DRAFT FINAL REPORT

Integrated Allied Health services in Rural Communities

September 2018

ABN: 70 141 687 774

Central Queensland RURAL HEALTH

Contents

1. Executive Summary

In 2016 Central Queensland Rural Health (CQRH) received funding from Queensland Health's Clinical Excellence Division Queensland Integrated Care Innovation Fund to undertake a two year pilot project in the Banana Shire to establish a service delivery framework and models of care that will allow Allied Health Professionals to work in a number of settings.

This progress report outlines what actions have been taken to implement the proposed service delivery framework and model of care that would allow Allied Health Professionals to work in a number of settings by adopting a multi-pronged approach to improve the accessibility and financial sustainability of Allied Health services in the region. The report also details the process for the development of the Allied Health Assistant role, increased access to telehealth services and potential shared infrastructure options.

Information is provided on the background to the funding and work completed to meet the project objectives. The report details each objective individually and outlines the process undertaken to implementation; it also provides a list of supporting documents and identifies potential issues and barriers to achieving the project outcomes. The planning templates and proposed service model that have been developed as part of the final project deliverables will span disciplines, funders, employers, and locations and will be available for implementation in other locations.

The project has established training programs and positions to support funding and the development of the Allied Health Assistant role within partner organisations in Banana Shire and consequently other rural communities.

The two year project is now complete and all outcomes have been explored and where possible implemented within the project timeframe.

2. Background

In June 2015 a local planning group within the Banana Shire raised concerns in relation to access to Allied Health services and the long term sustainability of these services. A local workshop was held which made the following recommendations:

1. Allied Health Assistants -
   - Investigate the development of the role of the Allied Health Assistants.
2. Telehealth services
   - Increase access to Allied Health services in multiple settings, and increase collaboration for service providers and patients not co-located.
3. Integrated Service Provision
   - Determine whether services could be co-funded rather than provided as separate outreach services.
   - Determine whether private and public services could be accessed through a single provider.
4. Co-ordinated Allied Health Planning
   - Complete a planning process for each community to develop coordinated services to increase access and effectiveness of the services and reduce unnecessary costs.
5. Shared Infrastructure
   - Investigate the possibility of shared equipment and workspaces across disciplines and providers.

Queensland Health's Clinical Excellence Division of Queensland has allocated funds from the Integrated Care Innovation Fund to Central Queensland Rural Health (CQRH) to undertake a pilot project in the Banana Shire to implement the recommendations from the workshop.

The scope of the pilot project is limited by geography. The initial project is limited to the Banana Shire Allied Health services and the second stage to services within the CQHHS. The initial area includes the communities of Biloela, Moura, Theodore, Taroom, Baralaba and Wowan (population 15,742 people spread over 28,577 square kilometers). Baseline data on service access and funding sources has been collected and will be reviewed every six months throughout the project along with community feedback.

The project aim has been to establish a service delivery framework and models of care that would allow Allied Health Professionals to work in a number of settings. This may utilise Option A or B employment models, the development of secondment to a secondary service, or part time positions. Establishing local management support services to ensure there are effective business systems to fund the delivery of services through multiple funding sources may also be required. This workforce re-alignment would provide flexible and attractive shared recruitment and retention strategies, career pathways and professional development opportunities for Allied Health clinicians through collaboration between CQHHS, Private Practice, Aged Care, Department of Education or other providers. Referral guidelines and pathways could be established to ensure the patient is seen by the most appropriate provider, with access to all available funding options, in the most appropriate location as quickly as clinically indicated.

The development of an Allied Health Assistant workforce along with the increased use of telehealth will assist in improved continuity of care and more timely access to Allied Health assessment and intervention.

3. Integrated Care Innovation Fund

Queensland Health's Integrated Care Innovation Fund (ICIF) is a state-wide initiative providing financial support to develop and progress new models of care and innovative approaches to integrated service delivery.

Funded projects must demonstrate a willingness to embrace and encourage the uptake of new technology alongside the benefits of integrating care and improving communication between health care sectors.

The major innovation in this project is the development of employment models and partnerships to allow staff to work across State, Federal and private practice services. Planning templates and service models that span disciplines, funders, employers, and locations will be available for implementation in other locations.

The other innovation with this project is the establishment of training programs and positions to support funding and the development of the Allied Health Assistant role within partner organisations in rural communities.

The implementation of integrated services will give staff a wider variety of experience and allow Allied Health clinicians to transition to part-time roles and private practice which is currently not a viable option in many rural areas. This then opens the option of service planning through commissioning or contracting Allied Health services by the HHS, the PHN and other organisations.

4. Central Queensland Rural Health

Central Queensland Rural Health (CQRH) aims to support, enhance and develop the delivery of quality health services to the residents of rural Central Queensland. With over 25 years' experience in health service planning within the Primary Health care sector. CQRH achieve this by working in collaboration and co-operation with general practitioners, other health service providers and consumers across our footprint.

CQRH has a subsidiary company which currently manages General Practices in Wide Bay, Central Queensland and Mackay Health and Hospital Service regions. It is through this company that we have maintained a strong focus on the need for effective partnerships with local communities and partnerships across sectors. In many cases these partnerships mean CQRH is not the service provider but a partner in the process to ensure the services are as accessible, effective and sustainable as possible. This has resulted in a deep appreciation and understanding of the health needs throughout local communities in the organisation's footprint.

CQRH has also led the delivery of Allied Health services on the ground with professionals based at Medical Centre's and private rooms across Central Queensland. This Integrated Allied Health services pilot project provides the opportunity to combine local knowledge and experience to develop a service model which will meet the need of consumers across Banana Shire.

5. Project Objectives

The five objectives for this project have been drawn from the recommendations developed by clinical and community leaders and Allied Health Professionals who participated in the Banana Shire Allied Health workshop.

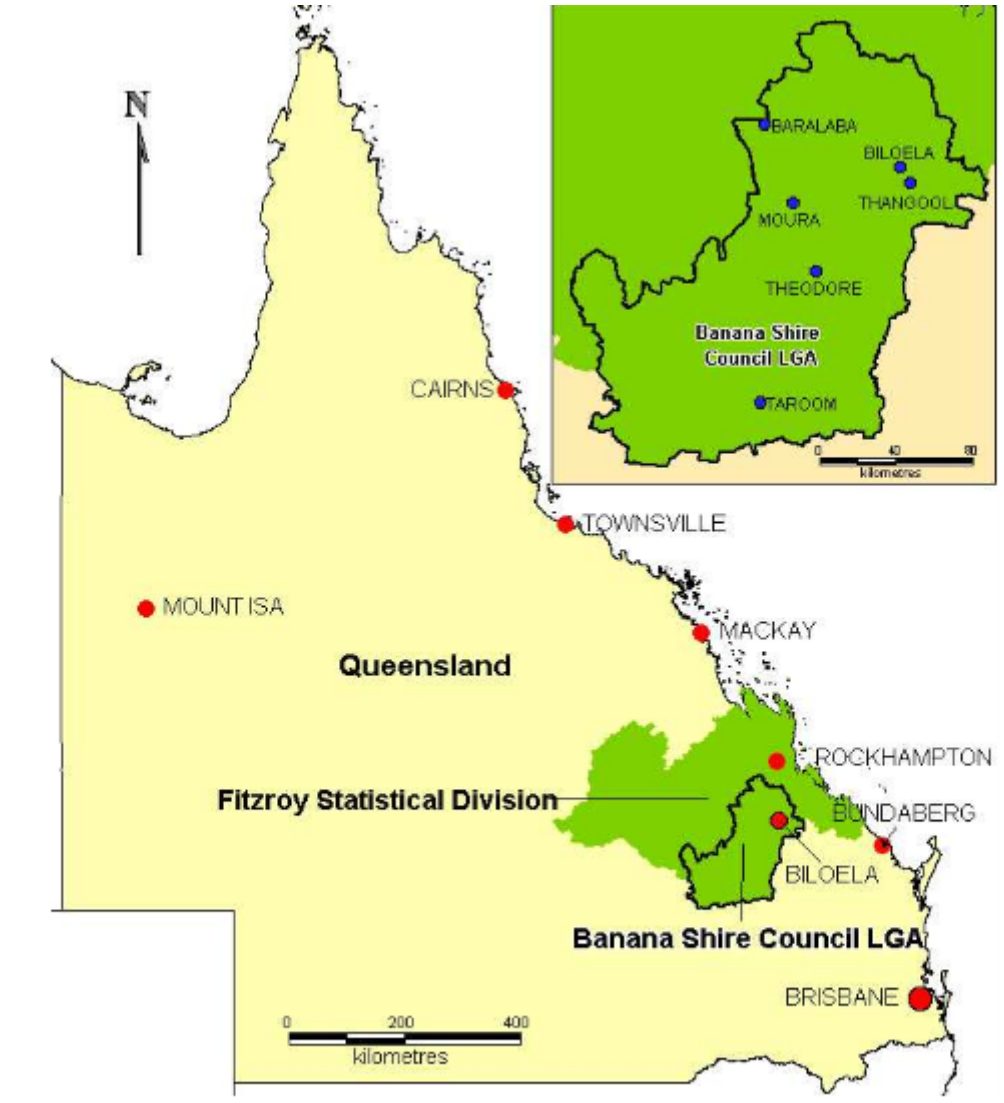
1. Develop integrate multi-funded, multi-disciplinary services across the Banana Shire.
2. Develop the role of Allied Health Assistants working within the Banana Shire.
3. Increase access to Allied Health Telehealth services within the Banana Shire.

4. Develop integrated, multi-funded, multi-disciplinary Allied Health plans for each community within the Banana Shire.

5. Develop an infrastructure plan for each discipline to ensure all communities within the Banana Shire have access to Allied Health services.

6. Project Area

The project is covered by the geographical area outlined in the map below.



Based on Australian Bureau of Statistics, Australian Standard Geographical Classification 2008.

6 Objective One

Develop integrate multi-funded, multi-disciplinary services across the Banana Shire.

6.1 Introduction

The majority of the Allied Health services currently provided in rural and remote communities are funded through Health and Hospital Services (HHS). If there was an increase in the availability of private practice services these services could be funded through other Allied Health funding programs.

Increasing access to Private Practice has the potential to increase access to additional funding options and increase the total funding for Allied Health services within the Banana region, resulting in a decrease in the amount of primary care Allied Health services funded through the HHS. Consequently this would allow an increased focus on early intervention, rehabilitation and Acute Care Services. There are a number of support factors required to enable effective service delivery in rural locations. Community based planning has been identified as essential to ensure that all available human and physical resources are used to support local service delivery, in the most effective and efficient way.

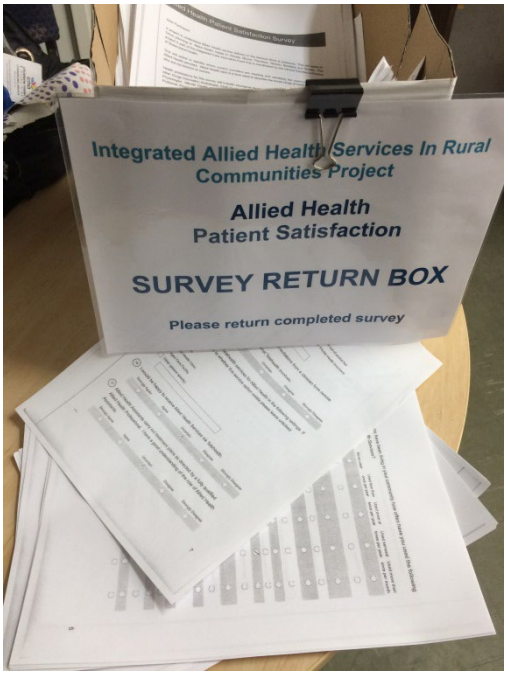
A list of the available funding at the commencement of this project (Nov 2016) is provided below. Further details including Patient Eligibility and AHP Provider Eligibility are provided in the Supporting Materials. Due to the amount of funding options it was identified that a resource tool to assist clinicians to be aware of the various funding options and the process for accessing these would be of benefit.

- Private Health Insurance – Includes extras/ Allied Health cover
- Medicare Benefits Schedule (MBS)
- Medicare Follow-Up Allied Health services for People of Aboriginal and Torres Strait Islander Descent *(MBS ITEM 715)*
- Medicare - AUTISM Helping Children with Autism Funding Package
- Medicare- Better Access to Psychiatrists, Psychologists and General Practitioners through the MBS (Better Access) initiative
- Medicare - Better Start for Children with Disability initiative
- Medicare- Chronic Disease Management — AH individual services
- Medicare - Group Allied Health services under Medicare for people with Type 2 diabetes
- Medicare - Mental Health – ATAPS
- Medicare – Pregnancy support counselling
- Medicare - Ear Disorders- Diagnostic Audiology Services
- Non- Government Organisation Funding
- A Better Life (ABLe) (Under Community Mental Health (CMH), the Department of Social Services (DSS) funds NGOs to deliver AH services)
- Family Mental Health Support Services (FMHSS)
- (under Community Mental Health (CMH), funded by the DSS)
- Mental Health Respite: Carer Support (MHR:CS)
- (under Community Mental Health (CMH), funded by the DSS)
- Non School organisations Program (NSO)
- INDIGENOUS AUSTRALIANS' HEALTH PROGRAMME
- Integrated Team Care (ITC)-funded under the Indigenous Australians' Health Programme guidelines
- Commonwealth Home Support Programme
- Allied Psychological Services (ATAPS)
- Indigenous Nutrition Services Program
- Healthy Ears – Better Hearing, Better Listening (HE – BHBL)
- Medical Outreach Indigenous Chronic Disease Program (MOICDP)

- Visiting Optometrists Scheme (VOS)
- Eye and Ears Surgical Services (EESS)
- Rural Health Outreach Fund (RHOF)
- National Disability Insurance Scheme (NDIS)
- Department of Veterans Affairs (DVA)
- Community Aids, Equipment and Assistive Technologies Initiative (CAETI)
- The Rehabilitation Appliances Program (RAP)
- Rural Primary Health Services (RPHS)
- NDIS QUEENSLAND
- Queensland Medical Aids Subsidy Scheme (MASS)
- Queensland Health
- Oral Health
- WORKCOVER QLD

6.2 Summary of progress

Over 200 clinical and community stakeholders across Banana Shire completed a survey providing information leading to an increased understanding of current service funding, patient eligibility/other potential funding sources, and how community sentiment regarding the services being delivered in their local community. The survey was divided into two parts:



1. Allied Health Patient Audit

The clinicians were asked to capture a one week window (anytime from 1 November to the 31 December 2016 and February 2018) of normal clinic in the Banana Shire. The questions included information regarding demographics, referral method, patient diagnosis and billing methods/ codes.

2. Patient Satisfaction Survey

Clinicians were asked to distribute to all patients seen during a one week period at any time in the month of February 2017 and February 2018.The questions included information on patient perceptions and demographics.

The analysis of the data collected from the Patient Audit survey showed a high percentage of Allied Health services being provided through HHS funding. The limited use of alternate funding options for services delivery would suggest an underutilisation of the various funding options available for the delivery of Allied Health Services.

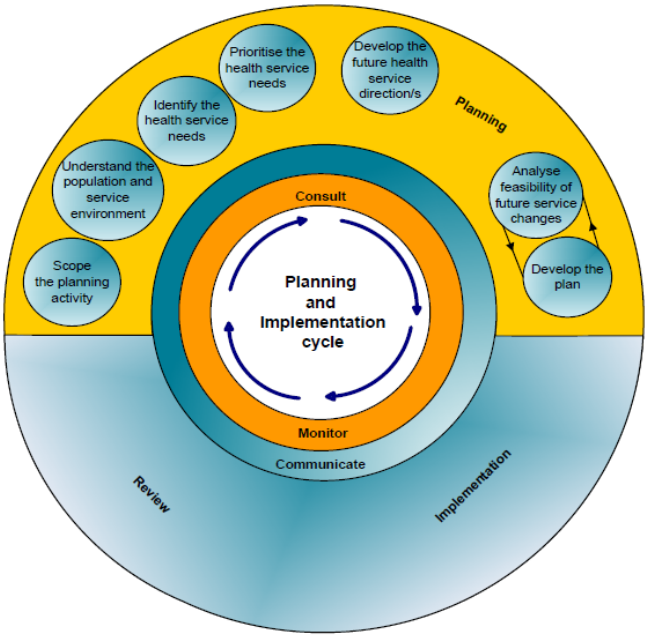
The lack of service delivery through valid alternate funding options may reflect a lack of knowledge regarding alternate funding sources for the delivery of services by both referrers and service providers. As such a key component identified is the need to ensure clinicians and private practitioners are aware of funding options for increasing access to services and the development of a website based resource that will support integration across a variety of agencies and disciplines detailing funding sort information

Additionally, it would also suggest a concurrent lack of understanding for consumers regarding their entitlements to access required Allied Health services and options for service delivery. The lack of utilisation of telehealth services would also suggest limited access to resources and/ or connectivity and perhaps limited understanding of the financial and clinical benefits of this medium which requires further exploration.

6.3 Action taken to implement project outcome

The development of the survey questions and the circulation took four months to complete. The Reference Group was involved in the development and approval of the questions. AusHSI had input to the survey questions to ensure they were relevant for the project. The Banana Shire area covers 28,577 square kilometres including Biloela, Moura, Theodore, Taroom, Baralaba and Wowan. It was estimated 210 providers and GPs received the survey which was emailed and hand delivered across the shire. It was also hand collected from many premises and follow up phone calls were necessary to those who did not return the surveys. In some cases, mainly private practices, there were face to face meetings to collect the data. The hard copy data was then entered into Survey Monkey (an electronic data platform) to allow the data to be easily collated and presented in various formats.

The information was collated and sorted via town, information on accessibility/frequency, population, current funding sources, the number of full time equivalents (FTE), and what disciplines were offered. It was also important to record whether there had been any changes since the initial desk top audit which was completed as part of the project proposal/ initial engagement in 2015. This information will also be measured again towards the end of the project. A full list of the survey questions and results are provided in the Supporting Material.



In addition to the survey data an analysis of other one off funding and other services was included namely Disaster Relief Funding eligibility criteria, distribution, effectiveness and limitations and counselling services and their funding options, application and eligibility criteria e.g. process for EAS.

The project has clearly identified there is an opportunity to develop a service models to meet the needs of the community and access additional funding for services. To date additional services have been recruited using predominantly Medicare, Fee for service and Aged Care funding sources.

The next step is to develop the tools to allow services to develop across the traditional employment and funding silos and provide a website based resource that will support integration across a variety of agencies and disciplines detailing funding sort information. Template service agreements and business cases have been developed based on audit data.

6.4 Supporting material

- Allied Health Patient Audit Questions Survey Questions
- Allied Health Patient Satisfaction Survey Questions Spreadsheets
- Allied Health Patient Satisfaction Survey Results
- Allied Health Patient Survey Audit Results
- Colour Funding mapping Draft
- Current Funding Mapping for Allied Health Services – collated research information
- Funding for AHP document – collated research information
- Funding Sources Breakdown
- Patient Audit Survey email text to participate
- Service Level Agreement – template for AHS
- MOURA data FTE ratio
- Aus Gov DOH Medicare Benefits Scheme Allied Health Services 1 Nov 2014

6.5 Evaluation of implementation (Progress update)

The scope of project requires extensive knowledge of current innovative initiatives for all allied health and complementary services delivery and purchasing models across local, state and national perspectives. This requires significant external engagement of high level staff of various specialties e.g. professional peak bodies and Queensland Health complementary services. Although essential this was at times difficult to implement due to staff changes and CQRH resources.

Whilst the Patient Audit provided some valuable data the Patients' Audit Survey uptake was limited and upon analysis of data did not capture all aspects required. During the initial stages of the project there was an assumption made that there would be other relevant creditable data available that could be shared from other health organisations as part of the desktop review. However data collection from PHN and HHS has been difficult due to the project lead service not having access to these systems. Consequently the baseline data formulation and comparison e.g. occasions of service and responsiveness to need could have been stronger, evaluating current benchmarking for future comparison may be flawed and there has been limited access to existing clinical guidelines for service delivery.

In addition accessing relevant raw data from the PHN for contribution toward the project has been complicated by issues of confidentiality. It would have been beneficial if AusHSI contributed toward data analysis.

For the purposes of this project there was an interest in assessing the status of allied health service delivery levels for the Banana Shire in comparison to other areas. Research was conducted to identify any guidelines or benchmarking for allied health service delivery in rural and remote Australia. Lead agencies such as the Australian Institute of Health and Welfare, APOQ, APHRA, National Rural Health Alliance Inc., SARRAH, Queensland Health Clinical Excellence Division and the World Health Organisation were consulted in order to ascertain if there was an established benchmark or best practice recommendation for the ratio of allied health disciplines FTE per head of population. To date there has been no confirmation that such a guide has been developed and endorsed. Various community projects have attempted to develop locally derived formulas or guidelines for such, however these have not been generalised or endorsed for use across other rural and remote localities.

APHRA publish data outlining the number of registered practitioners within each state and the type of registration they hold. This data is not able to be broken down into locality or region. Queensland Health collect data outlining the number of allied health professionals employed according to HHS and

collate this in line with Remote Access (RA) clarification. Queensland Health have established case mix ratios for allied health staffing profiles however this does not incorporate services funded through federal or private options. Extraction of data from the Australian Bureau of Statistics provides the opportunity for analysis of the number of allied health professionals registered according to Remote Access (RA) clarification. These figures show that outer regional and remote locations generally have a lower representation of AHP per head of population (for most disciplines) than urban and inner regional areas. As published by the Department of Health and in the PHN Baseline Needs Assessment, the Central Queensland population profile has higher rates of health risk behaviours, this raises concerns for access to appropriate early intervention and preventative health care. It is also relevant to consider the geographical context and the requirement for both clinicians and patients in rural and remote areas to experience higher levels of travel time to access services than their urban counterparts.

The Allied Health Patient Audit survey will be repeated in November 2017, 12 months after the initial survey, for comparative analysis as per the project evaluation plan.

7. Objective Two

Develop the role of Allied Health Assistants working within the Banana Shire.

7.1 Introduction

Allied Health services have developed progressively in rural communities over the last 20 years. These services have developed as part of a move to utilise multi-disciplinary models of primary and secondary health care. The viability and sustainability of these services has been limited by the population of the communities and limitations of single funded programs. The recognition of a need to make these services more robust has led to the discussions, service mapping and service review requested by the communities of the Banana Shire.

The June 2015 workshop attendees supported the development of the Allied Health Assistant role. It was agreed role descriptions across multiple sectors including aged care, education, health and the non-government sector would need to be developed. In order to ensure sustainability funds would need to be identified to support existing staff to attain an Allied Health Assistant qualification, including backfill for study time and placements. It was agreed it would be necessary for local Allied Health Professionals to develop the capacity to supervise Allied Health Assistants in training and in practice.

The new service delivery model will include the role of the Allied Health Assistants. This diversification of skills is essential to increase access and continuity of Allied Health services in the Banana Shire community.

7.2 Summary of progress

Three Allied Health Assistants have successfully enrolled in the Certificate IV Allied Health Assistant course. The students have placements secured and are enthusiastic about the opportunity that has been provided as part of the project.

The Project Officer regularly communicates with the students to track progress, provide support and motivation including regular face to face meetings. The course is accessed through online learning, self-paced and it is anticipated that the students will graduate within two years. Another round of scholarships will be offered early next year following the process outlined below.

The Certificate IV in Allied Health Assistant curriculum involves a mandatory 'Residential School' that requires on campus attendance for completion of practical components for a total of 13-15 days. The closest TAFE offering the Residential School component is located over 600km from the Banana Shire, resulting in additional barriers and challenges for the AHA's to complete their learning. As a result of CQRH's negotiations and communication an added bonus will be delivered with CQUniversity committing to developing a business case for Certificate III and Certificate IV in Allied Health Assistant, Certificate III and Certificate IV Indigenous Primary Care and Certificate III and Certificate IV Indigenous

Environmental Health Officer. The University is confident the business case will result in a new course offering in the future.

7.3 Action taken to implement project outcome

One of the first steps taken to ensure the implementation of this outcome was to research what institutions offered the Certificate IV Allied Health Assistant in Queensland. This was completed in December 2016 with a detailed list being developed.

No training organisations were identified in Central Queensland. Therefore CQRH initiated discussions with Associate Professor Leonie M. Short , Academic Lead, Vocational Education and Training, Head of Course for Oral Health, School of Health, Medical and Applied Sciences at CQUniversity to determine the feasibility of CQUniversity providing Cert IV Allied Health Assistant as EdQ shared Intellectual Property and it can be offered at any EdQ registered organisation. If successful this could maximise local engagement and support and reduce the need for students to travel for face to face components of their study.

CQUniversity has committed to developing the business case for Certificate III and Certificate IV in Allied Health Assistant, Certificate III and Certificate IV Indigenous Primary Care and Certificate III and Certificate IV Indigenous Environmental Health Officer. CQRH invited other key stakeholders to be part of the negotiations namely the CEO's of Excelcare Australia and Bidgerdii Community Health Service. While it may take time to implement this is an excellent outcome for future Allied Health Assistant students across Queensland.

In the meantime, funds were allocated for the scholarship to ensure financial support for any existing staff already working in the space who wished to attain an Allied Health Assistant qualification had an incentive for study time, placement and no out of pocket expenses. The course requires students to actively engage in study and placement for up to 120hours.

While the institutions were being researched a crucial step was to identify appropriate services for future employment of Allied Health Assistants and what organisations in Banana Shire had the capacity to train and support existing staff to become Allied Health Assistants.

A key component is ensuring appropriate supervision and clinical governance processes. A local supervision plan and a clinical governance policy are necessary for each position.

After the essential behind the scenes work was completed the positions were ready to be advertised. It was agreed that the Integrated Allied Health services Steering Committee would be accountable for assessing the scholarship applications and awarding the scholarships.

The scholarships were advertised and promoted across the region in the local newspaper, on the CQRH Facebook page and by direct email targeting. Candidates were shortlisted and then interviewed. The panel was represented CQRH, CQHHS and the Reference Group. All candidates were informed of the results via a letter of notification and scholarship payment is received on evidence of enrolment. Position Description and Competency Charts developed for the host organisations.

The successful recipients are in three different areas of specialization (Theodore Medical Centre, Banana Shire Community Resource Centre and Wowan/Dululu Multi-Purpose Centre) and are geographically apart, therefore there is no opportunity for study groups etc. Therefore it is essential for the Project Officer to maintain regular contact with the recipients and their placement representative

via phone calls, face to face meetings and email to ensure the students is tracking towards completion, to identify any issues and to encourage motivation.

As the Allied Health Assistants work placement locations are at different organisations a Memorandum of Understanding has been secured. Additional information provided to the host organisations is listed in the Supporting material below.

The final scholarship round will be advertised early 2018.

7.4 Supporting material

- Allied Health Course Summary – Registered Training Organisations
- Health-Industry-Training-AH-Infographic
- Course Outline - HLT42512 Certificate IV in Allied Health Assistance
- Text for promoting scholarship
- Text for information for scholarship
- Allied Health Assistant Role Description – given to them examples
- Allied Health Assistant Framework 2016 https://www.health.qld.gov.au/__data/assets/pdf_file/0017/147500/ahaframework.pdf
- The Allied Health Professional Office of Queensland (AHPOQ) in consultation with The Cunningham Centre has developed overarching guidelines for the role of Allied Health Assistants.
- Governance Guidelines for Allied Health Assistants 2016 - https://www.health.qld.gov.au/__data/assets/pdf_file/0028/144757/ahagovguide.pdf
- Clinical Task Instructions
- AHPOQ also provides guidelines for Allied Health Assistants Clinical Task Instructions:
- https://www.health.qld.gov.au/ahwac/html/clintaskinstructions
- and contextualized learning modules:
- https://www.health.qld.gov.au/ahwac/html/ahassist-modules
- AHA Supervision Training Examples
- AHA Supervision Agreement, Supervisor Meeting, Session Record
- QLD HEALTH Clinical Task Instructions x 11
- QLD HEALTH Allied Health Assistant Role Description
- Scholarship Letter - Employer

7.5 Evaluation of implementation (Progress update)

If possible dual placements should be considered to maximise learning for AHA student and/or more conducive to organisational capacity.

One of challenges from the process was the need to ensure timeliness from advertising the scholarships to interview to announcement. In the timespan it took one applicant had found an alternative study pathway.

8 Objective Three

Increase access to Allied Health Telehealth services within the Banana Shire.

8.1 Introduction

The Department of Health's Better Health for the Bush (2014), identified telehealth as a priority for improved access to Allied Health services for rural and remote consumers. Telehealth can assist in health outcomes through improving the timeliness and frequency of service delivery, as well as increasing access to Allied Health services for consumers who experience barriers due to distance or mobility. Telehealth also has the capacity to increase clinician capacity through a reduction in the need for the delivery of outreach services and reducing the occurrence of FTA's (Fail to Attend) as well as providing additional options for peer support and education. The term 'telehealth' has numerous different adaptations which include but are not limited to 'telemedicine'; 'tele-rehabilitation'; 'health video-conferencing'. For the purpose of this project the term telehealth and its definition will be guided by Queensland Health's terminology as outlined by the State-wide Telehealth Services Support Unit as follows:

- Live, audio and/or video inter-active link for clinical consultations and educational purposes
- Store and forward telehealth model that nay involve digital images, video, audio and clinical data being captured ("stored") on the client computer and transmitted securely ("forwarded") to a clinic at another location where they are studied by relevant specialists
- Teleradiology for remote reporting and clinical advice for diagnostic images
- Telehealth services and equipment to monitor people's health in their home

There are two primary models of telehealth outlined by the Allied Health Telehealth Capacity Building Scoping Project (2015) as listed below:

Table 1. Models of allied health telehealth services

Hub site	Recipient site (client present)	Model variants and descriptive terms used by informants
Dual Clinician Model		
AHP	AHP (same profession)	• Hub site clinician leads and primarily delivers session ("consultant" or "specialist" telehealth session) • Hub and recipient site AHP jointly deliver telehealth session / service ("shared care") • Recipient site clinician delivers the service with the hub site clinician contributing advice ("case review") or formal supervision of service delivery ("supervised practice")
AHP	Other health profession	The recipient site clinician may be an AHP of a different profession to the hub site clinician, a nurse, doctor or other professional. The recipient site clinician may provide: • 'Hands-on' assistance for physical tasks with strong direction on task requirements provided by the hub site AHP • The majority of the service following training in the skill shared task/s. The hub site clinician provides direction and guidance, primarily during the skill sharing training period and for complex cases beyond the scope of the skill shared task, or • The diagnostic procedure for hub site clinician review

		(e.g. offsite radiologist for breast ultrasound examination)
AHP	Allied Health Assistant	Telehealth is used as an enabler and/or adjunct to delegation. The relative contribution to service delivery between AHP and AHA depends of the complexity of task and extent of the AHA's training and competency assessment in the relevant clinical task/s.
Direct Client Care Model		
		• Client attends health clinic • Client attends from home using own / borrowed device ("home telehealth")

8.2 Summary of progress

In a 2015 Report canvasing the use of telehealth for the delivery of Allied Health services across the Banana Shire, conducted by Central Queensland Hospital and Health Service, it is acknowledged that there is significant potential for expansion in this area. In this report it was also identified that an additional model for telehealth involving an AHP and a Registered Nurse (RN) needs to be considered. This additional telehealth model is most relevant for more acute services such as dysphagia assessment and useful for remote sites where no AHA's are currently employed.

