)

"We're actually doing some service mapping at the moment for a youth project here in Mackay. And the systems map is eye watering. We, the people who live and breathe this stuff every day, find it eye watering. How do the young people and their parents find it?"
(community development stakeholder)

There is also a significant gap occurring due to **current models of outreach**, particularly to Dysart and other more remote locations. Visiting mental health services are limited and inconsistent, with many providers failing to engage with the communities to build trust and referrals.

> *"Yeah, everyone starts off with the most wonderful intentions, but it just takes one person not to turn up to their appointment and then that service doesn't come back for a month or that service will only come back when that clinician's rung and said, 'hey, I need you to come out here next Tuesday'."*
>
> (healthcare management/support stakeholder)

> *"Many [services] claim that they don't have user engagement to justify travelling out, however they do not do sufficient groundwork to promote their services or don't remain consistent enough for referral uptake."*
>
> (community development stakeholder)

Frontline providers in particular, highlighted the limited care options and referral points for **managing ongoing chronic conditions** and stepping patients down from specialised complex care services to be managed locally in the community (usually by the GP). GPs are seen as crucial as they often remain central to the patient's journey.

> *"But it seems like there's not the support when your need is between moderate and crisis. There's not anything in that gap. So, you're not, you're beyond what Headspace can do, but you're not bad enough to be with Child and Youth Mental Health Service. So those people, and particularly young people will fall through that gap."*
>
> (community development stakeholder)

> *"You know, you can sit in the severe and complex space being well managed [by the HHS] for a long time because the GPs might not be well trained in checking the biologicals or the specialised medications … So, I know in Mackay there has been at times up to 60 patients that are well managed with high needs that could step down. But there's no process within the general practices and probably not enough of the severe and complex primary care mental health to go around."*
>
> (healthcare management/support stakeholder)

There are also limited options for care which provides a **holistic approach to intervention** with case-management or a 'no wrong door' approach between services.

> *"I think it would be the fact that you don't have a hub out there to deliver it from and you don't have that key connecting group to pull it all together."*
>
> (healthcare management/support stakeholder)

> *"I think you would have services that probably are based out there, but don't connect all together."*
>
> (healthcare management/support stakeholder)

Most stakeholders highlighted that there is inadequate **early identification and intervention for emerging mental health difficulties**, as well as limited care for less severe issues which do not meet the criteria for community-based services or hospital admission.

> *"Community members who are employed by large employers such as BHP have access to some free EAP services, however general community members need to meet specific criteria to access*

services through Queensland Health. This means that many individuals who would benefit from early intervention may not be able to access the services that would best support them and they continue to deteriorate."

(community development stakeholder)

"I think our challenge is around that early intervention space and supporting consumers through that entire journey. I see that as one of our biggest challenges because I hate to see people bouncing in and out of our service when you know that a couple of months of support post-discharge would make a huge difference."

(clinical service provider)

"The mental health department here, they have a certain criteria. And I mean, and even that system isn't a good system. Like you know, if they don't fit the crisis, the crisis criteria then they don't see them."

(community/social services stakeholder)

Hand-in-hand with this is the lack of **general education around mental health** including awareness, stigma, and health literacy in the Bowen Basin community.

"So, I think that's a major barrier that understanding. I've also, in my very short time, done a lot of psycho education of what a mental health care plan is, how to get it, what it means, how to book a session with a GP… So, it's almost like taking the step back of we have to go from what that actually is before you make an appointment… So, I think a lack of education on that part is also a major, just a major barrier."

(clinical service provider)

Other gaps which were highlighted but which were not necessarily repeated across all stakeholders were: domestic violence services, people living on rural and remote properties, males aged 30-50 years, aged care and the elderly, trauma informed care, out of hours crisis care, GP support and training, drug and alcohol services, apprentices, a youth centre with no youth health services, and support for providers after hours.

Recommendations

Considering the currently available services, context assessment, and service gaps we propose several recommendations for a new model of care to support mental health service delivery in the Bowen Basin. Potential models of care are outlined below. It is likely that a multi-faceted approach is needed. These could be developed with a focus towards one specific town or area (e.g. Moranbah/Isaac), or extended more broadly across the region. Elements from two or more of these options can also be combined in a new multi-faceted model of care.