The survey identified that telehealth in Banana Shire is currently used for:

- Dysphagia assessment and management
- Speech sound therapy
- Paediatric supervision
- Inpatient interviews/medical histories etc. for outreach hospitals
- Supervision and client consultations with HP3 staff
- Lymphedema
- Complex care between health staff meetings with patients present
- Burns
- Meetings and professional development

Limitations to the use of telehealth within the Banana Shire were identified as:

- Lack of ability to use telehealth for urgent referrals
- No staff allocated at recipient sites Theodore, Moura and Baralaba
- Availability of facilities and equipment at recipient sites
- Delays in streaming
- No current VC points on wards
- Perception of Low level demand
- Clinical appropriateness

The results obtained through this survey correlate with the results obtained from other Queensland localities and are summarised in the Allied Health Telehealth Capacity Building: Scoping Project (2015). The majority of telehealth allied health service delivery has been facilitated through Queensland Health Hospital and Health Service sites utilising the infrastructure established by Queensland Health. Additional studies into telehealth services offered across other service areas have utilised alternative mediums for video-conferencing including iPads; smart phones and personal computers. Moreover

organisations outside Queensland Health have used alternative programs such as Skype, Face time and Video.

Services have the potential to be delivered to GP practices, education facilities, aged care residential facilities and directly to a patients' home. Currently, Allied Health services delivered through a telehealth modality are not claimable through Medicare with the exception of psychological services under a Better Mental Health Outcomes Plan. The delivery of Allied Health services through telehealth services may be funded through private health insurance in accordance with individual's level of cover and insurance funders' inclusion criteria for claimable services, although these are limited in number. Additionally Allied Health services delivered through telehealth may be funded through Commonwealth funds obtained through commissioning of funds via the Primary Health Networks. An opportunity has been identified to lobby the Department of Health to ensure changes are made to the funding of telehealth services and to ensure where possible funded services can be provided by telehealth when clinically appropriate.

8.3 Action taken to implement project outcome

A literature review and desk top analysis of current Telehealth Services has been completed. This has been completed in parallel to continued scoping of telehealth service models delivered in other rural and remote localities across Queensland and nationwide, through ongoing communication with the Allied Health Professions Australia, Health Service and Clinical Innovation Division, Allied Health Office of Queensland and SARRAH.

Local organisations and professionals have been canvassed to determine their use of telehealth.

A review of the different Telehealth apps used by AHPs and the associated costs has been completed.

Ongoing communication with the Telehealth Taskforce regarding request for support with appraisal of viability, resourcing and development of infrastructure for allied health service provision in Banana Shire

8.4 Supporting material

- Better Health for the Bush (2014)
- https://www.health.qld.gov.au/__data/assets/pdf_file/0027/436815/better-health-bush.pdf
- Allied Health Telehealth Capacity Building: Scoping Project (2015)
- https://www.health.qld.gov.au/__data/assets/pdf_file/0020/150149/telehealthreportpt1.pdf
- ACRRM Framework for Telehealth Standards
- http://www.ehealth.acrrm.org.au/telehealth-standards
- http://www.ehealth.acrrm.org.au/sites/default/files/content/ACRRM%20Handbook%20for%20telehealth%20online%20education%20module.pdf
- Sarrah - https://www.sarrah.org.au/sites/default/files/docs/allied_health_and_telehealth_final_-_19.10.12.pdf
- Telehealth Services Banana – (Central Queensland Hospital and Health Service report 2015)
- Allied Health Telehealth OOS 1st Jan to 30th June 2017 (1)
- QG DOH Allied Health Telehealth Capacity Building Project Progress Report 2016

8.5 Evaluation of implementation (Progress update)

The use of telehealth within the Banana Shire has been adopted by health professional from one Queensland Health site to another Queensland Health site with success in the delivery of services

across numerous interventions. There has also been some adoption of the use of telehealth by NGO's in the Banana Shire, and these systems are to be studied in more detail. It has been recognised that there is potential for increasing the scope of service delivery through telehealth options and factors to support this are:

- Mapping connectivity across the Banana Shire
- Clarification regarding the suitability of mobile mediums for video conferencing and appropriate apps
- Trained staff at recipient sites
- Appropriate equipment at recipient sites
- Knowledge of clinically appropriate interventions for telehealth
- Raising health professional and consumers awareness of the benefits of telehealth
- Raising awareness of funding sources that support the use of telehealth allied health service delivery

9. Objective Four

Develop integrated, multi-funded, multi-disciplinary Allied Health plans for each community within the Banana Shire.

9.1 Introduction

Many Allied Health services are managed and funded through regional or state based providers. Services are planned regionally with very little consultation with rural communities or other services providers. This leads to an overlap in services for some disciplines and communities and gaps in other services. This was clearly demonstrated through the mapping process and the consultation with local community members and Allied Health Professionals completed in 2015. As such a planning process for each community is essential to developing coordinated services that will potentially increase access and effectiveness of services and reduce unnecessary costs.

A major component of this project is the analysis of current Allied Health services. A survey was developed by Central Queensland Rural Health Service in collaboration with AusHSI and Central Queensland Hospital and Health Service to collect a combination of quantitative and qualitative data from Allied Health professionals delivering a service throughout the Banana Shire. To date the collection of data has been sourced from the area around Biloela due to limitations in accessing provider contact details along with limited resources available for this aspect of the project. This survey round will serve as a pilot study in order to evaluate the effectiveness of the process and modify future survey content and distribution appropriately.

9.2 Summary of progress

A great deal of work has been completed in this space. The community plans have been developed for each community and data collected to determine services. This has been reviewed against previous information from the 2015 data to identify changes and gaps.

Stakeholder groups formed to support the project are meeting regularly and functioning as per the Terms of Reference.

9.3 Action taken to implement project outcome

Engagement essential for success

Engagement and relationship building is a key factor in the information gathering process. It is essential that engagement occurs to ensure the quantitative data (achieved through collating existing data and mapping) is “ground truthed” with qualitative data. This means that the community and those involved with delivering health care are actively involved in the decision making and needs analysis.

Ongoing community engagement has occurred with two stakeholder groups established for the project with terms of reference created and agreed at the beginning. It is also essential to engage with a third group – the existing local health/community groups. The three groups, their member ship and some key information is provided below.

1. Steering Committee Reference Group

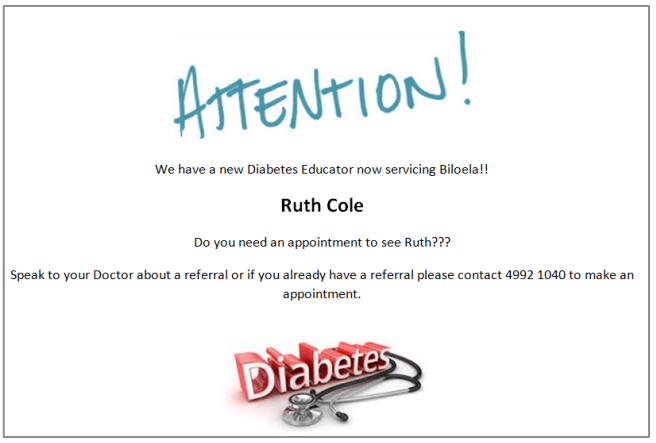
The Chair is the Queensland Health Project Clinical Lead AH Team Leader Gladstone and Banana (chair). Members - PHN CQ Manager, CQRH CEO, Banana Shire Council Mayor, LTTS Director, Community Representatives, local community groups, Allied Health representative, ICIF representative others nominated by the Steering Committee throughout the project. The Committee’s role is to provide

ongoing future planning and drafting of ideas for Allied Health Professional services to be reviewed against data collected for each discipline, previous issues and concerns that are identified during consultation with clinicians and communities. A key role has been with the selection and approval of Allied Health Assistant Scholarship recipients and the support to submit an application to PHN to subsidies a Diabetes Educator services not covered by MBS

2. Allied Health Reference Group

This group consists of clinical members from within the Central Queensland Hospital and Health Service, non-government and private providers and representatives from local health groups (as per below) working within the Banana Shire. The group meets second monthly at the Biloela Hospital and there has been five meetings held since November 2016. The members were selected by the Steering Committee and Project Officer based on their knowledge and expertise.

The main purpose of the group is to inform the Steering Group of local issues and to identify collaborative solutions. Wowan identified Podiatry as priority so meetings between Wowan/Dululu Multi-Purpose Centre and CQUniversity have been held to see if a Podiatry service can be provided in the near future. Moura identified Physiotherapy as priority, discussion have commenced looking at outreach options. Likewise the Biloela group identified an urgent need for a diabetes educator. CQRH took the lead in applying to PHN for funds, recruiting for the position and providing administration support to the position which is also based at the CQRH office. The Biloela group also had concerns regarding access to counselling services when drought funding ceased. Meetings have been held with one service provider



At the July meeting the group suggested a focus group meeting to explore Early Childhood Development Pathways. CQRH identified key interested parties from the health and education sectors (private and public) and private and public health practitioners. The meeting was held on Wednesday 23 July at the Biloela Community Resource Centre. At the meeting the group mapped the current services within the Banana Shire. An opportunity was identified to further promote the CQHHS Allied Health Team services. The group will meet in November to finalise improved referral pathways.

The group is essential to assist and approve the service mapping and referral pathways. Ongoing meetings with each community will continue throughout the development of the community allied health plans.

3. Community Reference Group

It is important to attend existing health group meetings to ensure two way effective communication and also include these groups in the Community Reference Group. For this project the following local health groups have been identified and included in the Community Reference Group. Biloela Health Action Group, Moura Health Action Group, Theodore Council of Ageing, Baralaba Community Advisory Network, Wowan Dululu Multi- Purpose Centre Management Committee and Taroom Community Advisory Network. The Project Officer also attends their meetings where possible to provide project

updates and to be advised of any additional issues. This committee is also involved with input and approval of community plans.

In addition to this a gap in early childhood services has been identified through the planning and discussions. CQRH hosted a stakeholder meeting in August 2017 with key stakeholders from the private and public health care practitioners, community groups and the education sector to discuss what gaps were missing and effective solutions. As a result a pathway document will be established clearly outlining what services are delivered by who and where and the associate funding.

Completing community profiles through an environmental scan and survey

1. Identify and map all service and funding options for every Allied Health services used by practitioners and consumers through contacting each service- email, phone, face to face visit
2. Sort funding into AHP categories as information resource and flowchart for each discipline, and each funding source
3. Add any other special/one off funding for example analysis of Disaster Relief Funding eligibility criteria, distribution, effectiveness and limitations.
4. Analysis of counselling services funding options, application and eligibility criteria e.g. process for EAS
5. Discussions with not for profit service providers in the region for example
    a. A meeting was held with Uniting Care Qld CEO regarding: counselling services within the region, Qld Counsellors Association, reports current advocacy regarding MBS eligibility for counsellors
    b. ADEA (Australian Diabetes Educators Association) was provided information on current funding options, with ongoing updates on any developments in this field
6. Allied Health Audit data for the information reported in the Patient audit has been entered and a draft report has been prepared. Opportunities will be identified to access alternative or complimentary funding for each discipline.

From the survey it became apparent that the following was necessary to occur as part of the project:

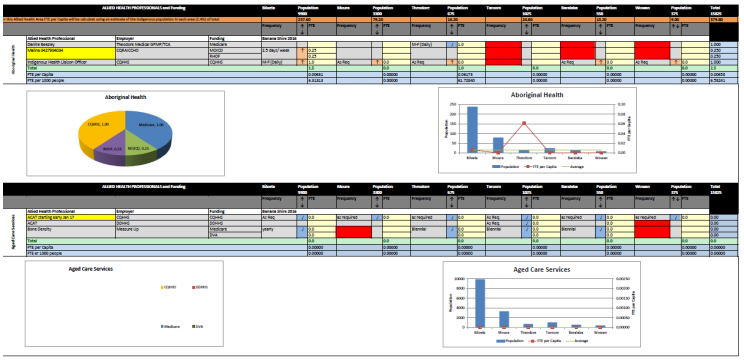
1. Increase knowledge of funding options for the delivery of Allied Health services to all service providers.
2. Improve education for consumers regarding the benefit of early identification and intervention to reduce poor health outcomes
3. Increase consumers awareness of their entitlements to access required Allied Health services and options for service delivery
4. A targeted focus on the development of telehealth service delivery would improve accessibility of Allied Health services to the region whilst also providing clinical and financial benefit to providers and consumers through increased service delivery and efficiency.

Community Plans

Community plans remain a work in progress, we are working with communities to develop a consistent approach to data and validating needs within the communities. Community groups remain committed to the process of developing services. We potentially will need to work across sectors within communities with the support of community representatives and HHS staff to ensure community needs are clearly identified.

Identifying gaps and implementing solutions

1. Meetings between Wowan/Dululu Multi-Purpose Centre and CQ University, looking at Podiatry service to commence in Wowan early July 2017.
2. Moura community has identified Physiotherapy as a need, discussion eventuated regarding outreach options. The solution identified was co – location of the physiotherapist conducting clinics at the Anglo American mine to visit the Moura General Practice.



3. CQRH prepared a submission to PHN to fund a Diabetics Educator. This has been successful. The position is based at the CQRH office and has reduced demand on CQHHS Dietitian.

9.4 Supporting material

- The survey questions
- Terms of Reference – Steering Committee
- Terms of Reference – Allied Health Reference Group
- Terms of Reference – Community Reference Group
- Draft Allied Health Patient Audit Report
- Environmental Scan
- Community Plans –Baralaba, Biloela, Moura, Taroom, Theodore and Wowan.

9.5 Evaluation of implementation (Progress update)

The survey was distributed to Allied Health service providers registered in the Central Queensland Rural Health Service email contacts address book, mailed and hand delivered. The survey was delivered to key stakeholders within organisations and services and was encouraged to be further distributed to associates. Therefore the total number of surveys distributed is somewhat difficult to quantify.

Alternate sources such as PenCAT data, HHS data, ABS data, etc. may be explored to formulate a clearer profile of service delivery that was not accurately captured in the survey.

Comparison of data obtained through our PHN Needs Assessment would provide additional information for elaboration and validation of data that has been collected through this survey.

The learnings gained from this survey may contribute toward refinement of the survey for future use across the Banana Shire region as determined to meet the outcomes for this project. Furthermore it may be of use for other regions that may also wish to canvas a profile of allied health service delivery for improved accessibility.

Considerations for inclusion in future surveys:

Post survey analysis would suggest additional data collection in the following areas may be of benefit:

- Details regarding the specific allied health service type being provided.
- Clarification around funding type utilised for the provision of service
- Service provider awareness of alternate funding options that may be sourced for provision of service.

- Challenges with Queensland Health and PHN regarding sharing of data and clinical documents - barriers identified are around confidentiality and IP.

10. Objective Five

Develop an infrastructure plan for each discipline to ensure all communities within the Banana Shire have access to Allied Health services.

10.1 Introduction

The 2015 Allied Health Forum identified that each community within Banana Shire had available health infrastructure. In some cases there was a need for specific equipment eg dental chairs. As such the project will review existing infrastructure and whether there is the potential for shared equipment and workspaces across disciplines and providers.

10.2 Summary of progress

An audit of available infrastructure has not been formally compiled. However engagement and consultation with providers has identified numerous opportunities which will be progressed in year 2 of the project. Agreements and Licenses to Occupy will be developed.

11. Evaluation

11.1 AusHSI evaluation

The Australian Centre for Health Services Innovation (AusHSI) is a research, consultancy and training organisation. AusHSI partners to deliver innovation and improvements for better health services.

AusHSI is funded by Queensland Health to deliver health services evaluation and study design and to assess the quality and effectiveness of initiatives funded by ICIF.

The Integrated Allied Health Services in Rural Communities project is the first of its kind in Queensland. However, many regional Queensland locations facing similar constraints in allied health service provision. It is therefore critical to accurately monitor, evaluate and report on the outcomes of the project in terms of its individual components, as well as on the whole.

AusHSI's evaluation of the effectiveness of this project will help inform HHSs and PHNs across Queensland to deliver new evidence-based practices leading to better outcomes for patients.

11.2 Outcome evaluations

The outcome evaluations as outlined in the Project Evaluation Plan, agreed with AusHSI are provided below.

The Integrated Allied Health Services in Rural Communities evaluation **aims** to:

1) Assess the both the outcome and implementation aspects of the project;
2) Provide useful information for decision making regarding ongoing allied health service provision for Queensland Health, as well as other relevant stakeholders;
3) Provide an evidence base for the further adoption of the project approach that

   may then be applied in other regional locations. T

The **objectives** of the evaluation are to:

1) Quantify the outcomes of the project in terms of improved access to allied health services as well as patient and workforce satisfaction;
2) Identify factors that supported and barriers that impeded the stated outcomes of the project;
3) Describe an optimal process for the implementation and sustainability of such a project, should it be replicated in other jurisdictions.

The evaluation will consist of two key components: an outcome evaluation and an implementation evaluation. Both evaluation components consist of a number of subcomponents, each with associated evaluation questions to be addressed. These are described in further detail below.

The feasibility of the outcomes specified in the Integrated Allied Health Services in Rural Communities project plan will be assessed as one component of the Implementation evaluation. However, the evaluation will adopt a broader focus, and seek to establish evidence to support a set of 'evaluation

questions' designed to determine how successfully the project has able to meet its underlying objectives of improving the accessibility and sustainability of allied health services.

Evaluation question 1: Did the project improve the accessibility of allied health services for rural communities in the Banana Shire?

The accessibility of services will be evaluated in terms of:

- The increase in the number of available appointments across the Shire;
- The reduction in median waiting times per patient;
- The number of identified service gaps that were able to be filled by the project, based on 'FTE per population' ratio targets informed by the Rural and Remote Planning report.

These outcomes will be informed by a two week referral audit that will be conducted at baseline and at the end of the project. The audit will coincide with a 'typical' two week period for each provider. Specific data collection items will include the total number of available appointments per provider within each community, and the time each patient has spent waiting.

Summary of Progress

- Individual patient waiting times have been mapped
- Service delivery gaps (in terms of the additional need for appointments) within each community, by discipline have been identified
- A service mapping /environmental scan of existing services at baseline has been completed.
- An audit of patient waiting times covered in a one week period has been completed. A survey was distributed to Allied Health Professionals in the project catchment area.
- Data has been collected to complete a needs analysis based on FTE Mairi data.
- The number of available allied health appointment slots per week across each discipline and community to be finalised. This will be completed using GP data
- Service mapping and waiting times scan and survey to be collected at end of project

Evaluation question 2: Did the project see an improvement in the distribution of funding sources utilised that is consistent with the established guidelines?

Allied health referrals within the Banana Shire may be eligible for funding from a number of sources, depending on the circumstances and needs of individual patients. For example, specific funding arrangements exist for population subgroups including Department of Veterans Affairs Gold Card holders and indigenous Australians. Further, allied health referrals that present through organisations including Work Cover and Education Queensland are also eligible for separate funding.

Historically, many of the patients eligible for these alternative funding schemes have been referred directly to the HHS. This is likely due to a lack of clinicians who are able to access these various funding sources, as well as a lack of awareness of the funding schemes available. The project aims to address both of these constraints.

The success of the project in improving the proportion of referrals directed to their most appropriate eligible funding source will be evaluated. This will be informed by a two week referral audit at baseline and project end that will profile how well the needs and circumstances of patients are being matched to the funding sources available. Evaluation metrics will include a comparison of the distribution of funding sources across all referrals, as well as any increase in the number of providers that registered for new funding sources over the course of the project.

Summary of Progress

- A profile of how well the needs and circumstances of patients are being matched to the funding sources available has been completed
- Information detailing the proportion of patients being referred to the most appropriate funding scheme is in progress
- Referral audit of local GP to providers to be accessed and finalised
- A comparison of the distribution of funding sources across all referrals, as well as any increase in the number of providers that registered for new funding sources over the course of the project to be finalised

Evaluation Question 3: Did the project improve the value for money obtained from allied health care services in the region?

'Value for money' will be assessed in terms of the cost per occasion of service, with a focus on clinical FTE (labour) costs. Information on public sector allied health funding will be obtained directly from HHS data, and include total labour expenses based on clinical FTEs relative to the number of patients seen and/or services delivered. Non-public sector funding will be determined via a provider survey requesting information on labour expenses and occasions of service.

A separate costing analysis will look at infrastructure related savings to reflect the efficiencies that may be gained from the sharing of facilities, rooms and/or equipment. Any increases in the sharing of infrastructure will be allocated a pro-rata saving based on the market value of the infrastructure in question.

It is also important for the evaluation to capture the costs associated with the implementation of the project itself. These costs will be sourced from the actual project budget as recorded at project end.

Summary of Progress

- Total labour expense for clinical FTEs delivering allied health services has been established.
- Service availability (number of appointments) has been gathered.
- Increases in sharing of infrastructure to be documented.
- Project implementation costs to be determined at project end.
- HHS costing data for public sector activity to be confirmed at project end.
- Provider survey for non- public sector to be completed at project end.
- Reported increases in infrastructure sharing to be completed at project end
- Project budget to be finalised at project end.

Evaluation question 4: Did the project reduce patient travel and productivity costs?

Patient time and travel costs will be compared at baseline and study end using postcode data from the two week patient audit. A cost of travel will be assigned using the Australian Taxation office 'cents per kilometre travelled' rates. A cost per lost patient time will also be estimated based on the distance travelled data and assigned an hourly cost equivalent to the average Australian wage rate. A limitation of this measure is that data on patients who access services outside the Banana Shire will not be included. Nonetheless, this will provide a conservative estimate of patient costs.

Summary of Progress

- Patient Audit survey included data on postcodes

- Data on postcodes of patients' address and location of treatment will be included in the survey to be completed at project end

Evaluation question 5: Are patients within each community satisfied with the changes to the allied health service model?

Patient satisfaction will be measured using a survey tool administered at baseline and project end. Satisfaction will be evaluated across the project as a whole, as well as within individual communities.

Summary of Progress

- Patient Satisfaction survey has been completed and will be replicated at project end.
- Minor adjustments will be made to the questions to improve data quality.

Evaluation Question 6: Is the allied health care workforce satisfied with changes to the service model?

Summary of Progress

- A separate survey will be provided to practicing clinicians at the end of the project to assess the overall satisfaction with service changes. This may be supplemented by qualitative information obtained from focus group interviews.

Evaluation question 7: What were the factors that supported and barriers that impeded the implementation and success of the project, including factors that may be important for scale-up or adoption in other HHSs?

Evaluation question 8: What are the requirements for the long term sustainability of this project?

Summary of Progress

- Will be informed by an implementation survey implemented at baseline and project end.
- Focus group interviews will be conducted with the project team and other key stakeholders at project end. The topics explored in the focus groups will be guided by responses to the implementation survey.
- Fidelity and sustainability assessments will be conducted at regular time points (e.g. 6, 12, 18, 24 months post implementation) as a part of regular reporting to Queensland Health. To date XXXX assessments have been completed.
- A separate survey will be provided to practicing clinicians at the end of the project to assess the overall satisfaction with service changes. This may be supplemented by qualitative information obtained from focus group interviews.

Table 1: Definitions of Allied Health Service categories delivered in Banana Shire included in the Mapping and Service Audit

Service Type	Definition
Aboriginal Health	As defined by the National Aboriginal Community Controlled Health Organisation http://www.naccho.org.au/aboriginal-health/definitions/
Aged Care Service	A special-purpose facility which provides accommodation and other types of support, including assistance with day-to-day living, intensive forms of care, and assistance towards independent living, to frail and
Alcohol Tobacco and Other Drug Services	Alcohol and other drugs (AOD) services providing people with a range of interventions that influence and support the decision to reduce or cease harmful substance use. Referrals to alcohol and other drugs services come can come from the individual experiencing the problem, family and friends, community services, Hospital and Health Services, GPs, Police, Courts and Corrective Services.
Audiology	A service provided by an Audiologist: a hearing health professional with tertiary qualifications in Audiology and a member of Audiology Australia Ltd.
Child Health	The Child Health Service provides a range of community health and support services for children and their parents/carers to give every child the best possible start in life. Services may be offered in the home, or in Child Health Centres, and some community centres, free of charge.
Counselling and Social Work	Services provided in the primary health care sector by a practitioner with a tertiary degree in social work and membership of the Australian Association of Social Workers which allows them to practice as an Accredited Social Worker.
Community Nurse	A community health nurse, also sometimes called a public health nurse, is a registered nurse who has received additional special training in the field of community health
Dental	A person who is qualified to treat diseases and other conditions that affect the teeth and gums, especially the repair and extract and is accredited by the Dental Board of Australia
Diabetes Education	A service delivered by a Credentialed Diabetes Educator (CDE). CDEs have been awarded this status by the Australian Diabetes Educators Association (ADEA) by fulfilling the ADEAs Credentialing Program's requirements.
Dietician	Clinical services provided by health professionals with tertiary training in nutrition and dietetics who are members, or eligible for membership of the Dietitians Association of Australia.
Exercise Physiology	Provided by Exercise Physiologists. Exercise physiologists are 4-year university qualified allied health professionals who specialise in the delivery of exercise, lifestyle and behavioural modification programs for the prevention and management of chronic diseases and injuries. They may or may not be an 'Accredited Exercise Physiologist'. Note: Only services provided by Accredited Exercise Physiologists are eligible under the Medicare chronic disease management items and/ or private health insurance rebates. Those Exercise Physiologists who are Accredited have been awarded this status by Exercise & Sports Science Australia (ESSA).

Service Type	Definition
Mental Health Nurse	A mental health nurse is a registered nurse who specialises in working with people who have a mental illness like depression, postnatal d depression, schizophrenia, bipolar disorder and psychosis. Mental health nurses might have also completed further study in mental health recognised by the Australian College of Mental Health Nurses.
Natural Therapies	Services provided by Natural Therapists as per the Australian Natural Therapies Association definitions
Occupational Therapy	Services provided by Occupational Therapists who are registered to practice with AHPRA, as operated through the Occupational Therapy Board of Australia.
Optometry	Delivery of direct clinical optometric care by Optometrists who are registered to practice with AHPRA, as operated through the Optometry Board of Australia.
Pharmacy	Services delivered by retail Pharmacists who are registered to practice with AHPRA, as operated through the Pharmacy Board of Australia.
Physiotherapy	Clinical services delivered by Physiotherapists who are registered to practice with AHPRA, as operated through the Physiotherapy Board of Australia.
Podiatry	Clinical services delivered by Podiatrists who are registered to practice with AHPRA, as operated through the Podiatry Board of Australia
Psychology	Services provided by a Psychologist who has registration with AHPRA, as operated by the Psychology Board of Australia. Where possible we have identified if that registration is General or whether the service is provided by a Registered Psychologist who has Endorsement to practice as a Clinical Psychologist.
Radiology	Services provided by Medical Radiation Practitioners registered to practice with AHPRA, as operated through the Medical Radiation Practice Board of Australia.
Speech Therapy	Services provided by a Speech Pathologist; a university trained allied health professional with expertise in the assessment and treatment of communication and/or swallowing difficulties who is eligible for membership of Speech Pathology Australia.
Pharmacy	Services delivered by retail Pharmacists who are registered to practice with AHPRA, as operated through the Pharmacy Board of Australia.
Physiotherapy	Clinical services delivered by Physiotherapists who are registered to practice with AHPRA, as operated through the Physiotherapy Board of Australia.
Podiatry	Clinical services delivered by Podiatrists who are registered to practice with AHPRA, as operated through the Podiatry Board of Australia
Speech Pathology	Services provided by a Speech Pathologist; a university trained allied health professional with expertise in the assessment and treatment of communication and/or swallowing difficulties who is eligible for Practising membership of Speech Pathology Australia.

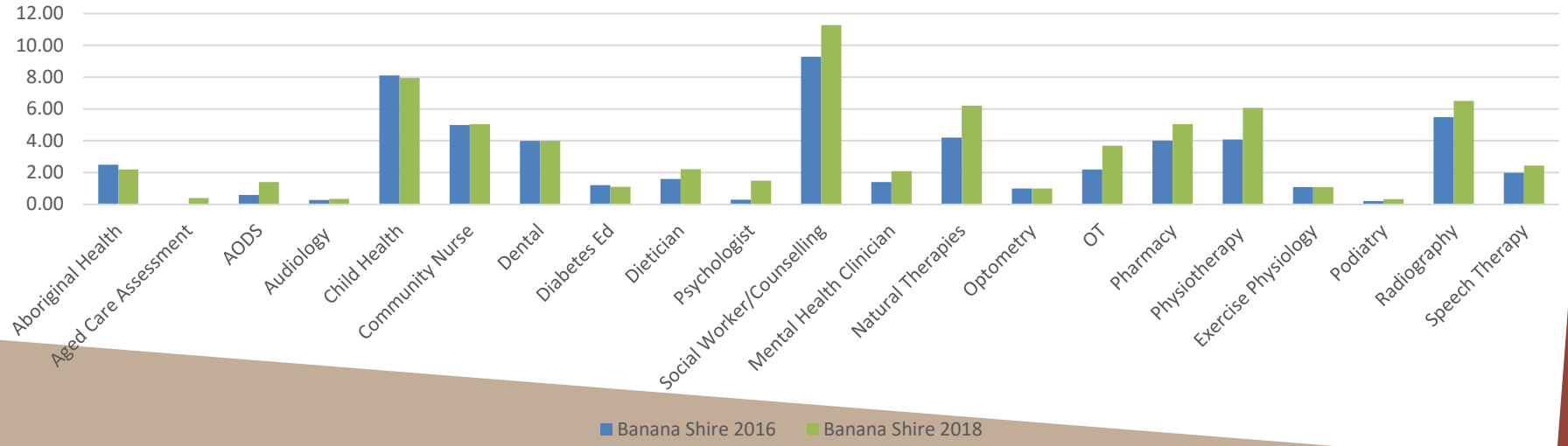
Central Queensland RURAL HEALTH

Integrated Allied Health Services

A new approach to building sustainable services in rural and remote Queensland

• Collaborative planning	• Community Leadership
• Allied Health Assistants	• Shared Infrastructure
• Telehealth	• Shared positions
• Public / Private partnerships	• Local mentorship and supervision

Total FTE - 58.44 to 73.6 (No increase in recurrent HHS funding)



Integrated allied health services in rural communities

Final Evaluation Report
March 2019

Proudly supported by Queensland Health's Clinical Excellence Queensland
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Executive Summary

The problem

Access to allied health services for communities in the Banana Shire is constrained due to fragmented funding mechanisms and poor staff retention. There is a need for a well-planned, integrated and sustainable service model that can provide better outcomes for both patients and providers.

The innovation

The innovation involved a coordinated approach to allied health service planning to meet the needs of communities across the region while capitalising on the breadth of available funding. This involved: an environmental scan that identified areas of need and informed strategies to address these; a focus on improving the integration and appropriateness of funding sources; the development of Allied Health Assistant roles; increased access to telehealth services; and the sharing of infrastructure.

Key findings

Qualitative data suggest significant progress was made in developing flexible service models that better utilise the human-resources and funding available for Allied Health services in the Banana region. Full time equivalent (FTE) allied health positions increased by 23% across the region, with improved access to services observed in five out of the six individual communities. Five out of the 12 new FTE positions were created and funded from outside the Central Queensland Hospital and Health Service (CQHHS). The remaining seven positions fell within the approved CQHHS budget and reflected lower staff vacancy rates. The proportion of outpatient occasions of service provided by CQHHS clinicians fell by 25% which translated into a Queensland Health saving of $23,000 between 2016-17 and 2017-18.

Recommendations

The project was successful in increasing access to allied health services in the Banana Shire, and in capitalising on non-CQHHS funding sources. As such it represents good value for money from a Queensland Health perspective. However, sustaining these improvements and implementing further service changes will require ongoing work. An investment in a core allied health planning and coordination role, either within the CQHHS or Primary Health Network (PHN), would capitalise on existing community goodwill and continue to strengthen the collaborative partnerships that have developed over the course of the project. Expansion of the role of Allied Health Assistants also has potential to improve value and cost-effectiveness of existing services; this warrants more investigation. Aspects of the project may be successfully replicated in other parts of rural Queensland facing similar constraints.

Introduction

Overview of problem and implications for health service delivery

Allied health services in Queensland are funded from multiple sources. The state government allocates funding for inpatient and outpatient allied health services to local Hospital and Health Services (HHS). The Commonwealth (federal) government funds services via the Medicare Benefits Schedule and Primary Health Networks (PHNs). In addition, there are a number of programs designed to increase access to services for specific patient or population groups, with funding provided from sources including: the Department of Veterans Affairs (DVA); Work Cover; Department of Education; Department of Families, Housing, Community Services and Indigenous Affairs; National Disability Insurance Scheme; Private Health Funds; and fee for service.

The Banana Shire region of Central Queensland has a population of approximately 15,800 spread over six rural communities spanning 28,000 square kilometres. Allied health services in this region have typically developed in isolation with a single funder in response to a single patient group. The viability and sustainability of these services has been limited by the population of the communities and the constraints of single funding programs. Establishing demand for full time staff within a local community for each funding option is often not feasible. Currently, the Central Queensland Hospital and Health Service (CQHHS) funds the majority of allied health services in the Banana Shire region. Despite the potential funding available via Commonwealth sources or fee for service, structural barriers have resulted in very limited access to these. This has in turn impacted on access to services for residents in these communities.

The complex nature of allied health service funding in the region also limits the flexibility of allied health practitioners. For most practitioners, transitioning to part time roles or private practice is not a viable option. This contributes to issues with staff retention and further contributes to the issue of access for residents.

In 2015 a local planning group raised concerns over residents' access to allied health services, and the long-term sustainability of these services. There was a recognised need for better planned and coordinated health services that were able to access the breadth of available funding.

The innovation

The Integrated Allied Health Services in Rural Communities project (the project) aimed to improve access to allied health services for residents of the Banana Shire through an innovative approach to service planning and coordination. A multi-pronged strategy was adopted which encompassed the following core components:

- A **coordinated allied health planning** approach that accounted for the needs of communities across the region with the aim of maximising access to services while minimising unnecessary costs;
- An **integrated funding model** that allowed for services to be funded across multiple channels, rather than operating within funding siloes. This included the ability for public and private services to be provided through a single clinician.
- The development of the role of **Allied Health Assistants**;
- Increased access to **Telehealth services**;
- **Shared infrastructure**, including equipment and workspaces, across disciplines and providers

This project was the first of its kind in Queensland. However, many regional Queensland locations are facing similar constraints in allied health service provision and there is the potential for this approach, if effective, to be transferable.

Target population

The target population were all residents accessing allied health services and living in the Banana Shire region of Central Queensland, encompassing approximately 15,800 residents across the following six communities:

- Biloela (population 9,900)
- Moura (population 3,300)
- Taroom (population 1,025)
- Theodore (population 675)
- Baralaba (population 550)
- Wowan (population 375)

Evaluation

The Integrated Allied Health Services in Rural Communities evaluation aimed to:

1) Assess both the outcome and implementation aspects of the project;
2) Provide useful information for decision making regarding ongoing allied health service provision for Queensland Health, as well as other relevant stakeholders;
3) Provide an evidence base for the further adoption of the project approach that may then be applied in other regional locations.

Scope and Limitations

The objectives of the evaluation were to:

1) Quantify the outcomes of the project in terms of improved access to allied health services as well as patient and workforce satisfaction;
2) Identify factors that supported and barriers that impeded the stated outcomes of the project;
3) Describe an optimal process for the implementation and sustainability of such a project, should it be replicated in other jurisdictions.

Due to a large number of proposed evaluation outcomes and systemic problems with collecting data, data was not able to be captured on all of the anticipated outcomes. The barriers to data collection are explained further in the Implementation Evaluation section of this report and the associated limitations on data analysis are explained in the Outcome Evaluation section.

Data sources

Data to evaluate each aim were collected from multiple sources by the project and evaluation teams. Table 1 summarises how various data sources informed the evaluation outcomes. A description of each data source is provided in Appendix 3.

Table 1: Sources of data used in the evaluation report

Outcome	Data sources
Access	• Environmental scan • Service audit
Community satisfaction and awareness	• Community satisfaction survey
Value for money	• AusHSI costing tool • Environmental scan • Occasions of service data • Infrastructure sharing register
Implementation	• Interviews with project team members and key stakeholders • CFIR pre/post survey • Issues log

Implementation Evaluation

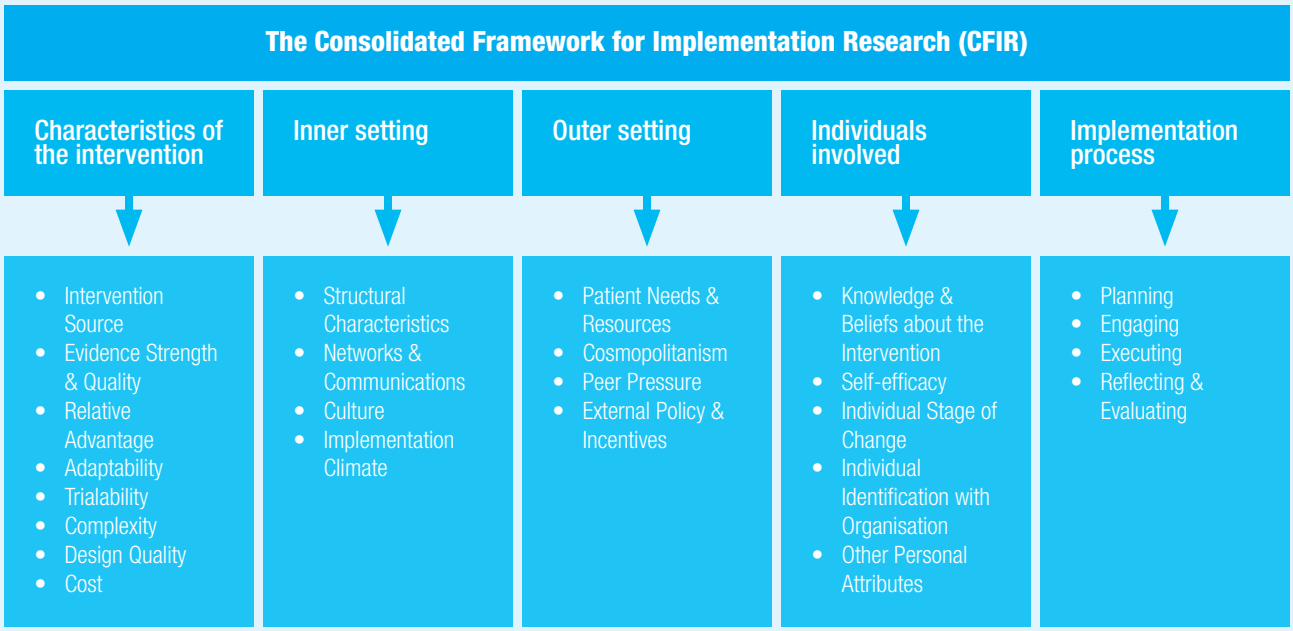
In evaluating the implementation of this project, we were interested to find out which factors facilitated or hindered the planning and roll-out of proposed service models, and if any of these factors significantly impacted on the overall success of the outcomes to date.

Implementation Framework

Evaluation of the project was based on the Consolidated Framework for Implementation Research (CFIR), a widely cited and rigorously developed determinants framework for implementation[1] (Figure 1). The CFIR framework was used to systematically and comprehensively frame the results by applying key constructs considered most influential for the project implementation in terms of valence (positive or negative influence on implementation) and strength (strong or weak influence on implementation).

Common themes that emerged throughout the evaluation were organised into the five CFIR domains: (1) intervention characteristics, (2) outer setting, (3) inner setting, (4) characteristics of individuals, and (5) process of implementation. Tables outlining all of the identified facilitators and barriers to implementation are provided in Appendix 2. The main findings are summarised here. Semi-structured interviews were guided by several key questions, a complete list of which are provided in Appendix 1. Findings are presented according to these question headings.

Figure 1: The Consolidated Framework for Implementation Research: Domains and constructs.



How was the project designed and implemented?

Project Staff and Working Groups

A project team was appointed to run the project, including a clinical lead, project manager and administrative officers. Three working groups were established:

1. Steering Committee, made up of high level health service directors to provide governance and decision-making oversight.
2. Allied Health Reference Group, comprising numerous allied health practitioners across the Banana region who met for the purpose of service planning.
3. Community Group, assembled from community members who represented the interests of the residents across the region at community forums.

Formal Planning Exercises and Partnership Agreements

The project team conducted numerous detailed planning exercises including an environmental scan, service maps, patient audits and patient satisfaction surveys. These, in conjunction with the feedback regularly obtained from working group meetings, informed the strategic planning of allied health services needed in the region. New service agreements were drafted to enable collaborative management of allied health positions between the HHS and other private sector organisations. Some service changes were implemented.

Allied Health Assistant

The project also recognised an opportunity to train up local residents in the role of an Allied Health Assistant (AHA). Candidates were interviewed and a scholarship set up to support the training and mentoring of these AHAs who worked under the direction of allied health professionals.

Implementation Facilitators

What worked? What were the facilitators of implementation?

Several factors emerged as working well and facilitating implementation, including the effort spent understanding the community needs and current state of service provision, and then developing opportunities for future service provision. A detailed summary of these facilitating factors is presented in Appendix 2. The key implementation facilitators with supporting qualitative data are summarised below.

Leadership of Project Staff

The human capital associated with the project leadership team significantly contributed to implementation success. Project leaders possessed strategic insight into the specific context, current systemic barriers to integrated allied healthcare, and steps required to solve issues. This is likely due to knowledge gained from years of prior experience in health services management in the Banana region. In addition, the working relationship built between the project and clinical leads was productive, as was the trusted connections that each of these individuals brought to the project. The strength of these personal relationships facilitated new stronger partnerships between the HHS and other stakeholders.

> *"I think it's the relationship that I have with <Project Manager> as well because I think that she's got ties into political realms that I don't have ties into…as someone who lives in the Banana region and has that buy-in and history, who's respected in the region by a lot of her peers and cohorts - that was extremely important. It just wouldn't have had the clout or the success without that." (Clinical Lead)*

> *"<Project Manager> has a much broader network amongst the organisations. And she's really skilled in that, she has a really good understanding of the communities and the health needs, and she has quite a big vision, lots of qualities that I really admire in her vision and her ability to see a possible solution, in her ability to put the people in the room who need to be there and give them a context and get them talking." (Stakeholder)*

Consideration of Resident and Provider Needs

The quality of engagement with health services, allied health providers, and residents in the local context was a major strength of the project. The project engaged with many stakeholders through the development of the working groups. These groups enabled stable feedback mechanisms and a thorough exploration of needs, barriers and opportunities in planning future service changes. In particular the working group of allied health providers has been a major success, with the group continuing to meeting beyond the end of the project period. This implementation strength is illustrated in the following quote:

> *"The three levels (of the working groups) essentially were the drivers for a feed-up and a feed-down mechanism in terms of communication so that we could start to get better collaboration amongst all the stakeholders to understand what the current status of allied health was in the community as well as to then address the issues that were being known to various parties within that." (Clinical Lead)*

Strategic Planning

In addition to the information gleaned from working groups, a variety of other planning tasks were completed, including: a detailed environmental scan, service-mapping exercises, patient audit tools, and patient satisfaction surveys. These enabled a careful analysis of the constraints of current service models and funding mechanisms, the identification of gaps, and a feasibility assessment of new service agreements. The opportunities of various potential changes were well-considered and well-planned before attempting action to implement change.

> *"We started to look at areas that needed addressing, the burning gaps were the first priority - about recruiting and funding those services. We looked at understanding allied health patient flows and where the money flowed. So we did a mapping exercise of all of the funds available for allied health services - a lot of the time…the allied health community and referrers don't really know what funding's out there. Then we looked at some of the patient flows around aged care patients and also paediatric patients and what service providers were available for them and how those referral pathways worked. We also looked at physical resources and the ability to use hospital allied health area and private practice areas." (Project Manager)*

Allied Health Assistants

The project successfully demonstrated the potential of the AHA role to extend the work of qualified allied health providers in order to serve more people across a broader geographical area and make better use of resources. Barriers faced in providing mentorship and support for AHAs-in-training are mentioned in the following section. However, stakeholders could see the value in the expansion of AHA roles and in continuing to provide support for local people training to become Allied Health Assistants. Continuation of this aspect of the project is entirely dependent on additional funding or another type of scholarship.

> *"I think there has been some good work done in terms of being able to get flexibility within the HHS to use available funding - for example we might not have been able to employ a full-time occupational therapist, they may have only wanted to work 0.7, but there was funding there for a full-time and the other 0.3 can be used for additional Allied Health Assistant hours." (Clinical Lead)*

> *"The training aspect was really valuable… Support for people who perhaps are really good workers, who are passionate about what they do, who are really good at doing it on the ground and want to upskill, but perhaps who don't have a particularly strong academic background, support throughout that study is vital." (Stakeholder)*

Implementation Barriers

What didn't work? What were the barriers to implementation?

The long-term aim of the project is to implement flexible staffing models that enable the co-appointment of allied health positions by both government and non-government health services in the Banana region. Although considerable progress was made towards this aim, particularly in forming collaborative service agreements, ultimately, the aim has not been achieved to date. Several structural, contextual and cultural barriers to the achievement of a flexible workforce model were identified. Some may be difficult to resolve, and are flagged as potential barriers to future implementation efforts.

Staff Recruitment and Retention

Difficulties with staff recruitment and retention is an underlying contextual reality in the region. Finding local clinical staff willing to drive the long distances often required is not always easy and turnover is high. The addition of Allied Health Assistants to the available workforce is attempting to address this barrier.

The project team itself experienced unexpected turnover of several project officers during the project period, the exact reasons for which are unclear. This is likely to have caused additional work burden for other project staff and temporary losses of momentum. The impact was felt especially by an Allied Health Assistant-in-training who lacked support due to the staff changeovers.

The HHS is the main Allied Health provider by default in the Banana region. The HHS typically offers benefits and remuneration, e.g. job security, paid maternity leave, that may not be available in private practice. Some allied health practitioners employed by the HHS may be reluctant to accept cross-sector positions despite demonstrated potential to better meet the needs of the community.

> *"It's challenging from a contractual point of view because you've got different rates of pay that sit between the two services. You've also got tax implications for individuals. Or from a private sector, you've got significant risk which may be there. For example, there might be a base salary that they might have to end up paying someone but then that's got to incorporate potential travel time and potential fail to attends. And the other part of that is that the HHS offer a lot more conditions that possibly someone who'd be in a self-employed capacity would probably not get the benefits thereof should they choose to reduce their FTE in the HHS to then be contracted out." (Clinical Lead)*

Organisational Bureaucracy & Cultural Shift

The organisational culture, policies and bureaucracy designed to maintain the status quo, particularly in the CQHHS are recognised barriers to change. Organisational cultural shift of 'the way things have always been done' takes time. Likewise, it takes time for NGOs to learn to trust and partner with the HHS. Private sector organisations may be reluctant to commit to shared appointments if it means the acceptance of considerably higher risk of lost revenue than regular models.

Resolving these structural barriers is inherently difficult. Nevertheless, devising strategies to overcome them is precisely what the project is attempting to achieve. This was being achieved through developing business plans and service level agreements that were acceptable to multiple parties. The following quote is illustrative:

> *"We didn't ever get to a secondment model out of Queensland Health. We worked out the process for doing that, and we worked out the business plans for doing that… we've got a service level agreement that we could have done it, but…there's a risk aversion to any change…a fear that if you let a service go there'll be an expectation that Queensland Health will maintain that service and then what if you can't recruit, and if you decrease your FTE then you'll never get them back and there's a lot of resistance to change… the cultural shift takes time." (Project Manager)*

Access to Data

One factor which may contribute to the organisational unwillingness (especially of the HHS) to proceed with co-appointments with external service providers was the systemic barriers to meaningful data collection and analysis across disparate organisations. Proposed service changes, especially those that would result in FTE reductions that were hard won in the first place, are difficult to justify to HHS executives without convincing evidence of need. In many cases, there was no easy way to 'compare apples with apples' as data collected across various services differed based on the objective of each service and the software used. Overcoming this implementation barrier requires careful consideration of systemic constraints on available data, and sufficient funding for administrative support to undertake research.

> *"The data collection elements became real barriers. To try to get data across sectors that were different, different methods of data collection occurring…and trying to make the data marry, making that data worthwhile, in terms of the occasions of service and the likes of that was where it became quite problematic. Sometimes we had a grandiose idea about what we wanted to prove, but the reality of what system's set up behind it to get that data, it just wasn't there. Certainly it wasn't there to go across all the sectors that we needed to go across to prove the points anyway. Everyone's system was delivering a little bit different objective for their own purposes and not talking the same language." (Clinical Lead)*

An overview of all factors identified as barriers to implementation are provided in the Appendix 2.

Outcome Evaluation

A series of evaluation outcomes were identified at the outset of the project (Table 2). Due to the large number of proposed outcomes, and limited project resources, it was not feasible to capture all necessary data. It was determined that data on patient travel costs and allied health provider satisfaction were of lower priority and these outcomes were subsequently dropped from the evaluation.

Table 2: Summary of evaluation outcomes

Outcome	Nature of evidence	Strength of evidence
Improved access to allied health services	Supports	Allied health FTE in the region increased by 23%
Improved distribution of funding sources	Supports	Five FTE positions were created and funded from non-CQHHS sources
Value for money	Supports	The increase in allied health FTE was created without an increase in the approved level of CQHHS funding. A saving of $23,000 on outpatient occasions of service reimbursements was recorded for Queensland Health
Did patient travel and productivity costs reduce?	More evidence required	Data was not collected
Improved community satisfaction and awareness of services improved	More evidence required	Results were mixed. Small sample sizes limit the generalisability of these findings
Allied health workforce satisfaction	More evidence required	Data was not collected

FTE = full time equivalent; CQHHS = Central Queensland Hospital and Health Service

Access: Has the innovation resulted in …improved access to allied health services for residents?

Allied Health Provider Full Time Equivalent (FTE) positions

There is evidence that the project has had a positive impact on improving access to services. The environmental scan revealed that the number of allied health FTEs in the region increased from 58.4 at the commencement of the project in 2016, to 71.8 at project end in 2018 (Table 3). This represents an overall increase of 23% within 2 years. The greatest improvement was seen in Taroom with a 40% increase in FTE.

Table 3: Allied Health FTE changes: pre-project versus post-project

	FTE		FTE per 1000 population		Percentage change
Community	Pre	Post	Pre	Post	
Biloela	37.5	48.8	3.8	4.9	30%
Moura	6.2	7.2	1.9	2.2	16%
Taroom	3.4	4.7	3.3	4.6	40%
Theodore	8.9	8.5	13.2	12.5	-5%
Baralaba	2.1	2.2	3.8	4.0	5%
Wowan	0.4	0.4	1.1	1.1	3%
TOTAL	58.4	71.8	3.7	4.5	23%

FTE = full time equivalent

A full summary of the FTE changes identified in the allied health environmental are included in Appendix 4. Key changes to services within each community include:

Biloela: Mental Health services have increased with Psychologists visiting weekly and more staff employed within Counselling/Social Work and Mental Health fields.

Moura: Moura now receives weekly visiting services for Dietetics and Alcohol and Other Drugs Service, and monthly visits from a Diabetes Educator. Visits from Physiotherapy have increased from fortnightly to weekly.

Taroom: Taroom services have increased now receiving fortnightly visits for Dietetics and monthly Counselling services through Darling Downs HHS.

Theodore: Theodore now receive weekly visits from Alcohol and Other Drugs Service where there was no service in previous years.

Baralaba: There is still a lack of allied health services available to Baralaba with only minor increase of services in areas of Dietetics and Pharmaceutical.

Wowan: There has been no increase of services to date within Wowan.

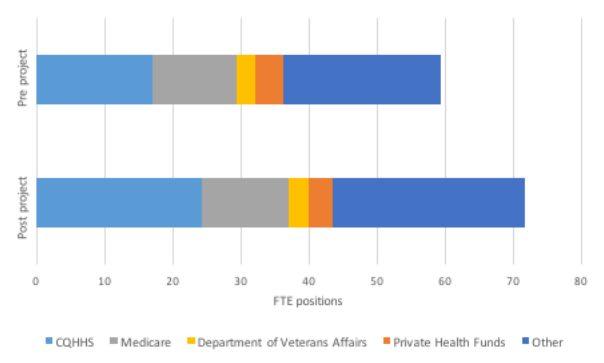
Allied health appointment waiting times

The allied health service audit provides further evidence to support increased access to services. The number of appointments with a waiting time of two or more weeks reduced from 51% at baseline to 33% at project end (Appendix 5, Table A5.2).

Did the distribution of funding sources improve?

Data was available to estimate the distribution of funding sources across FTE positions, but not across occasions of service. Figure 2 highlights the number of FTE positions funded under each source at baseline and project end. Prior to the commencement of the project, the main funding sources for allied health positions in the region were CQHHS (29%), Medicare (21%), Private Health Funds (7%) and Department of Veterans Affairs (5%). Of the 12 additional FTE positions funded between 2016 and 2018, approximately seven were funded via CQHHS. It is important to note that there was no change in approved funding for CQHHS positions; the increase in FTE for 2018 reflects higher staffing numbers due to a reduction in staff vacancies. Between 2016 and 2018, an additional five FTE positions were funded from 'other' sources. This evidence supports the effectiveness of the project in accessing a wider distribution of funding sources for allied health services.

Figure 2: Funding sources sources per Allied Health FTE positions



CQHHS = Central Queensland Hospital and Health Service

Value for money

What are the costs of implementing and sustaining the project?

The cost of implementing the project consisted almost entirely of employment costs. A core project team was responsible for establishing the project and undertaking the core activities. Team members included the Chief Executive Officer of Central Queensland Rural Health and the CQHHS Allied Health Team Leader, whose time was provided in-kind. Project officer and administrative support roles were funded as part of the project. When salary related costs were applied to the estimated number of hours each team member spent on the project, the monthly cost of implementation was estimated to be approximately $12,000.

As the activities of the project were limited to the two year funding period, there are no ongoing costs to report.

Were any other cost offsets identified?

As the purpose of this evaluation outcome was to examine value for money for Queensland Health, we have adopted a state government perspective, which encompasses the local CQHHS perspective. However, it is important to note that this does not account for the effects of any 'cost-shifting' that occurs within the broader Australian healthcare system, including any increase in services funded via other state agencies or the federal government.

CQHHS funded allied health occasions of service data for both inpatient and outpatient services are summarised in Appendix 6. While the total number of services remained consistent, there was a 25% reduction in the proportion of outpatient services. This suggests that demand for outpatient services were being adequately met from community providers funded from alternative sources. CQHHS was, in turn, able to focus their approved allied health resources on the acute care setting to deal with higher priority cases.

Queensland Health outpatient occasions of service and costing data for financial years 2016-17 and 2017-18 are summarised in Appendix 7. Due to the lower level of outpatient occasions of service in 2017-18, a saving of approximately $23,000 was made in outpatient service reimbursements.

Further cost offsets were available through the sharing of infrastructure across the region. The project team created a register of 18 premises across all six communities that were available to allied health providers. The types of premises include consult rooms, meeting rooms, conference rooms and soundproof booths. Details on the register included availability of facilities such as Wi-Fi, conference calling, videoconferencing, catering and kitchens along with the available days and relevant contact details.

Community satisfaction and awareness: Has the innovation resulted in...

… improved levels of satisfaction with allied health services?

The community survey was completed by 67 residents at baseline and 166 residents at project end. The relatively small sample sizes limit the generalisability of these results. Survey responses are summarised in Appendix 8.

Community satisfaction with access to allied health services was surprisingly high at baseline with 73% of patients agreeing that it was generally easy to access allied health services when needed. Only 14% of residents indicated they were dissatisfied with any aspect of allied health services. At project end, while fewer patients agreed that it was easy to access allied health services (56%), there were also fewer who expressed dissatisfaction (11%).

… improved awareness of services including Allied Health Assistants and telehealth?

Survey data indicated an increased level of awareness and confidence in telehealth services. The proportion of responses claiming a good understanding of what telehealth involved increased from 49% to 56%, while the proportion of patients who agreed they would be happy to receive services via allied health increased from 50% to 54%. However, survey responses did not reflect an increase in the community understanding of Allied Health Assistants.

Sustainability and scalability

The project was successful in achieving its objectives. There is evidence that this has translated to an increase in the number of available services in the Banana Shire Region with an additional five FTE positions funded from outside of the CQHHS.

> *"The research we did is there's a lot of services that are Medicare eligible that are being provided by State-funded services. What we're doing is trying to break down the walls between the funding buckets and learn how to use those funds better for a targeted service that will actually meet the needs of the community rather than the needs of the funding grant or the HHS recurrent funding, or the previous FTE." (Project Manager)*

The project's work is ongoing:

> *"The other thing that often happens is that a new clinician arrives because they're married to someone who got a job here. Suddenly you have an OT in a little town that doesn't have an existing position, but has four outreach services. So it's about how do we then plan those services to utilise the human resources that we have on the ground…It's really about regularly reviewing who's on the ground and where the gaps are and how do we work together to fill those." (Project Manager)*

Potential is there to ensure further implementation of service changes. The buy-in and willingness from a whole range of stakeholders is already there to continue the work. The Allied Health Reference Group is continuing to meet beyond the end of the project period.

However, there is no ongoing funding available to continue project activities. In order to capitalise on the collaborative partnerships that have been established and the service agreements that have already been made, administration support to facilitate the meetings, communications, and action the decisions made is required. An investment in a core allied health planning and coordination role, either within the CQHHS or PHN, would help ensure the sustainability of project outcomes. This role could also take the form of a liaison officer who promotes collaboration between sectors and organisations at the broader health service level.

If due attention is made to resolve implementation barriers discussed in this report, AusHSI believes that further important progress is likely. Resolving barriers to meaningful ongoing data collection is critical. This provides further rationale for funding of a more permanent role of health service planner in the region. There is substantial potential for similar work to be done in other parts of rural Queensland where similar gains are also likely.

> *"We've got to get enough wins on the board to convince the HHS to change…cultural change is actually the biggest shift that we still need to do…And I think actually the interest that we've had from Roma, from South West HHS, is they may well pick this up before CQ does." (Project Manager)*

Appendix 1: Semi-structured Interview Questions

Individual interviews were conducted with project stakeholders following a semi-structured list of questions. For each of the key questions, additional questions/prompts were used as required to ensure thorough data collection.

Key Question 1:
How was the project designed and implemented?

- Who developed the intervention?
- Why was the intervention implemented in your setting?
- How did you become involved in implementing the intervention?
- Can you describe how the intervention was implemented?
- Was the intervention implemented according to the implementation plan?
- Who were the key stakeholders to get on board with the intervention?
- What was your communication strategy for getting the word out about the intervention?

Key Question 2:
Was the project successful? What worked?

- Intervention characteristics?
- The process used to implement?
- Contextual issues, including local and external factors?
- Characteristics of individuals involved in the project?

Key Question 3:
What didn't work?
What would you do differently next time?

- Intervention characteristics?
- The process used to implement?
- Contextual issues, including local and external factors?
- Characteristics of individuals involved in the project?

Key Question 4:
What factors will be important for scale-up and/or sustainability?

Key Question 5:
Is the project generalisable to other settings?

Appendix 2: Implementation Facilitators and Barriers

Table A2.1. Factors facilitating implementation of the Integrated Allied Healthcare in Rural Communities project

CFIR Domains	Constructs	Summary of Findings
Intervention Characteristics	Intervention Source	The intervention had excellent buy-in from all stakeholders, particularly in the Allied Health Reference Group. These members had a sense of investment in co-designing strategies for mutual benefit. Stakeholders were convinced of the intervention's value both for service providers and the community. An inherent advantage of the intervention design is its flexibility to be continuously adapted as needs change.
	Relative Advantage	
	Adaptability	
Outer Setting	Patient Needs & Resources	Patient needs and concerns were well-considered.
	Cosmopolitanism	The project manager was already very well-connected in the region which set the project up for success.
Inner Setting	Networks and Communications	The project utilised existing networks of the project manager to gain early traction. Effort was also invested into expanding and strengthening these networks through the working groups. Regular meetings and communications between members were keys to implementation success.
	Implementation Climate - Compatibility	Open communication about the scope of practice and needs of various service organisations was crucial to ensuring intervention compatibility. The project sought to match opportunities for added services with the organisations and areas that provided the 'best fit'.
	Readiness for Implementation – (1) Leadership Engagement	The project had strong support and leadership from the project manager and clinical lead. This was a crucial factor for implementation success.
Characteristics of Individuals	Knowledge and Beliefs	The project manager was highly skilled in strategic oversight. She had a strong vision for the project and successfully engaged others to catch that vision. The clinical lead's pragmatic approach also facilitated progress. The strengths of these individuals were well-utilised to the benefit of the project.
	Self-efficacy	The Allied Health Assistant scholarship component of the project specifically resulted in improved self-efficacy of Allied Health Assistants to delivery crucial services which furthered project aims.
Process	Planning	Significant effort was well-invested in the planning phase of the project. Formalised planning processes such as environment scans, patient audit tools and service mapping exercises were used to good effect.
	Engaging	Engaging stakeholders, particularly in the Allied Health Reference Group was a key success. This group decided to continue operating even beyond the project period which demonstrates the strength of engagement.
	Engaging (1) Formally appointed implementation leaders (2) Champions	The clinical lead was well respected and held influence in the HHS. The project manager operated as a champion who was able to overcome resistance, and gain inter-organisational trust and commitment to the shared goals of the project.
	Reflecting and Evaluating	Feedback opportunities from multiple stakeholders were built into the design of the intervention especially in the planning phase. Making time and space for evaluation of service changes will be critical to ongoing implementation success.