Town Hall(s)

Given the very strong themes in the context assessment regarding community development, ownership and consultation in regard to developing and implementing mental health services in the region (see Figure 9), our chief recommendation is to engage local stakeholders and community members in the

process of selecting and operationalising the new model of care. In order to do this, we propose to hold a town hall (or multiple town halls) in the region that would facilitate discussion around the main findings of this report and recommended models of care; explore how these could be operationalised in practice; establish what resources or funding would be needed; and identify potential partners and in-kind support for the pilot program. The town hall would take a hybrid information-consultation format and be led by AusHSI staff experienced in facilitation, in partnership with local stakeholders. Invited participants would include stakeholders already consulted, as well as those able to provide broader representation from consumers and additional community members.

Figure 9. Word cloud of the 100 most frequently used words by contributing stakeholders in the context assessment. (1=services, 2=people, 3=community).

Models of care

Option 1: Care navigation

A model of service delivery which focuses on care navigation and connection of services would assist people to be directed to the right place the first time, and to be supported through their help seeking journey by a consistent person. This would help to address the lack of service awareness and care continuity, as well as provide a localised central point of contact. This model of care could have several components including:

- A physical and virtual mental health and wellbeing information hub, with a recognised phone number and visible presence in the community. Ideally, this would be a central, accessible point of contact in a non-stigmatising environment such as a general practice, council office, community centre or youth centre.

"It's one phone number, that it's like triple-O, like everyone knows that number. So, it's one recognised number and it has some kind of visible presence as well. And you can go to that place and there's - you can find information on lots of services, but you can find someone who can tell you about all of them as well."

(community development stakeholder)

- A dedicated person (care navigator) in an intake, referral, and coordination role to direct and link patients with the most appropriate service to meet their needs and guide them through their healthcare journey. The aim would be to make it as simple as possible for consumers and providers to navigate services. This would require someone with clinical knowledge and an understanding of the local health system. They could be embedded within an existing community or social service organisation or work out of the mental health hub. The aim would be to provide wrap-around support and empower people to seek care.

"Someone that is delegated as a coordination and local point of contact. So that people like they might know that Mary is not going too well at the moment. And, you know, they are in touch with what's happening in their community. People know them. They know to go to them. Just at the local point of connection, I think has a lot of merit...the information and somebody who can support them to get where they need to be."

(community development stakeholder)

"There's some level of triage about, you know, 'it sounds like you need to talk to someone' or 'it sounds like you need to go to the hospital' or, you know, 'is there a friend we can link you in with?' ...some level of identifying what's next for them and supporting them to go to that next thing. So, a soft referral or, you know, a warm, 'I'll ring the GP, I'll make the appointment for you, I'll tell the GP everything that you need'…So, all of those kinds of things that just save people running around for days, getting worse and worse in their mental health condition or giving up is what we know."

(community development stakeholder)

- Update, promote and maintain service listings on My Community Directory or create a similar webpage. Develop a service decision making flowchart and/or mobile app.

Option 2: A consortium of services working together for holistic care

A jointly commissioned consortium of agencies and clinical providers working together in a case-management approach to individual patient care provides an attractive option to mental health stakeholders in the Bowen Basin. It supports the drive to attain a model of care with 'no wrong door' and helps to overcome multiple service delivery gaps. This may be operationalised as:

A. An interorganisational, multi-disciplinary case-management team with a mix of skills and experience who jointly look after the holistic mental health needs of each patient. They would be based in a hub town such as Moranbah with either spoke sites or outreach travel to areas such as Dysart and Clermont. While individual providers on the team may change over time, the consortium would remain. Workforce incentivisation would be important for balancing the right ratio of providers to referral rates to avoid burnout. As this option would likely need joint commissioning between health services, both the MHHS and Northern Queensland PHN would need to be key partners.

"Having a team who basically are aware of what's happening for people in that community and have some kind of holistic oversight and can support people with whatever's happening for them at the moment."
(community development stakeholder)

"If we could mimic that model that we're doing for youth mental health, for our older- breaking the stigma of what that looks like, travelling with a GP and a drug and alcohol trained person and someone who's trained, you know, in every area, having an employment person there to write resumes, if we could travel and take that model what we're doing for youth in our adult area."
(healthcare management/support stakeholder)

"And I think if you can have a case coordination approach and have all the players there around the table, you get things done much quicker then following up after the fact."
(community/social services stakeholder)

or

B. A co-located set of agencies and providers working out of one physical space to provide a holistic one-stop mental health hub including services such as employment, alcohol and drugs, and physical health. This creates a less stigmatising environment for consumers and makes it easier for services to provide warm referrals to each other. This option would require a dedicated physical space, service level agreements with providers, and a community steering committee. Headspace currently operates under this model for youth and has already set-up a successful place-based satellite to their Mackay service in Whitsunday. Northern Australia Primary Health Limited would be a key partner to engage if Moranbah were to establish such a hub.