Table A2.2. Factors hindering implementation of the Integrated Allied Healthcare in Rural Communities project

CFIR Domains	Constructs	Summary of Findings
Intervention Characteristics	Complexity	This project attempted radical change in developing a model of collaborative service provision across multiple organisations. The complexity of this challenge appeared to make progress slow but not impossible.
Outer Setting	External Policy & Incentives	Multiple layers of bureaucracy particularly with regards to funding rules and co-appointments of staff is a barrier that slows implementation and has the potential to block it altogether. Support for the intervention must be given from the top levels of Queensland Health to ensure sustainability.
Inner Setting	Structural Characteristics	Structural barriers to innovation, particularly in powerful, established organisations such as the HHS, promote resistance to change. Securing HHS staff involvement in services outside the four walls of the hospital was difficult, as was engaging practitioners to use new telehealth processes. Queensland Health's stringent data security requirements are a likely structural impediment. Historic difficulties with recruitment and retention in the Banana region is an underlying threat to implementation success. If new shared service agreements cannot offer staff the same benefits and remuneration as Queensland Health, recruitment may be even more difficult.
	Culture	A culture of maintaining the status quo was evident in some organisations. Protectiveness over organisational assets, funding and human resources is a barrier to new business models that have been developed in this project. Fear of losing FTEs and not being able to get them back was an identified barrier.
	Readiness for Implementation – Available Resources	There is some evidence to suggest that project officers had more workload than could be accomplished within the time allocated for their role. This may have contributed to staff turnover in this position. Inadequate support was given to training Allied Health Assistants and this may have reduced the overall success of this arm of the project. If this part of the project is to continue, securing the necessary funding to support it properly is crucial.

Appendix 3: Description of Data Sources

Allied Health Environment Scan: A comprehensive scan of allied health services available within the Banana Shire was completed at baseline and project end. The scan identified the total FTE allocated to each allied health profession within each community.

Allied Health Service Audit: An audit of allied health service provider appointments over a 4 week period was conducted at baseline, mid-project and project end.

Allied Health Community Satisfaction and Awareness Survey: A survey was designed to ascertain community satisfaction with access to services, as well as knowledge and confidence in Allied Health Assistant roles and telehealth service models.

Queensland Health Outpatient Occasions of Service Dataset: A dataset summarising all Queensland Health funded outpatient allied health occasions of service in the Banana Shire was obtained via request from the Statistical Services Branch.

Central Queensland HHS Occasions of Service and FTE Data: Aggregate data was obtained from CQHHS on total allied health occasions of service, as well as the approved and actual FTE expenses.

AusHSI Costing Tool: A survey designed by the Australian Centre for Health Services Innovation (AusHSI) was completed by the project team to provide an estimate of the typical monthly expenses incurred over the course of the project.

Infrastructure sharing register: An infrastructure sharing register was created by the project team to summarise the availability of allied health resources and space

CFIR pre- and post- survey: The project lead completed a survey designed to capture perceptions of selected constructs across the five CFIR domains, at both baseline and project end.

Issues log: The project team kept a record of key issues or barriers to implementation as they arose.

Interviews with Key Stakeholders: In-depth, semi-structured interviews with key stakeholders were conducted at the end of the project to explore the implementation process, including barriers and facilitators to successful implementation, and issues for ongoing sustainability.

Appendix 4: Environmental Scan Analysis

Table A4.1 Total pre- and post- allied health FTEs by profession: CQHHS versus whole of Banana Shire

Allied Health Professional	Shire 2016	CQHHS	Shire 2018	CQHHS
Aboriginal Health	2.50	1.00	2.20	1
Aged Care Assessor	0.00	0.00	0.40	0.40
Alcohol and Other Drugs Service	0.60	0.40	1.40	0.4
Audiology	0.28	0.00	0.35	0
Child Health	8.10	4.80	7.94	1.94
Community Nurse	5.00	2.00	5.04	3.04
Dental	3.99	1.00	3.99	0
Diabetes Educator	1.20	0.00	1.10	0
Dietician	1.60	0.60	2.21	0.72
Psychologist	0.30	0.00	1.49	1.04
Social Worker/Counselling	9.29	0.80	11.27	0.80
Mental Health Clinician	1.40	1.00	2.09	2.00
Natural Therapies	4.20	0.00	6.20	0
Optometry	0.99	0.00	1.01	0
Occupational Therapy	2.20	1.00	3.69	2.00
Pharmacy	4.00	0.00	5.05	1.00
Physiotherapy	4.08	2.00	6.07	3.00
Exercise Physiology	1.09	0.00	1.09	0
Podiatry	0.20	0.00	0.32	0
Radiography	5.49	3.40	6.51	4.40
Speech Therapy	1.99	1.00	2.44	1.00
Total FTE	**58.50**	**19.00**	**71.83**	**22.74**

FTE = full time equivalent

Table A4.2 Allied health pre- and post- project FTEs by profession and community

Allied Health Profession	Biloela		Moura		Taroom		Theodore		Baralaba		Wowan		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Aboriginal Health	1.5	1.2	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	2.5	2.2
Aged Care Assessor	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Alcohol & Other Drugs Service	0.6	1.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.4
Audiology	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4
Child Health	3.9	3.4	1.4	1.6	0.1	0.2	1.4	1.4	1.3	1.3	0.0	0.0	8.1	7.9
Community Nurse	3.0	3.0	0.0	0.0	0.0	0.0	1.0	1.0	0.6	0.6	0.4	0.4	5.0	5.0
Dental	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
Diabetes Educator	0.2	0.1	0.0	0.1	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.2	1.1
Dietician	1.6	1.6	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	1.6	2.2
Psychologist	0.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5
Social Worker/Counselling	7.9	10.8	0.4	0.4	0.0	0.0	1.0	0.1	0.0	0.0	0.0	0.0	9.3	11.3
Mental Health Clinician	1.2	2.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.3	2.1
Natural Therapies	1.2	3.2	2.0	2.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	4.2	6.2
Optometry	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Occupational Therapy	1.9	3.1	0.1	0.2	0.1	0.2	0.1	0.3	0.0	0.0	0.0	0.0	2.2	3.7
Pharmacy	2.0	3.0	1.0	1.0	1.0	1.0	0.0	0.1	0.0	0.0	0.0	0.0	4.0	5.2
Physiotherapy	2.4	4.1	0.2	0.4	1.1	1.1	0.2	0.3	0.2	0.2	0.0	0.0	4.1	6.1
Exercise Physiology	0.8	0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.1	1.1
Podiatry	0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.3
Radiography	1.5	1.5	1.0	1.0	1.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	5.5	6.5
Speech Therapy	2.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.4
Total FTE	**37.5**	**48.8**	**6.2**	**7.2**	**3.4**	**4.7**	**8.9**	**8.5**	**2.1**	**2.2**	**0.4**	**0.4**	**58.5**	**71.8**

Appendix 5: Summary of allied health service audit data

Table A5.1 Audit of allied health appointments by profession

Provider type	Baseline (2016)	Mid-project (2017)	Project end (2018)
Aged Care Assessor		6	36
Alcohol and Other Drugs Service			1
Audiology			10
Chiropractor		2	
Counsellor	15	15	1
Credentialled Mental Health Nurse			16
Diabetes Educator	14	26	12
Dietician	20	26	29
Exercise Physiologist	24	30	41
Indigenous Hospital Liaison Officer			1
Mental Health Clinician			4
Occupational Therapist	16	34	50
Optometrist		21	
Physiotherapist	12	34	43
Podiatrist	5	11	12
Psychologist	1	2	1
Social Worker	2	2	
Speech Pathologist	19	34	75
No response	3	7	
Total	**131**	**250**	**332**

Table A5.2 Audit of waiting times for allied health appointments

	Baseline		Project end	
Waiting period	Number	Percentage	Number	Percentage
0 - 3 days	31	24%	26	8%
4 - 7 days	14	11%	115	35%
1 - 2 weeks	16	12%	83	25%
2 – 4 weeks	33	25%	59	18%
More than 4 weeks	34	26%	49	15%
No response	3	2%	0	0%
Total	**131**	**100%**	**332**	**100%**

Table A5.3 Audit of allied health appointment by mode of delivery

Mode of delivery	Baseline (2016)	Mid-project (2017)	Project-end (2018)
Face to Face in clinic	86	176	156
Face to Face in home	16	32	39
Face to Face in hospital setting	16	16	31
Face to Face in school setting	-	-	87
Other	13	17	10
Telehealth consultation	-	9	9
Total	**131**	**250**	**332**

Appendix 6: Banana Shire allied health activity and FTE summary

Notes:

These tables report on CQHHS administrative data on approved allied health FTE funding, actual FTE expenses and actual occasions of service for both inpatient and outpatient services in the Banana Shire. Some caveats to note include:

1. Some staff that were funded from Banana Shire cost centres were involved with in-reach activities in Gladstone. It was estimated that this activity would have accounted for at least 0.5 FTE each year and primarily affected the Physiotherapy, Speech Pathology and Dietetics professions.
2. 1.0 FTE of the total 9.2 allied health health practitioner FTE included a supernumerary Occupational Therapy position from Jan 2016-Dec 2018. Another 0.5 of FTE over the entire time was a team leader with a non-clinical role and another 0.5 was a Psychologist who operated from Gladstone predominately.

A6.1 Central Queensland HHS FTE summary

Central Queensland HHS	2016-17	2017-18
Approved FTE		
Allied health practitioners	9.2	9.2
Allied health assistants	2.5	2.5
Total	11.7	11.7
Actual labour expense		
Allied health practitioners	983,000	1,085,000
Allied health assistants	117,000	165,000
Total	**1,100,000**	**1,250,000**

Table A6.2 Central Queensland HHS Allied Health Occasions of Service Summary

	2016-17			2017-18			Percentage change		
	Outpatient	Inpatient	Total	Outpatient	Inpatient	Total	Outpatient	Inpatient	Total
Dietetics	257	137	394	188	200	388	-27%	46%	-2%
Occupational Therapy	798	123	921	722	335	1,057	-10%	172%	15%
Physiotherapy	1,199	756	1,955	876	1,131	2,007	-27%	50%	3%
Psychology	29	0	29	21	0	21	-28%	0%	-28%
Social Work	293	141	434	276	179	455	-6%	27%	5%
Speech Pathology	691	135	826	303	293	596	-56%	117%	-28%
Paediatrics (transdisciplinary)	0	86	86	0	32	32	0%	-63%	-63%
Total	**3,267**	**1,292**	**4,559**	**2,386**	**2,138**	**4,524**	**-27%**	**65%**	**-1%**

Appendix 7: Summary of Queensland Health Outpatient Occasions of Service Data

Notes:

These tables summarise administrative allied health outpatient occasions of service data for the Banana Shire region. Aggregate data were sourced via a request to the Queensland Health Statistical Services Branch. Some key points to note include:

1. Data includes all service delivery modes (including telehealth provider and receiver).
2. Data is restricted to service events from 1 July 2016 to 30 June 2018 inclusive.
3. Data is restricted to service events provided by allied health professionals (Dietitian, Occupational Therapist, Physiologist, Physiotherapist, Podiatrist, Psychologist, Clinical, Social Worker or Speech Therapist), reported by Moura, Baralaba, Theodore, Biloela and Woorabinda Hospitals
4. In 2016/2017, due to reporting of data using shared information systems, it was not possible to differentiate which hospital had provided service events, as Moura and Baralaba reported all activity for Moura, Baralaba, Theodore and Woorabinda Hospitals. This issue was corrected in 2017/2018 data collection. For consistency we have reported both years as combined for Moura, Baralaba, Theodore and Woorabinda Hospitals
5. Duplication of records reported by both Moura and Baralaba 2016/2017 have been corrected.

Table A7.1 Banana Shire Outpatient Occasions of Service by Funding Source

Funding source	2016-17	2017-18
Department of Veterans' Affairs	28	29
Health service budget (Reciprocal Health Care Agreement)	5	0
Health service budget (not covered elsewhere)	3,534	2,964
Worker's compensation	14	14
Total	**3,581**	**3,007**

Table A7.2 Banana Shire Outpatient Occasions of Service by Community and Provider Type

	Occasions of service	
Services by community	2016-17	2017-18
Biloela	**3,168**	**2,534**
Dietitian	240	170
Occupational therapist	761	647
Physiologist	216	278
Physiotherapist	1,015	712
Podiatrist	38	46
Psychologist, clinical	16	21
Social worker	270	247
Speech therapist	612	413
Moura/Baralaba/Theodore	**413**	**473**
Dietitian	46	45
Occupational therapist	60	81
Physiotherapist	197	188
Podiatrist	42	79
Social worker	13	31
Speech therapist	55	49
Total in Banana Shire	**3,581**	**3,007**
Dietitian	286	215
Occupational therapist	821	728
Physiologist	216	278
Physiotherapist	1,212	900
Podiatrist	80	125
Psychologist, clinical	16	21
Social worker	283	278
Speech therapist	667	462

Table A7.3 Outpatient Service Events and Reimbursements from Queensland Health

Waiting period	2016/2017		2017/2018	
	Service events	Queensland Health Reimbursements	Service events	Queensland Health Reimbursements
Nutrition/Dietetics	286	11,506	216	8,690
Occupational Therapy	777	31,259	729	29,328
Physiotherapy	1,359	54,673	903	36,328
Podiatry	80	3,218	125	5,029
Psychology	29	1,167	21	845
Rehabilitation		0	275	11,063
Social Work	285	11,466	278	11,184
Speech Pathology	692	27,839	460	18,506
Unknown/undefined	73	2,937		0
Total	**3,581**	**144,064**	**3,007**	**120,972**

Appendix 8: Summary of Community Survey Responses

In general, it is easy for me to get access to Allied Health Services when I need them

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=67)	0%	6%	21%	63%	10%
Post (N = 165)	1%	10%	33%	46%	10%

I find it hard to get an appointment for Allied Health Services right away or when I need it

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=63)	6%	40%	27%	24%	3%
Post (N = 165)	5%	36%	33%	22%	4%

I am dissatisfied with some things about the Allied Health Care I receive

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=56)	29%	38%	20%	11%	4%
Post (N = 147)	8%	50%	32%	10%	1%

Telehealth is another way to receive consultations from a clinician form remote locations. I have a good understanding of what telehealth involves

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=61)	7%	16%	28%	28%	21%
Post (N = 163)	5%	9%	30%	44%	12%

I would be happy to receive Allied Health Services via telehealth

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=56)	4%	14%	32%	41%	9%
Post (N = 168)	4%	8%	35%	39%	15%

Allied Health Assistants carry out treatment plans as directed by a fully qualified Allied Health Professional. I have a good understanding of the role of Allied Health Assistants

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=61)	2%	10%	33%	39%	16%
Post (N = 164)	2%	5%	40%	43%	10%

Having an Allied Health Assistant in my community would improve access to the services available

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=62)	2%	0%	15%	52%	32%
Post (N = 166)	0%	2%	20%	57%	22%

References

1. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implementation Science 2009; 4:50.

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Options for sustainable Medical Services for the communities of the Western Corridor

Townsville Hospital and Health Service

This document provides outlines possible solutions for medical workforce issues in the communities of Hughenden, Richmond and Charters Towers.

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Options for sustainable Medical Services for the communities of the Western Corridor

Executive Summary

Sustainability, cost, and access to health services have been a concern for the communities of Richmond, Hughenden and Charters Towers for many years. The area known as the Western Corridor covers a large and diverse population who are often isolated by distance, with limited access to local healthcare. The communities are not high socio-economic communities and struggle to access health care outside their local community. The medical models in Richmond and Hughenden rely on solo medical officers.

Developing affordable, sustainable healthcare with a stable medical workforce, that provides access to care for all residents of the region is a priority for the Townsville Hospital and Health Service. There has been a recognition of the need to work with communities, other health service providers and clinicians to plan primary and secondary services in rural communities. This is a significant first step in establishing sustainability of health services for rural and remote communities.[1] The planning process can be based on the framework developed for rural and remote health services and planned through a collaborative process described in the Rural and Remote Health services Panning process (2013).[2]

Rural Health Management Services (RHMS) has been invited by the Townsville Hospital Rural Division to provide an options paper to support future planning for the implementation of alternate models for the delivery of medical services in the Western Corridor. A visit was undertaken to the communities in the western corridor with Dr Paul Lane and meetings held with Medical, Hospital staff and community leaders to identify priorities for each community and potential partnerships to build sustainable services communities.

The review identified that services had remained unchanged for many years and highlighted the necessity to address the evolving needs of the communities and medical workforce. The Medical model of solo Medical Officer working with right of private practice in place in Richmond and Hughenden is outdated, unsustainable and no longer fit for purpose for these communities. The following report identifies solutions for managing a medical workforce crisis and options to invest and develop a sustainable workforce able to self-relieve, giving communities continuity of care and local clinical leadership. There is capacity within the Western Corridor communities to establish a strong medical education network with

[1] https://www.publications.qld.gov.au/dataset/rural-and-remote-health-service-planning/resource/0d627e3a-1a38-443a-80e5-6b60fd837b8f

[2] Rural and Remote Health Services Planning Process (2013)

development of allied health and nursing services to support strong local health service delivery.

The cost of the alternate Medical models will be less than the current Medical Workforce expenditure and will provide two full time Medical Officers for both Hughenden and Richmond.

Services in Charters Towers are also static with limited investment in planning or infrastructure for many years. The generalist skills of the Medical Workforce are underutilised. General Practices are at risk and putting pressure on Emergency Department and Aged Care services. Development of a Health Plan for Charters Towers will give clear directions and a clear business case to ensure the health services developed will meet current and future needs of the community and support access to health services for the communities of the Western Corridor.

Demographics

All these communities have low SEIFA scores, higher than average indigenous and aged populations and children below the age of 14 years. Most residents were born in Australia and speak English with education to bachelor levels less than 10%

Flinders

The Local Government Area of Flinders covers 41200 square kilometres and has a population of 1536, according to the 2016 census. The SEIFA score for this LGA is 943, with a minimum of 862 and a maximum of 1050. The median weekly household income was $1109, with median rental cost being $150 and the median monthly mortgage repayment being $509. Children aged 0 - 14 years made up 17.6% of the population and people aged 65 years and over made up 20.5% of the population. Of people aged 15 years and over, 15.8% had completed year 12 as their highest level of education, 15.5 had completed a certificate III or IV, 4.9% have completed an Advanced Diploma or Diploma and 7.4% had completed a Bachelor Degree or above. Aboriginal and/or Torres Strait Islander people made up 6.5% of the population. Most households speak only English at home, with only 1.1% speaking another language at home. Most of the population, 84.8%, were born in Australia.

Richmond

The Local Government Area of Richmond covers 26581 square kilometres and has a population of 791. The SEIFA score for this LGA is 964, with a minimum of 909 and a maximum of 1033. The median weekly household income was $1183, with median rental cost being $80 and the median monthly mortgage repayment being $710. Children aged 0 - 14 years made up 18.4% of the population and people aged 65 years and over made up 14.1% of the population. Of people aged 15 years and over, 14.2% reported Year 12 as their highest level of education, 16% had completed Certificate III or IV, 7% had completed a Diploma or Advanced Diploma and 9% had completed a bachelor's degree or above. Aboriginal and/or Torres Strait Islander people made up 6.7% of the population. In Richmond, 90.9% of people only spoke English at home. The only other response for language spoken at home was Japanese 0.9%. Most people, 85.1%, were born in Australia.

Charters Towers

The Local Government Area of Charters Towers covers 68382 square kilometres and has a population of 11876. The SEIFA score for this LGA is 921, with a minimum of 849 and maximum of 12157. The median weekly household income is 1047, with median rental cost of $200 and median monthly mortgage repayments of $1300. Children aged 0 - 14 years made up 21.4% of the population and people aged 65 years and over made up 18.5% of the population. Of people 15 years and over, 4.3% reported having completed Year 12 as their highest level of educational attainment, 16.9% had completed a Certificate III or IV, 5.0% had completed an Advanced Diploma or Diploma and 8.6% had completed a Bachelor Degree or above. Aboriginal and/or Torres Strait Islander people made up 8.7% of the population. In Charters Towers 87.8% of people only spoke English at home. Other languages spoken at home

included Filipino 0.2%, Tagalog 0.2%, German 0.1%, Malayalam 0.1% and Vietnamese 0.1%. The majority, 83.5%, of people were born in Australia.

Hughenden, Richmond, and Charters Towers are planning additional industries to come to their communities. Mining is growing for each area; meatworks are planned and significant agricultural development and irrigation projects have been identified in the Blueprint.[3]

Essential Components of a sustainable Model

Establishing sustainable medical services in rural and remote communities is complex and at times can seem unachievable due to the vast distances and isolation of these communities, combined with the complexity of health services required. There are several factors which should be considered when planning the service models in rural and remote communities. The factors are different in each community and each community requires a unique solution.

Workforce ratio

The workload for each clinician is determined by the number and type of services required. Initially, this is determined on a population demographic but over time should be reviewed as services develop in response to specific needs in each community. The medical team are the clinical leads in each community. There is a need to establish a strong medical workforce to lead service development and team-based care in each community. The clinical leadership should bring public, private and non-government services together to plan and deliver primary and secondary care in each community. The plan should ensure the available workforce and health funding (State, Commonwealth and Fee for service) is maximised in each location, as well as the skills of the workforce in each community are utilised fully.

Reducing Professional Isolation

Professional isolation is a significant consideration in each location. To reduce this isolation there needs to be clearly identified mentorship pathways for each clinician. A regional training and skills development pathway, local training programs and support from specialty services to manage complex presentations locally.

Reducing Social Isolation

Living in a small rural community can at times be challenging and rewarding. A local orientation, and connections with others in the local community, particularly those working in similar positions can reduce this isolation. Connecting socially across the health services is also important. Social occasions with clinicians in other communities periodically, allows both professional and social support networks to develop.

[3] *Unlock the North: North Queensland Projects & Policies (See attachment)*

Succession Plans and a career pathway

Each clinician will have a plan for their career development and varying intentions to continue with rural and remote practice. Access to local and distance training support is essential in order to further develop skills and knowledge. A career path is a valuable retention incentive for all rural and remote clinicians and will vary for each clinician and should be supported by local and distant training opportunities. The option to attend training programs or placements to further skills and knowledge should be available and planned as part of an annual performance review with each Medical Officer.

Multi-disciplinary services

Team based care is an essential aspect of rural and remote practice. These teams are not only within the public services but also span commonwealth funded allied health services, council managed services and private practice. Some of the clinicians and other health workers will be based in the community and others provide in-reach services from outlying communities. The medical officers in each community provide a source of referrals and a connection across multiple providers for each patient. In order to provide a fully integrated service, medical officers should have sufficient non patient contact time to build co-ordinated local services with effective communication systems and support for complex patients to navigate the health system.

Assessing a health services vulnerability

The table below[4] has been developed by the Rural Doctors Association of Queensland as an indicator of communities where the health workforce has reached a critical level. This set of traffic lights can be used by as a rapid assessment for action. The actions need to be taken as a collaborative response between health service providers, community and all levels of government.

The current workforce services in the Western Corridor are critical in all areas for some of the communities and at risk in others. These traffic lights can be used as a quick reference when planning service changes or reviewing the health of the workforce model, or level of vulnerability.

Indicators	Green – In place	Amber – At risk	Red – Critical
Health Workforce	Workforce at or just above critical mass	Workforce just below critical mass	Workforce well below critical mass - Chronic workforce shortage - Long term vacancies
Workforce Relief	Capacity to self-relieve or access timely and clinically suitable relief	Intermittent and/or unsuitable relief	No ability to self-relieve from within medical community

[4] Traffic Lights Indicators developed by Rural Doctors Association of Queensland.

General Practice	General practice has capacity		Limited capacity in general practice		Highly limited or no capacity in general practice	
Workforce Model	Workforce capacity is balanced with the service model, including referrals		Vacancies with some difficulties to recruit		Over reliance on locum or visiting workforce does not have continuity.	
Organizational Culture	Private / GP / public hospital relationships are positive and supportive		Organizational culture is changing		Organizational culture is having a damaging impact on clinical community	
Continuity of Care	Continuity of care models including visiting outreach services		Referral services difficult to identify		Breakdown in professional relationships including relationships with referral services	
Clinical Leadership	Appropriate autonomy in clinical decision making		Some tension between general practice & hospital services (professional or personal)		Recent change or vacancy in clinical Leadership. Difficult ongoing relationships with clinical / executive management	
Learning Environment	Supportive learning environment		Tension between service / learning model; available workforce or skill mix; demand or community expectations		No current student / intern / registrar placements.	

Hughenden

The medical workforce ratio in Hughenden is currently too high, the Royal Australian College of General Practice (RACGP) average ratio is 1GP to a population of 830 people. The ratio in Hughenden is 1: 1569. This ratio is too high and would require a minimum of two doctors to effectively provide the minimum primary care services.

Hughenden is currently in crisis, with the imminent threat of a complete Medical Workforce failure. It is essential for the continued function of the services to plan for crisis and how to

rebuild a service to a point of excellence. Excellence is indicated when the green lights are all met, there is an effective health service plan for the community, and services meet or exceed those recommended in the rural and remote health service framework[5]

Traffic Lights review

- Workforce Critical with some uncertainty about the ability of the current MORPP to maintain services.
- Locums required for routine relief and all other leave. There is at least 6 months of leave accrued.
- There is limited capacity in General Practice with 40 plus patients seen each day and aged care and home visits provided on the weekend. There are over 100 people on aged care packages being cared for in the community / region
- The services rely on locums for all relief. There is a small pool of regular locums who provide this relief.
- The services feel isolated and not well supported by the THHS with little or no connection to Charters Towers.
- Referral services are available but there does not seem to be a good use of telehealth and communication with visiting allied health is limited. There are no specialist outreach services.
- There is potential for the current MSRPP to lose her place in the ACRRM independent pathway and therefore scope of practice for work in Hughenden. There has been a change in the Medical Executive for the rural group hospitals.
- Currently, there are no planned student or intern rotations, although there have been at times in the past.

The service workforce plans must also consider managing services at all stages of development and cater to changing the workforce model as services develop.

Crisis Response

If the current MSRPP is unable to continue to practice, there will be a permanent medical vacancy and will require locum cover. The options for this are to cover with locums at an average cost of $2500/day plus travel costs. Short term this will be the only option. The locums are also working in the General Practice owned by the MORPP. A fee structure needs to be negotiated where an agreed amount or percentage of the billings are paid to the HHS in lieu of a locum fee to the practice.

The next immediate response will be to create one SMO Position with Locum relief and then two permanent SMO positions. This will give the community two medical officers for 2 weeks of

[5] https://www.publications.qld.gov.au/dataset/rural-and-remote-health-service-planning/resource/0d627e3a-1a38-443a-80e5-6b60fd837b8f

the month with relief for regular leave and potentially also require a locum to cover longer periods of leave.

Investment

The next phase of establishing a strong workforce requires financial and professional investment in the Medical Officers (SMO's) working in the community.

- Effective continuity of care is in place with each patient able to see the Medical Officer of their choice regularly.
- Establish a training mentor support model with Charters Towers hospital (including on-site visits at least every 6 weeks)
- Establish an introduction to the community program with the Flinders Shire Council
- Purchase or lease permanent accommodation for the second doctor in the community (possibly in partnership with the Flinders Shire Council)
- Develop a partnership with private practice to ensure return of funds for workforce and continued development of Medicare and privately funded services in the community. At this point it may also be necessary to purchase the practice equipment and lease the building. It may also be the time to develop a partnership in relation to practice management options. This partnership could be with a practice management group or a neighbouring general practice.
- Develop telehealth clinics in conjunction with the Townsville University Hospital
- Establish quarterly outreach clinics with the Geriatrician
- Begin work on the Health Plan for Flinders Shire

Stabilise

Stabilising the workforce involves building the recruitment and retention incentives into each position within the Medical Workforce and ensuring there are local options to develop skills and improved remuneration.

- Effective multi-disciplinary care is in place with the Medical Officers working with the patient to access the care required as close to home as possible.
- Ensure each Medical Officer has a professional development plan in place, a nominated mentor and is actively undertaking a training pathway for vocational registration or further developing their skills as a rural generalist.
- Each medical officer is supported to be an active member of the community, and encouraged to take on local leadership roles to support the development of health services within the Shire
- Permanent Medical Officer accommodation is available for two medical officers and reliever accommodation if needed.
- The private practice is a viable business, with skilled staff, fully accredited and well equipped
- Each SMO is billing a minimum or $1500 per day and has been offered the opportunity to work as a MORPP or MSRPP. The right of private practice will increase the remuneration to

Medical Officer and offer more options to manage taxable income as the earnings are not in the form of a salary.

- Telehealth clinics are available within the General practice for all specialties from the Townsville University hospital and from other locations where patients are receiving specialist care.
- Geriatrician and at least 2 other specialist clinics are held in Hughenden at least twice a year with education sessions for local medical, nursing, and allied health staff.
- The Health Plan for Flinders Shire is complete, and a steering group is in place to oversee the implementation of the plan locally. One of the Medical Officers is a member of the group and may take on the role of chairing the group.

Excellence

It is important to have a shared vision or target for how the health services should develop in each community. This is achieved through the development of the Health Plan for Flinders Shire. The following dot points reflect some of the probable ideals to be included in the plan.

- All patients with Chronic or Complex care needs have a documented care plan and known team of clinicians support their path to recovery or palliative care within their community and ideally their home.
- Professional development plans are in place and Medical Officers and other clinicians support student, intern and registrar placements with the Hughenden General Practice, Multi-purpose Health Service, Pharmacy, QAS and local community organisations.
- The private General Practice has transitioned to the MSRPP and continues to expand services to the community.
- Students and registrars are supported to participate in local health service projects and local leadership groups as part of their placements.
- Relief staff from Charters Towers or Richmond can cover annual leave, or emergency leave in Hughenden.
- Registrars with special interest can provide outreach clinics such as mental health, women's health, paediatrics, surgical services, and work with specialist providers in Townsville University Hospital.
- Telehealth services are a normal service model for most specialist services.
- There is at least one specialist outreach clinic held each month in Hughenden including the Geriatric Outreach services and services from Townsville University Hospital. Multi-disciplinary Education sessions are a normal part of the outreach support services.
- Outreach GP clinics are provided monthly to the smaller communities and support by telehealth contact between outreach visits.
- Meetings are held bi-monthly to review the Health Plan for Flinders and develop plans for further improvements and support for responding to identified health needs or gaps in services.

Solutions for Richmond

The medical workforce ratio in Richmond is currently not under any stress. The Royal Australian College of General Practice (RACGP) average ratio is 1GP to a population of 830 people. The ratio in Richmond is 1: 791. This ratio is acceptable but requires the provision of a locum for 9 weeks (63 days annual and professional development leave and 86 days or normal leave within the roster). This is a significant cost to the health services and does not provide any continuity of care for the patients. Residents often wait until the MORPP returns or a known locum returns to the community. Some residents drive to Julia Creek for Medical Services.

Richmond is currently quite stable but presents an opportunity to plan for succession and build a strong training model locally. The current MORPP will sit vocational registration exams this year and will then be a capable supervisor for registrar placements independently or as part of a training program with Charters Towers Hospital. It is essential for the continued function of the services to build a service to a point of excellence. Excellence is indicated when the green lights are all met, there is an effective health service plan for the community, and services meet or exceed those recommended in the rural and remote health service framework[6]

Traffic Lights review

- Workforce ratios are acceptable but only with a considerable locum contribution
- Locums required for routine relief and all other leave. There is at least 6 months of leave accrued which must be covered.
- There is capacity in General Practice with 20 to 25 patients seen each day and aged care and home visits provided. This ratio provides a good teaching environment and will allow the registrar to provide relief in Hughenden if needed and participate in specialist and outreach clinics.
- The services rely on locums for all relief. There is a small pool of regular locums who provide this relief but with no certainty for the community or allied health and nursing staff.
- The organisational culture seems very positive locally but there is little evidence of strong linkages or support from Charters Towers or Townsville.
- Referral services are available but there does not seem to be a good use of telehealth and communication with visiting allied health is limited. There are no specialist outreach services.
- There is good autonomy with the scope of practice for work in Richmond. There has been a change in the Medical Executive for the rural group hospitals which will provide opportunity to strengthen the sustainability of services in Richmond.
- Currently, there are no planned student or intern rotations, although there have been at times in the past.

[6] https://www.publications.qld.gov.au/dataset/rural-and-remote-health-service-planning/resource/0d627e3a-1a38-443a-80e5-6b60fd837b8f

The service workforce plans must also consider managing services at all stages of development and cater to changing the workforce model as services develop.

Crisis

This service is not in crisis but does require some thought in how to manage the risk if the current MORPP was to become unwell or take his accrued leave. This could be achieved with the development of a rural reliver position based in Charters Towers and covering the western corridor and other THHS facilities. This position may be a PHO who is able to backfill the roster in Charters Towers if a senior medical officer is required in a rural facility. This would replace the continual need for locums in every facility.

Investment

The next phase of establishing a strong workforce requires financial investment and investment in the Medical Officers working in the community. This stage would establish a registrar position in Richmond to provide relief cover for the MSRPP's leave and potentially support cover in Hughenden.

- Effective continuity of care is in place with each patient able to see the Medical Officer of their choice regularly. One position could be a female medical officer and cover both Richmond and Hughenden providing access to Women's Health clinics for both communities.
- Establish a training mentor support model with Charters Towers hospital (including on-site visits at least every 6 weeks)
- Establish an introduction to the community program with the Richmond Shire Council
- Allocate one to the units in Richmond as accommodation for the registrar (two bedrooms at least if they have a family)
- Develop partnership with private practice to ensure return of funds for workforce and continued development of Medicare and privately funded services in the community. The practice is currently owned by the MORPP and would require a formal agreement between the Practice and THHS.
- Develop telehealth clinics in conjunction with the Townsville University Hospital
- Establish quarterly outreach clinics with the Geriatrician
- Begin work on the Health Plan for Richmond Shire

Stabilise

Stabilising the workforce involves building the recruitment and retention incentives into each position within the Medical Workforce and ensuring there are local options to develop skills and improved remuneration.

- Effective multi-disciplinary care is in place with the Medical Officers working with the patients to access the care required as close to home as possible.
- Ensure each Medical Officer has a professional development plan in place, a nominated mentor and is actively undertaking a training pathway for vocational registration or further developing their skills as a rural generalist or supervisor.

- The registrar is supported to be an active member of the community, and encouraged to take on local leadership roles to support the development of health services within the Shire
- The private practice is a viable business, with skilled staff, fully accredited and well equipped.
- The practice has developed some early intervention and chronic disease programs led by the registrar and the patient numbers and services available in the General Practice have increased.
- Telehealth clinics are available within the General practice for all specialties from the Townsville University hospital and from other locations where patients are receiving specialist care.
- Geriatrician and at least 2 other specialist clinics are held in Richmond at least twice a year with education sessions for local medical, nursing, and allied health staff.
- The Health Plan for Richmond Shire is complete, and a steering group is in place to oversee the implementation of the plan locally. One of the Medical Officers is a member of the group and may take on the role of chairing the group.

Excellence

It is important to have a shared vision or target for how the health services should develop in each community. This is achieved through the development of the Health Plan for Richmond Shire. The following dot points reflect some of the probable ideals to be included in the plan.

- All patients with Chronic or Complex care needs have a documented care plan and know the team of clinicians supporting their path to recovery or palliative care within their community or ideally their home.
- Professional development plans are in place and Medical Officers and other clinicians are support student, intern and registrar placements with the Richmond General Practice, Multi-purpose Health Service, Pharmacy, QAS and local community organisations.
- The private General Practice continues to expand services to the community.
- Students and registrars are supported to participated in local health service projects and local leadership groups as part of their placements.
- Relief staff from Charters Towers can cover annual leave, or emergency leave internally.
- Registrars with special interest can provide outreach clinics such as mental health, women's health, paediatrics, surgical services, and work with specialist providers in Townsville University Hospital.
- Telehealth services are a normal service model for most specialist services.
- There is at least one specialist outreach clinic held each month in Richmond including the Geriatric Outreach services and services from Townsville University Hospital. Education sessions are a normal part of the outreach support services.
- Outreach GP clinics are provided monthly to the smaller communities and support by telehealth contact between outreach visits.
- Meetings are held second monthly to review the Health Plan for Flinders and develop plans for further improvements and support for responding to identified health needs or gaps in services.

Solutions for Charters Towers

The medical workforce ratio in Charters Towers Hospital is currently not under any stress. The Royal Australian College of General Practice (RACGP) average ratio is 1 GP to a population of 830 people. There are 11.5 FTE GPs in Charters Towers. This varies as some GPs work part time or on a sessional basis. The ratio in Charters Towers is 1:1033. This ratio is not acceptable and is under stress and should be part of targeted local training programs. The risk for the HHS when GP numbers are low is the exacerbation of preventable illness, and ineffective care for those with more Chronic and Complex needs, particularly the aged and lower socio-economic members of the community. There is also very limited access to fully bulk billed services in Charters Towers.

Charters Towers is currently quite stable but presents an opportunity to plan for succession and build a strong training model locally. The current Medical Superintendent and senior Medical Officers are capable supervisors for registrar placements independently or as part of a training program. Registrar placements and Rural Generalist training could be delivered in partnership with the local General Practices and Practices in Richmond and Hughenden. It is essential for the continued function of the services to plan to build a service to a point of excellence. Excellence is indicated when the green lights are all met, there is an effective health service plan for the community, and services meet or exceed those recommended in the rural and remote health service framework[7]

Traffic Lights review.

- The General Practice workforce is in crisis in Charters Towers and this impacts on THHS and Charters Towers hospital in the number of Cat 4 and 5 presentations to ED and also the reliance on THHS to provide GP care to the residents of the Eventide Nursing Home.
- There is capacity in Charters Towers to self-relieve. The capacity could be increased to also relieve in Richmond and Hughenden.
- There is a minimum of 3 days wait for a GP appointment in Charters Towers. The current practices see 20-30 patients per day for each GP. There is potential to develop the integrated role with local General Practices as teaching practices and allow registrars to work in the practice. aged care, and in the Charters Towers Hospital. There is also potential to develop an additional General Practice service utilising the SMO Rural Generalist worforce
- There is a stable workforce model with some recruitment delays. There is potential to better utilise the advanced skills of rural generalist within the workforce model. There is also an opportunity to increase outreach and telehealth services as part of service and training model.

[7] https://www.publications.qld.gov.au/dataset/rural-and-remote-health-service-planning/resource/0d627e3a-1a38-443a-80e5-6b60fd837b8f

- The organisational culture is positive. There is an opportunity to expand the network of clinicians to include Hughenden and Richmond to a greater extent. There is also an opportunity to formalise relationships with private GPs and Allied Health providing services in the community.
- Referral services are available but there does not seem to be a good use of telehealth and communication with visiting allied health is limited. There are limited specialist outreach services.
- There is good autonomy within the scope of practice for work in Charters Towers. There is a potential to better utilise the advances skills of the rural generalist workforce in the hospital and private practice.
- There are limited planned student and intern rotations although there have been at times in the past. There is potential to enhance the training opportunities in Charters Towers to include some sessions and mentorship for clinicians in Richmond and Hughenden and when appropriate private GPs and allied health.

The service workforce plans must also consider managing services at all stages of development and cater to changing the workforce model as services develop.

Crisis

There is currently no imminent crisis risk in Charter Towers for the Hospital. There is a significant workforce crisis in General Practice which is a service and safety risk for Aged Care, particularly the Eventide Aged Care Facility managed by THHS. There is an option to plan for the development of General Practice Services in partnership with the local General Practices or as part of a stand-alone General Practice.

The potential is for Charters Towers to develop a workforce model that covers internal rostering and relieves in Richmond and Hughenden for emergency leave and as part of Registrar training programs.

Investment

The next phase of establishing a strong workforce requires financial investment and investment in training pathways across the Western Corridor. This stage would establish a robust aged care management support service through the establishment of a Junior House Officer position in Charters Towers as part of an internal medicine rural rotation. This position would work in the Aged Care facilities in Charters Towers (Eventide and Dalrymple Villa) to support the delivery of Geriatrician and GP services. The junior position could also be rostered to work in General Practice and Hospital shifts. The position would be an ideal training position as part of a rural rotation.

There is also a need to build capacity in the General Practice workforce. This can be done through formalising the current relationships with Gold City Medical and the shared workforce arrangements. There is also the opportunity to establish an additional General Practice which

would be staffed by SMO's currently working in Charters Towers and also provide opportunity to attract other registrars and Medical Officers to work in Charters Towers and also complete their vocational registration.

- Effective continuity of care is in place with each patient able to see the Medical Officer of their choice regularly. There is good communication and follow up between Charters Towers Hospital and the General Practices. Numbers of Category 4 and 5 presentations to Charters Towers Emergency Department is reduced.
- Establish a training mentor support model within Charters Towers hospital involving Eventide Aged Care and the local General practices, for a Junior Doctor rotation. Formalise a training model for GP registrars / rural generalists within Charters Towers Hospital, General Practice and Richmond and Hughenden.
- Commence Planning to establish opportunities to provide a full scope of practice rural generalist service in Charters Towers. This should cover full low risk obstetrics with birthing available[8], surgical services, mental health, physician, and paediatric services as a minimum.
- Establish an introduction to the community program with the Charters Towers Shire Council.
- Allocate accommodation within the currently available accommodation
- Review the current infrastructure and commence a redevelopment plan to source funding for renovations or a fit for purpose building to provide a full scope of rural generalist and teaching services in Charters Towers.
- Formalise the partnership with Gold City Medical to quantify the current arrangements for training places and the options for placements of SMO Rural Generalists to ensure clinical governance, medical insurance and financial arrangements are well documented.
- Develop a business case for the development of an additional General Practice working collaboratively with Charters Towers Hospital to provide access to bulk billed GP services and also to provide GP services to Eventide residents who do not currently have a nominated GP.
- Investigate and develop business cases to support the provision of integrated Allied Health services with the introduction of Right of Private Practice through Option A or part- time appointments or developing a shared workforce with General practice and non-government organisations.
- Develop telehealth clinics in conjunction with the Townsville University Hospital for all specialty services. Include agreements with each specialty to provide a minimum of two face to face clinics each year, combined with an education opportunity for the local clinical staff (private, public, medical, nursing and allied health).
- Develop the capacity of the RIPERN nursing workforce across the Western Corridor and the role of the RIPERN nurse within the emergency department and outpatient clinics operating in Charters Towers,

[8] Rural Maternity Taskforce Report, June 2019

- Begin work on the Health Plan for Charters Towers Shire, this plan should be an integrated plan to cover all health services and all available funding sources for health services in rural and remote communities.

Stabilise

Stabilising the workforce involves building the recruitment and retention incentives into each position within the Medical Workforce and ensuring there are local options to develop skills and improved remuneration.

- Effective multi-disciplinary care is in place with the Medical Officers, Specialists and Hospital staff working with the patients to access the care required as close to home as possible.
- Roles are established for Allied Health providers working in public and private roles in the community and providing outreach services.
- The RIPERN nurse positions are established, and a community of practice established for RIPERN trained nurses.
- Each Medical Officer has a professional development plan in place, a nominated mentor and is actively undertaking a training pathway for vocational registration or further developing their skills as a rural generalist or supervisor.
- The registrars and Junior Medical staff are supported to be active members of the community and are encouraged to take on local leadership roles to support the development of health services within the Shire, the hospital and the General Practices.
- Each of the private practices are viable businesses, with skilled staff, fully accredited and well equipped. Including an additional 4 GP positions covering registrar and vocationally registered GPs.
- The practices have developed some early intervention and chronic disease programs led by the registrars. Patient numbers and services available in the General Practices have increased. Emergency department presentations for category 4 and 5 and avoidable admissions have reduced.
- Telehealth clinics are available within the General practice for all specialties from the Townsville University hospital and from other locations where patients are receiving specialist care.
- Outreach specialist clinics are held for at least 6 specialties at least twice a year with education sessions for local medical, nursing, and allied health staff (both public and private).
- Infrastructure plans have been approved for construction of a purpose-built hospital to support the delivery of full scope of practice services. Increase access to services locally for obstetrics, surgery, medical, mental health, and paediatrics. Services have been designed to meet the needs of the community.
- The Health Plan for Charters Towers Shire is complete, and a steering group is in place to oversee the implementation of the plan locally. One of the Medical Officers and a delegate for Eventide Nursing home are members of the group and may take on the role of chairing the group.

Excellence

It is important to have a shared vision or target for how the health services should develop in each community. This is achieved through the development of the Health Plan for Charters Towers Shire as a hub site for the Western Corridor communities or Hughenden and Richmond. The following dot points reflect some of the probable ideals to be included in the plan.

- All patients with Chronic or Complex care needs have a documented care plan and know the team of clinicians supporting their path to recovery or palliative care within their community or ideally their home. Regular opportunities are available for case conferencing for complex patients.
- Professional development plans are in place and Medical Officers and other clinicians. Student, intern, and registrar placements are supported with the Charter Towers General Practices, Charters Towers Hospital, Eventide Residential Aged Care Facility, Pharmacies, QAS and local community organisations. An outreach clinic opportunity is provided for each student, intern or registrar to work in either Hughenden or Richmond.
- The private General Practice workforce has expanded and continues to expand services to the community.
- Students and registrars are supported to participated in local health service projects and local leadership groups as part of their placements.
- Relief staff from Charters Towers can cover annual leave, or emergency leave internally. Rosters reflect relief positions and staff are confident in their ability to provide relief cover in Richmond and Hughenden.
- Registrars with special interest regularly provide outreach clinics such as mental health, women's health, paediatrics, and surgical services. Rural Generalists work with specialist providers in Townsville University Hospital to provide support to patients in their advanced skills area between telehealth services and on early discharge from Townsville.
- Telehealth services are a normal service model for most specialist services.
- There is at least one specialist outreach clinic held each month in Charters Towers including the Geriatric Outreach services and services from Townsville University Hospital. Education sessions are a normal part of the outreach support services. Charters Towers Rural Generalist are active in organising, participating in and following up outreach clinics.
- Outreach GP clinics are provided monthly to the smaller communities surrounding Charters Towers and patients are supported by telehealth contacts between outreach visits.
- Meetings are held bi-monthly to review the Health Plan for Charters Towers and develop plans for further improvements and support for responding to identified health needs or gaps in services.

Financial Considerations

The Medical Workforce costs in Richmond and Hughenden have been increasing progressively over the last 4 years.

		Fiscal / Measures			
Account	Division QH_ALT_7	2017 Actual	2018 Actual	2019 Actual	2020 Actual
Internal Labour - Medical	Hughenden Health Service	260,396	277,866	342,699	251,311
	Richmond Health Service	224,005	255,839	297,677	283,961
External Labour - Medical	Hughenden Health Service	236,938	276,388	300,365	507,189
	Richmond Health Service	366,354	257,230	315,486	343,027

The most significant financial cost is the cost of doing nothing. Positions for solo medical officers are almost impossible to recruit to and incur significant external labour costs for relief.

There is also a significant financial risk from continuing to rely on a locum workforce to cover rostered leave, annual leave and emergency leave. Each of the permanent positions in Hughenden and Richmond have over six months accrued leave.

If either position requires any form of leave the current solution to cover leave is to recruit locums. The leave liability if filled with locums is 12 months @ $2,500 day $912,500 plus on costs (agency fees and travel). The risk is the same if either position becomes vacant. There is no internal cover internally and the recruitment process is likely to be extended. This is a significant financial risk and a quality and safety risk as there is then no clinical leadership or continuity of care for patients.

Hughenden or Richmond (or both) are at high risk of reverting to the 100% locum workforce.

Crisis Response costs will be significantly higher than current expenditure.

Immediate Crisis Hughenden

To manage a crisis in Hughenden where the incumbent is on leave can currently only be managed by a locum workforce. This will increase the Medical Workforce costs.

Medical Model	Salary Costs	Other Costs	Actual 2020	Variation
100% Locum	$912,500	$150,000	$818,500	-$244,000

Immediate Crisis Richmond

Medical Model	Salary Costs	Other Costs	Actual 2020	Variation
100% Locum	$912,500	$150,000	$626,588	-$435,912

Until the workforce model is changed there needs to be consideration given to funding a staged recruitment to a permanent sustainable, self-relieving workforce. This may be a

permanent locum and a Medical officer and then two Senior Medical Officer positions or Senior Medical Officer and Registrar.

The clinical experience will determine the annual Salary for the Medical Officers.

$124,991 – PHO (Lvl 7)
$131,571 – Registrar (Lvl 9)
$159,479 - Snr Registrar (Non Fellow SMO – Lvl 13)
$184,196 – SMO (Fellow with a recognised AS – Lvl 18)

The senior Medical Officers are also entitled to the following allowances
$20,000 – Professional Development Leave and Supplement
$21,000 – Motor Vehicle Allowance

Inaccessibility Allowance
$41,400 - Richmond & Hughenden – identical values

Locality Allowance:
$159.20 – Richmond per fortnight ($4,139.20/Annum)
$131.40 – Hughenden per fortnight ($3,416.40/Annum)

SMO Attraction & Retention Incentive Allowance (old Option A)
40% of Base Salaries and Wages

Hughenden Investment Workforce

This establishes two full time positions with the capacity to self-relieve, both as employed Medical Officers to cover if the current MSRPP takes extended leave.

Medical Model	Salary Costs	On-costs Allowances	THHS Costs	Actual 2020	Variation
Level 13 SMO	$159,479	$148,078	$307.557		
Level 18 SMO	$184,196	$164,143	$348,339		
			$655,896	$818,500	$162,604 (saved)

These amounts do not include overtime or on call allowances, which will vary depending on workload.

A similar model would be needed to build capacity in Richmond is the current MSRPP were to take extended leave or resign.

Return from Private Practice to Townsville Hospital and Health Service

In each of these communities there is a considerable amount of time required to provide primary care services currently funded through the Right of Private Practice. THHS can enter a service level agreement with the private practice and recoup an agreed amount of the Medicare billings in each of the communities. The amount is dependent on the experience, and capacity of the Medical Officer to generate Medicare billings. An estimate would be between $70,000 and $220,000 per annum for each Medical Officer.

Right of Private Practice opportunities for Medical Officers

The right of private practice allows the Medical Officers to work within a practice (their own or a managed practice) and generate income through Medicare or other fee for service funding. General Practices services are Commonwealth funded and work on a payment for services model. The more services provided the greater the income. This is a different concept to a salaried position which relies on the hours worked to generate income. To increase income on a salary, more hours are worked (overtime). In private practice the more efficient the services, the higher the income. The table below illustrates the Annual income from Right of Private Practice based on days worked and income earned. A registrar will need time to build the skills to generate an income from General Practice. Most senior GPs will bill over $1800 per day if working in a well-run practice.

Table 1 Average billings and potential Medical Officer earning for days worked and averaged billings over the payment period.

Assumption - A day equates to approximately 25 consultations

Private Practice Income (calculated at 65% of receipted billings)			
Average days worked each week	Average total daily billings to the practice	Amount earned by Medical Officer per Fortnight	Annual (48 wks 10 PH) earned by the Medical Officer
1	$800	$1,040.00	$23,920.00
1	$1,000	$1,300.00	$29,900.00
1	$1,200	$1,560.00	$35,880.00
1	$1,400	$1,820.00	$41,860.00
1	$1,600	$2,080.00	$47,840.00
1	$1,800	$2,340.00	$53,820.00
1	$2,000	$2,600.00	$59,800.00
1	$2,200	$2,860.00	$65,780.00
2	$800	$2,080.00	$47,840.00
2	$1,000	$2,600.00	$59,800.00
2	$1,200	$3,120.00	$71,760.00
2	$1,400	$3,640.00	$83,720.00
2	$1,600	$4,160.00	$95,680.00
2	$1,800	$4,680.00	$107,640.00
2	$2,000	$5,200.00	$119,600.00
2	$2,200	$5,720.00	$131,560.00
3	$800	$3,120.00	$71,760.00
3	$1,000	$3,900.00	$89,700.00
3	$1,200	$4,680.00	$107,640.00
3	$1,400	$5,460.00	$125,580.00
3	$1,600	$6,240.00	$143,520.00
3	$1,800	$7,020.00	$161,460.00
3	$2,000	$7,800.00	$179,400.00
3	$2,200	$8,580.00	$197,340.00
4	$800	$4,160.00	$95,680.00
4	$1,000	$5,200.00	$119,600.00
4	$1,200	$6,240.00	$143,520.00
4	$1,400	$7,280.00	$167,440.00
4	$1,600	$8,320.00	$191,360.00
4	$1,800	$9,360.00	$215,280.00
4	$2,000	$10,400.00	$239,200.00
4	$2,200	$11,440.00	$263,120.00
5	$800	$5,200.00	$119,600.00

5	$1,000	$6,500.00	$149,500.00
5	$1,200	$7,800.00	$179,400.00
5	$1,400	$9,100.00	$209,300.00
5	$1,600	$10,400.00	$239,200.00
5	$1,800	$11,700.00	$269,100.00
5	$2,000	$13,000.00	$299,000.00
5	$2,200	$14,300.00	$328,900.00
5.5	$800	$5,720.00	$131,560.00
5.5	$1,000	$7,150.00	$164,450.00
5.5	$1,200	$8,580.00	$197,340.00
5.5	$1,400	$10,010.00	$230,230.00
5.5	$1,600	$11,440.00	$263,120.00
5.5	$1,800	$12,870.00	$296,010.00
5.5	$2,000	$14,300.00	$328,900.00
5.5	$2,200	$15,730.00	$361,790.00

The table shows that it does not take a lot of days for the Medical Officer with Right of Private Practice to earn more than a SMO salary. In some cases, Medical Officers will earn the equivalent or more in their private practice roles. Most registrars can earn above their salary by their second year. Most experienced GPs will earn more through right of private practice and feel remunerated for additional effort and hours work in General Practice. The priority must still be to cover the inpatient and emergency presentations and provide on call cover as required. (On call for 20 days straight is not attractive and is often unsafe, so a shared call roster with at least one other being first on call is much more attractive).

Working with right of private practice also offers a second income via an ABN and contract directly to the General Practice which can be an advantage to the Medical Officer who wishes to establish businesses or other assets offset against their taxable income. The opportunity to own and manage a well-run private practice can also be a retention incentive for the Medical Superintendent. The Medical Officer should be vocationally registered and committed to a minimum of 5 years in the community to undertake full ownership of the private practice. There is a financial return in owning the practice but there is also the opportunity to provide Medical Services to the community in a way that the Medical Officer controls and invest in for patients, themselves, staff and the broader community. It is often the autonomy rather than the financial incentives which attract and retain senior medical staff to right of private practice positions.

The table below shows the Annual Salary for Right of Private Practice positions.

14.8 Minimum salary levels - medical practitioners with private practice

The minimum salary levels payable to medical practitioners with private practice covered by this Award are prescribed in the table below:

Classification	Classification Level	Award Rate[1] Per Fortnight $[2]	Annual Salary[3] $[2]
Medical officer with private practice	MOPP 1-1	5,074	132,376
	MOPP 1-2	5,228	136,393
	MOPP 1-3	5,376	140,254
Medical superintendent with private practice	MSPP 1-1	5,074	132,376
	MSPP 1-2	5,228	136,393
	MSPP 1-3	5,376	140,254
	MSPP 1-4	5,531	144,298
Senior medical superintendent with private practice	MSPP 2-1	5,684	148,290
	MSPP 2-2	5,856	152,777

Notes:

[1] Includes the arbitrated wage adjustment payable under the 1 September 2018 Declaration of General Ruling.

[2] Rounded to the nearest dollar.

[3] Annual salaries (fortnightly rate x 26.089) are for reference purposes only.

The Medical Officers with Right of Private Practice are also entitled to the following allowances
$20,000 – Professional Development Leave and Supplement
$21,000 – Motor Vehicle Allowance

Inaccessibility Allowance
$41,400 - Richmond & Hughenden – identical values

Locality Allowance:
$159.20 – Richmond per fortnight ($4,139.20/Annum)
$131.40 – Hughenden per fortnight ($3,416.40/Annum)

In order to develop sustainable medical positions, the option for right of private practice should be available to Medical staff working in Hughenden and Richmond. These positions offer significant retention incentives and may also be a recruitment incentive.

Sustainable Medical Services in Hughenden

The table below compares the THHS salary costs for two full time right of private practice positions. These amounts are capped as there is no overtime or additional payments such as on-call allowances.

Both would need emergency department experience. Ideally one of the positions would have vocational registration. If no supervision was available there are remote vocational training

options for registrars through the Remote Vocational Training Scheme (RVTS). (Salary figures corrected)

Medical Model	Salary Costs	Allowances	THHS Costs	Actual 2020	Variation
MORPP	$159,479	$84,169	$243,675		
MSRPP	$169,424	$86,745	$256,169		
			$499,844	$818,500	$318,656 (saving)

Sustainable Medical Workforce for Richmond

The current Medical superintendent in Richmond is very settled and is due to attain vocational registration this year. The workload at the practice will need to be considered in this situation and may suit a more junior registrar on salary.

Medical Model	Salary Costs	Allowances		Actual 2020	Variation
MORPP	$159,479	$84,892	$244,371		
MSRPP	$179,445	$90,000	$269,445		
			$513,816	$626,588	$112,772 (saving)

The second position for Richmond may also be available to support leave cover in Hughenden and support outreach services to Richmond.

Managing Financial Risk

The costs for the Salaried Medical Officer and Right of Private Practice position are comparable except for the unknown amounts for overtime incurred through call ins for each position. Both options are lower than the current expenditure. Recruiting the two positions gives savings in both communities compared to current actual expenditure.

The most significant benefit is the ability to recruit to these positions as they are no longer solo positions. The capacity to manage the potential financial risk if either position is vacant or there is a need for emergent leave is in place as there is the capacity to self-relieve and avoid an extended locum expense.

Conclusion

The introduction of alternate Medical Models to the communities of Richmond and Hughenden will give sustainability, cost efficient services, continuity of care for the community and the clinical leadership to develop strong local health services. There is capacity to introduce the second Medical Officer positions in both communities to avoid a potential workforce crisis and reduce the Medical workforce expenditure.

The Unlock the North report has identified THHS committed expenditure in the rebuilding of the Charters Towers Hospital and works on Eventide Residential Aged Care. In order for these projects to succeed there needs to be a planned development of the health services provided in Charters Towers to fully utilise the workforce and build capacity in General Practice. Some ideas are contained in this report with the links to the communities of Hughenden and Richmond. In order to make the services of the Western Corridor fully sustainable a network with and education and support pipeline from Charters Towers needs to be established.

The change to the medical workforce models should be the first step in developing the local health services and integrated local health plans for each community within the Western Corridor. Each community has the capacity to develop a shared vision for excellent health services with investment from local, state and federal governments as well as local businesses and fee for service. Townsville Hospital and Health Services can participate in the development of local plans and support the provision of hospital, emergency and specialist services as well as allied health and public health services.

Appendices

Glossary of Terms

RHMS – Rural Health Management Services

SEIFA – Socio-economic indexes for areas

LGA – Local Government Area

MORPP – Medical Officer with Right of Private Practice

MSRPP - Medical Superintendents with Right of Private Practice

SMO – Senior Medical Officer

RACGP - The Royal Australian College of General Practice

THHS – Townsville Hospital and Health Service

QAS – Queensland Ambulance Service

RVTS – Remote Vocational Training Scheme

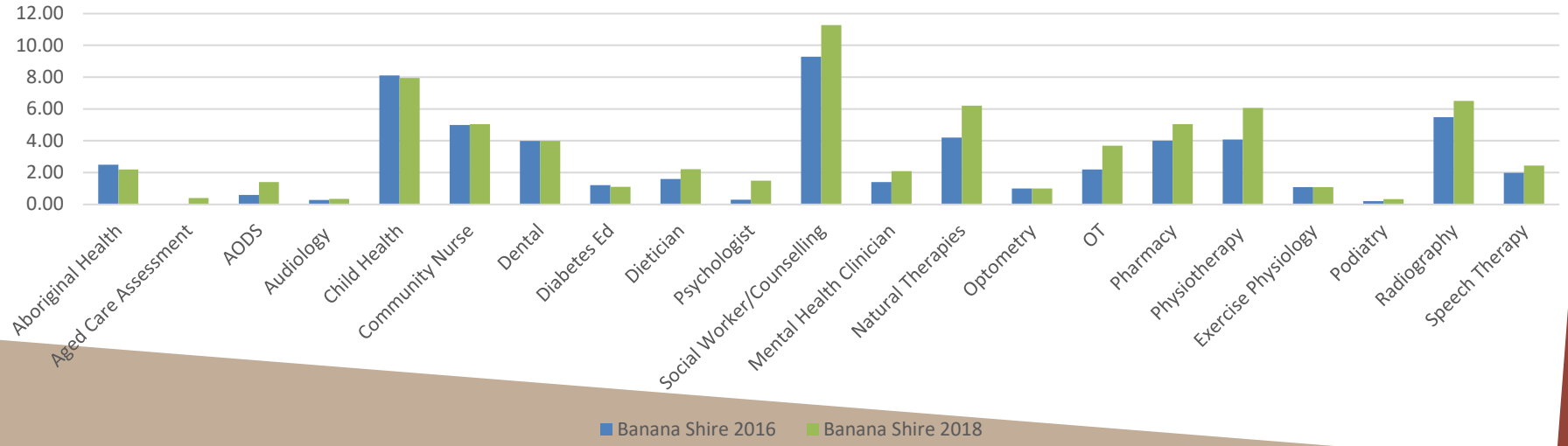
Central Queensland RURAL HEALTH

Integrated Allied Health Services

A new approach to building sustainable services in rural and remote Queensland

• Collaborative planning	• Community Leadership
• Allied Health Assistants	• Shared Infrastructure
• Telehealth	• Shared positions
• Public / Private partnerships	• Local mentorship and supervision

Total FTE - 58.44 to 73.6 (No increase in recurrent HHS funding)



Integrated allied health services in rural communities

Final Evaluation Report
March 2019

Proudly supported by Queensland Health's Clinical Excellence Queensland
Queensland Government

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Executive Summary

The problem

Access to allied health services for communities in the Banana Shire is constrained due to fragmented funding mechanisms and poor staff retention. There is a need for a well-planned, integrated and sustainable service model that can provide better outcomes for both patients and providers.