"And so, I guess a one stop hub where, just not focus on mental health, but whatever you need will be there for you. And you don't have to go spend time looking for other places and looking for someone to support you with certain things because everything is there."
(community/social services stakeholder)

"Yeah, it hits all of those areas that we know contribute to mental health with financial, work and study, drug and alcohol, it kind of ticks the box."
(healthcare management/support stakeholder)

Option 3: Education, training and support for the community and frontline providers

Working with community members to share their own stories of lived experience and training them in how they can better identify, and support others would assist in developing the capacity of the community to take responsibility for improving mental health. There is also a strong case to be made for providing simple community psychoeducation around mental health and wellbeing, service access, and available resources. This would help to decrease stigma, aid in early identification, and increase service awareness. This education should be coupled with supported community development to collectively take action on important issues. There are already established groups and organisations in the region delivering these types of services who could be supported as partners under this model of care.

"I think education around Medicare, around resources, around the effects of mental health and what quantifies as not so good mental health would be really, really needed."
(clinical service provider)

"I think the other thing that's probably missing out there is just some significant community development work. Working out what are the issues, what are the opportunities, what are the trends, and responding accordingly."
(community/social services stakeholder)

This model of care should also encompass better training and support for frontline providers, and particularly GPs, to better understand and manage mental health in the community. This may be via specialised training, remote mentoring, a mental health providers network, co-location with a mental health nurse, and/or improved service directories and pathways. Both the Northern Queensland PHN and Central Queensland Rural Health are well placed to partner in this endeavour.

"Yeah. I think definitely that model could be reinvigorated. The Mental Health Professionals Network… and the doctors would even come. Such a good opportunity to connect. So, I think that model really works. That's after hours, dinners paid for or there's something. Yeah. And a paid position for someone to actually have the time to coordinate it because I just don't think it can occur within hours."
(clinical service provider)

"GPs could do with a lot of support because they don't know where to send people. We encourage people to see their GP, but they don't really know where to send them to."
(clinical service provider)

Option 4: Increase capacity of existing services to delivery care in the community

Many stakeholders believe that mental health service delivery could be improved if existing services in the region are provided with additional resources, extended in scope or provided in more flexible formats. Therefore, rather than being a specific model of care, this option is about partnering with organisations and providers to recruit a larger mental health workforce and provide resources and/or funding to increase their capacity and reach. This may include working with universities to provide placements and bursaries for students, supporting workforce incentive schemes with the Northern Queensland PHN, providing incentives or resources for afterhours care and outreach from Emerald or Moranbah more frequently, or contributing to accommodation/rent for service providers and leases for commercial spaces.

"If we had visiting people, we could immediately refer straight to those people and know that they were going to be serviced."
(community/social services stakeholder)

"Flexibility and extension of the services already accessing the community, for example; if the EAP service visiting fortnightly, had incentives to visit weekly and extend their services to those on Mental Health Plans who could not otherwise afford a private Psychologist."
(community development stakeholder)

Option 4 also includes the recommendation to establish one or more supported telehealth rooms to increase access to psychology services and specialised providers.

Increase access to psychology and specialised providers via telehealth

A dedicated telehealth room(s) could be established within a general practice or existing non-stigmatising community space such as the Moranbah Youth Centre. The aim of this room would be to provide additional access to social workers, psychologists and psychiatrists based in Mackay, Rockhampton,

Sunshine Coast or Brisbane, including those who specialise in children and youth services. To overcome some of the reticence to use telehealth in the community, this service would need to be supported by an administrative/technical role to recruit and coordinate potential providers, take bookings, provide information, and support patients through the telehealth process. Partnerships with psychologists, allied health staff and hospitals in these regions would be crucial in achieving this model of care and reimbursement and contracting agreements would need to be established. Buderim Private Hospital has expressed interest in this project and may be a potential site to trial this model of care.

Costs of models of care

There are varying costs to implement and sustain each of these models of care. It is likely that many existing services and groups can also be leveraged to assist in implementing these recommendations.

AusHSI and WMR do not commission these types of services and are therefore not confident in making judgements in this regard. However, many of these models have been implemented before elsewhere and we have sought advice from the Northern Queensland PHN into the level of resourcing required for each model. These costs may be varied as elements are added, subtracted, or combined from different model options. The town hall discussions will also assist in assessing the final costs of the new model of care chosen. An additional cost will be incurred to determine the impact, sustainability and value of the chosen model of care via formal evaluation over the project's lifespan.

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