The innovation

The innovation involved a coordinated approach to allied health service planning to meet the needs of communities across the region while capitalising on the breadth of available funding. This involved: an environmental scan that identified areas of need and informed strategies to address these; a focus on improving the integration and appropriateness of funding sources; the development of Allied Health Assistant roles; increased access to telehealth services; and the sharing of infrastructure.

Key findings

Qualitative data suggest significant progress was made in developing flexible service models that better utilise the human-resources and funding available for Allied Health services in the Banana region. Full time equivalent (FTE) allied health positions increased by 23% across the region, with improved access to services observed in five out of the six individual communities. Five out of the 12 new FTE positions were created and funded from outside the Central Queensland Hospital and Health Service (CQHHS). The remaining seven positions fell within the approved CQHHS budget and reflected lower staff vacancy rates. The proportion of outpatient occasions of service provided by CQHHS clinicians fell by 25% which translated into a Queensland Health saving of $23,000 between 2016-17 and 2017-18.

Recommendations

The project was successful in increasing access to allied health services in the Banana Shire, and in capitalising on non-CQHHS funding sources. As such it represents good value for money from a Queensland Health perspective. However, sustaining these improvements and implementing further service changes will require ongoing work. An investment in a core allied health planning and coordination role, either within the CQHHS or Primary Health Network (PHN), would capitalise on existing community goodwill and continue to strengthen the collaborative partnerships that have developed over the course of the project. Expansion of the role of Allied Health Assistants also has potential to improve value and cost-effectiveness of existing services; this warrants more investigation. Aspects of the project may be successfully replicated in other parts of rural Queensland facing similar constraints.

Introduction

Overview of problem and implications for health service delivery

Allied health services in Queensland are funded from multiple sources. The state government allocates funding for inpatient and outpatient allied health services to local Hospital and Health Services (HHS). The Commonwealth (federal) government funds services via the Medicare Benefits Schedule and Primary Health Networks (PHNs). In addition, there are a number of programs designed to increase access to services for specific patient or population groups, with funding provided from sources including: the Department of Veterans Affairs (DVA); Work Cover; Department of Education; Department of Families, Housing, Community Services and Indigenous Affairs; National Disability Insurance Scheme; Private Health Funds; and fee for service.

The Banana Shire region of Central Queensland has a population of approximately 15,800 spread over six rural communities spanning 28,000 square kilometres. Allied health services in this region have typically developed in isolation with a single funder in response to a single patient group. The viability and sustainability of these services has been limited by the population of the communities and the constraints of single funding programs. Establishing demand for full time staff within a local community for each funding option is often not feasible. Currently, the Central Queensland Hospital and Health Service (CQHHS) funds the majority of allied health services in the Banana Shire region. Despite the potential funding available via Commonwealth sources or fee for service, structural barriers have resulted in very limited access to these. This has in turn impacted on access to services for residents in these communities.

The complex nature of allied health service funding in the region also limits the flexibility of allied health practitioners. For most practitioners, transitioning to part time roles or private practice is not a viable option. This contributes to issues with staff retention and further contributes to the issue of access for residents.

In 2015 a local planning group raised concerns over residents' access to allied health services, and the long-term sustainability of these services. There was a recognised need for better planned and coordinated health services that were able to access the breadth of available funding.

The innovation

The Integrated Allied Health Services in Rural Communities project (the project) aimed to improve access to allied health services for residents of the Banana Shire through an innovative approach to service planning and coordination. A multi-pronged strategy was adopted which encompassed the following core components:

- A **coordinated allied health planning** approach that accounted for the needs of communities across the region with the aim of maximising access to services while minimising unnecessary costs;
- An **integrated funding model** that allowed for services to be funded across multiple channels, rather than operating within funding siloes. This included the ability for public and private services to be provided through a single clinician.
- The development of the role of **Allied Health Assistants**;
- Increased access to **Telehealth services**;
- **Shared infrastructure**, including equipment and workspaces, across disciplines and providers

This project was the first of its kind in Queensland. However, many regional Queensland locations are facing similar constraints in allied health service provision and there is the potential for this approach, if effective, to be transferable.

Target population

The target population were all residents accessing allied health services and living in the Banana Shire region of Central Queensland, encompassing approximately 15,800 residents across the following six communities:

- Biloela (population 9,900)
- Moura (population 3,300)
- Taroom (population 1,025)
- Theodore (population 675)
- Baralaba (population 550)
- Wowan (population 375)

Evaluation

The Integrated Allied Health Services in Rural Communities evaluation aimed to:

1) Assess both the outcome and implementation aspects of the project;
2) Provide useful information for decision making regarding ongoing allied health service provision for Queensland Health, as well as other relevant stakeholders;
3) Provide an evidence base for the further adoption of the project approach that may then be applied in other regional locations.

Scope and Limitations

The objectives of the evaluation were to:

1) Quantify the outcomes of the project in terms of improved access to allied health services as well as patient and workforce satisfaction;
2) Identify factors that supported and barriers that impeded the stated outcomes of the project;
3) Describe an optimal process for the implementation and sustainability of such a project, should it be replicated in other jurisdictions.

Due to a large number of proposed evaluation outcomes and systemic problems with collecting data, data was not able to be captured on all of the anticipated outcomes. The barriers to data collection are explained further in the Implementation Evaluation section of this report and the associated limitations on data analysis are explained in the Outcome Evaluation section.

Data sources

Data to evaluate each aim were collected from multiple sources by the project and evaluation teams. Table 1 summarises how various data sources informed the evaluation outcomes. A description of each data source is provided in Appendix 3.

Table 1: Sources of data used in the evaluation report

Outcome	Data sources
Access	• Environmental scan • Service audit
Community satisfaction and awareness	• Community satisfaction survey
Value for money	• AusHSI costing tool • Environmental scan • Occasions of service data • Infrastructure sharing register
Implementation	• Interviews with project team members and key stakeholders • CFIR pre/post survey • Issues log

Implementation Evaluation

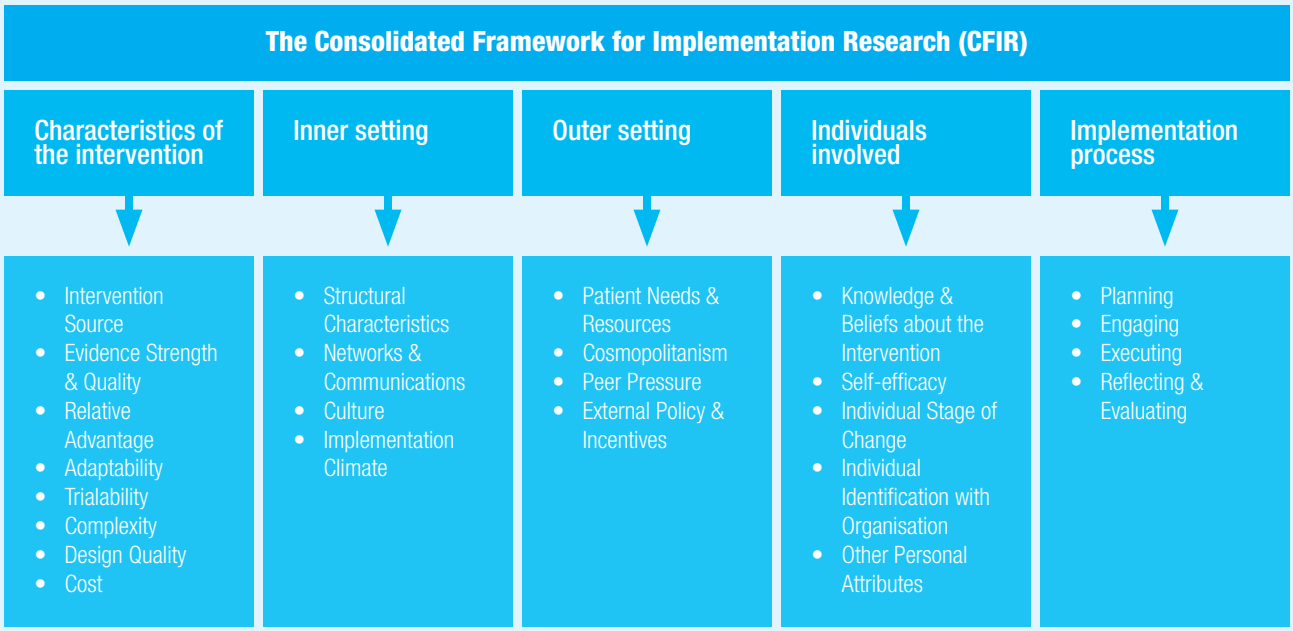
In evaluating the implementation of this project, we were interested to find out which factors facilitated or hindered the planning and roll-out of proposed service models, and if any of these factors significantly impacted on the overall success of the outcomes to date.

Implementation Framework

Evaluation of the project was based on the Consolidated Framework for Implementation Research (CFIR), a widely cited and rigorously developed determinants framework for implementation[1] (Figure 1). The CFIR framework was used to systematically and comprehensively frame the results by applying key constructs considered most influential for the project implementation in terms of valence (positive or negative influence on implementation) and strength (strong or weak influence on implementation).

Common themes that emerged throughout the evaluation were organised into the five CFIR domains: (1) intervention characteristics, (2) outer setting, (3) inner setting, (4) characteristics of individuals, and (5) process of implementation. Tables outlining all of the identified facilitators and barriers to implementation are provided in Appendix 2. The main findings are summarised here. Semi-structured interviews were guided by several key questions, a complete list of which are provided in Appendix 1. Findings are presented according to these question headings.

Figure 1: The Consolidated Framework for Implementation Research: Domains and constructs.



How was the project designed and implemented?

Project Staff and Working Groups

A project team was appointed to run the project, including a clinical lead, project manager and administrative officers. Three working groups were established:

1. Steering Committee, made up of high level health service directors to provide governance and decision-making oversight.
2. Allied Health Reference Group, comprising numerous allied health practitioners across the Banana region who met for the purpose of service planning.
3. Community Group, assembled from community members who represented the interests of the residents across the region at community forums.

Formal Planning Exercises and Partnership Agreements

The project team conducted numerous detailed planning exercises including an environmental scan, service maps, patient audits and patient satisfaction surveys. These, in conjunction with the feedback regularly obtained from working group meetings, informed the strategic planning of allied health services needed in the region. New service agreements were drafted to enable collaborative management of allied health positions between the HHS and other private sector organisations. Some service changes were implemented.

Allied Health Assistant

The project also recognised an opportunity to train up local residents in the role of an Allied Health Assistant (AHA). Candidates were interviewed and a scholarship set up to support the training and mentoring of these AHAs who worked under the direction of allied health professionals.

Implementation Facilitators

What worked? What were the facilitators of implementation?

Several factors emerged as working well and facilitating implementation, including the effort spent understanding the community needs and current state of service provision, and then developing opportunities for future service provision. A detailed summary of these facilitating factors is presented in Appendix 2. The key implementation facilitators with supporting qualitative data are summarised below.

Leadership of Project Staff

The human capital associated with the project leadership team significantly contributed to implementation success. Project leaders possessed strategic insight into the specific context, current systemic barriers to integrated allied healthcare, and steps required to solve issues. This is likely due to knowledge gained from years of prior experience in health services management in the Banana region. In addition, the working relationship built between the project and clinical leads was productive, as was the trusted connections that each of these individuals brought to the project. The strength of these personal relationships facilitated new stronger partnerships between the HHS and other stakeholders.

> *"I think it's the relationship that I have with <Project Manager> as well because I think that she's got ties into political realms that I don't have ties into…as someone who lives in the Banana region and has that buy-in and history, who's respected in the region by a lot of her peers and cohorts - that was extremely important. It just wouldn't have had the clout or the success without that." (Clinical Lead)*

> *"<Project Manager> has a much broader network amongst the organisations. And she's really skilled in that, she has a really good understanding of the communities and the health needs, and she has quite a big vision, lots of qualities that I really admire in her vision and her ability to see a possible solution, in her ability to put the people in the room who need to be there and give them a context and get them talking." (Stakeholder)*

Consideration of Resident and Provider Needs

The quality of engagement with health services, allied health providers, and residents in the local context was a major strength of the project. The project engaged with many stakeholders through the development of the working groups. These groups enabled stable feedback mechanisms and a thorough exploration of needs, barriers and opportunities in planning future service changes. In particular the working group of allied health providers has been a major success, with the group continuing to meeting beyond the end of the project period. This implementation strength is illustrated in the following quote:

> *"The three levels (of the working groups) essentially were the drivers for a feed-up and a feed-down mechanism in terms of communication so that we could start to get better collaboration amongst all the stakeholders to understand what the current status of allied health was in the community as well as to then address the issues that were being known to various parties within that." (Clinical Lead)*

Strategic Planning

In addition to the information gleaned from working groups, a variety of other planning tasks were completed, including: a detailed environmental scan, service-mapping exercises, patient audit tools, and patient satisfaction surveys. These enabled a careful analysis of the constraints of current service models and funding mechanisms, the identification of gaps, and a feasibility assessment of new service agreements. The opportunities of various potential changes were well-considered and well-planned before attempting action to implement change.

> *"We started to look at areas that needed addressing, the burning gaps were the first priority - about recruiting and funding those services. We looked at understanding allied health patient flows and where the money flowed. So we did a mapping exercise of all of the funds available for allied health services - a lot of the time…the allied health community and referrers don't really know what funding's out there. Then we looked at some of the patient flows around aged care patients and also paediatric patients and what service providers were available for them and how those referral pathways worked. We also looked at physical resources and the ability to use hospital allied health area and private practice areas." (Project Manager)*

Allied Health Assistants

The project successfully demonstrated the potential of the AHA role to extend the work of qualified allied health providers in order to serve more people across a broader geographical area and make better use of resources. Barriers faced in providing mentorship and support for AHAs-in-training are mentioned in the following section. However, stakeholders could see the value in the expansion of AHA roles and in continuing to provide support for local people training to become Allied Health Assistants. Continuation of this aspect of the project is entirely dependent on additional funding or another type of scholarship.

> *"I think there has been some good work done in terms of being able to get flexibility within the HHS to use available funding - for example we might not have been able to employ a full-time occupational therapist, they may have only wanted to work 0.7, but there was funding there for a full-time and the other 0.3 can be used for additional Allied Health Assistant hours." (Clinical Lead)*

> *"The training aspect was really valuable… Support for people who perhaps are really good workers, who are passionate about what they do, who are really good at doing it on the ground and want to upskill, but perhaps who don't have a particularly strong academic background, support throughout that study is vital." (Stakeholder)*

Implementation Barriers

What didn't work? What were the barriers to implementation?

The long-term aim of the project is to implement flexible staffing models that enable the co-appointment of allied health positions by both government and non-government health services in the Banana region. Although considerable progress was made towards this aim, particularly in forming collaborative service agreements, ultimately, the aim has not been achieved to date. Several structural, contextual and cultural barriers to the achievement of a flexible workforce model were identified. Some may be difficult to resolve, and are flagged as potential barriers to future implementation efforts.

Staff Recruitment and Retention

Difficulties with staff recruitment and retention is an underlying contextual reality in the region. Finding local clinical staff willing to drive the long distances often required is not always easy and turnover is high. The addition of Allied Health Assistants to the available workforce is attempting to address this barrier.

The project team itself experienced unexpected turnover of several project officers during the project period, the exact reasons for which are unclear. This is likely to have caused additional work burden for other project staff and temporary losses of momentum. The impact was felt especially by an Allied Health Assistant-in-training who lacked support due to the staff changeovers.

The HHS is the main Allied Health provider by default in the Banana region. The HHS typically offers benefits and remuneration, e.g. job security, paid maternity leave, that may not be available in private practice. Some allied health practitioners employed by the HHS may be reluctant to accept cross-sector positions despite demonstrated potential to better meet the needs of the community.

> *"It's challenging from a contractual point of view because you've got different rates of pay that sit between the two services. You've also got tax implications for individuals. Or from a private sector, you've got significant risk which may be there. For example, there might be a base salary that they might have to end up paying someone but then that's got to incorporate potential travel time and potential fail to attends. And the other part of that is that the HHS offer a lot more conditions that possibly someone who'd be in a self-employed capacity would probably not get the benefits thereof should they choose to reduce their FTE in the HHS to then be contracted out." (Clinical Lead)*

Organisational Bureaucracy & Cultural Shift

The organisational culture, policies and bureaucracy designed to maintain the status quo, particularly in the CQHHS are recognised barriers to change. Organisational cultural shift of 'the way things have always been done' takes time. Likewise, it takes time for NGOs to learn to trust and partner with the HHS. Private sector organisations may be reluctant to commit to shared appointments if it means the acceptance of considerably higher risk of lost revenue than regular models.

Resolving these structural barriers is inherently difficult. Nevertheless, devising strategies to overcome them is precisely what the project is attempting to achieve. This was being achieved through developing business plans and service level agreements that were acceptable to multiple parties. The following quote is illustrative:

> *"We didn't ever get to a secondment model out of Queensland Health. We worked out the process for doing that, and we worked out the business plans for doing that… we've got a service level agreement that we could have done it, but…there's a risk aversion to any change…a fear that if you let a service go there'll be an expectation that Queensland Health will maintain that service and then what if you can't recruit, and if you decrease your FTE then you'll never get them back and there's a lot of resistance to change… the cultural shift takes time." (Project Manager)*

Access to Data

One factor which may contribute to the organisational unwillingness (especially of the HHS) to proceed with co-appointments with external service providers was the systemic barriers to meaningful data collection and analysis across disparate organisations. Proposed service changes, especially those that would result in FTE reductions that were hard won in the first place, are difficult to justify to HHS executives without convincing evidence of need. In many cases, there was no easy way to 'compare apples with apples' as data collected across various services differed based on the objective of each service and the software used. Overcoming this implementation barrier requires careful consideration of systemic constraints on available data, and sufficient funding for administrative support to undertake research.

> *"The data collection elements became real barriers. To try to get data across sectors that were different, different methods of data collection occurring…and trying to make the data marry, making that data worthwhile, in terms of the occasions of service and the likes of that was where it became quite problematic. Sometimes we had a grandiose idea about what we wanted to prove, but the reality of what system's set up behind it to get that data, it just wasn't there. Certainly it wasn't there to go across all the sectors that we needed to go across to prove the points anyway. Everyone's system was delivering a little bit different objective for their own purposes and not talking the same language." (Clinical Lead)*

An overview of all factors identified as barriers to implementation are provided in the Appendix 2.

Outcome Evaluation

A series of evaluation outcomes were identified at the outset of the project (Table 2). Due to the large number of proposed outcomes, and limited project resources, it was not feasible to capture all necessary data. It was determined that data on patient travel costs and allied health provider satisfaction were of lower priority and these outcomes were subsequently dropped from the evaluation.

Table 2: Summary of evaluation outcomes

Outcome	Nature of evidence	Strength of evidence
Improved access to allied health services	Supports	Allied health FTE in the region increased by 23%
Improved distribution of funding sources	Supports	Five FTE positions were created and funded from non-CQHHS sources
Value for money	Supports	The increase in allied health FTE was created without an increase in the approved level of CQHHS funding. A saving of $23,000 on outpatient occasions of service reimbursements was recorded for Queensland Health
Did patient travel and productivity costs reduce?	More evidence required	Data was not collected
Improved community satisfaction and awareness of services improved	More evidence required	Results were mixed. Small sample sizes limit the generalisability of these findings
Allied health workforce satisfaction	More evidence required	Data was not collected

FTE = full time equivalent; CQHHS = Central Queensland Hospital and Health Service

Access: Has the innovation resulted in …improved access to allied health services for residents?

Allied Health Provider Full Time Equivalent (FTE) positions

There is evidence that the project has had a positive impact on improving access to services. The environmental scan revealed that the number of allied health FTEs in the region increased from 58.4 at the commencement of the project in 2016, to 71.8 at project end in 2018 (Table 3). This represents an overall increase of 23% within 2 years. The greatest improvement was seen in Taroom with a 40% increase in FTE.

Table 3: Allied Health FTE changes: pre-project versus post-project

	FTE		FTE per 1000 population		Percentage change
Community	Pre	Post	Pre	Post	
Biloela	37.5	48.8	3.8	4.9	30%
Moura	6.2	7.2	1.9	2.2	16%
Taroom	3.4	4.7	3.3	4.6	40%
Theodore	8.9	8.5	13.2	12.5	-5%
Baralaba	2.1	2.2	3.8	4.0	5%
Wowan	0.4	0.4	1.1	1.1	3%
TOTAL	58.4	71.8	3.7	4.5	23%

FTE = full time equivalent

A full summary of the FTE changes identified in the allied health environmental are included in Appendix 4. Key changes to services within each community include:

Biloela: Mental Health services have increased with Psychologists visiting weekly and more staff employed within Counselling/Social Work and Mental Health fields.

Moura: Moura now receives weekly visiting services for Dietetics and Alcohol and Other Drugs Service, and monthly visits from a Diabetes Educator. Visits from Physiotherapy have increased from fortnightly to weekly.

Taroom: Taroom services have increased now receiving fortnightly visits for Dietetics and monthly Counselling services through Darling Downs HHS.

Theodore: Theodore now receive weekly visits from Alcohol and Other Drugs Service where there was no service in previous years.

Baralaba: There is still a lack of allied health services available to Baralaba with only minor increase of services in areas of Dietetics and Pharmaceutical.

Wowan: There has been no increase of services to date within Wowan.

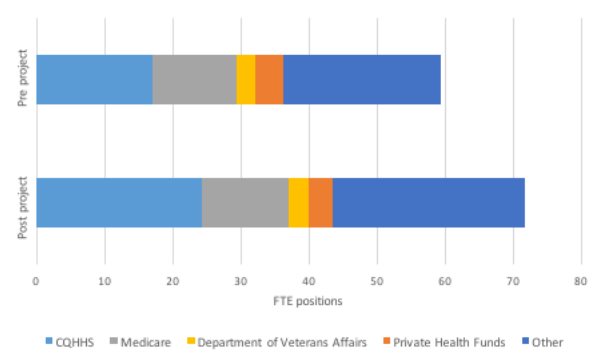
Allied health appointment waiting times

The allied health service audit provides further evidence to support increased access to services. The number of appointments with a waiting time of two or more weeks reduced from 51% at baseline to 33% at project end (Appendix 5, Table A5.2).

Did the distribution of funding sources improve?

Data was available to estimate the distribution of funding sources across FTE positions, but not across occasions of service. Figure 2 highlights the number of FTE positions funded under each source at baseline and project end. Prior to the commencement of the project, the main funding sources for allied health positions in the region were CQHHS (29%), Medicare (21%), Private Health Funds (7%) and Department of Veterans Affairs (5%). Of the 12 additional FTE positions funded between 2016 and 2018, approximately seven were funded via CQHHS. It is important to note that there was no change in approved funding for CQHHS positions; the increase in FTE for 2018 reflects higher staffing numbers due to a reduction in staff vacancies. Between 2016 and 2018, an additional five FTE positions were funded from 'other' sources. This evidence supports the effectiveness of the project in accessing a wider distribution of funding sources for allied health services.

Figure 2: Funding sources sources per Allied Health FTE positions



CQHHS = Central Queensland Hospital and Health Service

Value for money

What are the costs of implementing and sustaining the project?

The cost of implementing the project consisted almost entirely of employment costs. A core project team was responsible for establishing the project and undertaking the core activities. Team members included the Chief Executive Officer of Central Queensland Rural Health and the CQHHS Allied Health Team Leader, whose time was provided in-kind. Project officer and administrative support roles were funded as part of the project. When salary related costs were applied to the estimated number of hours each team member spent on the project, the monthly cost of implementation was estimated to be approximately $12,000.

As the activities of the project were limited to the two year funding period, there are no ongoing costs to report.

Were any other cost offsets identified?

As the purpose of this evaluation outcome was to examine value for money for Queensland Health, we have adopted a state government perspective, which encompasses the local CQHHS perspective. However, it is important to note that this does not account for the effects of any 'cost-shifting' that occurs within the broader Australian healthcare system, including any increase in services funded via other state agencies or the federal government.

CQHHS funded allied health occasions of service data for both inpatient and outpatient services are summarised in Appendix 6. While the total number of services remained consistent, there was a 25% reduction in the proportion of outpatient services. This suggests that demand for outpatient services were being adequately met from community providers funded from alternative sources. CQHHS was, in turn, able to focus their approved allied health resources on the acute care setting to deal with higher priority cases.

Queensland Health outpatient occasions of service and costing data for financial years 2016-17 and 2017-18 are summarised in Appendix 7. Due to the lower level of outpatient occasions of service in 2017-18, a saving of approximately $23,000 was made in outpatient service reimbursements.

Further cost offsets were available through the sharing of infrastructure across the region. The project team created a register of 18 premises across all six communities that were available to allied health providers. The types of premises include consult rooms, meeting rooms, conference rooms and soundproof booths. Details on the register included availability of facilities such as Wi-Fi, conference calling, videoconferencing, catering and kitchens along with the available days and relevant contact details.

Community satisfaction and awareness: Has the innovation resulted in...

… improved levels of satisfaction with allied health services?

The community survey was completed by 67 residents at baseline and 166 residents at project end. The relatively small sample sizes limit the generalisability of these results. Survey responses are summarised in Appendix 8.

Community satisfaction with access to allied health services was surprisingly high at baseline with 73% of patients agreeing that it was generally easy to access allied health services when needed. Only 14% of residents indicated they were dissatisfied with any aspect of allied health services. At project end, while fewer patients agreed that it was easy to access allied health services (56%), there were also fewer who expressed dissatisfaction (11%).

… improved awareness of services including Allied Health Assistants and telehealth?

Survey data indicated an increased level of awareness and confidence in telehealth services. The proportion of responses claiming a good understanding of what telehealth involved increased from 49% to 56%, while the proportion of patients who agreed they would be happy to receive services via allied health increased from 50% to 54%. However, survey responses did not reflect an increase in the community understanding of Allied Health Assistants.

Sustainability and scalability

The project was successful in achieving its objectives. There is evidence that this has translated to an increase in the number of available services in the Banana Shire Region with an additional five FTE positions funded from outside of the CQHHS.

> *"The research we did is there's a lot of services that are Medicare eligible that are being provided by State-funded services. What we're doing is trying to break down the walls between the funding buckets and learn how to use those funds better for a targeted service that will actually meet the needs of the community rather than the needs of the funding grant or the HHS recurrent funding, or the previous FTE." (Project Manager)*

The project's work is ongoing:

> *"The other thing that often happens is that a new clinician arrives because they're married to someone who got a job here. Suddenly you have an OT in a little town that doesn't have an existing position, but has four outreach services. So it's about how do we then plan those services to utilise the human resources that we have on the ground…It's really about regularly reviewing who's on the ground and where the gaps are and how do we work together to fill those." (Project Manager)*

Potential is there to ensure further implementation of service changes. The buy-in and willingness from a whole range of stakeholders is already there to continue the work. The Allied Health Reference Group is continuing to meet beyond the end of the project period.

However, there is no ongoing funding available to continue project activities. In order to capitalise on the collaborative partnerships that have been established and the service agreements that have already been made, administration support to facilitate the meetings, communications, and action the decisions made is required. An investment in a core allied health planning and coordination role, either within the CQHHS or PHN, would help ensure the sustainability of project outcomes. This role could also take the form of a liaison officer who promotes collaboration between sectors and organisations at the broader health service level.

If due attention is made to resolve implementation barriers discussed in this report, AusHSI believes that further important progress is likely. Resolving barriers to meaningful ongoing data collection is critical. This provides further rationale for funding of a more permanent role of health service planner in the region. There is substantial potential for similar work to be done in other parts of rural Queensland where similar gains are also likely.

> *"We've got to get enough wins on the board to convince the HHS to change…cultural change is actually the biggest shift that we still need to do…And I think actually the interest that we've had from Roma, from South West HHS, is they may well pick this up before CQ does." (Project Manager)*

Appendix 1: Semi-structured Interview Questions

Individual interviews were conducted with project stakeholders following a semi-structured list of questions. For each of the key questions, additional questions/prompts were used as required to ensure thorough data collection.

Key Question 1:
How was the project designed and implemented?

- Who developed the intervention?
- Why was the intervention implemented in your setting?
- How did you become involved in implementing the intervention?
- Can you describe how the intervention was implemented?
- Was the intervention implemented according to the implementation plan?
- Who were the key stakeholders to get on board with the intervention?
- What was your communication strategy for getting the word out about the intervention?

Key Question 2:
Was the project successful? What worked?

- Intervention characteristics?
- The process used to implement?
- Contextual issues, including local and external factors?
- Characteristics of individuals involved in the project?

Key Question 3:
What didn't work?
What would you do differently next time?

- Intervention characteristics?
- The process used to implement?
- Contextual issues, including local and external factors?
- Characteristics of individuals involved in the project?

Key Question 4:
What factors will be important for scale-up and/or sustainability?

Key Question 5:
Is the project generalisable to other settings?

Appendix 2: Implementation Facilitators and Barriers

Table A2.1. Factors facilitating implementation of the Integrated Allied Healthcare in Rural Communities project

CFIR Domains	Constructs	Summary of Findings
Intervention Characteristics	Intervention Source	The intervention had excellent buy-in from all stakeholders, particularly in the Allied Health Reference Group. These members had a sense of investment in co-designing strategies for mutual benefit. Stakeholders were convinced of the intervention's value both for service providers and the community. An inherent advantage of the intervention design is its flexibility to be continuously adapted as needs change.
	Relative Advantage	
	Adaptability	
Outer Setting	Patient Needs & Resources	Patient needs and concerns were well-considered.
	Cosmopolitanism	The project manager was already very well-connected in the region which set the project up for success.
Inner Setting	Networks and Communications	The project utilised existing networks of the project manager to gain early traction. Effort was also invested into expanding and strengthening these networks through the working groups. Regular meetings and communications between members were keys to implementation success.
	Implementation Climate - Compatibility	Open communication about the scope of practice and needs of various service organisations was crucial to ensuring intervention compatibility. The project sought to match opportunities for added services with the organisations and areas that provided the 'best fit'.
	Readiness for Implementation – (1) Leadership Engagement	The project had strong support and leadership from the project manager and clinical lead. This was a crucial factor for implementation success.
Characteristics of Individuals	Knowledge and Beliefs	The project manager was highly skilled in strategic oversight. She had a strong vision for the project and successfully engaged others to catch that vision. The clinical lead's pragmatic approach also facilitated progress. The strengths of these individuals were well-utilised to the benefit of the project.
	Self-efficacy	The Allied Health Assistant scholarship component of the project specifically resulted in improved self-efficacy of Allied Health Assistants to delivery crucial services which furthered project aims.
Process	Planning	Significant effort was well-invested in the planning phase of the project. Formalised planning processes such as environment scans, patient audit tools and service mapping exercises were used to good effect.
	Engaging	Engaging stakeholders, particularly in the Allied Health Reference Group was a key success. This group decided to continue operating even beyond the project period which demonstrates the strength of engagement.
	Engaging (1) Formally appointed implementation leaders (2) Champions	The clinical lead was well respected and held influence in the HHS. The project manager operated as a champion who was able to overcome resistance, and gain inter-organisational trust and commitment to the shared goals of the project.
	Reflecting and Evaluating	Feedback opportunities from multiple stakeholders were built into the design of the intervention especially in the planning phase. Making time and space for evaluation of service changes will be critical to ongoing implementation success.

Table A2.2. Factors hindering implementation of the Integrated Allied Healthcare in Rural Communities project

CFIR Domains	Constructs	Summary of Findings
Intervention Characteristics	Complexity	This project attempted radical change in developing a model of collaborative service provision across multiple organisations. The complexity of this challenge appeared to make progress slow but not impossible.
Outer Setting	External Policy & Incentives	Multiple layers of bureaucracy particularly with regards to funding rules and co-appointments of staff is a barrier that slows implementation and has the potential to block it altogether. Support for the intervention must be given from the top levels of Queensland Health to ensure sustainability.
Inner Setting	Structural Characteristics	Structural barriers to innovation, particularly in powerful, established organisations such as the HHS, promote resistance to change. Securing HHS staff involvement in services outside the four walls of the hospital was difficult, as was engaging practitioners to use new telehealth processes. Queensland Health's stringent data security requirements are a likely structural impediment. Historic difficulties with recruitment and retention in the Banana region is an underlying threat to implementation success. If new shared service agreements cannot offer staff the same benefits and remuneration as Queensland Health, recruitment may be even more difficult.
	Culture	A culture of maintaining the status quo was evident in some organisations. Protectiveness over organisational assets, funding and human resources is a barrier to new business models that have been developed in this project. Fear of losing FTEs and not being able to get them back was an identified barrier.
	Readiness for Implementation – Available Resources	There is some evidence to suggest that project officers had more workload than could be accomplished within the time allocated for their role. This may have contributed to staff turnover in this position. Inadequate support was given to training Allied Health Assistants and this may have reduced the overall success of this arm of the project. If this part of the project is to continue, securing the necessary funding to support it properly is crucial.

Appendix 3: Description of Data Sources

Allied Health Environment Scan: A comprehensive scan of allied health services available within the Banana Shire was completed at baseline and project end. The scan identified the total FTE allocated to each allied health profession within each community.

Allied Health Service Audit: An audit of allied health service provider appointments over a 4 week period was conducted at baseline, mid-project and project end.

Allied Health Community Satisfaction and Awareness Survey: A survey was designed to ascertain community satisfaction with access to services, as well as knowledge and confidence in Allied Health Assistant roles and telehealth service models.

Queensland Health Outpatient Occasions of Service Dataset: A dataset summarising all Queensland Health funded outpatient allied health occasions of service in the Banana Shire was obtained via request from the Statistical Services Branch.

Central Queensland HHS Occasions of Service and FTE Data: Aggregate data was obtained from CQHHS on total allied health occasions of service, as well as the approved and actual FTE expenses.

AusHSI Costing Tool: A survey designed by the Australian Centre for Health Services Innovation (AusHSI) was completed by the project team to provide an estimate of the typical monthly expenses incurred over the course of the project.

Infrastructure sharing register: An infrastructure sharing register was created by the project team to summarise the availability of allied health resources and space

CFIR pre- and post- survey: The project lead completed a survey designed to capture perceptions of selected constructs across the five CFIR domains, at both baseline and project end.

Issues log: The project team kept a record of key issues or barriers to implementation as they arose.

Interviews with Key Stakeholders: In-depth, semi-structured interviews with key stakeholders were conducted at the end of the project to explore the implementation process, including barriers and facilitators to successful implementation, and issues for ongoing sustainability.

Appendix 4: Environmental Scan Analysis

Table A4.1 Total pre- and post- allied health FTEs by profession: CQHHS versus whole of Banana Shire

Allied Health Professional	Shire 2016	CQHHS	Shire 2018	CQHHS
Aboriginal Health	2.50	1.00	2.20	1
Aged Care Assessor	0.00	0.00	0.40	0.40
Alcohol and Other Drugs Service	0.60	0.40	1.40	0.4
Audiology	0.28	0.00	0.35	0
Child Health	8.10	4.80	7.94	1.94
Community Nurse	5.00	2.00	5.04	3.04
Dental	3.99	1.00	3.99	0
Diabetes Educator	1.20	0.00	1.10	0
Dietician	1.60	0.60	2.21	0.72
Psychologist	0.30	0.00	1.49	1.04
Social Worker/Counselling	9.29	0.80	11.27	0.80
Mental Health Clinician	1.40	1.00	2.09	2.00
Natural Therapies	4.20	0.00	6.20	0
Optometry	0.99	0.00	1.01	0
Occupational Therapy	2.20	1.00	3.69	2.00
Pharmacy	4.00	0.00	5.05	1.00
Physiotherapy	4.08	2.00	6.07	3.00
Exercise Physiology	1.09	0.00	1.09	0
Podiatry	0.20	0.00	0.32	0
Radiography	5.49	3.40	6.51	4.40
Speech Therapy	1.99	1.00	2.44	1.00
Total FTE	**58.50**	**19.00**	**71.83**	**22.74**

FTE = full time equivalent

Table A4.2 Allied health pre- and post- project FTEs by profession and community

Allied Health Profession	Biloela		Moura		Taroom		Theodore		Baralaba		Wowan		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Aboriginal Health	1.5	1.2	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	2.5	2.2
Aged Care Assessor	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Alcohol & Other Drugs Service	0.6	1.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.4
Audiology	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4
Child Health	3.9	3.4	1.4	1.6	0.1	0.2	1.4	1.4	1.3	1.3	0.0	0.0	8.1	7.9
Community Nurse	3.0	3.0	0.0	0.0	0.0	0.0	1.0	1.0	0.6	0.6	0.4	0.4	5.0	5.0
Dental	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
Diabetes Educator	0.2	0.1	0.0	0.1	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.2	1.1
Dietician	1.6	1.6	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	1.6	2.2
Psychologist	0.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5
Social Worker/Counselling	7.9	10.8	0.4	0.4	0.0	0.0	1.0	0.1	0.0	0.0	0.0	0.0	9.3	11.3
Mental Health Clinician	1.2	2.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.3	2.1
Natural Therapies	1.2	3.2	2.0	2.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	4.2	6.2
Optometry	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Occupational Therapy	1.9	3.1	0.1	0.2	0.1	0.2	0.1	0.3	0.0	0.0	0.0	0.0	2.2	3.7
Pharmacy	2.0	3.0	1.0	1.0	1.0	1.0	0.0	0.1	0.0	0.0	0.0	0.0	4.0	5.2
Physiotherapy	2.4	4.1	0.2	0.4	1.1	1.1	0.2	0.3	0.2	0.2	0.0	0.0	4.1	6.1
Exercise Physiology	0.8	0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.1	1.1
Podiatry	0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.3
Radiography	1.5	1.5	1.0	1.0	1.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	5.5	6.5
Speech Therapy	2.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.4
Total FTE	**37.5**	**48.8**	**6.2**	**7.2**	**3.4**	**4.7**	**8.9**	**8.5**	**2.1**	**2.2**	**0.4**	**0.4**	**58.5**	**71.8**

Appendix 5: Summary of allied health service audit data

Table A5.1 Audit of allied health appointments by profession

Provider type	Baseline (2016)	Mid-project (2017)	Project end (2018)
Aged Care Assessor		6	36
Alcohol and Other Drugs Service			1
Audiology			10
Chiropractor		2	
Counsellor	15	15	1
Credentialled Mental Health Nurse			16
Diabetes Educator	14	26	12
Dietician	20	26	29
Exercise Physiologist	24	30	41
Indigenous Hospital Liaison Officer			1
Mental Health Clinician			4
Occupational Therapist	16	34	50
Optometrist		21	
Physiotherapist	12	34	43
Podiatrist	5	11	12
Psychologist	1	2	1
Social Worker	2	2	
Speech Pathologist	19	34	75
No response	3	7	
Total	**131**	**250**	**332**

Table A5.2 Audit of waiting times for allied health appointments

	Baseline		Project end	
Waiting period	Number	Percentage	Number	Percentage
0 - 3 days	31	24%	26	8%
4 - 7 days	14	11%	115	35%
1 - 2 weeks	16	12%	83	25%
2 – 4 weeks	33	25%	59	18%
More than 4 weeks	34	26%	49	15%
No response	3	2%	0	0%
Total	**131**	**100%**	**332**	**100%**

Table A5.3 Audit of allied health appointment by mode of delivery

Mode of delivery	Baseline (2016)	Mid-project (2017)	Project-end (2018)
Face to Face in clinic	86	176	156
Face to Face in home	16	32	39
Face to Face in hospital setting	16	16	31
Face to Face in school setting	-	-	87
Other	13	17	10
Telehealth consultation	-	9	9
Total	**131**	**250**	**332**

Appendix 6: Banana Shire allied health activity and FTE summary

Notes:

These tables report on CQHHS administrative data on approved allied health FTE funding, actual FTE expenses and actual occasions of service for both inpatient and outpatient services in the Banana Shire. Some caveats to note include:

1. Some staff that were funded from Banana Shire cost centres were involved with in-reach activities in Gladstone. It was estimated that this activity would have accounted for at least 0.5 FTE each year and primarily affected the Physiotherapy, Speech Pathology and Dietetics professions.
2. 1.0 FTE of the total 9.2 allied health health practitioner FTE included a supernumerary Occupational Therapy position from Jan 2016-Dec 2018. Another 0.5 of FTE over the entire time was a team leader with a non-clinical role and another 0.5 was a Psychologist who operated from Gladstone predominately.

A6.1 Central Queensland HHS FTE summary

Central Queensland HHS	2016-17	2017-18
Approved FTE		
Allied health practitioners	9.2	9.2
Allied health assistants	2.5	2.5
Total	11.7	11.7
Actual labour expense		
Allied health practitioners	983,000	1,085,000
Allied health assistants	117,000	165,000
Total	**1,100,000**	**1,250,000**

Table A6.2 Central Queensland HHS Allied Health Occasions of Service Summary

	2016-17			2017-18			Percentage change		
	Outpatient	Inpatient	Total	Outpatient	Inpatient	Total	Outpatient	Inpatient	Total
Dietetics	257	137	394	188	200	388	-27%	46%	-2%
Occupational Therapy	798	123	921	722	335	1,057	-10%	172%	15%
Physiotherapy	1,199	756	1,955	876	1,131	2,007	-27%	50%	3%
Psychology	29	0	29	21	0	21	-28%	0%	-28%
Social Work	293	141	434	276	179	455	-6%	27%	5%
Speech Pathology	691	135	826	303	293	596	-56%	117%	-28%
Paediatrics (transdisciplinary)	0	86	86	0	32	32	0%	-63%	-63%
Total	**3,267**	**1,292**	**4,559**	**2,386**	**2,138**	**4,524**	**-27%**	**65%**	**-1%**

Appendix 7: Summary of Queensland Health Outpatient Occasions of Service Data

Notes:

These tables summarise administrative allied health outpatient occasions of service data for the Banana Shire region. Aggregate data were sourced via a request to the Queensland Health Statistical Services Branch. Some key points to note include:

1. Data includes all service delivery modes (including telehealth provider and receiver).
2. Data is restricted to service events from 1 July 2016 to 30 June 2018 inclusive.
3. Data is restricted to service events provided by allied health professionals (Dietitian, Occupational Therapist, Physiologist, Physiotherapist, Podiatrist, Psychologist, Clinical, Social Worker or Speech Therapist), reported by Moura, Baralaba, Theodore, Biloela and Woorabinda Hospitals
4. In 2016/2017, due to reporting of data using shared information systems, it was not possible to differentiate which hospital had provided service events, as Moura and Baralaba reported all activity for Moura, Baralaba, Theodore and Woorabinda Hospitals. This issue was corrected in 2017/2018 data collection. For consistency we have reported both years as combined for Moura, Baralaba, Theodore and Woorabinda Hospitals
5. Duplication of records reported by both Moura and Baralaba 2016/2017 have been corrected.

Table A7.1 Banana Shire Outpatient Occasions of Service by Funding Source

Funding source	2016-17	2017-18
Department of Veterans' Affairs	28	29
Health service budget (Reciprocal Health Care Agreement)	5	0
Health service budget (not covered elsewhere)	3,534	2,964
Worker's compensation	14	14
Total	**3,581**	**3,007**

Table A7.2 Banana Shire Outpatient Occasions of Service by Community and Provider Type

	Occasions of service	
Services by community	2016-17	2017-18
Biloela	**3,168**	**2,534**
Dietitian	240	170
Occupational therapist	761	647
Physiologist	216	278
Physiotherapist	1,015	712
Podiatrist	38	46
Psychologist, clinical	16	21
Social worker	270	247
Speech therapist	612	413
Moura/Baralaba/Theodore	**413**	**473**
Dietitian	46	45
Occupational therapist	60	81
Physiotherapist	197	188
Podiatrist	42	79
Social worker	13	31
Speech therapist	55	49
Total in Banana Shire	**3,581**	**3,007**
Dietitian	286	215
Occupational therapist	821	728
Physiologist	216	278
Physiotherapist	1,212	900
Podiatrist	80	125
Psychologist, clinical	16	21
Social worker	283	278
Speech therapist	667	462

Table A7.3 Outpatient Service Events and Reimbursements from Queensland Health

Waiting period	2016/2017		2017/2018	
	Service events	Queensland Health Reimbursements	Service events	Queensland Health Reimbursements
Nutrition/Dietetics	286	11,506	216	8,690
Occupational Therapy	777	31,259	729	29,328
Physiotherapy	1,359	54,673	903	36,328
Podiatry	80	3,218	125	5,029
Psychology	29	1,167	21	845
Rehabilitation		0	275	11,063
Social Work	285	11,466	278	11,184
Speech Pathology	692	27,839	460	18,506
Unknown/undefined	73	2,937		0
Total	**3,581**	**144,064**	**3,007**	**120,972**

Appendix 8: Summary of Community Survey Responses

In general, it is easy for me to get access to Allied Health Services when I need them

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=67)	0%	6%	21%	63%	10%
Post (N = 165)	1%	10%	33%	46%	10%

I find it hard to get an appointment for Allied Health Services right away or when I need it

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=63)	6%	40%	27%	24%	3%
Post (N = 165)	5%	36%	33%	22%	4%

I am dissatisfied with some things about the Allied Health Care I receive

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=56)	29%	38%	20%	11%	4%
Post (N = 147)	8%	50%	32%	10%	1%

Telehealth is another way to receive consultations from a clinician form remote locations. I have a good understanding of what telehealth involves

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=61)	7%	16%	28%	28%	21%
Post (N = 163)	5%	9%	30%	44%	12%

I would be happy to receive Allied Health Services via telehealth

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=56)	4%	14%	32%	41%	9%
Post (N = 168)	4%	8%	35%	39%	15%

Allied Health Assistants carry out treatment plans as directed by a fully qualified Allied Health Professional. I have a good understanding of the role of Allied Health Assistants

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=61)	2%	10%	33%	39%	16%
Post (N = 164)	2%	5%	40%	43%	10%

Having an Allied Health Assistant in my community would improve access to the services available

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Pre (N=62)	2%	0%	15%	52%	32%
Post (N = 166)	0%	2%	20%	57%	22%

References

1. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implementation Science 2009; 4:50.

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Options for sustainable Medical Services for the communities of the Western Corridor

Townsville Hospital and Health Service

This document provides outlines possible solutions for medical workforce issues in the communities of Hughenden, Richmond and Charters Towers.

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Options for sustainable Medical Services for the communities of the Western Corridor

Executive Summary

Sustainability, cost, and access to health services have been a concern for the communities of Richmond, Hughenden and Charters Towers for many years. The area known as the Western Corridor covers a large and diverse population who are often isolated by distance, with limited access to local healthcare. The communities are not high socio-economic communities and struggle to access health care outside their local community. The medical models in Richmond and Hughenden rely on solo medical officers.

Developing affordable, sustainable healthcare with a stable medical workforce, that provides access to care for all residents of the region is a priority for the Townsville Hospital and Health Service. There has been a recognition of the need to work with communities, other health service providers and clinicians to plan primary and secondary services in rural communities. This is a significant first step in establishing sustainability of health services for rural and remote communities.[1] The planning process can be based on the framework developed for rural and remote health services and planned through a collaborative process described in the Rural and Remote Health services Panning process (2013).[2]

Rural Health Management Services (RHMS) has been invited by the Townsville Hospital Rural Division to provide an options paper to support future planning for the implementation of alternate models for the delivery of medical services in the Western Corridor. A visit was undertaken to the communities in the western corridor with Dr Paul Lane and meetings held with Medical, Hospital staff and community leaders to identify priorities for each community and potential partnerships to build sustainable services communities.

The review identified that services had remained unchanged for many years and highlighted the necessity to address the evolving needs of the communities and medical workforce. The Medical model of solo Medical Officer working with right of private practice in place in Richmond and Hughenden is outdated, unsustainable and no longer fit for purpose for these communities. The following report identifies solutions for managing a medical workforce crisis and options to invest and develop a sustainable workforce able to self-relieve, giving communities continuity of care and local clinical leadership. There is capacity within the Western Corridor communities to establish a strong medical education network with

[1] https://www.publications.qld.gov.au/dataset/rural-and-remote-health-service-planning/resource/0d627e3a-1a38-443a-80e5-6b60fd837b8f

[2] Rural and Remote Health Services Planning Process (2013)

development of allied health and nursing services to support strong local health service delivery.

The cost of the alternate Medical models will be less than the current Medical Workforce expenditure and will provide two full time Medical Officers for both Hughenden and Richmond.

Services in Charters Towers are also static with limited investment in planning or infrastructure for many years. The generalist skills of the Medical Workforce are underutilised. General Practices are at risk and putting pressure on Emergency Department and Aged Care services. Development of a Health Plan for Charters Towers will give clear directions and a clear business case to ensure the health services developed will meet current and future needs of the community and support access to health services for the communities of the Western Corridor.

Demographics

All these communities have low SEIFA scores, higher than average indigenous and aged populations and children below the age of 14 years. Most residents were born in Australia and speak English with education to bachelor levels less than 10%

Flinders

The Local Government Area of Flinders covers 41200 square kilometres and has a population of 1536, according to the 2016 census. The SEIFA score for this LGA is 943, with a minimum of 862 and a maximum of 1050. The median weekly household income was $1109, with median rental cost being $150 and the median monthly mortgage repayment being $509. Children aged 0 - 14 years made up 17.6% of the population and people aged 65 years and over made up 20.5% of the population. Of people aged 15 years and over, 15.8% had completed year 12 as their highest level of education, 15.5 had completed a certificate III or IV, 4.9% have completed an Advanced Diploma or Diploma and 7.4% had completed a Bachelor Degree or above. Aboriginal and/or Torres Strait Islander people made up 6.5% of the population. Most households speak only English at home, with only 1.1% speaking another language at home. Most of the population, 84.8%, were born in Australia.

Richmond

The Local Government Area of Richmond covers 26581 square kilometres and has a population of 791. The SEIFA score for this LGA is 964, with a minimum of 909 and a maximum of 1033. The median weekly household income was $1183, with median rental cost being $80 and the median monthly mortgage repayment being $710. Children aged 0 - 14 years made up 18.4% of the population and people aged 65 years and over made up 14.1% of the population. Of people aged 15 years and over, 14.2% reported Year 12 as their highest level of education, 16% had completed Certificate III or IV, 7% had completed a Diploma or Advanced Diploma and 9% had completed a bachelor's degree or above. Aboriginal and/or Torres Strait Islander people made up 6.7% of the population. In Richmond, 90.9% of people only spoke English at home. The only other response for language spoken at home was Japanese 0.9%. Most people, 85.1%, were born in Australia.

Charters Towers

The Local Government Area of Charters Towers covers 68382 square kilometres and has a population of 11876. The SEIFA score for this LGA is 921, with a minimum of 849 and maximum of 12157. The median weekly household income is 1047, with median rental cost of $200 and median monthly mortgage repayments of $1300. Children aged 0 - 14 years made up 21.4% of the population and people aged 65 years and over made up 18.5% of the population. Of people 15 years and over, 4.3% reported having completed Year 12 as their highest level of educational attainment, 16.9% had completed a Certificate III or IV, 5.0% had completed an Advanced Diploma or Diploma and 8.6% had completed a Bachelor Degree or above. Aboriginal and/or Torres Strait Islander people made up 8.7% of the population. In Charters Towers 87.8% of people only spoke English at home. Other languages spoken at home

included Filipino 0.2%, Tagalog 0.2%, German 0.1%, Malayalam 0.1% and Vietnamese 0.1%. The majority, 83.5%, of people were born in Australia.

Hughenden, Richmond, and Charters Towers are planning additional industries to come to their communities. Mining is growing for each area; meatworks are planned and significant agricultural development and irrigation projects have been identified in the Blueprint.[3]

Essential Components of a sustainable Model

Establishing sustainable medical services in rural and remote communities is complex and at times can seem unachievable due to the vast distances and isolation of these communities, combined with the complexity of health services required. There are several factors which should be considered when planning the service models in rural and remote communities. The factors are different in each community and each community requires a unique solution.

Workforce ratio

The workload for each clinician is determined by the number and type of services required. Initially, this is determined on a population demographic but over time should be reviewed as services develop in response to specific needs in each community. The medical team are the clinical leads in each community. There is a need to establish a strong medical workforce to lead service development and team-based care in each community. The clinical leadership should bring public, private and non-government services together to plan and deliver primary and secondary care in each community. The plan should ensure the available workforce and health funding (State, Commonwealth and Fee for service) is maximised in each location, as well as the skills of the workforce in each community are utilised fully.

Reducing Professional Isolation

Professional isolation is a significant consideration in each location. To reduce this isolation there needs to be clearly identified mentorship pathways for each clinician. A regional training and skills development pathway, local training programs and support from specialty services to manage complex presentations locally.

Reducing Social Isolation

Living in a small rural community can at times be challenging and rewarding. A local orientation, and connections with others in the local community, particularly those working in similar positions can reduce this isolation. Connecting socially across the health services is also important. Social occasions with clinicians in other communities periodically, allows both professional and social support networks to develop.

[3] *Unlock the North: North Queensland Projects & Policies (See attachment)*

Succession Plans and a career pathway

Each clinician will have a plan for their career development and varying intentions to continue with rural and remote practice. Access to local and distance training support is essential in order to further develop skills and knowledge. A career path is a valuable retention incentive for all rural and remote clinicians and will vary for each clinician and should be supported by local and distant training opportunities. The option to attend training programs or placements to further skills and knowledge should be available and planned as part of an annual performance review with each Medical Officer.

Multi-disciplinary services

Team based care is an essential aspect of rural and remote practice. These teams are not only within the public services but also span commonwealth funded allied health services, council managed services and private practice. Some of the clinicians and other health workers will be based in the community and others provide in-reach services from outlying communities. The medical officers in each community provide a source of referrals and a connection across multiple providers for each patient. In order to provide a fully integrated service, medical officers should have sufficient non patient contact time to build co-ordinated local services with effective communication systems and support for complex patients to navigate the health system.

Assessing a health services vulnerability

The table below[4] has been developed by the Rural Doctors Association of Queensland as an indicator of communities where the health workforce has reached a critical level. This set of traffic lights can be used by as a rapid assessment for action. The actions need to be taken as a collaborative response between health service providers, community and all levels of government.

The current workforce services in the Western Corridor are critical in all areas for some of the communities and at risk in others. These traffic lights can be used as a quick reference when planning service changes or reviewing the health of the workforce model, or level of vulnerability.

Indicators	Green – In place	Amber – At risk	Red – Critical
Health Workforce	Workforce at or just above critical mass	Workforce just below critical mass	Workforce well below critical mass - Chronic workforce shortage - Long term vacancies
Workforce Relief	Capacity to self-relieve or access timely and clinically suitable relief	Intermittent and/or unsuitable relief	No ability to self-relieve from within medical community

[4] Traffic Lights Indicators developed by Rural Doctors Association of Queensland.

General Practice	General practice has capacity		Limited capacity in general practice		Highly limited or no capacity in general practice	
Workforce Model	Workforce capacity is balanced with the service model, including referrals		Vacancies with some difficulties to recruit		Over reliance on locum or visiting workforce does not have continuity.	
Organizational Culture	Private / GP / public hospital relationships are positive and supportive		Organizational culture is changing		Organizational culture is having a damaging impact on clinical community	
Continuity of Care	Continuity of care models including visiting outreach services		Referral services difficult to identify		Breakdown in professional relationships including relationships with referral services	
Clinical Leadership	Appropriate autonomy in clinical decision making		Some tension between general practice & hospital services (professional or personal)		Recent change or vacancy in clinical Leadership. Difficult ongoing relationships with clinical / executive management	
Learning Environment	Supportive learning environment		Tension between service / learning model; available workforce or skill mix; demand or community expectations		No current student / intern / registrar placements.	

Hughenden

The medical workforce ratio in Hughenden is currently too high, the Royal Australian College of General Practice (RACGP) average ratio is 1GP to a population of 830 people. The ratio in Hughenden is 1: 1569. This ratio is too high and would require a minimum of two doctors to effectively provide the minimum primary care services.

Hughenden is currently in crisis, with the imminent threat of a complete Medical Workforce failure. It is essential for the continued function of the services to plan for crisis and how to

rebuild a service to a point of excellence. Excellence is indicated when the green lights are all met, there is an effective health service plan for the community, and services meet or exceed those recommended in the rural and remote health service framework[5]

Traffic Lights review

- Workforce Critical with some uncertainty about the ability of the current MORPP to maintain services.
- Locums required for routine relief and all other leave. There is at least 6 months of leave accrued.
- There is limited capacity in General Practice with 40 plus patients seen each day and aged care and home visits provided on the weekend. There are over 100 people on aged care packages being cared for in the community / region
- The services rely on locums for all relief. There is a small pool of regular locums who provide this relief.
- The services feel isolated and not well supported by the THHS with little or no connection to Charters Towers.
- Referral services are available but there does not seem to be a good use of telehealth and communication with visiting allied health is limited. There are no specialist outreach services.
- There is potential for the current MSRPP to lose her place in the ACRRM independent pathway and therefore scope of practice for work in Hughenden. There has been a change in the Medical Executive for the rural group hospitals.
- Currently, there are no planned student or intern rotations, although there have been at times in the past.

The service workforce plans must also consider managing services at all stages of development and cater to changing the workforce model as services develop.

Crisis Response

If the current MSRPP is unable to continue to practice, there will be a permanent medical vacancy and will require locum cover. The options for this are to cover with locums at an average cost of $2500/day plus travel costs. Short term this will be the only option. The locums are also working in the General Practice owned by the MORPP. A fee structure needs to be negotiated where an agreed amount or percentage of the billings are paid to the HHS in lieu of a locum fee to the practice.

The next immediate response will be to create one SMO Position with Locum relief and then two permanent SMO positions. This will give the community two medical officers for 2 weeks of

[5] https://www.publications.qld.gov.au/dataset/rural-and-remote-health-service-planning/resource/0d627e3a-1a38-443a-80e5-6b60fd837b8f

the month with relief for regular leave and potentially also require a locum to cover longer periods of leave.

Investment

The next phase of establishing a strong workforce requires financial and professional investment in the Medical Officers (SMO's) working in the community.

- Effective continuity of care is in place with each patient able to see the Medical Officer of their choice regularly.
- Establish a training mentor support model with Charters Towers hospital (including on-site visits at least every 6 weeks)
- Establish an introduction to the community program with the Flinders Shire Council
- Purchase or lease permanent accommodation for the second doctor in the community (possibly in partnership with the Flinders Shire Council)
- Develop a partnership with private practice to ensure return of funds for workforce and continued development of Medicare and privately funded services in the community. At this point it may also be necessary to purchase the practice equipment and lease the building. It may also be the time to develop a partnership in relation to practice management options. This partnership could be with a practice management group or a neighbouring general practice.
- Develop telehealth clinics in conjunction with the Townsville University Hospital
- Establish quarterly outreach clinics with the Geriatrician
- Begin work on the Health Plan for Flinders Shire

Stabilise

Stabilising the workforce involves building the recruitment and retention incentives into each position within the Medical Workforce and ensuring there are local options to develop skills and improved remuneration.

- Effective multi-disciplinary care is in place with the Medical Officers working with the patient to access the care required as close to home as possible.
- Ensure each Medical Officer has a professional development plan in place, a nominated mentor and is actively undertaking a training pathway for vocational registration or further developing their skills as a rural generalist.
- Each medical officer is supported to be an active member of the community, and encouraged to take on local leadership roles to support the development of health services within the Shire
- Permanent Medical Officer accommodation is available for two medical officers and reliever accommodation if needed.
- The private practice is a viable business, with skilled staff, fully accredited and well equipped
- Each SMO is billing a minimum or $1500 per day and has been offered the opportunity to work as a MORPP or MSRPP. The right of private practice will increase the remuneration to

Medical Officer and offer more options to manage taxable income as the earnings are not in the form of a salary.

- Telehealth clinics are available within the General practice for all specialties from the Townsville University hospital and from other locations where patients are receiving specialist care.
- Geriatrician and at least 2 other specialist clinics are held in Hughenden at least twice a year with education sessions for local medical, nursing, and allied health staff.
- The Health Plan for Flinders Shire is complete, and a steering group is in place to oversee the implementation of the plan locally. One of the Medical Officers is a member of the group and may take on the role of chairing the group.

Excellence

It is important to have a shared vision or target for how the health services should develop in each community. This is achieved through the development of the Health Plan for Flinders Shire. The following dot points reflect some of the probable ideals to be included in the plan.

- All patients with Chronic or Complex care needs have a documented care plan and known team of clinicians support their path to recovery or palliative care within their community and ideally their home.
- Professional development plans are in place and Medical Officers and other clinicians support student, intern and registrar placements with the Hughenden General Practice, Multi-purpose Health Service, Pharmacy, QAS and local community organisations.
- The private General Practice has transitioned to the MSRPP and continues to expand services to the community.
- Students and registrars are supported to participate in local health service projects and local leadership groups as part of their placements.
- Relief staff from Charters Towers or Richmond can cover annual leave, or emergency leave in Hughenden.
- Registrars with special interest can provide outreach clinics such as mental health, women's health, paediatrics, surgical services, and work with specialist providers in Townsville University Hospital.
- Telehealth services are a normal service model for most specialist services.
- There is at least one specialist outreach clinic held each month in Hughenden including the Geriatric Outreach services and services from Townsville University Hospital. Multi-disciplinary Education sessions are a normal part of the outreach support services.
- Outreach GP clinics are provided monthly to the smaller communities and support by telehealth contact between outreach visits.
- Meetings are held bi-monthly to review the Health Plan for Flinders and develop plans for further improvements and support for responding to identified health needs or gaps in services.

Solutions for Richmond

The medical workforce ratio in Richmond is currently not under any stress. The Royal Australian College of General Practice (RACGP) average ratio is 1GP to a population of 830 people. The ratio in Richmond is 1: 791. This ratio is acceptable but requires the provision of a locum for 9 weeks (63 days annual and professional development leave and 86 days or normal leave within the roster). This is a significant cost to the health services and does not provide any continuity of care for the patients. Residents often wait until the MORPP returns or a known locum returns to the community. Some residents drive to Julia Creek for Medical Services.

Richmond is currently quite stable but presents an opportunity to plan for succession and build a strong training model locally. The current MORPP will sit vocational registration exams this year and will then be a capable supervisor for registrar placements independently or as part of a training program with Charters Towers Hospital. It is essential for the continued function of the services to build a service to a point of excellence. Excellence is indicated when the green lights are all met, there is an effective health service plan for the community, and services meet or exceed those recommended in the rural and remote health service framework[6]

Traffic Lights review

- Workforce ratios are acceptable but only with a considerable locum contribution
- Locums required for routine relief and all other leave. There is at least 6 months of leave accrued which must be covered.
- There is capacity in General Practice with 20 to 25 patients seen each day and aged care and home visits provided. This ratio provides a good teaching environment and will allow the registrar to provide relief in Hughenden if needed and participate in specialist and outreach clinics.
- The services rely on locums for all relief. There is a small pool of regular locums who provide this relief but with no certainty for the community or allied health and nursing staff.
- The organisational culture seems very positive locally but there is little evidence of strong linkages or support from Charters Towers or Townsville.
- Referral services are available but there does not seem to be a good use of telehealth and communication with visiting allied health is limited. There are no specialist outreach services.
- There is good autonomy with the scope of practice for work in Richmond. There has been a change in the Medical Executive for the rural group hospitals which will provide opportunity to strengthen the sustainability of services in Richmond.
- Currently, there are no planned student or intern rotations, although there have been at times in the past.

[6] https://www.publications.qld.gov.au/dataset/rural-and-remote-health-service-planning/resource/0d627e3a-1a38-443a-80e5-6b60fd837b8f

The service workforce plans must also consider managing services at all stages of development and cater to changing the workforce model as services develop.

Crisis

This service is not in crisis but does require some thought in how to manage the risk if the current MORPP was to become unwell or take his accrued leave. This could be achieved with the development of a rural reliver position based in Charters Towers and covering the western corridor and other THHS facilities. This position may be a PHO who is able to backfill the roster in Charters Towers if a senior medical officer is required in a rural facility. This would replace the continual need for locums in every facility.

Investment

The next phase of establishing a strong workforce requires financial investment and investment in the Medical Officers working in the community. This stage would establish a registrar position in Richmond to provide relief cover for the MSRPP's leave and potentially support cover in Hughenden.

- Effective continuity of care is in place with each patient able to see the Medical Officer of their choice regularly. One position could be a female medical officer and cover both Richmond and Hughenden providing access to Women's Health clinics for both communities.
- Establish a training mentor support model with Charters Towers hospital (including on-site visits at least every 6 weeks)
- Establish an introduction to the community program with the Richmond Shire Council
- Allocate one to the units in Richmond as accommodation for the registrar (two bedrooms at least if they have a family)
- Develop partnership with private practice to ensure return of funds for workforce and continued development of Medicare and privately funded services in the community. The practice is currently owned by the MORPP and would require a formal agreement between the Practice and THHS.
- Develop telehealth clinics in conjunction with the Townsville University Hospital
- Establish quarterly outreach clinics with the Geriatrician
- Begin work on the Health Plan for Richmond Shire

Stabilise

Stabilising the workforce involves building the recruitment and retention incentives into each position within the Medical Workforce and ensuring there are local options to develop skills and improved remuneration.

- Effective multi-disciplinary care is in place with the Medical Officers working with the patients to access the care required as close to home as possible.
- Ensure each Medical Officer has a professional development plan in place, a nominated mentor and is actively undertaking a training pathway for vocational registration or further developing their skills as a rural generalist or supervisor.

- The registrar is supported to be an active member of the community, and encouraged to take on local leadership roles to support the development of health services within the Shire
- The private practice is a viable business, with skilled staff, fully accredited and well equipped.
- The practice has developed some early intervention and chronic disease programs led by the registrar and the patient numbers and services available in the General Practice have increased.
- Telehealth clinics are available within the General practice for all specialties from the Townsville University hospital and from other locations where patients are receiving specialist care.
- Geriatrician and at least 2 other specialist clinics are held in Richmond at least twice a year with education sessions for local medical, nursing, and allied health staff.
- The Health Plan for Richmond Shire is complete, and a steering group is in place to oversee the implementation of the plan locally. One of the Medical Officers is a member of the group and may take on the role of chairing the group.

Excellence

It is important to have a shared vision or target for how the health services should develop in each community. This is achieved through the development of the Health Plan for Richmond Shire. The following dot points reflect some of the probable ideals to be included in the plan.

- All patients with Chronic or Complex care needs have a documented care plan and know the team of clinicians supporting their path to recovery or palliative care within their community or ideally their home.
- Professional development plans are in place and Medical Officers and other clinicians are support student, intern and registrar placements with the Richmond General Practice, Multi-purpose Health Service, Pharmacy, QAS and local community organisations.
- The private General Practice continues to expand services to the community.
- Students and registrars are supported to participated in local health service projects and local leadership groups as part of their placements.
- Relief staff from Charters Towers can cover annual leave, or emergency leave internally.
- Registrars with special interest can provide outreach clinics such as mental health, women's health, paediatrics, surgical services, and work with specialist providers in Townsville University Hospital.
- Telehealth services are a normal service model for most specialist services.
- There is at least one specialist outreach clinic held each month in Richmond including the Geriatric Outreach services and services from Townsville University Hospital. Education sessions are a normal part of the outreach support services.
- Outreach GP clinics are provided monthly to the smaller communities and support by telehealth contact between outreach visits.
- Meetings are held second monthly to review the Health Plan for Flinders and develop plans for further improvements and support for responding to identified health needs or gaps in services.

Solutions for Charters Towers

The medical workforce ratio in Charters Towers Hospital is currently not under any stress. The Royal Australian College of General Practice (RACGP) average ratio is 1 GP to a population of 830 people. There are 11.5 FTE GPs in Charters Towers. This varies as some GPs work part time or on a sessional basis. The ratio in Charters Towers is 1:1033. This ratio is not acceptable and is under stress and should be part of targeted local training programs. The risk for the HHS when GP numbers are low is the exacerbation of preventable illness, and ineffective care for those with more Chronic and Complex needs, particularly the aged and lower socio-economic members of the community. There is also very limited access to fully bulk billed services in Charters Towers.

Charters Towers is currently quite stable but presents an opportunity to plan for succession and build a strong training model locally. The current Medical Superintendent and senior Medical Officers are capable supervisors for registrar placements independently or as part of a training program. Registrar placements and Rural Generalist training could be delivered in partnership with the local General Practices and Practices in Richmond and Hughenden. It is essential for the continued function of the services to plan to build a service to a point of excellence. Excellence is indicated when the green lights are all met, there is an effective health service plan for the community, and services meet or exceed those recommended in the rural and remote health service framework[7]

Traffic Lights review.

- The General Practice workforce is in crisis in Charters Towers and this impacts on THHS and Charters Towers hospital in the number of Cat 4 and 5 presentations to ED and also the reliance on THHS to provide GP care to the residents of the Eventide Nursing Home.
- There is capacity in Charters Towers to self-relieve. The capacity could be increased to also relieve in Richmond and Hughenden.
- There is a minimum of 3 days wait for a GP appointment in Charters Towers. The current practices see 20-30 patients per day for each GP. There is potential to develop the integrated role with local General Practices as teaching practices and allow registrars to work in the practice. aged care, and in the Charters Towers Hospital. There is also potential to develop an additional General Practice service utilising the SMO Rural Generalist worforce
- There is a stable workforce model with some recruitment delays. There is potential to better utilise the advanced skills of rural generalist within the workforce model. There is also an opportunity to increase outreach and telehealth services as part of service and training model.

[7] https://www.publications.qld.gov.au/dataset/rural-and-remote-health-service-planning/resource/0d627e3a-1a38-443a-80e5-6b60fd837b8f

- The organisational culture is positive. There is an opportunity to expand the network of clinicians to include Hughenden and Richmond to a greater extent. There is also an opportunity to formalise relationships with private GPs and Allied Health providing services in the community.
- Referral services are available but there does not seem to be a good use of telehealth and communication with visiting allied health is limited. There are limited specialist outreach services.
- There is good autonomy within the scope of practice for work in Charters Towers. There is a potential to better utilise the advances skills of the rural generalist workforce in the hospital and private practice.
- There are limited planned student and intern rotations although there have been at times in the past. There is potential to enhance the training opportunities in Charters Towers to include some sessions and mentorship for clinicians in Richmond and Hughenden and when appropriate private GPs and allied health.

The service workforce plans must also consider managing services at all stages of development and cater to changing the workforce model as services develop.

Crisis

There is currently no imminent crisis risk in Charter Towers for the Hospital. There is a significant workforce crisis in General Practice which is a service and safety risk for Aged Care, particularly the Eventide Aged Care Facility managed by THHS. There is an option to plan for the development of General Practice Services in partnership with the local General Practices or as part of a stand-alone General Practice.

The potential is for Charters Towers to develop a workforce model that covers internal rostering and relieves in Richmond and Hughenden for emergency leave and as part of Registrar training programs.

Investment

The next phase of establishing a strong workforce requires financial investment and investment in training pathways across the Western Corridor. This stage would establish a robust aged care management support service through the establishment of a Junior House Officer position in Charters Towers as part of an internal medicine rural rotation. This position would work in the Aged Care facilities in Charters Towers (Eventide and Dalrymple Villa) to support the delivery of Geriatrician and GP services. The junior position could also be rostered to work in General Practice and Hospital shifts. The position would be an ideal training position as part of a rural rotation.

There is also a need to build capacity in the General Practice workforce. This can be done through formalising the current relationships with Gold City Medical and the shared workforce arrangements. There is also the opportunity to establish an additional General Practice which

would be staffed by SMO's currently working in Charters Towers and also provide opportunity to attract other registrars and Medical Officers to work in Charters Towers and also complete their vocational registration.

- Effective continuity of care is in place with each patient able to see the Medical Officer of their choice regularly. There is good communication and follow up between Charters Towers Hospital and the General Practices. Numbers of Category 4 and 5 presentations to Charters Towers Emergency Department is reduced.
- Establish a training mentor support model within Charters Towers hospital involving Eventide Aged Care and the local General practices, for a Junior Doctor rotation. Formalise a training model for GP registrars / rural generalists within Charters Towers Hospital, General Practice and Richmond and Hughenden.
- Commence Planning to establish opportunities to provide a full scope of practice rural generalist service in Charters Towers. This should cover full low risk obstetrics with birthing available[8], surgical services, mental health, physician, and paediatric services as a minimum.
- Establish an introduction to the community program with the Charters Towers Shire Council.
- Allocate accommodation within the currently available accommodation
- Review the current infrastructure and commence a redevelopment plan to source funding for renovations or a fit for purpose building to provide a full scope of rural generalist and teaching services in Charters Towers.
- Formalise the partnership with Gold City Medical to quantify the current arrangements for training places and the options for placements of SMO Rural Generalists to ensure clinical governance, medical insurance and financial arrangements are well documented.
- Develop a business case for the development of an additional General Practice working collaboratively with Charters Towers Hospital to provide access to bulk billed GP services and also to provide GP services to Eventide residents who do not currently have a nominated GP.
- Investigate and develop business cases to support the provision of integrated Allied Health services with the introduction of Right of Private Practice through Option A or part- time appointments or developing a shared workforce with General practice and non-government organisations.
- Develop telehealth clinics in conjunction with the Townsville University Hospital for all specialty services. Include agreements with each specialty to provide a minimum of two face to face clinics each year, combined with an education opportunity for the local clinical staff (private, public, medical, nursing and allied health).
- Develop the capacity of the RIPERN nursing workforce across the Western Corridor and the role of the RIPERN nurse within the emergency department and outpatient clinics operating in Charters Towers,

[8] Rural Maternity Taskforce Report, June 2019

- Begin work on the Health Plan for Charters Towers Shire, this plan should be an integrated plan to cover all health services and all available funding sources for health services in rural and remote communities.

Stabilise

Stabilising the workforce involves building the recruitment and retention incentives into each position within the Medical Workforce and ensuring there are local options to develop skills and improved remuneration.

- Effective multi-disciplinary care is in place with the Medical Officers, Specialists and Hospital staff working with the patients to access the care required as close to home as possible.
- Roles are established for Allied Health providers working in public and private roles in the community and providing outreach services.
- The RIPERN nurse positions are established, and a community of practice established for RIPERN trained nurses.
- Each Medical Officer has a professional development plan in place, a nominated mentor and is actively undertaking a training pathway for vocational registration or further developing their skills as a rural generalist or supervisor.
- The registrars and Junior Medical staff are supported to be active members of the community and are encouraged to take on local leadership roles to support the development of health services within the Shire, the hospital and the General Practices.
- Each of the private practices are viable businesses, with skilled staff, fully accredited and well equipped. Including an additional 4 GP positions covering registrar and vocationally registered GPs.
- The practices have developed some early intervention and chronic disease programs led by the registrars. Patient numbers and services available in the General Practices have increased. Emergency department presentations for category 4 and 5 and avoidable admissions have reduced.
- Telehealth clinics are available within the General practice for all specialties from the Townsville University hospital and from other locations where patients are receiving specialist care.
- Outreach specialist clinics are held for at least 6 specialties at least twice a year with education sessions for local medical, nursing, and allied health staff (both public and private).
- Infrastructure plans have been approved for construction of a purpose-built hospital to support the delivery of full scope of practice services. Increase access to services locally for obstetrics, surgery, medical, mental health, and paediatrics. Services have been designed to meet the needs of the community.
- The Health Plan for Charters Towers Shire is complete, and a steering group is in place to oversee the implementation of the plan locally. One of the Medical Officers and a delegate for Eventide Nursing home are members of the group and may take on the role of chairing the group.

Excellence

It is important to have a shared vision or target for how the health services should develop in each community. This is achieved through the development of the Health Plan for Charters Towers Shire as a hub site for the Western Corridor communities or Hughenden and Richmond. The following dot points reflect some of the probable ideals to be included in the plan.

- All patients with Chronic or Complex care needs have a documented care plan and know the team of clinicians supporting their path to recovery or palliative care within their community or ideally their home. Regular opportunities are available for case conferencing for complex patients.
- Professional development plans are in place and Medical Officers and other clinicians. Student, intern, and registrar placements are supported with the Charter Towers General Practices, Charters Towers Hospital, Eventide Residential Aged Care Facility, Pharmacies, QAS and local community organisations. An outreach clinic opportunity is provided for each student, intern or registrar to work in either Hughenden or Richmond.
- The private General Practice workforce has expanded and continues to expand services to the community.
- Students and registrars are supported to participated in local health service projects and local leadership groups as part of their placements.
- Relief staff from Charters Towers can cover annual leave, or emergency leave internally. Rosters reflect relief positions and staff are confident in their ability to provide relief cover in Richmond and Hughenden.
- Registrars with special interest regularly provide outreach clinics such as mental health, women's health, paediatrics, and surgical services. Rural Generalists work with specialist providers in Townsville University Hospital to provide support to patients in their advanced skills area between telehealth services and on early discharge from Townsville.
- Telehealth services are a normal service model for most specialist services.
- There is at least one specialist outreach clinic held each month in Charters Towers including the Geriatric Outreach services and services from Townsville University Hospital. Education sessions are a normal part of the outreach support services. Charters Towers Rural Generalist are active in organising, participating in and following up outreach clinics.
- Outreach GP clinics are provided monthly to the smaller communities surrounding Charters Towers and patients are supported by telehealth contacts between outreach visits.
- Meetings are held bi-monthly to review the Health Plan for Charters Towers and develop plans for further improvements and support for responding to identified health needs or gaps in services.

Financial Considerations

The Medical Workforce costs in Richmond and Hughenden have been increasing progressively over the last 4 years.

		Fiscal / Measures			
Account	Division QH_ALT_7	2017 Actual	2018 Actual	2019 Actual	2020 Actual
Internal Labour - Medical	Hughenden Health Service	260,396	277,866	342,699	251,311
	Richmond Health Service	224,005	255,839	297,677	283,961
External Labour - Medical	Hughenden Health Service	236,938	276,388	300,365	507,189
	Richmond Health Service	366,354	257,230	315,486	343,027

The most significant financial cost is the cost of doing nothing. Positions for solo medical officers are almost impossible to recruit to and incur significant external labour costs for relief.

There is also a significant financial risk from continuing to rely on a locum workforce to cover rostered leave, annual leave and emergency leave. Each of the permanent positions in Hughenden and Richmond have over six months accrued leave.

If either position requires any form of leave the current solution to cover leave is to recruit locums. The leave liability if filled with locums is 12 months @ $2,500 day $912,500 plus on costs (agency fees and travel). The risk is the same if either position becomes vacant. There is no internal cover internally and the recruitment process is likely to be extended. This is a significant financial risk and a quality and safety risk as there is then no clinical leadership or continuity of care for patients.

Hughenden or Richmond (or both) are at high risk of reverting to the 100% locum workforce.

Crisis Response costs will be significantly higher than current expenditure.

Immediate Crisis Hughenden

To manage a crisis in Hughenden where the incumbent is on leave can currently only be managed by a locum workforce. This will increase the Medical Workforce costs.

Medical Model	Salary Costs	Other Costs	Actual 2020	Variation
100% Locum	$912,500	$150,000	$818,500	-$244,000

Immediate Crisis Richmond

Medical Model	Salary Costs	Other Costs	Actual 2020	Variation
100% Locum	$912,500	$150,000	$626,588	-$435,912

Until the workforce model is changed there needs to be consideration given to funding a staged recruitment to a permanent sustainable, self-relieving workforce. This may be a

permanent locum and a Medical officer and then two Senior Medical Officer positions or Senior Medical Officer and Registrar.

The clinical experience will determine the annual Salary for the Medical Officers.

$124,991 – PHO (Lvl 7)
$131,571 – Registrar (Lvl 9)
$159,479 - Snr Registrar (Non Fellow SMO – Lvl 13)
$184,196 – SMO (Fellow with a recognised AS – Lvl 18)

The senior Medical Officers are also entitled to the following allowances
$20,000 – Professional Development Leave and Supplement
$21,000 – Motor Vehicle Allowance

Inaccessibility Allowance
$41,400 - Richmond & Hughenden – identical values

Locality Allowance:
$159.20 – Richmond per fortnight ($4,139.20/Annum)
$131.40 – Hughenden per fortnight ($3,416.40/Annum)

SMO Attraction & Retention Incentive Allowance (old Option A)
40% of Base Salaries and Wages

Hughenden Investment Workforce

This establishes two full time positions with the capacity to self-relieve, both as employed Medical Officers to cover if the current MSRPP takes extended leave.

Medical Model	Salary Costs	On-costs Allowances	THHS Costs	Actual 2020	Variation
Level 13 SMO	$159,479	$148,078	$307.557		
Level 18 SMO	$184,196	$164,143	$348,339		
			$655,896	$818,500	$162,604 (saved)

These amounts do not include overtime or on call allowances, which will vary depending on workload.

A similar model would be needed to build capacity in Richmond is the current MSRPP were to take extended leave or resign.

Return from Private Practice to Townsville Hospital and Health Service

In each of these communities there is a considerable amount of time required to provide primary care services currently funded through the Right of Private Practice. THHS can enter a service level agreement with the private practice and recoup an agreed amount of the Medicare billings in each of the communities. The amount is dependent on the experience, and capacity of the Medical Officer to generate Medicare billings. An estimate would be between $70,000 and $220,000 per annum for each Medical Officer.

Right of Private Practice opportunities for Medical Officers

The right of private practice allows the Medical Officers to work within a practice (their own or a managed practice) and generate income through Medicare or other fee for service funding. General Practices services are Commonwealth funded and work on a payment for services model. The more services provided the greater the income. This is a different concept to a salaried position which relies on the hours worked to generate income. To increase income on a salary, more hours are worked (overtime). In private practice the more efficient the services, the higher the income. The table below illustrates the Annual income from Right of Private Practice based on days worked and income earned. A registrar will need time to build the skills to generate an income from General Practice. Most senior GPs will bill over $1800 per day if working in a well-run practice.

Table 1 Average billings and potential Medical Officer earning for days worked and averaged billings over the payment period.

Assumption - A day equates to approximately 25 consultations

Private Practice Income (calculated at 65% of receipted billings)			
Average days worked each week	Average total daily billings to the practice	Amount earned by Medical Officer per Fortnight	Annual (48 wks 10 PH) earned by the Medical Officer
1	$800	$1,040.00	$23,920.00
1	$1,000	$1,300.00	$29,900.00
1	$1,200	$1,560.00	$35,880.00
1	$1,400	$1,820.00	$41,860.00
1	$1,600	$2,080.00	$47,840.00
1	$1,800	$2,340.00	$53,820.00
1	$2,000	$2,600.00	$59,800.00
1	$2,200	$2,860.00	$65,780.00
2	$800	$2,080.00	$47,840.00
2	$1,000	$2,600.00	$59,800.00
2	$1,200	$3,120.00	$71,760.00
2	$1,400	$3,640.00	$83,720.00
2	$1,600	$4,160.00	$95,680.00
2	$1,800	$4,680.00	$107,640.00
2	$2,000	$5,200.00	$119,600.00
2	$2,200	$5,720.00	$131,560.00
3	$800	$3,120.00	$71,760.00
3	$1,000	$3,900.00	$89,700.00
3	$1,200	$4,680.00	$107,640.00
3	$1,400	$5,460.00	$125,580.00
3	$1,600	$6,240.00	$143,520.00
3	$1,800	$7,020.00	$161,460.00
3	$2,000	$7,800.00	$179,400.00
3	$2,200	$8,580.00	$197,340.00
4	$800	$4,160.00	$95,680.00
4	$1,000	$5,200.00	$119,600.00
4	$1,200	$6,240.00	$143,520.00
4	$1,400	$7,280.00	$167,440.00
4	$1,600	$8,320.00	$191,360.00
4	$1,800	$9,360.00	$215,280.00
4	$2,000	$10,400.00	$239,200.00
4	$2,200	$11,440.00	$263,120.00
5	$800	$5,200.00	$119,600.00

5	$1,000	$6,500.00	$149,500.00
5	$1,200	$7,800.00	$179,400.00
5	$1,400	$9,100.00	$209,300.00
5	$1,600	$10,400.00	$239,200.00
5	$1,800	$11,700.00	$269,100.00
5	$2,000	$13,000.00	$299,000.00
5	$2,200	$14,300.00	$328,900.00
5.5	$800	$5,720.00	$131,560.00
5.5	$1,000	$7,150.00	$164,450.00
5.5	$1,200	$8,580.00	$197,340.00
5.5	$1,400	$10,010.00	$230,230.00
5.5	$1,600	$11,440.00	$263,120.00
5.5	$1,800	$12,870.00	$296,010.00
5.5	$2,000	$14,300.00	$328,900.00
5.5	$2,200	$15,730.00	$361,790.00

The table shows that it does not take a lot of days for the Medical Officer with Right of Private Practice to earn more than a SMO salary. In some cases, Medical Officers will earn the equivalent or more in their private practice roles. Most registrars can earn above their salary by their second year. Most experienced GPs will earn more through right of private practice and feel remunerated for additional effort and hours work in General Practice. The priority must still be to cover the inpatient and emergency presentations and provide on call cover as required. (On call for 20 days straight is not attractive and is often unsafe, so a shared call roster with at least one other being first on call is much more attractive).

Working with right of private practice also offers a second income via an ABN and contract directly to the General Practice which can be an advantage to the Medical Officer who wishes to establish businesses or other assets offset against their taxable income. The opportunity to own and manage a well-run private practice can also be a retention incentive for the Medical Superintendent. The Medical Officer should be vocationally registered and committed to a minimum of 5 years in the community to undertake full ownership of the private practice. There is a financial return in owning the practice but there is also the opportunity to provide Medical Services to the community in a way that the Medical Officer controls and invest in for patients, themselves, staff and the broader community. It is often the autonomy rather than the financial incentives which attract and retain senior medical staff to right of private practice positions.

The table below shows the Annual Salary for Right of Private Practice positions.

14.8 Minimum salary levels - medical practitioners with private practice

The minimum salary levels payable to medical practitioners with private practice covered by this Award are prescribed in the table below:

Classification	Classification Level	Award Rate[1] Per Fortnight $[2]	Annual Salary[3] $[2]
Medical officer with private practice	MOPP 1-1	5,074	132,376
	MOPP 1-2	5,228	136,393
	MOPP 1-3	5,376	140,254
Medical superintendent with private practice	MSPP 1-1	5,074	132,376
	MSPP 1-2	5,228	136,393
	MSPP 1-3	5,376	140,254
	MSPP 1-4	5,531	144,298
Senior medical superintendent with private practice	MSPP 2-1	5,684	148,290
	MSPP 2-2	5,856	152,777

Notes:

[1] Includes the arbitrated wage adjustment payable under the 1 September 2018 Declaration of General Ruling.

[2] Rounded to the nearest dollar.

[3] Annual salaries (fortnightly rate x 26.089) are for reference purposes only.

The Medical Officers with Right of Private Practice are also entitled to the following allowances
$20,000 – Professional Development Leave and Supplement
$21,000 – Motor Vehicle Allowance

Inaccessibility Allowance
$41,400 - Richmond & Hughenden – identical values

Locality Allowance:
$159.20 – Richmond per fortnight ($4,139.20/Annum)
$131.40 – Hughenden per fortnight ($3,416.40/Annum)

In order to develop sustainable medical positions, the option for right of private practice should be available to Medical staff working in Hughenden and Richmond. These positions offer significant retention incentives and may also be a recruitment incentive.

Sustainable Medical Services in Hughenden

The table below compares the THHS salary costs for two full time right of private practice positions. These amounts are capped as there is no overtime or additional payments such as on-call allowances.

Both would need emergency department experience. Ideally one of the positions would have vocational registration. If no supervision was available there are remote vocational training

options for registrars through the Remote Vocational Training Scheme (RVTS). (Salary figures corrected)

Medical Model	Salary Costs	Allowances	THHS Costs	Actual 2020	Variation
MORPP	$159,479	$84,169	$243,675		
MSRPP	$169,424	$86,745	$256,169		
			$499,844	$818,500	$318,656 (saving)

Sustainable Medical Workforce for Richmond

The current Medical superintendent in Richmond is very settled and is due to attain vocational registration this year. The workload at the practice will need to be considered in this situation and may suit a more junior registrar on salary.

Medical Model	Salary Costs	Allowances		Actual 2020	Variation
MORPP	$159,479	$84,892	$244,371		
MSRPP	$179,445	$90,000	$269,445		
			$513,816	$626,588	$112,772 (saving)

The second position for Richmond may also be available to support leave cover in Hughenden and support outreach services to Richmond.

Managing Financial Risk

The costs for the Salaried Medical Officer and Right of Private Practice position are comparable except for the unknown amounts for overtime incurred through call ins for each position. Both options are lower than the current expenditure. Recruiting the two positions gives savings in both communities compared to current actual expenditure.

The most significant benefit is the ability to recruit to these positions as they are no longer solo positions. The capacity to manage the potential financial risk if either position is vacant or there is a need for emergent leave is in place as there is the capacity to self-relieve and avoid an extended locum expense.

Conclusion

The introduction of alternate Medical Models to the communities of Richmond and Hughenden will give sustainability, cost efficient services, continuity of care for the community and the clinical leadership to develop strong local health services. There is capacity to introduce the second Medical Officer positions in both communities to avoid a potential workforce crisis and reduce the Medical workforce expenditure.

The Unlock the North report has identified THHS committed expenditure in the rebuilding of the Charters Towers Hospital and works on Eventide Residential Aged Care. In order for these projects to succeed there needs to be a planned development of the health services provided in Charters Towers to fully utilise the workforce and build capacity in General Practice. Some ideas are contained in this report with the links to the communities of Hughenden and Richmond. In order to make the services of the Western Corridor fully sustainable a network with and education and support pipeline from Charters Towers needs to be established.

The change to the medical workforce models should be the first step in developing the local health services and integrated local health plans for each community within the Western Corridor. Each community has the capacity to develop a shared vision for excellent health services with investment from local, state and federal governments as well as local businesses and fee for service. Townsville Hospital and Health Services can participate in the development of local plans and support the provision of hospital, emergency and specialist services as well as allied health and public health services.

Appendices

Glossary of Terms

RHMS – Rural Health Management Services

SEIFA – Socio-economic indexes for areas

LGA – Local Government Area

MORPP – Medical Officer with Right of Private Practice

MSRPP - Medical Superintendents with Right of Private Practice

SMO – Senior Medical Officer

RACGP - The Royal Australian College of General Practice

THHS – Townsville Hospital and Health Service

QAS – Queensland Ambulance Service

RVTS – Remote Vocational Training Scheme